

IRT 100

mySAP Retail – Process Overview

THE BEST-RUN BUSINESSES RUN SAP



© SAP AG 2005

- SAP Retail 4.7
- 2005/Q2
- Material Number: 50075211

Copyright 2005 SAP AG. 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 AG. The information contained herein may be changed without prior notice.

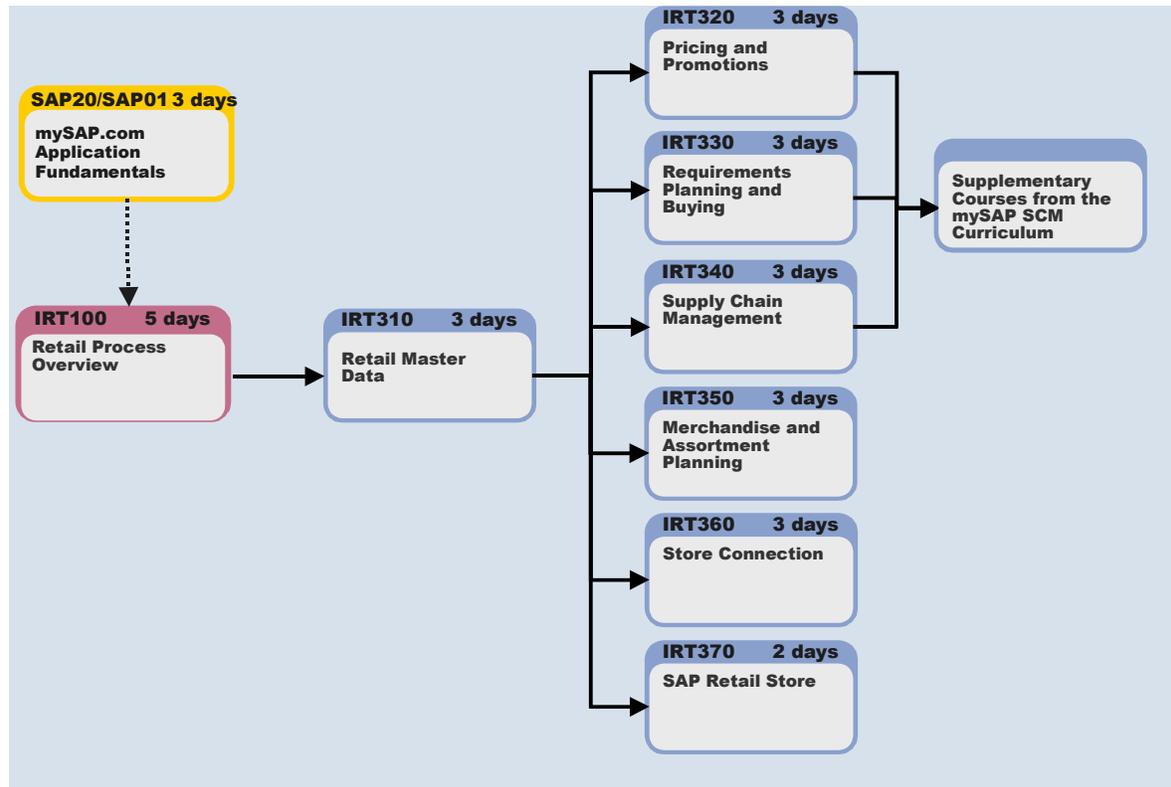
© SAP AG 2005

- Some software products marketed by SAP AG and its distributors contain proprietary software components of other software vendors.
- Microsoft, Windows, Outlook, and PowerPoint are registered trademarks of Microsoft Corporation.
- IBM, DB2, DB2 Universal Database, OS/2, Parallel Sysplex, MVS/ESA, AIX, S/390, AS/400, OS/390, OS/400, iSeries, pSeries, xSeries, zSeries, z/OS, AFP, Intelligent Miner, WebSphere, Netfinity, Tivoli, and Informix are trademarks or registered trademarks of IBM Corporation in the United States and/or other countries.
- Oracle is a registered trademark of Oracle Corporation.
- UNIX, X/Open, OSF/1, and Motif are registered trademarks of the Open Group.
- Citrix, ICA, Program Neighborhood, MetaFrame, WinFrame, VideoFrame, and MultiWin are trademarks or registered trademarks of Citrix Systems, Inc.
- HTML, XML, XHTML and W3C are trademarks or registered trademarks of W3C®, World Wide Web Consortium, Massachusetts Institute of Technology.
- Java is a registered trademark of Sun Microsystems, Inc.

...

...

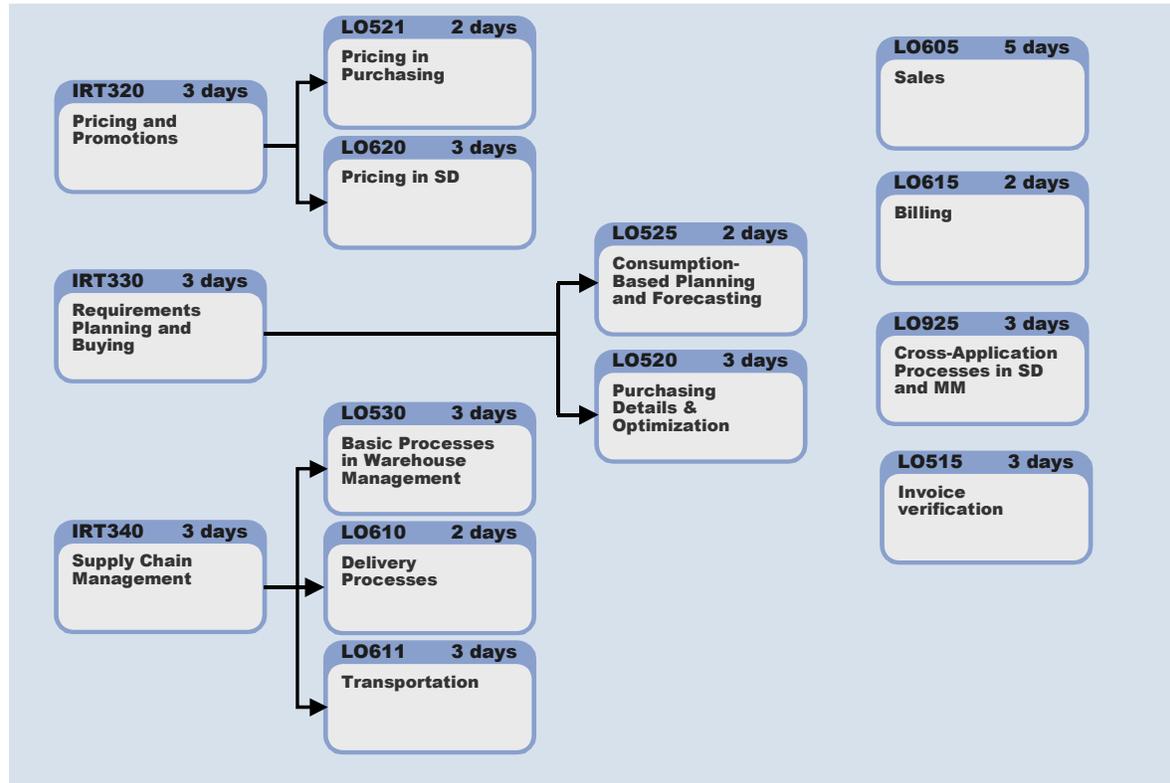
- JavaScript is a registered trademark of Sun Microsystems, Inc., used under license for technology invented and implemented by Netscape.
- MaxDB is a trademark of MySQL AB, Sweden.
- SAP, R/3, mySAP, mySAP.com, xApps, xApp, SAP NetWeaver and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and in several other countries all over the world. All other product and service names mentioned are the trademarks of their respective companies. Data contained in this document serves informational purposes only. National product specifications may vary.
- The information in this document is proprietary to SAP. No part of this document may be reproduced, copied, or transmitted in any form or for any purpose without the express prior written permission of SAP AG.
- This document is a preliminary version and not subject to your license agreement or any other agreement with SAP. This document contains only intended strategies, developments, and functionalities of the SAP® product and is not intended to be binding upon SAP to any particular course of business, product strategy, and/or development. Please note that this document is subject to change and may be changed by SAP at any time without notice.
- SAP assumes no responsibility for errors or omissions in this document. SAP does not warrant the accuracy or completeness of the information, text, graphics, links, or other items contained within this material. This document is provided without a warranty of any kind, either express or implied, including but not limited to the implied warranties of merchantability, fitness for a particular purpose, or non-infringement.
- SAP shall have no liability for damages of any kind including without limitation direct, special, indirect, or consequential damages that may result from the use of these materials. This limitation shall not apply in cases of intent or gross negligence.
- The statutory liability for personal injury and defective products is not affected. SAP has no control over the information that you may access through the use of hot links contained in these materials and does not endorse your use of third-party Web pages nor provide any warranty whatsoever relating to third-party Web pages.



© SAP AG 2003

Internal Use SAP Partner Only

Internal Use SAP Partner Only



© SAP AG 2003

Internal Use SAP Partner Only

Internal Use SAP Partner Only

- **Basic knowledge of retailing**
- **Experience of working with WINDOWS applications**

© SAP AG 2003

- **Participants:**
 - Associates with organizational and IT responsibilities
 - Members of project teams
 - Consultants responsible for implementing R/3
- **Duration: 5 days**



© SAP AG 2003

Contents:

- **Course Goals**
- **Course Objectives**
- **Contents**
- **Overview Diagram**
- **Main Business Scenario**

© SAP AG 2003



This course will prepare you to:

- **Understand the main business processes in SAP Retail**
- **Run the main functions in the business processes in an SAP Retail system**

Customizing is not covered in IRT100. It is covered in the Level 3 training courses.

© SAP AG 2003



At the conclusion of this course, you will be able to:

- **Model the different processes in merchandise procurement and distribution to an SAP Retail system**
- **Describe the main functions of an SAP Retail system and name the settings that you are required to make in the master data**

© SAP AG 2003

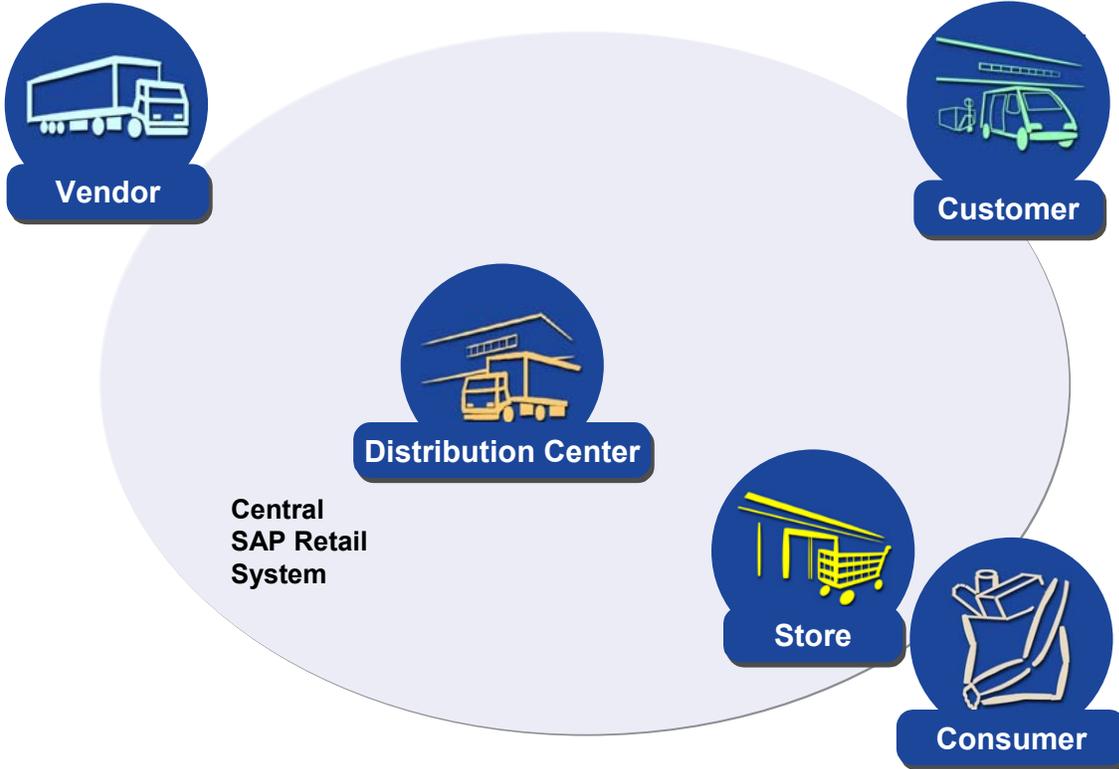
Preface

- Unit 1 **Course Overview**
 - Unit 2 **Navigation**
 - Unit 3 **Basic Concepts**
 - Unit 4 **From Requirements Planning to Delivery to the DC**
 - Unit 5 **From Replenishment Planning to Sale in the Store**
 - Unit 6 **From Planning to Distributing the Articles**
 - Unit 7 **From the Vendor to the Store by Cross-Docking**
 - Unit 8 **Analysis and Promotions**
 - Unit 9 **Selling To Customers On The Internet**
 - Unit 10 **Returns to the Distribution Center**
 - Unit 11 **Summary**
-

© SAP AG 2004

Overview Diagram

SAP



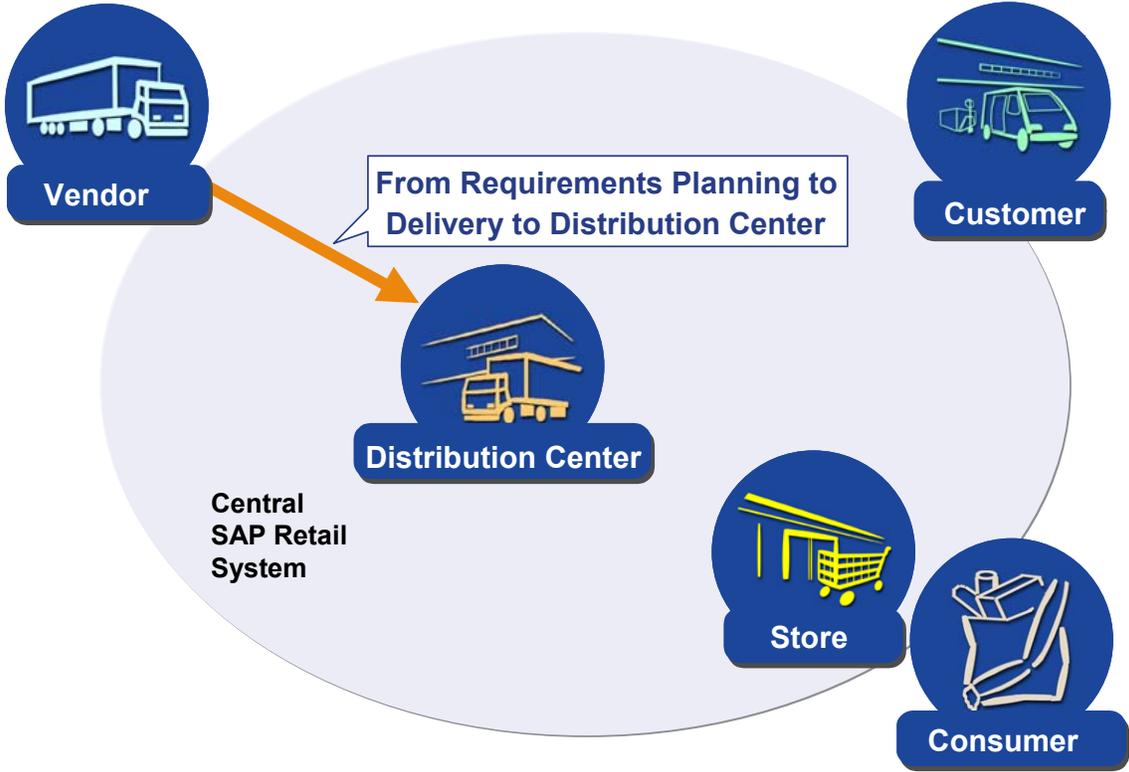
© SAP AG 2003

Internal Use SAP Partner Only

Internal Use SAP Partner Only

Overview Diagram

SAP



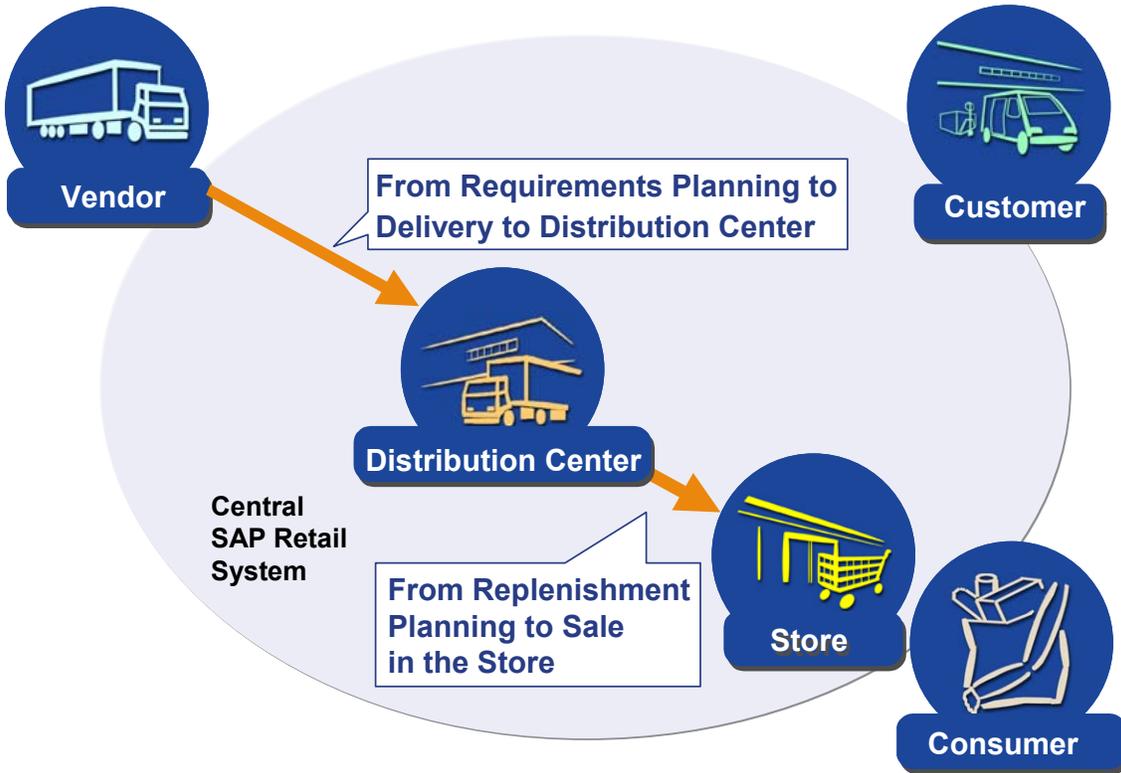
© SAP AG 2003

Internal Use SAP Partner Only

Internal Use SAP Partner Only

Overview Diagram

SAP



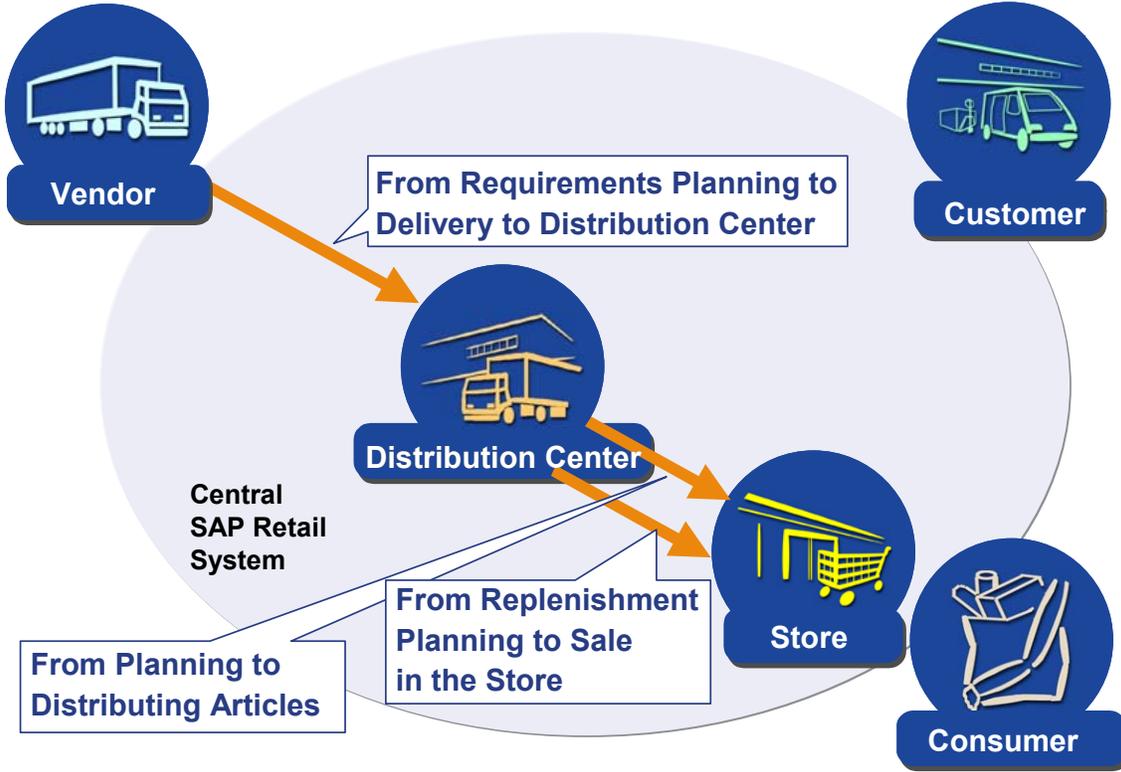
© SAP AG 2003

Internal Use SAP Partner Only

Internal Use SAP Partner Only

Overview Diagram

SAP



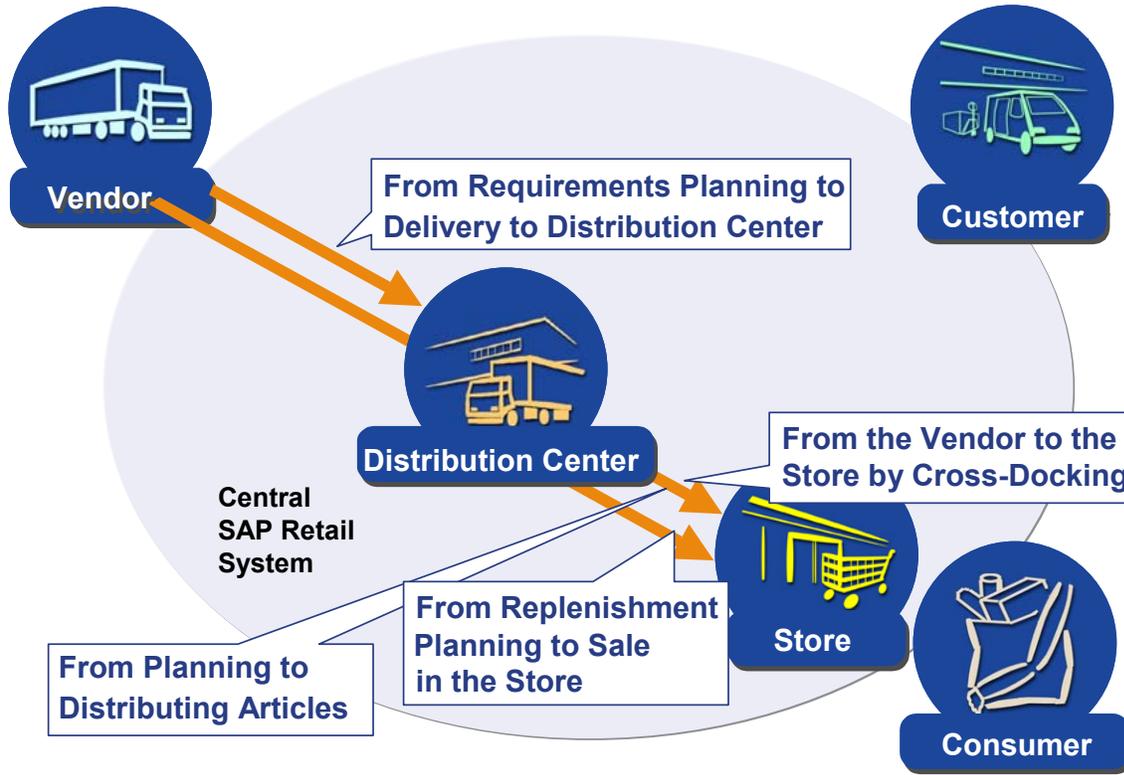
© SAP AG 2003

Internal Use SAP Partner Only

Internal Use SAP Partner Only

Overview Diagram

SAP



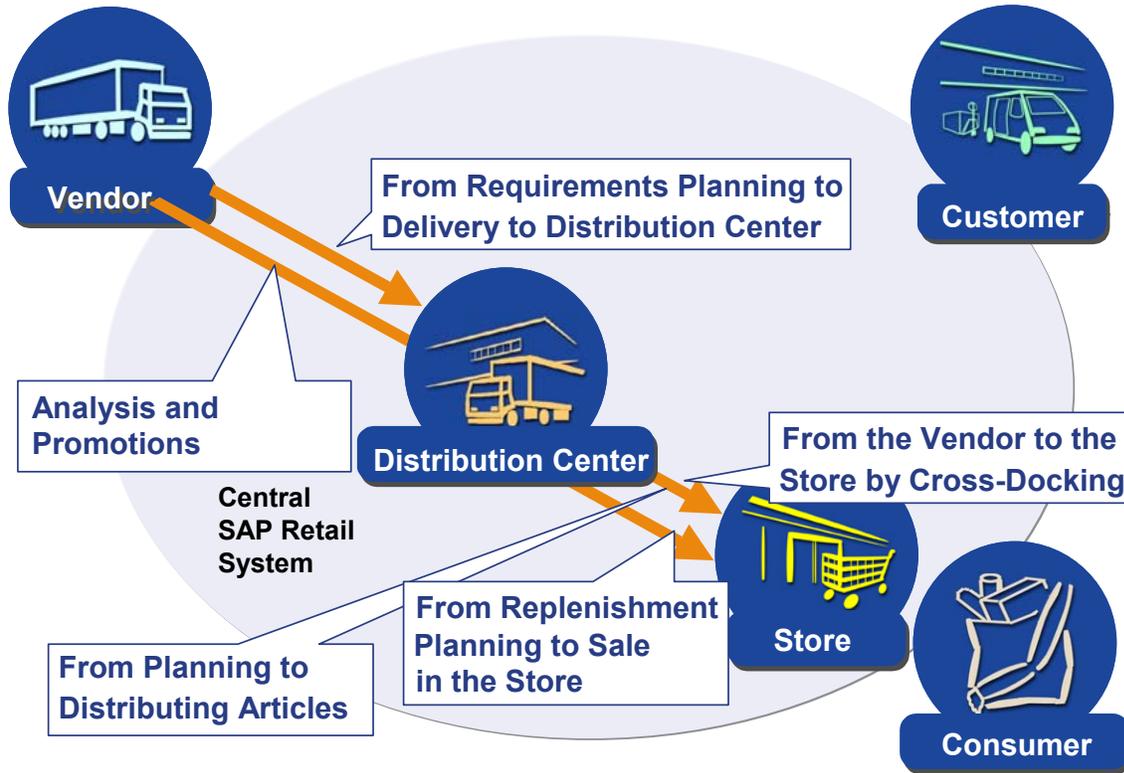
© SAP AG 2003

Internal Use SAP Partner Only

Internal Use SAP Partner Only

Overview Diagram

SAP

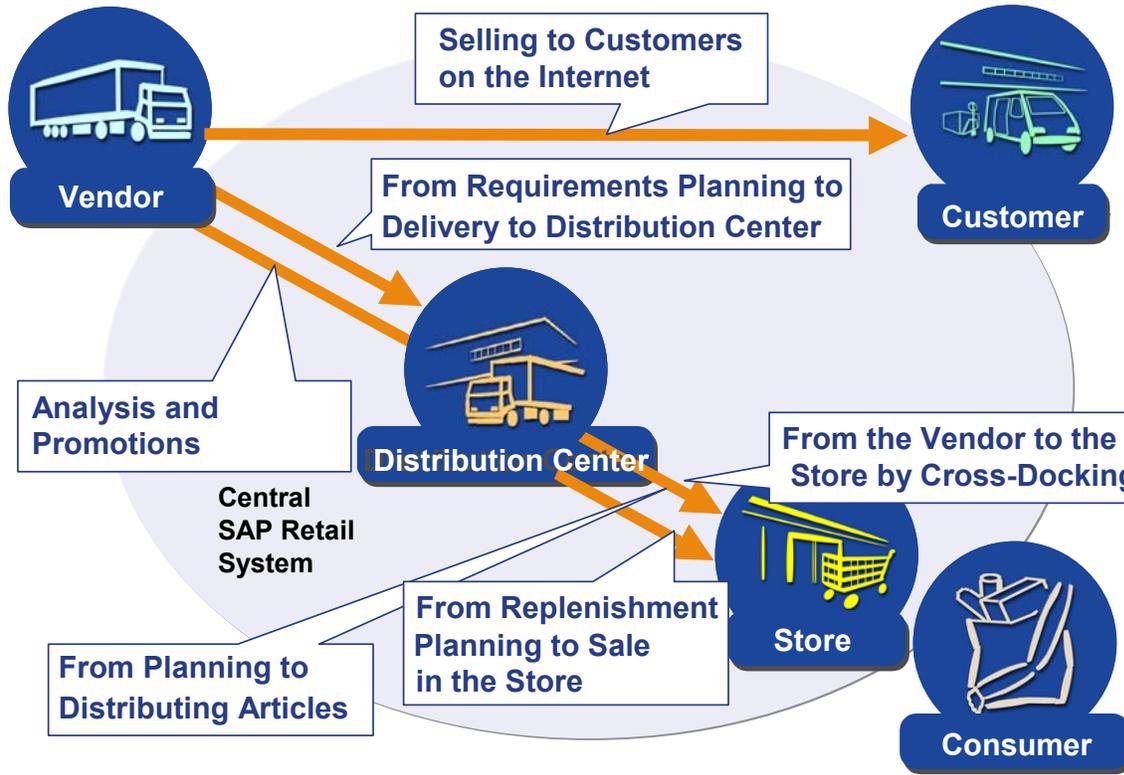


© SAP AG 2003

Internal Use SAP Partner Only

Internal Use SAP Partner Only

Overview Diagram



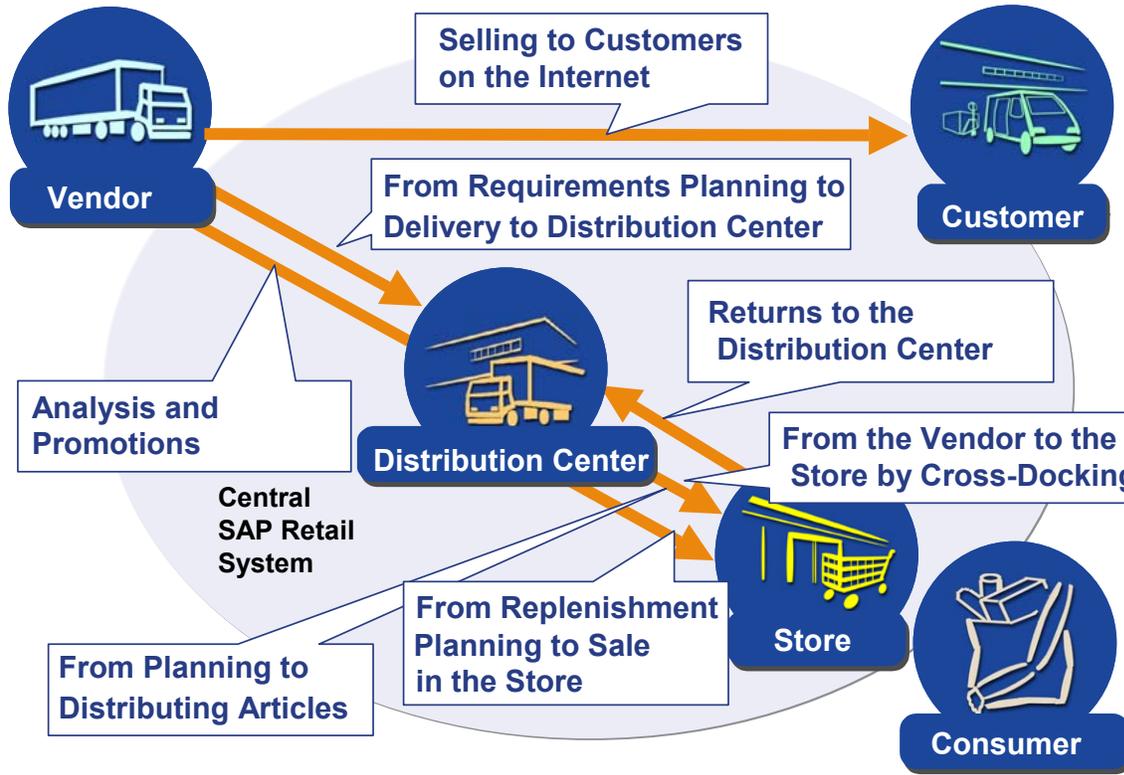
© SAP AG 2003

Internal Use SAP Partner Only

Internal Use SAP Partner Only

Overview Diagram

SAP



© SAP AG 2003

Internal Use SAP Partner Only

Internal Use SAP Partner Only



- **Your enterprise operates as a retailer and as a wholesaler.**
- **Articles are procured for a distribution center, from which they are delivered to individual stores and external customers.**
- **Stores and customers can, however, also receive merchandise directly from the vendor.**

© SAP AG 2003

Contents:

- **Navigation in the system**
- **Help options**
- **User-specific settings**

© SAP AG 2002



At the conclusion of this unit, you will be able to:

- **Identify the elements of a standard window**
- **Navigate in the system**
- **Use the basic help functions**
- **Personalize your user settings**

© SAP AG 2002

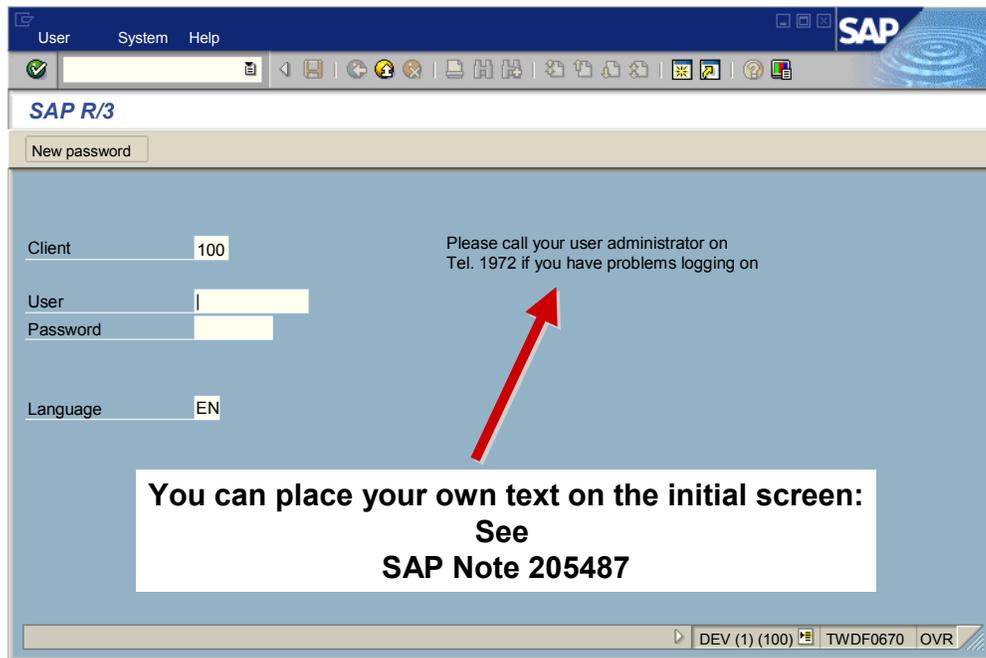


- **New users need to familiarize themselves with the screens in the system and define their personal default settings**

© SAP AG 2002

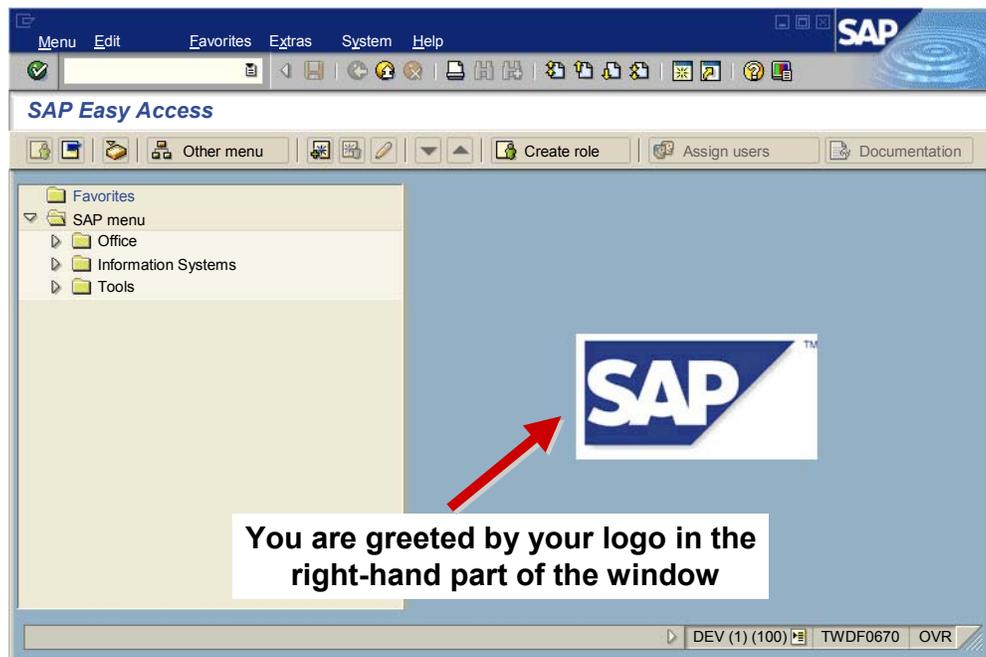
Logging Onto The System

SAP



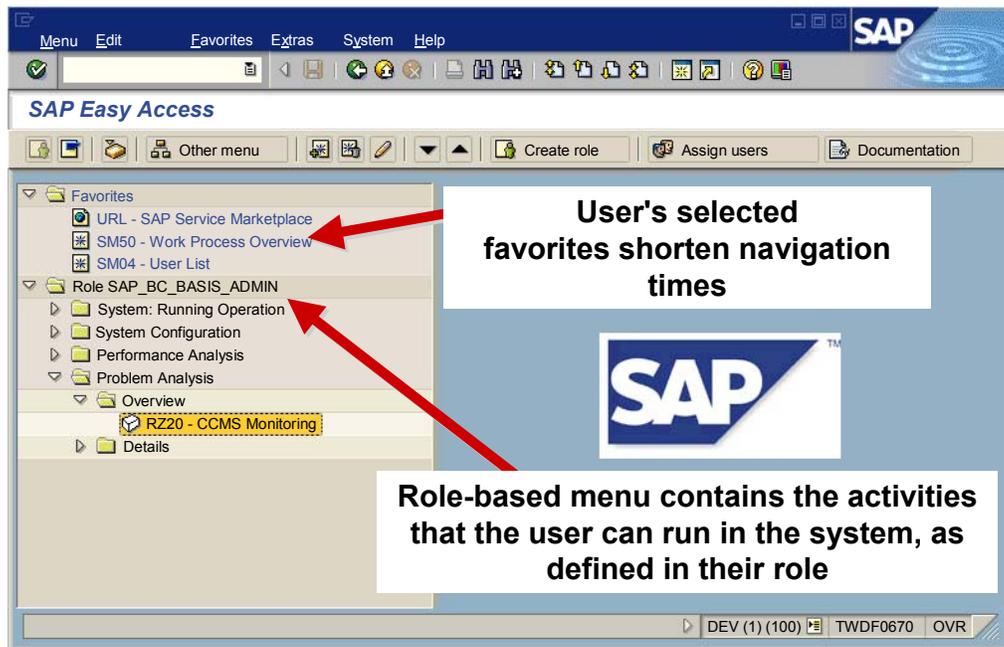
© SAP AG 2002

- SAP R/3 systems are **client systems**. The client concept enables you to run several separate business operations at the same time in one SAP R/3 system. The SAP Business Information Warehouse (BW) and SAP Knowledge Warehouse (KW) components are, however, exceptions to this as only a single client can be used. Each user session only accesses data on the client that you selected when you logged on.
- A **client** is, in organizational terms, an independent unit in the system. Clients have their own data environment and therefore their own user master and transaction data, assigned user master records and chart of accounts and specific Customizing parameters.
- So that you can log onto the SAP R/3 system, you must have a user master record created for you for the corresponding client. For reasons of access protection, you must enter a password when you log onto the SAP System. The system does not display the password that you enter.
- SAP R/3 systems are available in several languages. Use the *Language* input field to select the logon language for each session.
- Multiple logons have been logged in SAP R/3 systems as of Release 4.6. This is for security as well as licensing reasons. A warning message appears if the same user attempts to log on twice or more. This message offers the user three options:
 - Continue with this logon and end any other logons in the system
 - Continue with this logon, without ending any other logons in the system (this will be logged in the system)
 - Terminate this logon
- You can place your own text on the initial screen in a number of ways. For more information, see SAP Note 205487.



© SAP AG 2002

- **SAP Easy Access** is the standard entry screen displayed after logon. You navigate through the system using a tree structure.
- You can include an image on the right-hand side of the screen, for example, your company logo. This image can only be entered system-wide and is a cross-client setting. Assuming you have the appropriate authorization, you can find a detailed description of the necessary settings by choosing *Extras -> Administration Information*. Note that this image is stored in the system and transported to the SAP Front End every time it is called by SAP Easy Access. Although this transfer is compressed, the image for the initial screen should not exceed 20 kB. You can prevent this image being called either by using the setting *Low Speed Connection* in the SAPLogon program (see SAP Note 161053) or by deactivating the calling of the image by choosing *Extras -> Settings*. For more information, see the slide "User-Specific Personalization".

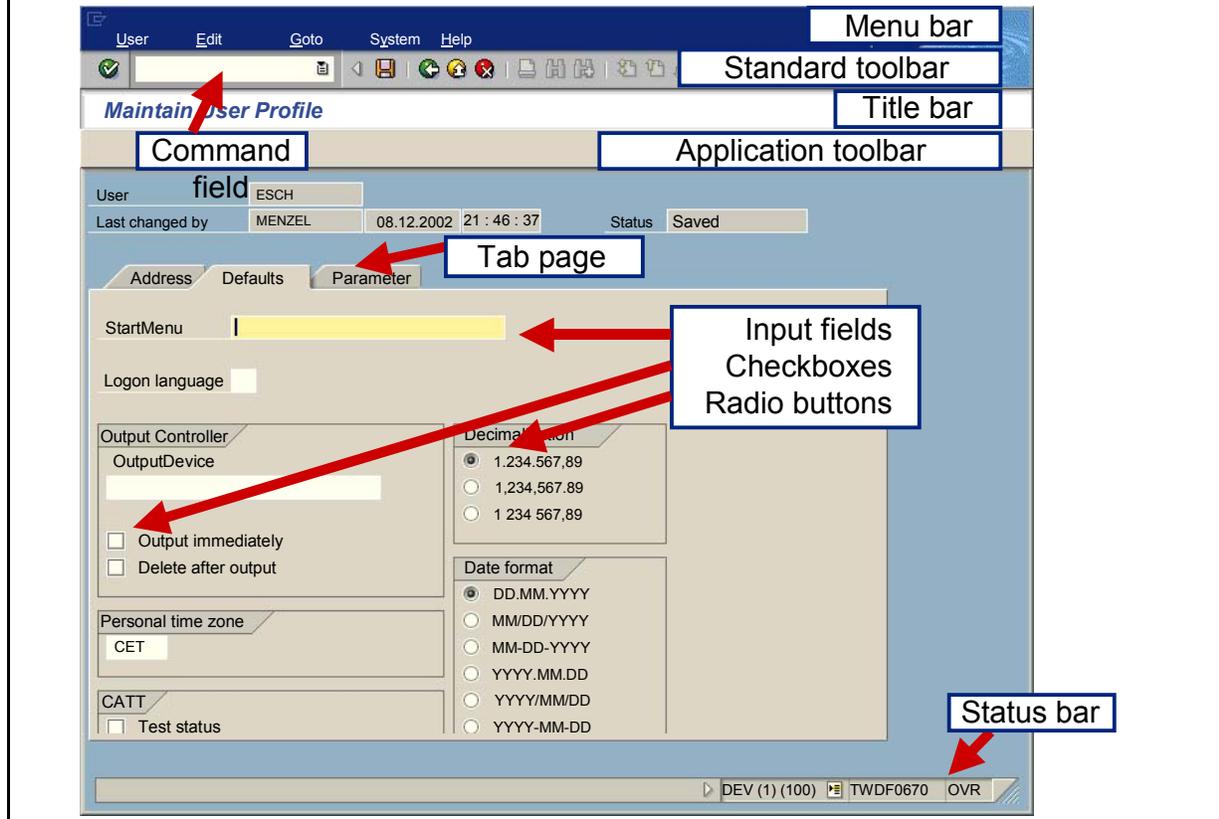


© SAP AG 2002

- A **role** describes a suitably defined number of activities in the system. These represent the range of functions users typically need for their work.
- **User roles** have to be set up using the Profile Generator so that SAP R/3 system users can work with **user-specific** or **position-related** menus.
- The authorizations for the activities listed in the menus are also assigned to the users using user roles. Predefined user roles from all application areas are included in the standard system.
- Users who have been assigned a user role can choose between the user menu and the SAP standard menu.
- You can find the roles that are supplied in the standard SAP R/3 system by choosing *Other menu* on the *SAP Easy Access* initial screen.
- Every user can personalize the initial screen using *Favorites*. You can create your own **Favorites list** containing the transactions, reports, files and Web addresses that you use most often.
- You can add favorites either by choosing *Favorites* or by using the mouse to "drag & drop" items into the *Favorites* directory.

Elements of the Screen Layout

SAP

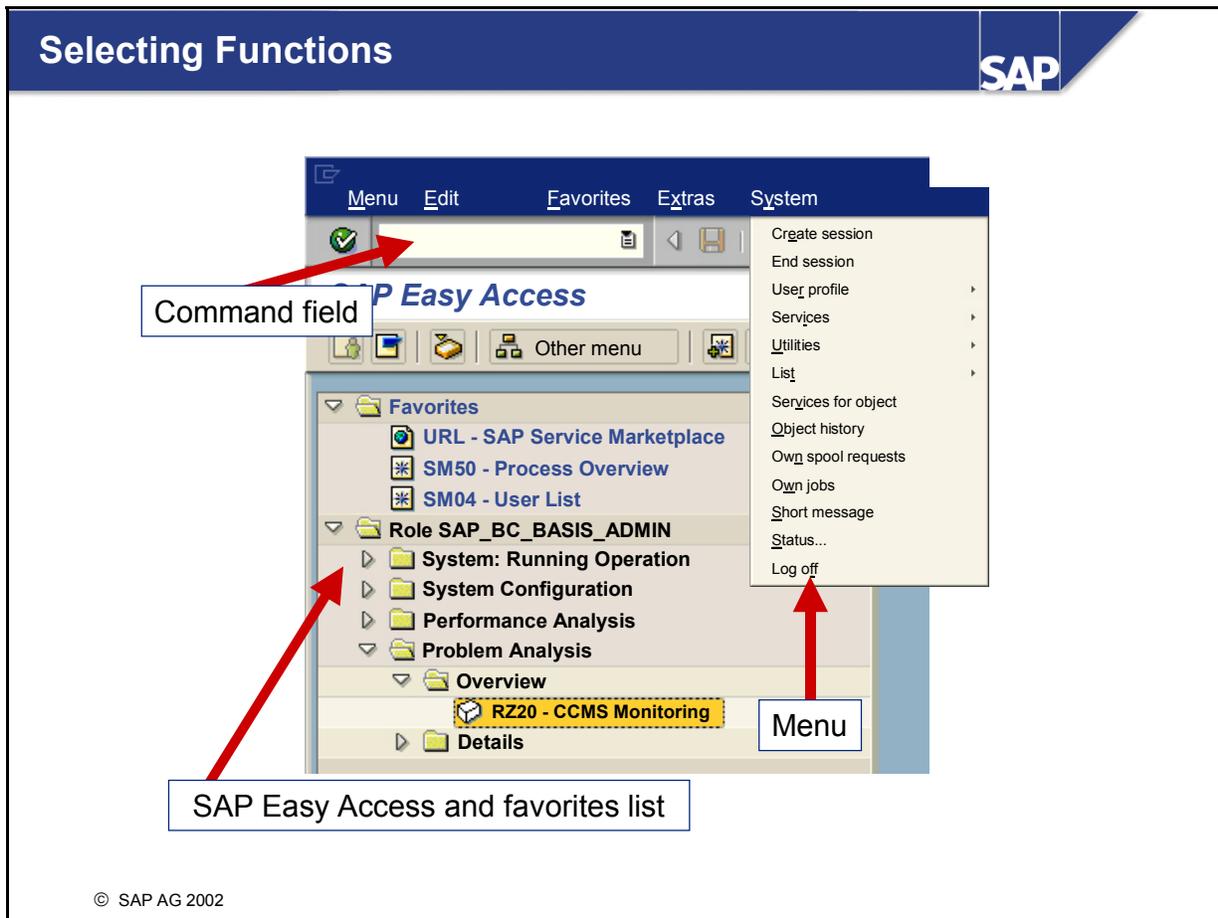


- **Command field:** Use the command field (hidden as default) to go to applications directly by entering the transaction code. You can find the transaction code for an application in the *SAP Easy Access* menu (see *User-Specific Personalization*) or in the appropriate application by choosing *System* → *Status*.
- **Standard toolbar:** The pushbuttons in the standard tool bar are found on every screen in an SAP R/3 system. Any pushbuttons that cannot be used in a particular application are grayed out. If you place your cursor on a pushbutton for a while, the system displays a quick info text that explains the pushbutton's function. The appropriate function key setting is also displayed here. The **application toolbar** shows you which functions are available in the current application.
- **Checkboxes:** Checkboxes enable you to select several options simultaneously within a group.
- **Radio buttons:** allow you to choose exactly one item from a selection.
- A **tab page** provides a clearer overview of several information screens.
- **Status bar:** The status bar displays information on the current system status, for example, warning or error messages.

Other elements are:

Menu bar: The menus shown here depend on which application you are working in. These menus contain cascading menu options.

Title bar: The title bar displays the functions that are available for the user.

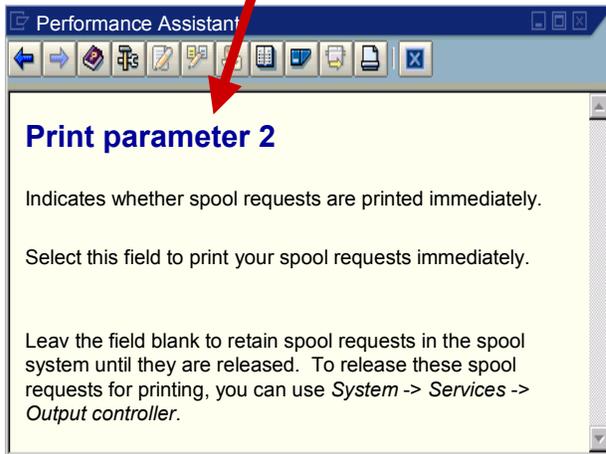
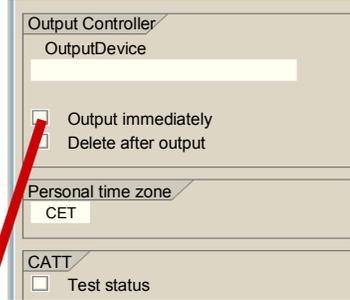


© SAP AG 2002

- You can call functions in the system as follows:
 - Using the mouse by selecting a
 - menu option
 - Favorites
 - Entry in the SAP Easy Access menu
 - Using the keyboard (Alt + the underlined letter in the appropriate menu option)
 - By entering a transaction code in the **command field**: A transaction code is assigned to each function (but not every screen) in SAP R/3 systems. You call display the appropriate transaction code from each screen in the system, for example, to display the customer master data, enter **/n** and then the appropriate transaction code - **/nsu3**. You can determine the transaction code by choosing *System -> Status*. Additional input options:
 - "/n" ends the current transaction
 - "/i" deletes the current session
 - "/osm04" opens a new session and branches to the transaction specified (SM04.)
- The command field can also be called using keyboard commands. To do this, use the keyboard combinations Strg+Tab and the cursor moves from the current input field to the next input field. Use Tab to move within an input field group.
- By entering "**search_sap_menu**" in the command field, you can display menu paths for the desired SAP transactions. You can also search for text strings.

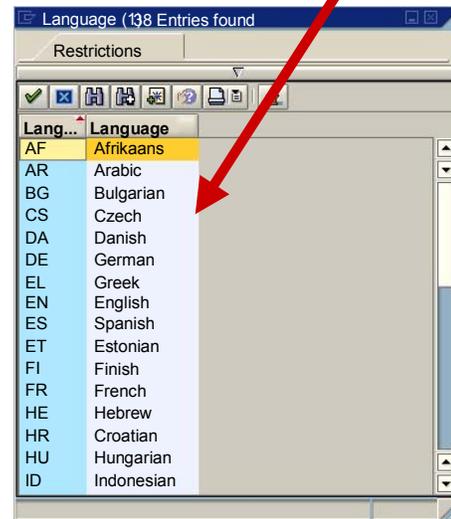
F1 Help

Displays the meaning of fields and technical information



F4 Help

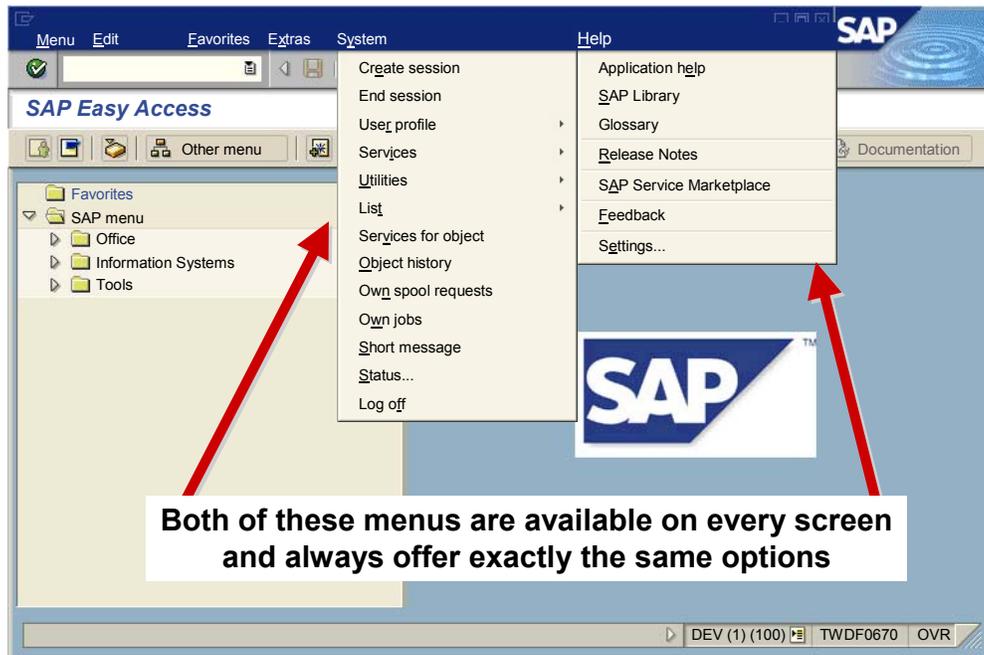
Displays possible entries



- Use **F1** to display an explanation of fields, menus, functions and messages.
- F1 Help also provides technical information on the relevant field. This includes, for example, the parameter ID which you can use to assign values for your user to input fields, which have to refer to these parameter IDs.
- Use **F4** to display possible input values. You can also access F4 help for a selected field using the button immediately to the right of that field.
- If input fields are marked with a checkmark icon, then you can only continue in that application by entering a permitted value. You can identify many fields in an application as either required entry fields or optional entry fields by using transaction variants, screen variants or Customizing settings.

Menus: System and Help

SAP



© SAP AG 2002

■ The *System menu* contains the following options:

- Create/End session: Allows you to create and end sessions. The maximum number of sessions can be set (between two and six) by the system administrator using the parameter `rdisp/max_alt_modes`.
- User profile: This is where you can enter user-specific settings. For example, you can use parameter IDs in *Own Data*, in order to set default values for specific user-dependent fields in the system (for example, the company code field.)
- List: Contains important list functions, such as searching for character strings, saving in PC fields, printing and so on.
- Status: Enables you to display important user and system data.
- Log off: Ends the SAP session (with a confirmation prompt.)

■ The *Help menu* contains the following options:

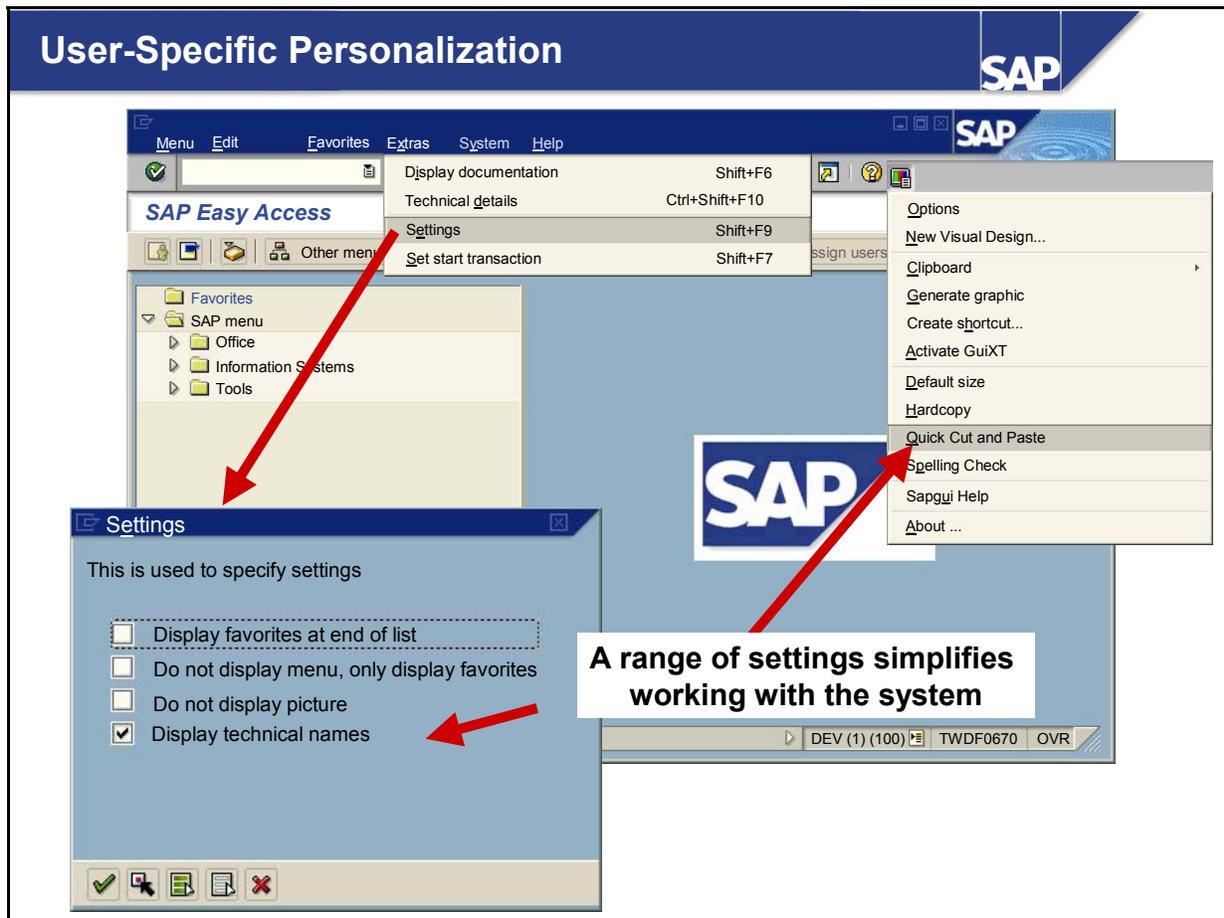
- Context-sensitive *Application Help*
- Access to *SAP Library* (see next page)
- A *glossary*



- SAP R/3 systems provide comprehensive online help. You can display this help from every screen in the system by choosing *Help*. Alternatively, you can use the relevant icon (the yellow question mark) to display the documentation.
- You can access the SAP Library quickly and comfortably by using the *SAP Service Marketplace*. There you can find the SAP Help Portal under *Knowledge and Training*. Here you can access the Help documentation in HTML format and perform efficient full-text searches in the SAP Library. If you have the SAP Library installed, you can also take advantage of these options within your own company.
- You can access the SAP Help Portal at <http://help.sap.com>.

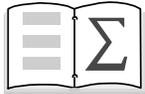
User-Specific Personalization

SAP



A range of settings simplifies working with the system

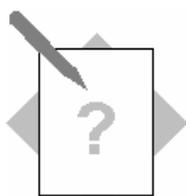
- The end user has many possibilities for personalizing the system. Some are described below:
 - You can alter the layout of your initial screen by selecting *Extras* → *Settings*, for example, by switching off the image in the right-hand part of the window to display the technical names (transaction codes) in the SAP Easy Access menu.
 - Under *Customizing of local layout*, you can activate the *Quick Cut and Paste* function. Under *Options...* you can influence the reaction time of the quick info that is displayed when you move your mouse over an icon or pushbutton.
 - By selecting *System* → *User profile* → *Own data* you can define your personal default values. When doing so, you can choose between the tab pages *Address*, *Defaults* and *Parameters*. As an example, the setting of *Parameters* is explained here:
 - Parameters: Here you can set defaults for frequently used input fields. In order to be able to set a default value for a field, it must have been assigned a parameter ID first.
Procedure for finding the parameter ID: Goto the field for which you wish to set a default value. Select F1 Help and then choose *Technical Info*. The system displays an information window that contains the relevant parameter ID under the heading *Field Data* (as long as the field has been assigned a parameter ID.)



You are now able to:

- **Identify the elements of a standard window**
- **Navigate in the system**
- **Use the basic help functions**
- **Personalize your user settings**

© SAP AG 2002



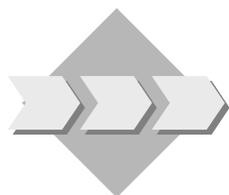
Unit: Navigation

Topic: Navigating in SAP Retail



After completing this exercise you will be able to:

- Navigate in the SAP Retail menu and make your own system settings.



You use SAP Retail as a retailing system in your company. You will now familiarize yourself with the system and make some basic settings.

- 1-1 You want to use the SAP Easy Access menu for SAP Retail as your initial screen. This menu will appear automatically every time you log on to your system in the future.
- 1-1-1 To make this setting, go to *Maintain User Profile* by choosing **System** → **User profile** → **Own data**. Select the *Defaults* tab page and enter transaction **W10T** as your start menu. Save your data.
- 1-1-2 Make sure that **SAP Easy Access** SAP Retail. now appears when you log on to the system.
- 1-2 Values for the most frequently used organizational structures can be proposed as default values in the application transactions if you enter these in the user parameters.
- 1-2-1 To make these settings, choose **System** → **User profile** → **Own data** to get to the *Maintain User Profile* screen. Select the tab page *Parameters*. In the *Parameters* column, select F4 Help. In *Restrictions*, select the long, thin box containing the gray triangle. In the *Short text* field, you can enter your data.
- 1-2-2 In this client you usually work with *company code* **R300**, *purchasing organization* **R300**, and belong to *purchasing group* **R30**. You normally work in the distribution chain self-service department store, consisting of: *Sales organization* **R300**, *distribution channel* **R1** and *division* **R1**.
- Use F4 Help to determine the keys for the following parameters. Make sure you spell them correctly.

- Company code: _____
- Purchasing organization: _____

- Purchasing group: _____

Internal Use SAP Partner Only

Internal Use SAP Partner Only

Use the following keys also:

- Sales organization: **VKO**
- Distribution channel: **VTW**
- Division: **SPA**

Enter the keys as parameter IDs and their values as parameter values and then save your settings.

Ensure that you enter the parameter values in upper case.

1-3 Create a new session.

1-3-1 How do you create a new session?

1-3-2 How do you delete the session you just created?



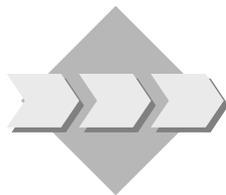
Unit: Navigation

Topic: Creating Favorites



After completing this exercise you will be able to:

- Create folders, place them in a tree structure and assign favorites
- Create and set up menu paths and their transaction codes in a folder, depending on the responsibilities you have in your company



You use SAP Retail as a retailing system in your company. You will now familiarize yourself with the system and make some basic settings.

2-1 You want to define and create a tree structure within your favorites. In later exercises you will require a URL, which we will now add to your favorites as a folder.

2-1-1 Insert a new folder under the ***Favorites*** node. To do so, right-click with your mouse and select *Insert folder*. Call your new folder ***Unit 7 – SAP Retail Store***.

2-1-2 Assign an ‘other object’ to this folder. Again, use the right-hand mouse button to do so. Choose *Web address or file* and make the following entries:

Text: SAP Retail Store
Web address: <http://igttr- <client> wdf.sap.corp:1080/sap/ist/homepages/sapstore.htm>

2-2 You also decide to add another folder to your Favorites to be responsible for the most important master data, so that you can access this at any time.

2-2-1 Create a new folder called ***Master Data***. Right-click with your mouse and insert transaction MM42. What is the description for this transaction?

You are not completely satisfied with the current name of the transaction in your favorites and decide you want to change it. To do so, right-click with your mouse on the *Change Favorites* function. Overwrite the existing name with *Retail Article Master Data*.

2-3 You can set up more new folders for other important transactions in the same way. To avoid having to search for all the menu paths in the SAP Easy Access menu and then adding them to your new folder using Drag & Drop, you can add the transactions **directly** and change their names as required.

2-3-1 Select your new folder, for example, Requirements Planning, Purchase Order, and insert the following transactions using the right mouse button:

| Transaction | Description |
|--------------------|-------------------------------|
| MDW1 | Access RP control program |
| ME59 | Automatic Generation of POs |
| ME21N | Create purchase order |
| WLB5 | Combine POs in a logical load |
| ME23N | Display purchase order |



Unit: Navigation

Topic: Navigating in SAP Retail

1-1 To configure SAP Retail as your initial screen:

1-1-1 **System** → **User profile** → **Own data** (a new session is opened).

Select tab page *Defaults*, field *StartMenu*: **W10T**

User → *Save*

1-1-2 **SAP menu** → **Logistics** → **Retailing**

1-2 To maintain user defaults:

1-2-1 **System** → **User profile** → **Own data**,
select *Parameters* tab page.

1-2-2 In the *Parameter ID* column, select F4 Help. In *Restrictions*, select the long, thin box containing the gray triangle. Delete the value in the *Maximum no. of hits* field and start your search by entering data in the short text field. Make sure you spell your entries correctly.

You can sort the columns alphabetically by clicking on the column headers on the selection screen that appears. Alternatively, you can search for data using the *Display* button.

- Company code: **BUK**

- Purchasing organization: **EKO**

- Purchasing group: **EKG**

Ensure that you enter the parameter values/letters in upper case.

User → *Save*

1-3 To create a new session:

1-3-1 **System** → **Create session**

1-3-2 **System** → **End session**



Unit: Navigation

Topic: Creating Favorites

2-1 You want to define and create a tree structure within your favorites. In later exercises you will require a URL, which we will now add to your favorites as a folder.

2-1-1 Insert a new folder under the **Favorites** node. Click *Favorites* with the right mouse button and choose *Insert folder*. Call your new folder **Unit 7 – SAP Retail Store**. Again, click the right mouse button and choose *Change favorite*.

2-1-2 Assign an ‘other object’ to this folder using the secondary mouse button. Choose *Web address or file* and make the following entries:

Text: SAP Retail Store
Web address: <http://igttr- <client> wdf.sap.corp:1080/sap/ist/homepages/sapstore.htm>

2-2 You also decide to add another folder to your favorites to be responsible for the most important master data, so that you can access this at any time.

2-2-1 Create a new folder called **Master Data**. Right-click with your mouse and insert transaction MM42. What is the description for this transaction?

MM42 – Change Article &

You are not completely satisfied with the current name of the transaction in your favorites and decide you want to change it. To do so, right-click with your mouse on the *Change Favorites* function. Overwrite *Change Article &* with *Retail Article Master Data*.

2-3 You can set up more new folders for other important transactions in the same way. To avoid having to search for all the menu paths in the SAP Easy Access menu and then adding them to your new folder using Drag & Drop, you can add the transactions **directly** and change their names as required.

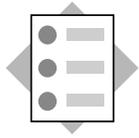
2-3-1 Select your new folder, for example, Requirements Planning, Purchase Order, and insert the following transactions by using the right mouse button and choosing *Insert transaction*:

| Transaction | Description |
|--------------------|-------------------------------|
| MDW1 | Access RP control program |
| ME59 | Automatic Generation of POs |
| ME21N | Create purchase order |
| WLB5 | Combine POs in a logical load |
| ME23N | Display purchase order |

Contents:

- **Organizational structures for SAP Retail**
- **Sites**
- **Customers**
- **Vendors**
- **Merchandise categories**
- **Articles**
- **Assortment management/listing**
- **Assortment list**
- **Summary**

© SAP AG 2004



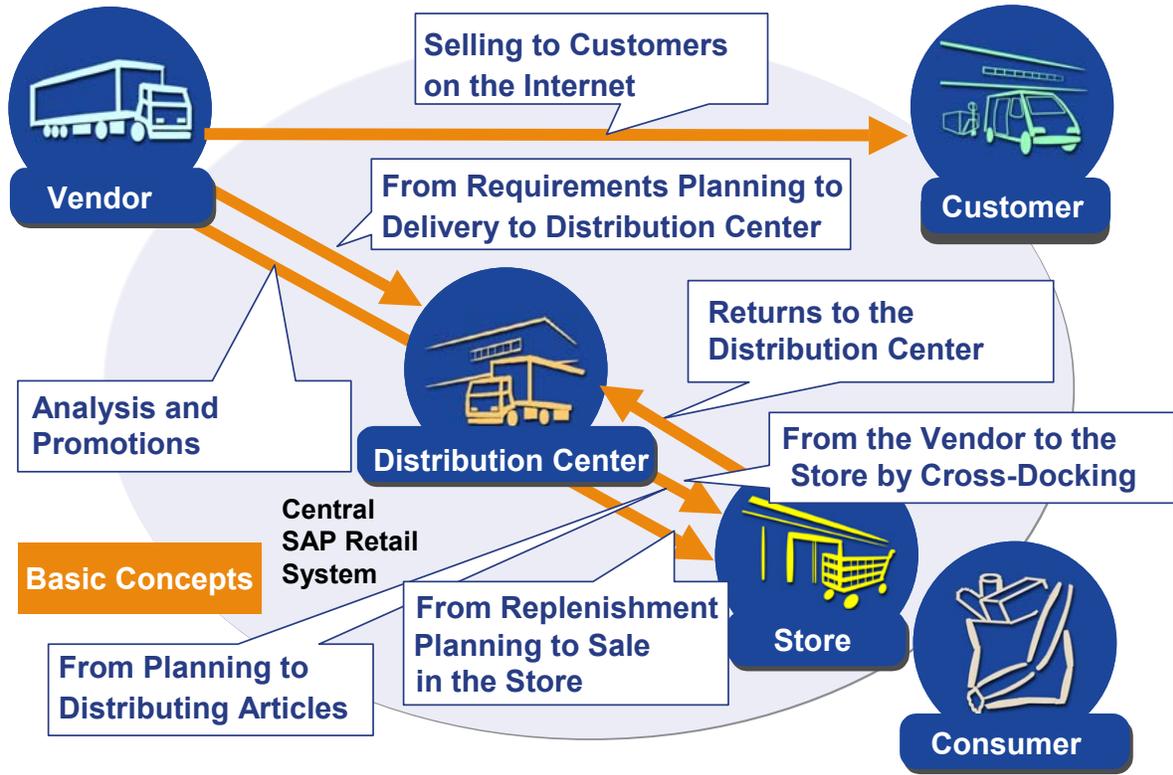
At the conclusion of this unit, you will be able to:

- **Name the main organizational structures in SAP Retail**
- **Name the main differences between a distribution center and a store**
- **Describe how the article master is structured in SAP Retail**

© SAP AG 2004

Overview Diagram

SAP



© SAP AG 2004

Internal Use SAP Partner Only

Internal Use SAP Partner Only

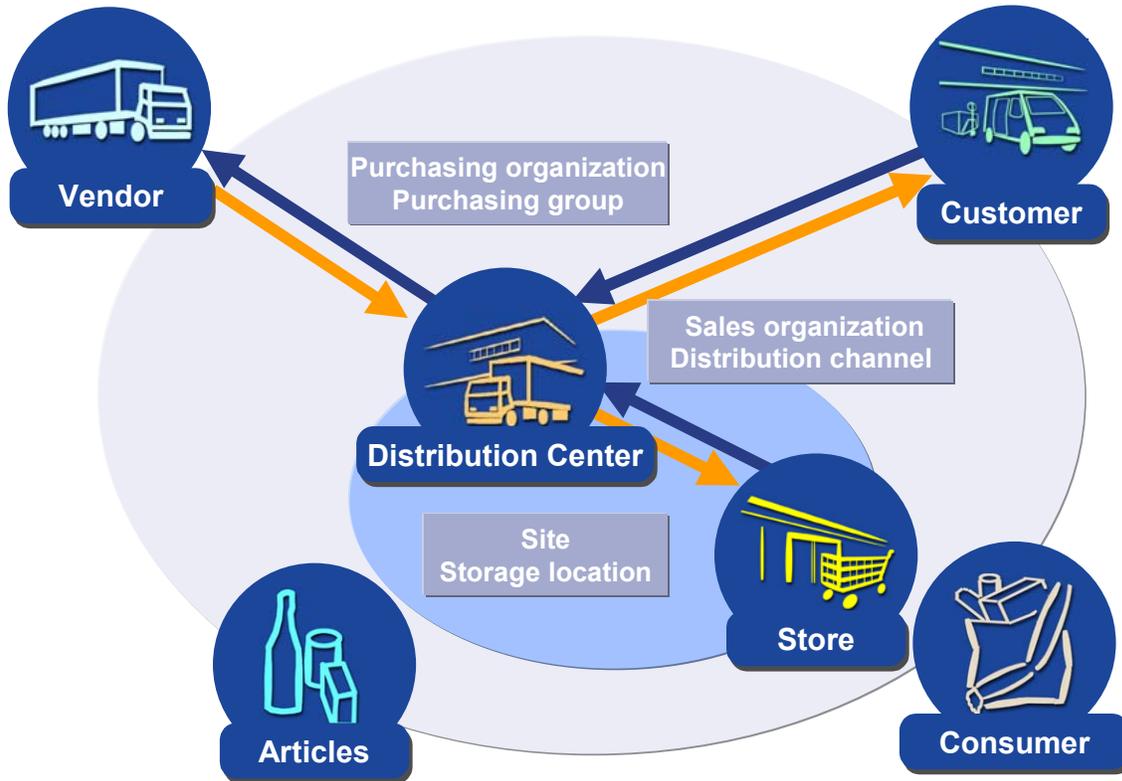


- You want to implement SAP Retail in your enterprise.
- First, you familiarize yourself with the retailing terminology used by SAP.

© SAP AG 2004

Basic Concepts: Overview

SAP



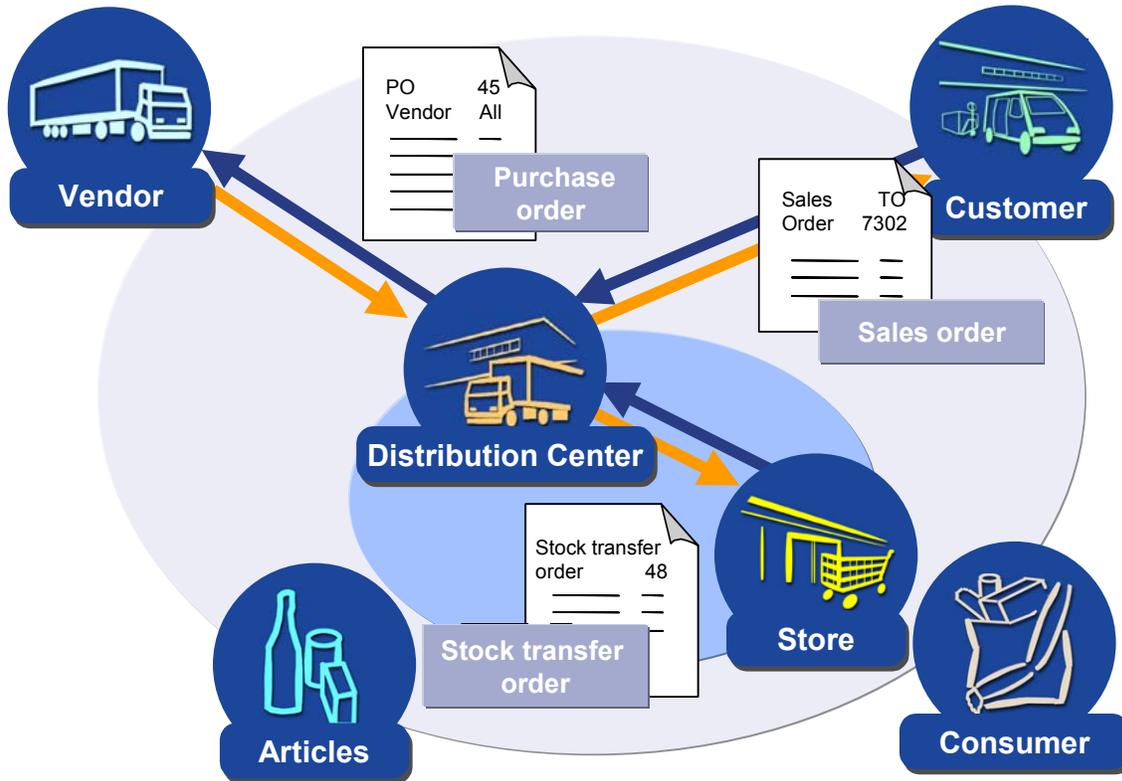
© SAP AG 2004

Internal Use SAP Partner Only

Internal Use SAP Partner Only

Overview: Documents in the System

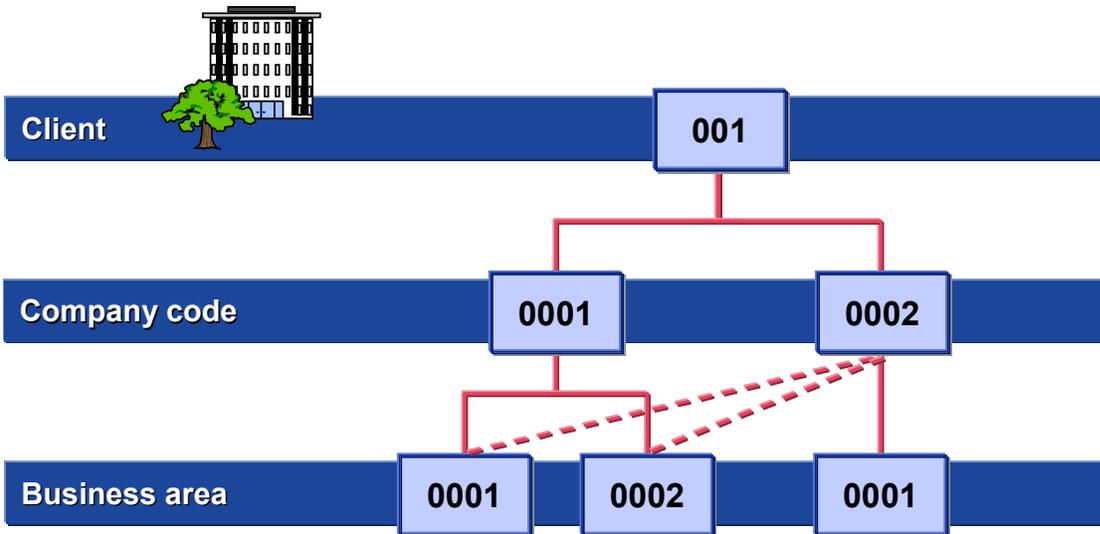
SAP



© SAP AG 2004

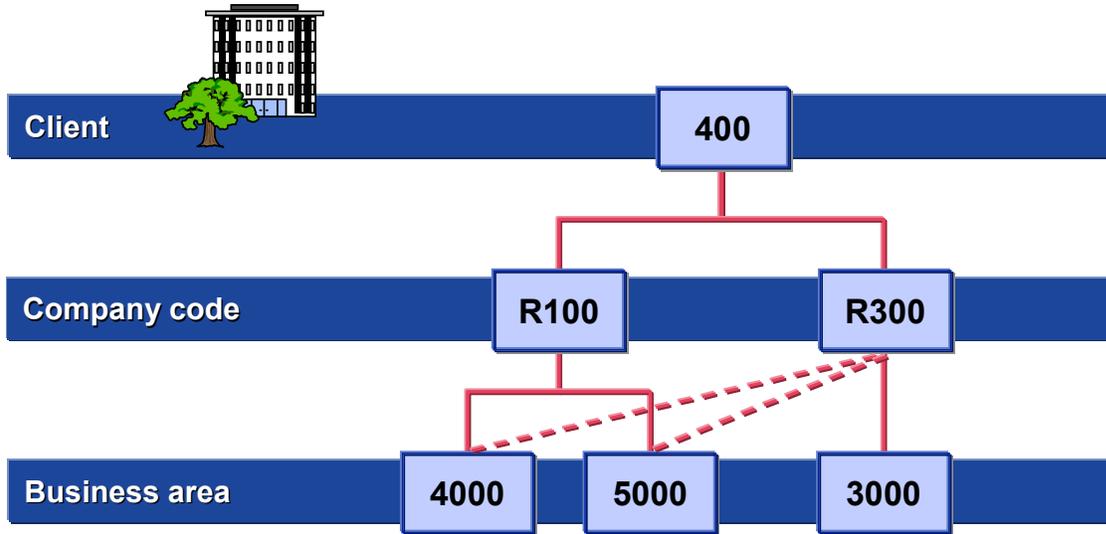
Internal Use SAP Partner Only

Internal Use SAP Partner Only

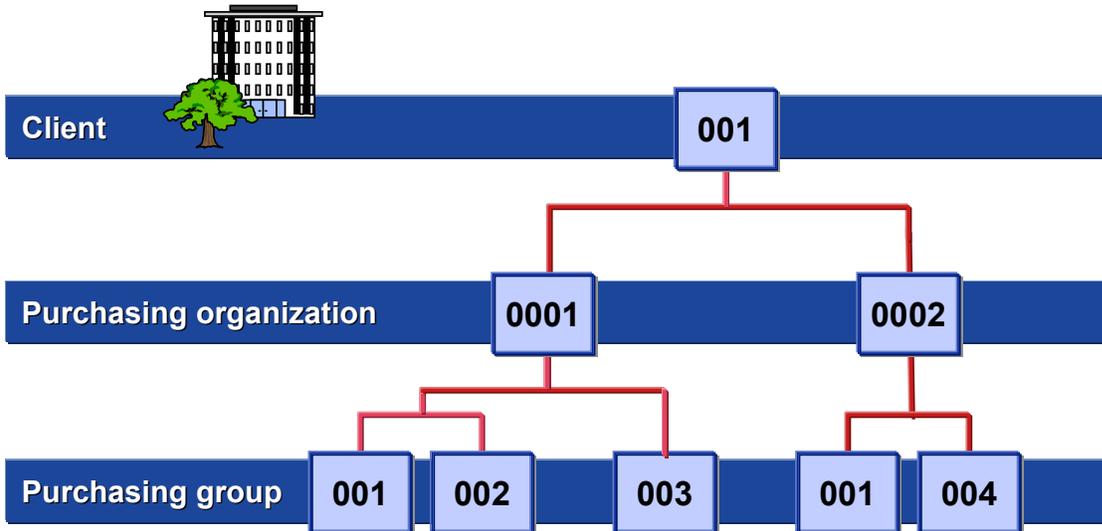


© SAP AG 2004

- Organizational structures are used to:
 - Map complex enterprise structures in a flexible way in the system
 - Map the individual parts of an enterprise (for example, Purchasing, Sales)
 - Ensure that all independent parts of the enterprise are integrated by linking the organizational elements.
- A **client** corresponds to a corporate group, which often comprises subsidiaries.
- A **company code** is an independent organizational unit that exists for the purposes of accounting and which balances accounts in accordance with legal requirements. It can be divided into **business areas**. This allows all transaction figures and financial statistics (for example, P&L) to be managed and analyzed according to business area.
- Business areas enable you to map accounting levels, such as the site or sales organization, according to business considerations. A site and a sales organization can each be assigned to a business area. This ensures that each business area can be used by each company code. The division in the standard system should not be used in Retail.
- In a centralized organization, one single chart of accounts is created at corporate group level; this is valid for all company codes. In a decentralized organization, charts of accounts are drawn up at company code level.
- Every transaction that affects the results of analysis leads to the creation of a Financial Accounting document; this document shows the G/L accounts posted to and the details of the posting.

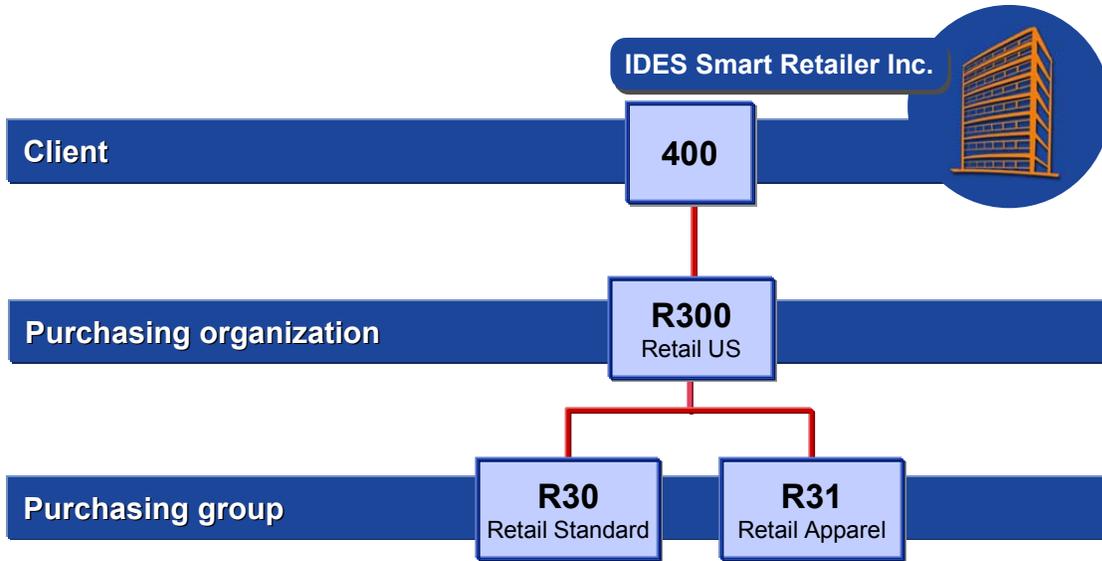


© SAP AG 2004

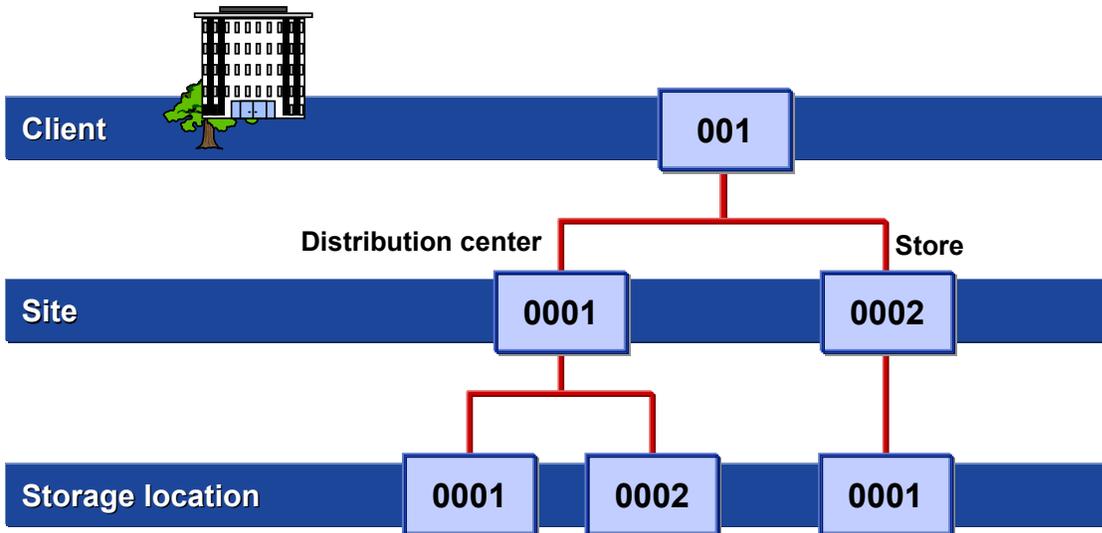


© SAP AG 2004

- A **purchasing organization** procures merchandise for stores and negotiates purchase price conditions with vendors. This is the business unit legally responsible for all purchasing activities and acts as a data retention level for master data.
- A **purchasing group** is similar to a purchasing department in that it consists of one or more buyers. Purchasing groups are responsible for maintaining master data and control data, and for local purchasing operations. A purchasing group is a data retention level.

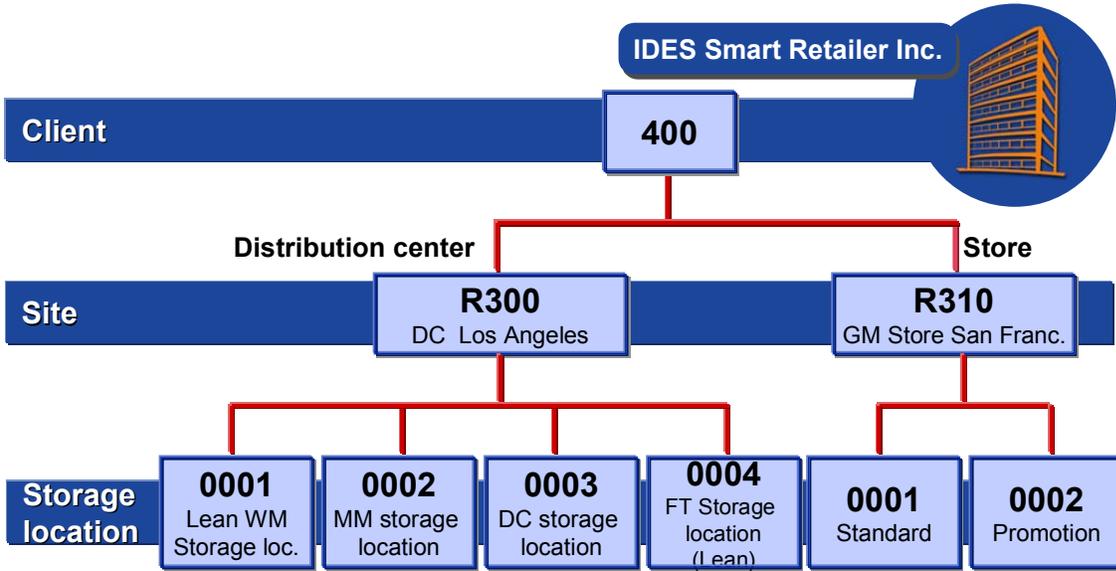


© SAP AG 2004



© SAP AG 2004

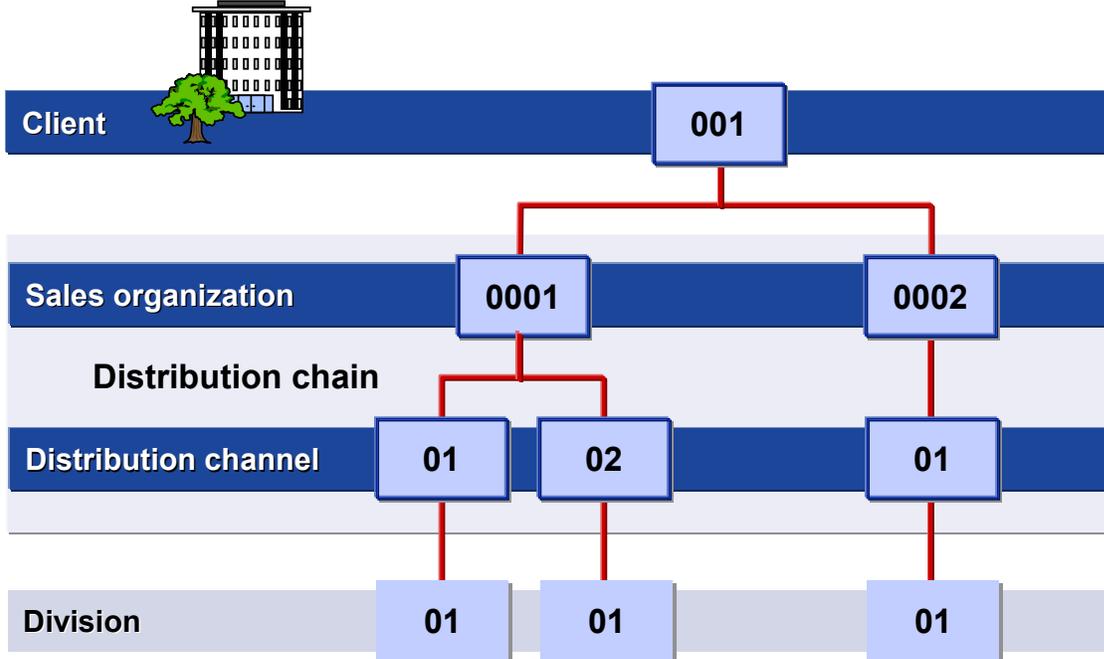
- Article stocks are managed on a quantity basis in the system to keep track of merchandise in your company. Stocks are managed for each individual site and storage location.
- A **site** can be a store, a distribution center or a production location.
- A **storage location** is a stock-keeping unit with its own inventory management. The stocks located in a site can be managed separately in different storage locations.
- A **distribution center** is usually subdivided into more than once storage location to distinguish between physical locations (for example, between internal and external storage areas) and to allow separate inventory management for each storage location.
- One storage location is normally assigned to a single **store**.
- It is possible to define expiration dates for an article and to activate a check for these dates in inventory management at site level.



© SAP AG 2004

Internal Use SAP Partner Only

Internal Use SAP Partner Only



© SAP AG 2004

- A **distribution chain** is the combination of a particular sales organization and distribution channel.
- A **sales organization** is legally responsible for sales in your company and is therefore responsible for product liability and any recourse claims from customers.
Sales organizations allow you to divide your market into regions. Sales transactions are always processed within a sales organization.
- In order to best serve individual markets, your sales and distribution department has the option of defining **distribution channels**. Possible distribution channels for sales to the consumer include chains of stores, wholesale outlets, or mail order.
Distribution channels are assigned to sales organizations.
- **Divisions** are not used as organizational levels in SAP Retail.

Sales at IDES Smart Retailer Inc.



IDES Smart Retailer Inc.



Client

400

Sales organization

R300

Distribution chain

Distribution channel

R1

Dept. store

R2

Super-market

R3

Fashion

R4

Online Store

R5

Distribution

R6

Wholesale

Division

R1

R1

R1

R1

R1

R1

© SAP AG 2004

Internal Use SAP Partner Only

Internal Use SAP Partner Only



| Departments | Merch. Categories | Merchant ID | Supplying Sites | Customer |
|-------------------------|-------------------|----------------------------|-----------------|----------|
| Organization | Address | Valuation/Inv. Mgmt | Planning | |
| Company Code | | R300 | | |
| Purchasing organization | | R300 | | |
| Sales organization | | R300 | | |
| Distribution channel | | R5 | | |
| Purch. org. - site | | Distribution chains - site | | |



Distribution Center

Vendor
Different storage locations
POS

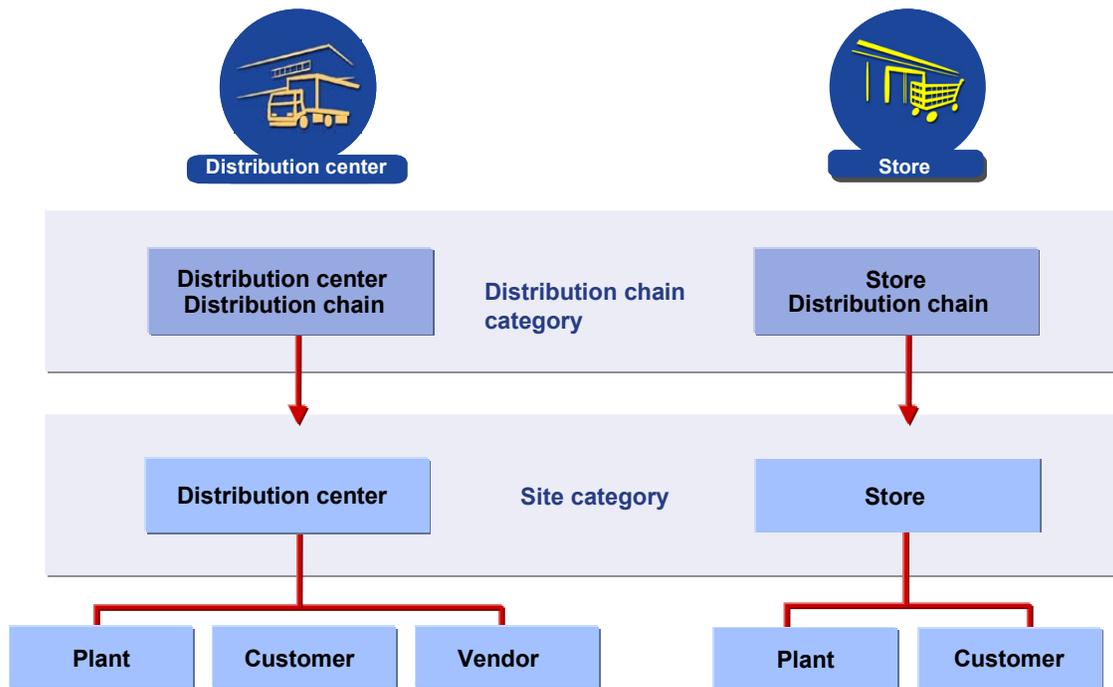


Store

Departments
Receiving points
Supplying sites
POS
Layout

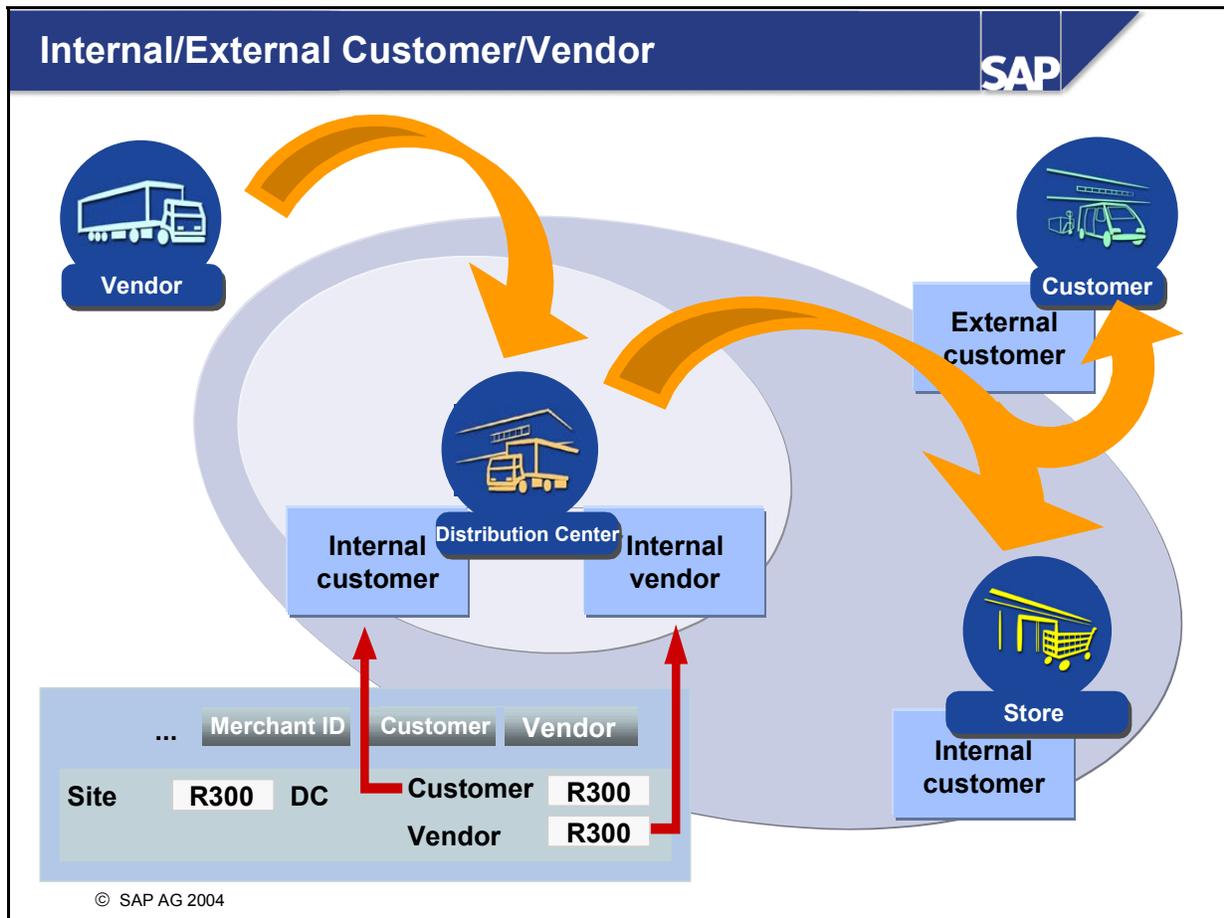
© SAP AG 2004

- A **site** is an organizational unit. Sites are used to manage inventory at storage location level and to map the relevant business processes such as goods receipts, physical inventory and goods issues.
- As a **site** (DC or store) is also a **customer** in your system, all the functions that normal customers can use are also available for sites. You can choose for some functions not to be displayed. You do this in the site profile, which is a Customizing function.
- Distribution centers can have more than one storage location. Storage locations represent a link to the Warehouse Management System. One storage location is assigned to a each **store** to enable inventory management.
- A store can be subdivided into **departments**, depending on the business aspects that are relevant for the store.
Departments can be assigned to a **receiving point**. One staging point can be assigned to each receiving point.
- Supplying sites for a particular validity period and per merchandise category can be assigned to a site.
- The **merchant ID** that is assigned to a store is used for billing sales with a credit card (for example, American Express, Visa Card) at the relevant clearing point.
- The *Point of Sale* tab page can contain sales data (for a store) and assortment list data (for a distribution center).



© SAP AG 2004

- Two types of sites are used in SAP Retail:
 - Distribution centers that store and prepare merchandise for other sites or customers
 - Stores which present merchandise and sell it to consumers
- The distribution chain category describes the logistical function of a distribution chain. In SAP Retail, a distinction is made between consumer distribution chains and distribution chains that are used by distribution centers.
- A site is always a combination of the site master and the customer master. The site master is required as it functions as an organizational unit in its own right, with inventory management and requirements planning capabilities.
For organizational reasons, a site can also be regarded as a customer, as sales functions can also be used, for example, deliveries and invoicing.
- A distribution center (DC) also functions as a vendor (internally) as it provides other sites with merchandise. A distribution center delivers merchandise to stores belonging to one or more distribution chains.
- Each store is assigned to a specific distribution chain but may receive merchandise from distribution centers using different distribution chains.



- A distribution center (DC) is supplied with merchandise by an external vendor. This means that the distribution center is, in effect, an internal customer. As this is the case, a customer master record must exist in the system. The customer master record is an integral part of the site master for the distribution center.
- A distribution center is also an internal vendor as it supplies other sites and external customers with merchandise. For this reason, a vendor master record must exist in the system. The vendor master record is an integral part of the site master for the distribution center.
- Recipients that are supplied with merchandise from the DC can belong to the same company as the DC (for example, a store or a different distribution center). The recipient can, equally, be an external customer. Customer master records must be created in the system. The customer master records represent an integral part of the site master, if the DC is supplying sites that belong to the same company.



General data

Address, control data,
bank details, marketing,
staging points, export data,
contact partner



Company code data

Account management
Payment transactions
Correspondence
Insurance



Sales area data

Orders, shipping,
billing documents, partner
functions



Customer
master record

© SAP AG 2004

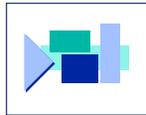
- A customer is regarded as a business partner, for financial accounting purposes. For this reason, the customer master record is used by both sales departments and financial accounting departments. Customers are classified as debtors in Financial Accounting.
- Every site has a customer master record.

**General data**

Address, communication,
Control data
Bank details

**Company code data**

Account management
Payment transactions
Correspondence
Withholding tax

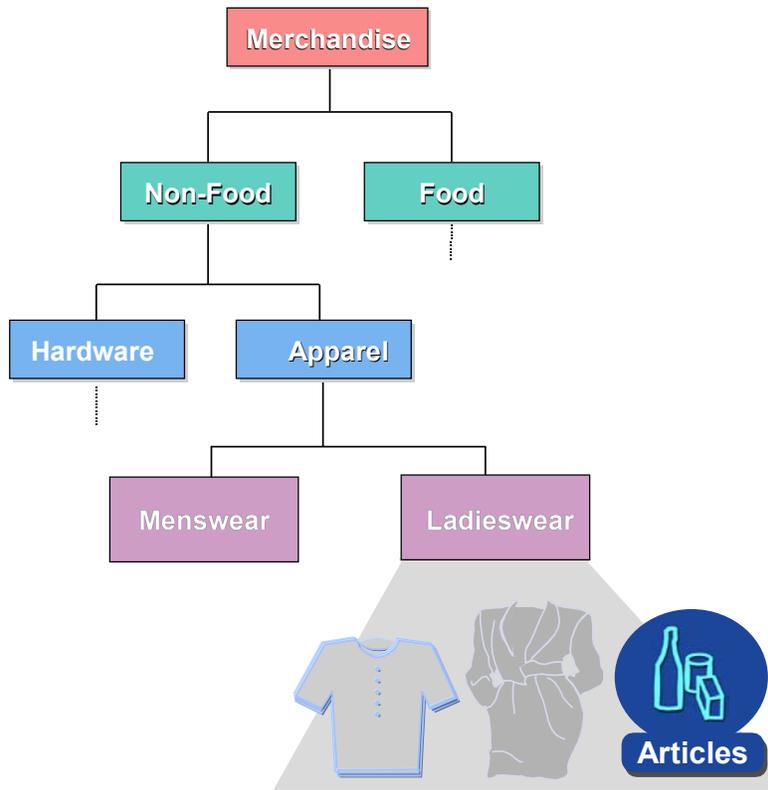
**Purchasing organization data**

Purchasing data
Partner roles



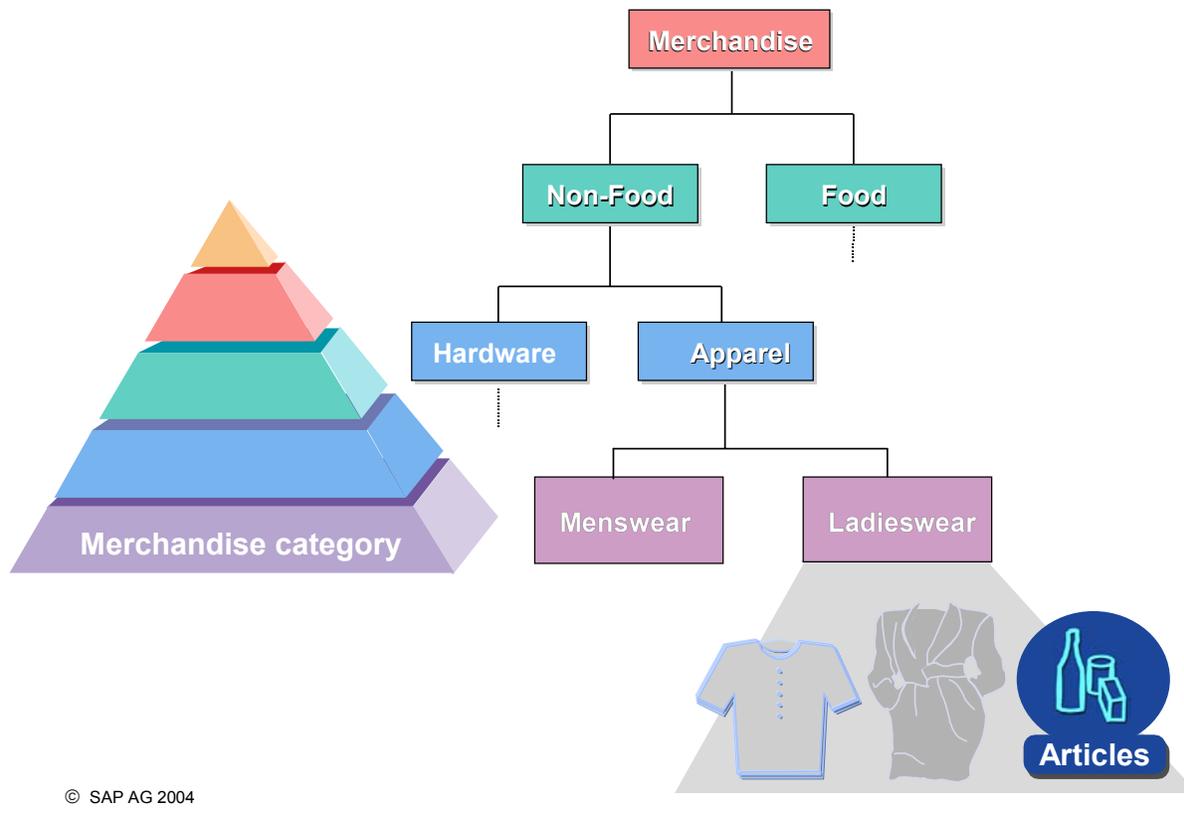
© SAP AG 2004

- The data in the vendor master record is subdivided into three categories:
 - General data: general customer information, for example, address and banking details. The data is valid in all clients.
 - Purchasing data: purchase order currency, Incoterms and different control data for the relevant creditor. The data that is entered is valid for the relevant purchase organization. You can also enter data that is only valid for specific sites and vendor subranges.
 - Financial accounting data: contains, for example, the number of the relevant reconciliation account and the payment method for handling any automatic payment transactions. Financial accounting data is entered at the company code level.
- A vendor master record may be blocked if, for example, the quality of the products provided by the vendor does not meet the relevant quality standards. You can block a vendor from providing a particular product in the order book.

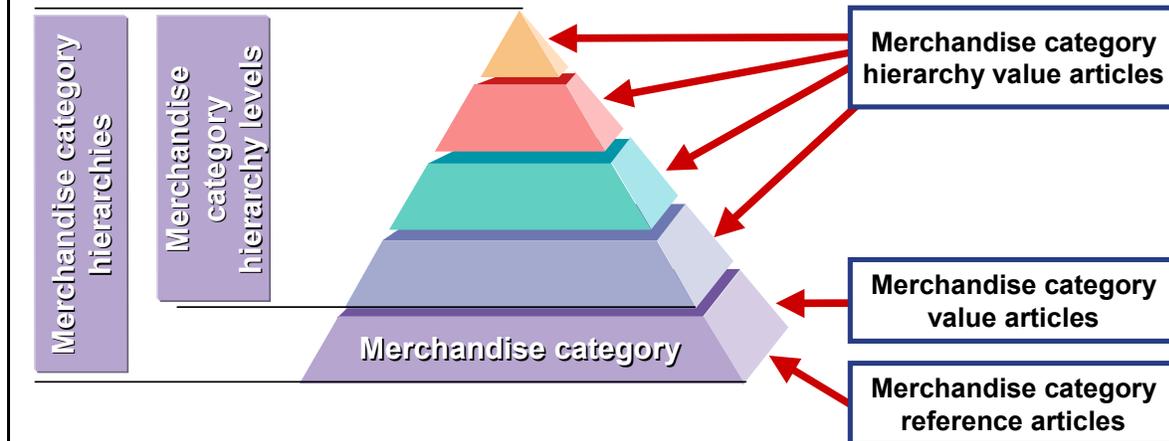


© SAP AG 2004

- A **merchandise category** is a grouping of objects (articles) that have common or similar properties.
- Ladieswear

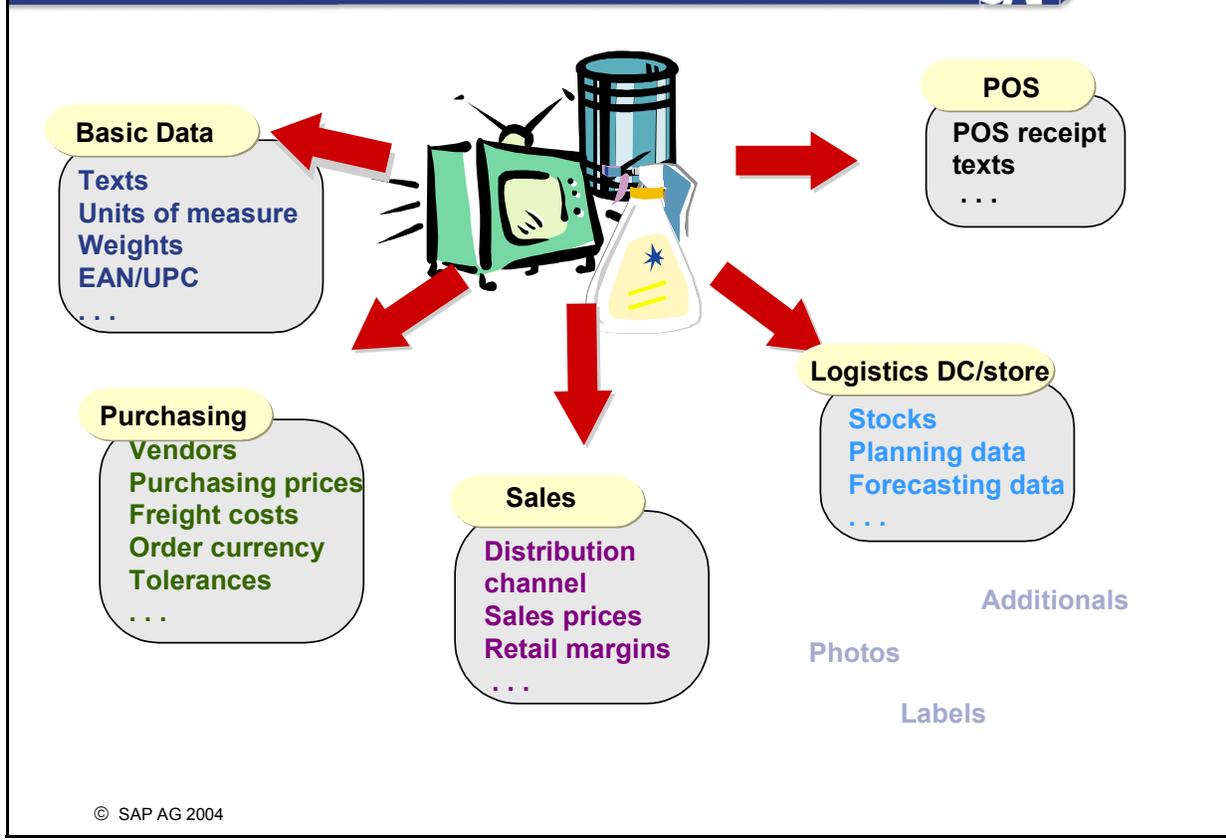


- There are two types of hierarchy levels:
 - Merchandise categories: articles and characteristic profiles are assigned to merchandise categories.
 - Merchandise category hierarchy levels: merchandise categories or different hierarchy levels are assigned to hierarchy levels.
- Merchandise category hierarchies are formed when individual hierarchy levels are assigned to each other.

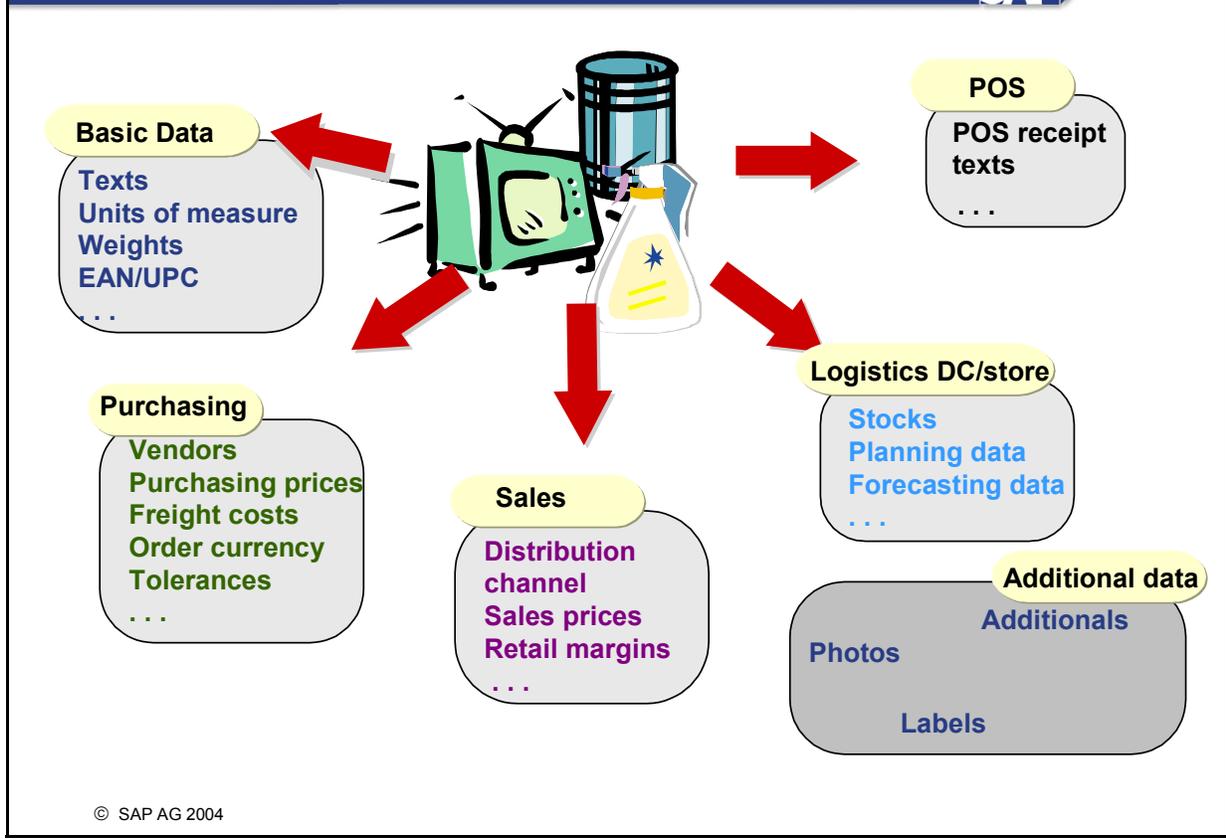


© SAP AG 2004

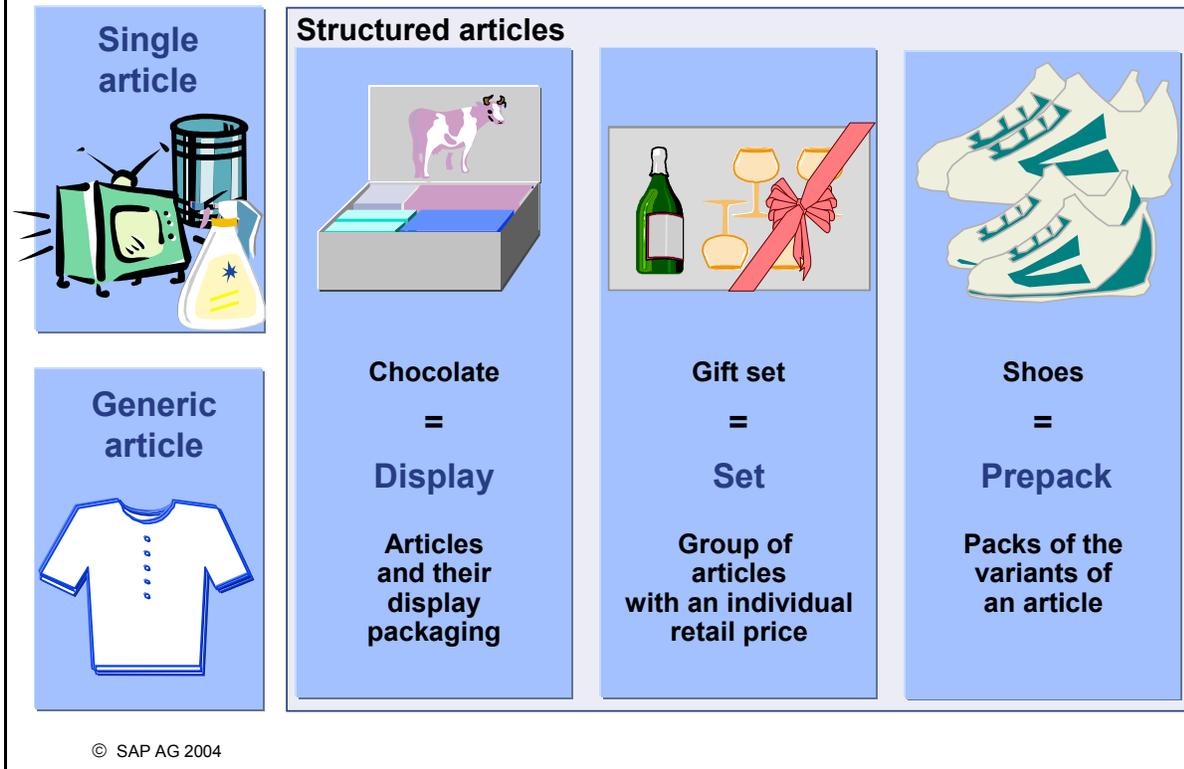
- You can assign a **merchandise category reference article** to each merchandise category. The reference article is then used every time you create an article. A reference article can be assigned to different merchandise categories and is an existing article master record.
- You can also create and assign a **value-only article** for each merchandise category. This enables you to use inventory management on a value basis at merchandise category level. The value-only article for your merchandise category can be used at POS for transactions at merchandise category level.
- A merchandise category value-only article can be defined for each hierarchy level. This enables you to use inventory management on a value basis at merchandise category hierarchy level.
- **Characteristics** can be assigned to hierarchy levels as well as merchandise categories. The lower hierarchy levels inherit the characteristics that are assigned to the higher hierarchy levels.
- **Characteristic inheritance** is when a characteristic and its values are passed on to all the lower classes in a class hierarchy, for example, to all the levels in the merchandise category hierarchy or the merchandise category itself.
- A characteristic can be for **information purposes only** or be flagged as being **variant-creating**. When creating a generic article, the variant-creating characteristic is used to create variants of the generic article.



- The article master record is the data record in your system that contains all the required basic data for an article, structured according to different criteria.
- An article master record contains:
 - Descriptive data, for example, size and weight
 - Control data, for example, article type
 - Data that is automatically updated by the system (for example, warehouse stock)
- Article master records also contain data that is entered directly by users and data that is updated automatically by the system (for example, warehouse stocks).
- An article master contains article-relevant data and data from other areas of the system that may be relevant for articles. These areas are called user departments in the article master. Unnecessary data storage is reduced when all data is stored in a single database object.

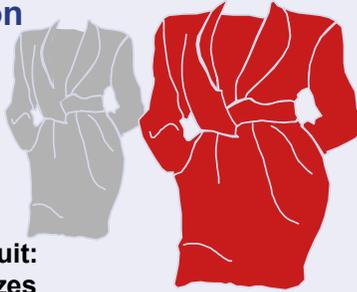


- An **article** is the smallest unit that can be ordered independently and that cannot be split further into any smaller units. Articles are generally ordered for a site and sold. Articles are, however, not always sold in the form in which they were purchased.
- Due to the large amount of data that is generated in article maintenance, reference articles can be used when you create an article master record. This reduces the amount of data that is generated; changes to the reference articles are automatically integrated in the relevant data records.
 - Reference articles provide default values when you create and enhance article data. All data that has been created for the reference articles is made available, except EAN/UPCs, consumption values, forecast values, and prices and conditions for Purchasing and Sales. The appropriate generic article is used as the reference article for a variant.
 - Reference sites provide specific logistics data when creating or changing article data.



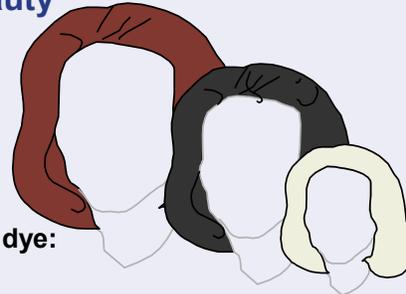
- **Single articles** are articles that are handled individually, in individual packaging or in special units of weight.
- **Generic articles** can be sold in different forms, called variants.
- **Structured articles** consist of different articles. You must enter components and quantities which are used for the components in the structured articles.
- A **display** is a number of single articles or variants of one or more generic articles that are sold as a single article. A display has only one article number, a purchase price and purchase price conditions. Displays are made up by the manufacturer or vendors.
- Two types of **sets** exist: sales sets and purchased sets.
 - A **sales set** is a number of single articles or variants of one or more generic articles that are sold as a single article. A sales set has only one article number, a purchase price and purchase price conditions.
 - **Purchased sets** are already in a set when they are purchased, are managed as a set throughout the logistics chain and are sold as a set or single article.
- A **prepack** is a number of variants of one or more generic articles that are sold as a single article. A prepack has only one article number, a purchase price and purchase price conditions. Unlike displays, the components in prepacks belong to the same merchandise category as the display itself.

Fashion



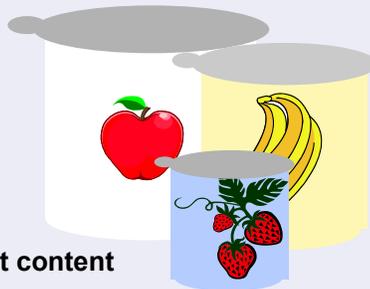
Ladies' suit:
colors/sizes

Beauty



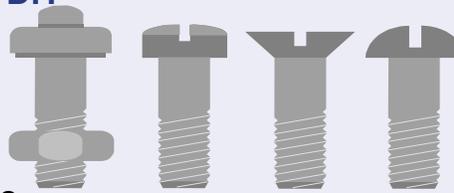
Hair dye:
tone

Food



Yogurt:
flavor/fat content

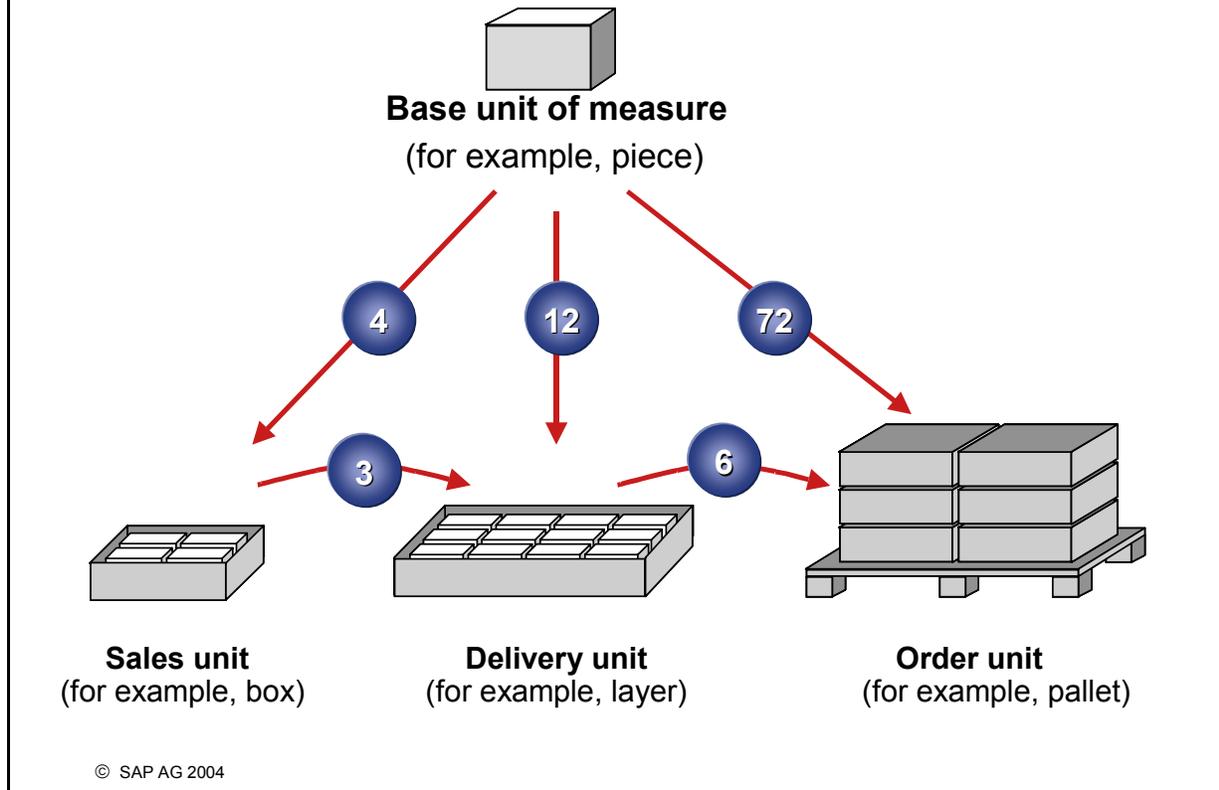
DIY



Screws:
use/length/diameter

© SAP AG 2004

- If certain articles only differ in their characteristics, for example in size and color, the individual styles are called **variants** and are grouped together under the one master style referred to as a **generic article**.
- Using generic articles makes variant maintenance easier as the data that is valid for all variants only needs to be entered once for the generic article.
- When you create a generic article and its variants, you also create an article master record for each individual variant.
- Normally, you only work with variants.



■ Base unit of measure

The base unit of measure is the unit of measure used in Inventory Management. The base unit of measure is normally the smallest possible unit in which an article can be sold.

If a different unit of measure is to be used in Inventory Management, logistical variants must first be created for the article. For more information about this, see the SAP Retail documentation for *Inventory Management: Logistical Variants*.

■ Order unit

The order unit is the unit of measure in which an article is normally ordered. It is maintained for each vendor.

■ Sales unit

The sales unit is the unit of measure used when an article is sold to a customer. This is normally the base unit of measure for end consumers. The sales unit is maintained for each distribution chain.

■ Delivery unit/unit of issue

The delivery unit/unit of issue is the unit of measure used when articles are delivered (from the warehouse). It is maintained for each site.

■ Conversion

You must state the conversion of the different units of measure. It is also possible to convert a specific unit of measure into the base unit of measure or another unit of measure.

| Views | Areas of Validity | |
|-----------------|---------------------------|-------------------------------|
| | Obligatory | Optional |
| Basic Data | - | - |
| Listing | - | Sls org.+ Distr. channel |
| Purchasing | Purch.org.+ Vendor | Site and / or vendor subrange |
| Sales | Sls org. + Distr. channel | Site or price list |
| Logistics DC | - | Distribution center |
| Logistics Store | - | Distribution chain, store |
| POS | Sls org. + Distr. channel | Site |

© SAP AG 2004

There are validity areas for the maintenance of data in the article master that may differ depending on the view:

- No limitations are placed on basic data.
- Listing can be restricted as soon as you enter the article master: Sales Organization and Distribution Channel
- In order to be able to create purchasing data, you must enter a purchasing organization and a vendor. You have the option of limiting the validity of data to a particular site and/or vendor subrange (VSR).
- Sales data can be maintained for the connection sales organization - distribution channel. This can also be done at site level or in a price list (in the case of wholesale customers, for example). There is also another level, the site group. Data that is entered at site group level is not stored at this level - it is stored at the same level as the individual sites. Doing this may, however, lead to an increased volume of data in your system.
- Logistics data can be maintained at a general level. The data is then valid for all sites. This data is stored for all the reference sites that are defined in Customizing. Logistics data can also be created at distribution center or store level.
- The receipt texts in the POS data can be maintained independently of the distribution chain; to maintain the POS data in full, however, you must enter at least the distribution chain.

Areas of validity

Purch. Org. R300
Vendor TS100

Articles

Data retention levels

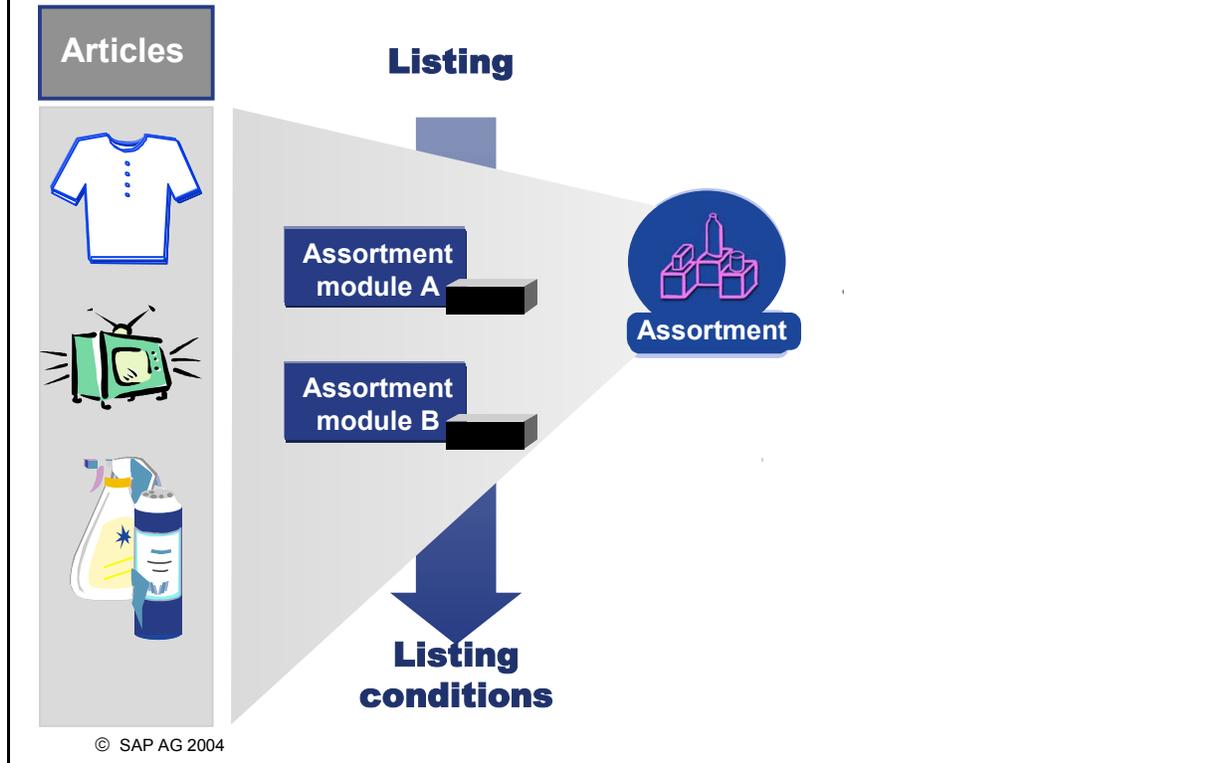
Header level

Vendor TS100

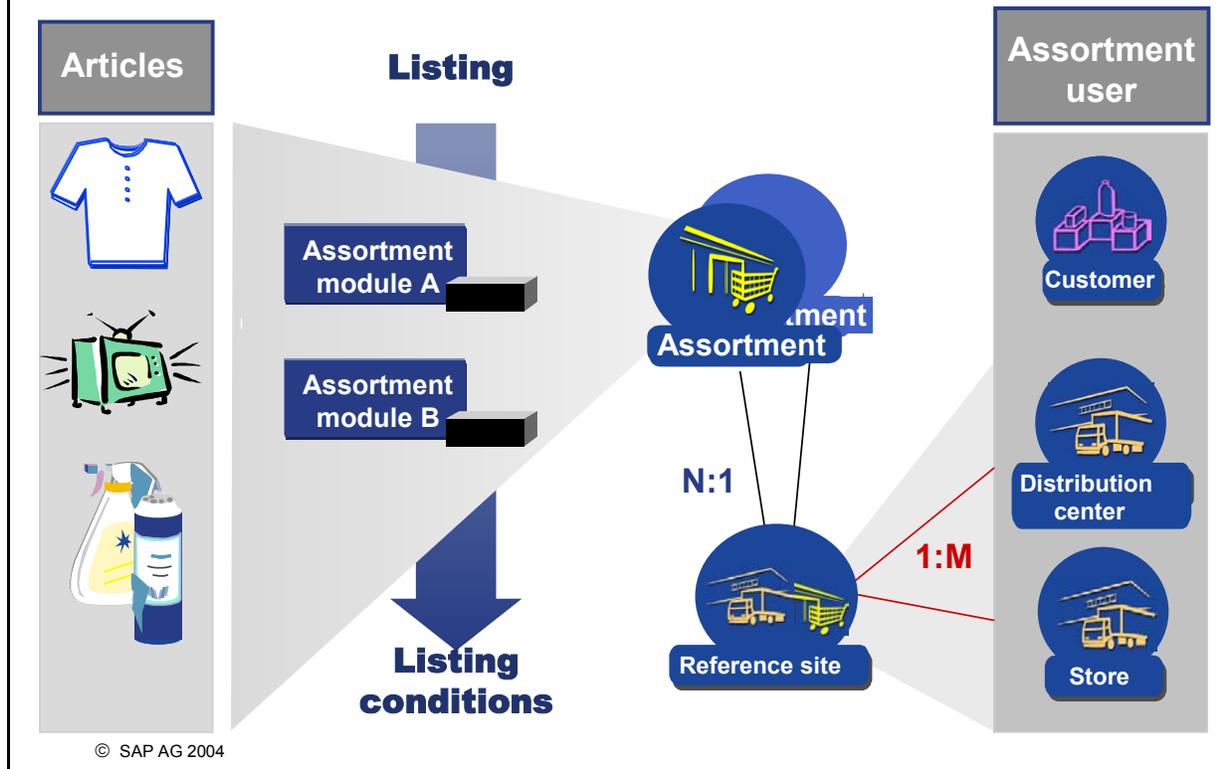
Purch. org. R300
Vendor TS100
Site R314

© SAP AG 2004

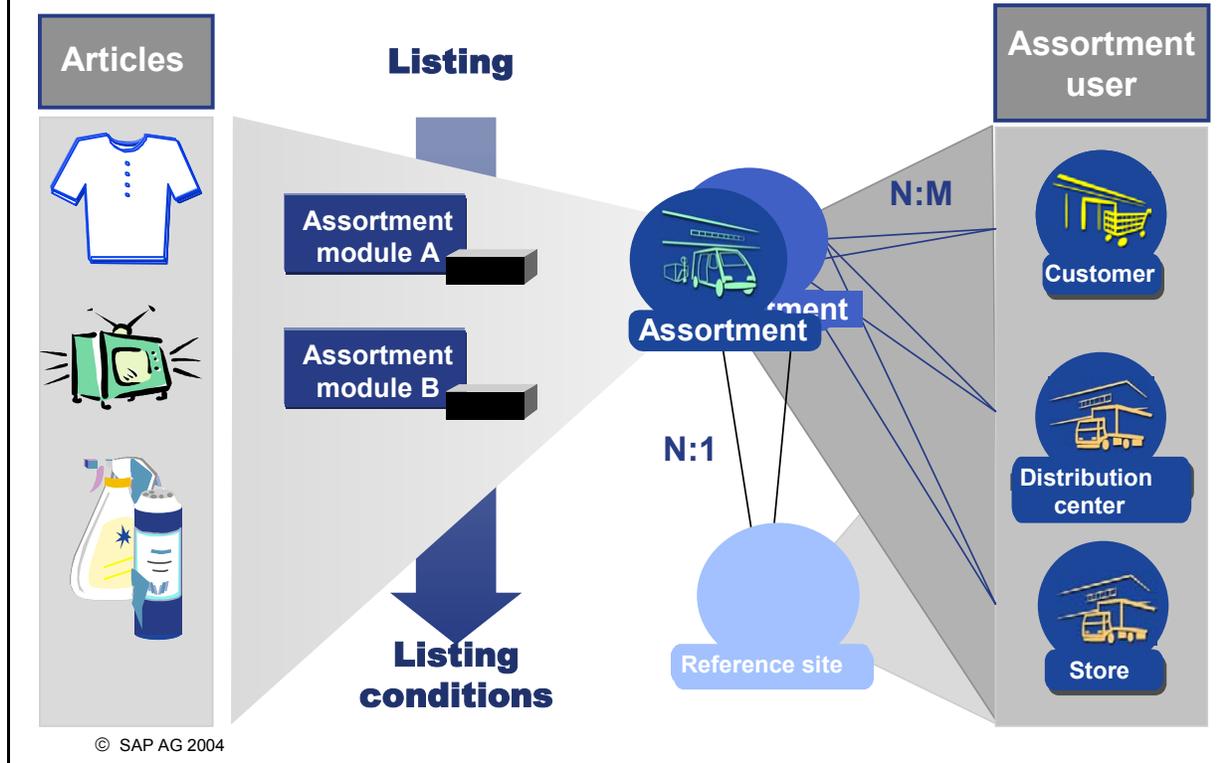
- On the initial screen of article master maintenance (areas of validity), you must enter a purchasing organization and a vendor to be able to enter purchasing data. However, settings for the site are not copied as the area of validity.
- In the purchasing view, you can create data at an additional level, site level. To do so, you choose the Areas of Validity button and enter the data retention level *site*. You also use this button to switch to the purchasing view of the same article, however, for a different vendor and/or purchasing organization.
- You can also assign the article to a vendor subrange (VSR) in the purchasing view. This is only possible, however, if a VSR for this vendor has already been defined in vendor master data maintenance.
- The first subscreen of the purchasing view of an article creates data **only** at the data retention level *vendor*. If you want to define site-specific regular vendors, for example, you must use the source list.
- The second subscreen of the purchasing view of an article creates data at the data retention levels *purchasing organization* and *vendor*. You also have the option of entering site-specific data here. The current data retention level is displayed right at the top of the purchasing view of an article.



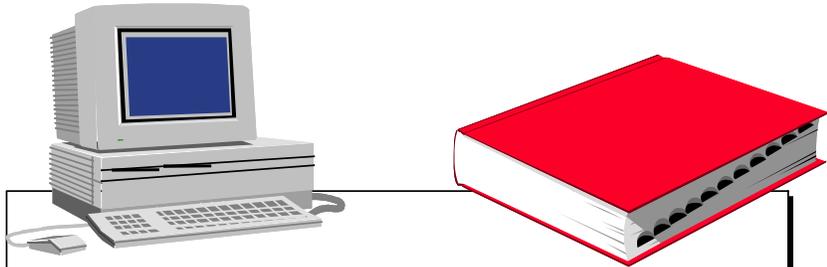
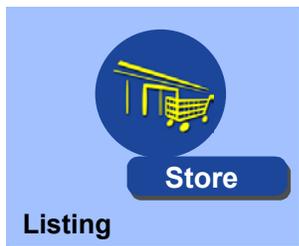
- An assortment is an object in SAP Retail to which articles are assigned, that is, listed for a certain validity period. The assignment of articles to assortments determines which assortments, and therefore which articles, a store can buy and sell.
- Articles are assigned on the shelf using assortment modules. The assignment results in listing conditions, which serve as the basis for subsequent business processes. Articles can be assigned to assortments automatically during article or assortment maintenance. Alternatively, you can assign articles to assortment modules manually and then assign the modules to the assortments.



- Assigning an assortment user to an assortment makes the articles available for the users concerned for use in the various different business functions. The most important assortment user in retail is the retail site. The assortments for a site include all articles that are involved in the site's economic activities. In addition to assigning individual general assortments to assortment users, it is also possible to define reference sites and to assign them to sites in a 1:M ratio. Only sites that are not assigned to a reference site can be assigned to an assortment. Sites assigned to reference sites are assigned to assortments via their reference sites. A reference site cannot be assigned to a customer.
- The big advantage of reference sites is the one-time assignment of general assortments. All dependent sites (sites assigned to the reference sites) automatically take on all the assortments assigned to the reference site. This pointer function means that changes to general assortments and changes to the assignments of general assortments to reference sites are also copied automatically. If a site is already assigned to assortments, it can only be assigned to a reference site if the reference site contains these assignments.
- The main use for this n:m multiple assignment and reference sites is in assortment management for stores. It is, however, also possible to assign a reference site to a distribution center. We recommend the exclusive use of dummy reference sites so that you can maintain certain listing conditions for each of your operative stores, independently of your regular reference handling. (Example: You want to create an assortment for certain articles and release it for certain sites only. If one of these sites was a reference site, the data would automatically be passed on to all the sites assigned to it.)
- If the assignment of a site to a reference site is deleted, all assortments assigned to the reference site will be deleted for the site.



- In many retail companies, assortments for a distribution chain or for a certain region, for example, are often identical or differ only slightly. It therefore makes sense to define only a few general assortments and then to assign these to a group of assortment users.
- In Release 4.70, you can decide whether you want a 1:1 assignment of assortments to sites or whether you want to construct an n:m assignment. This new function is similar to the multiple assignment of customers to assortments of assortment type C, which was already available prior to Release 4.70. This new assignment option has simplified assortment management significantly. Multiple assignment can also considerably reduce the number of listing condition records in the database since, among other things, a very large number of sites can be assigned to a general assortment. This results, above all, from the fact that articles are listed for assortments and not for sites and therefore the listing conditions created are valid for all the sites assigned to the assortment. Unlike with local assortments, which are not maintained in assortment maintenance and therefore cannot be assigned to sites or customers, it is now possible to assign general assortments (assortment type C) to any number of sites or customers (n:m multiple assignment of sites to assortments is activated in Customizing).
- Exclusion modules can still be used for local assortments. This enables you to generate exceptions for certain articles and subsequent listings. Exclusion modules can, of course, also be defined for general assortments.

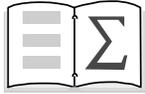


Site: Store - New York Assortment list type: FOOD
Valid from: 08.12.2001 Valid to: 08.18.2001 Version: 002

| Articles | Name | SUn | From | Price | Note |
|----------|-------------------|-----|--------|-------|----------|
| R10011 | Pure Apple Juice | Btl | 08.12. | 1.89 | |
| R10047 | Dry White Wine | Btl | 08.14. | 6.39 | On promo |
| R10001 | Redband Margarine | PC | 08.12. | 1.29 | New |

© SAP AG 2004

- Assortment lists provide the stores or the customer with an overview of all listed articles. The user is informed about changes to the assortment (for example, new or discontinued articles, price changes, promotional articles).
- The assortment list type is used to group the articles for the assortment list. For each of the assortment list types, you determine the time periods for which new assortment lists are generated.
- Assortment list profiles are used to fix the external appearance of the assortment list (for example, which data is to be analyzed, sorted) for each of the stores.
- Assortment lists can be configured for every situation and assortment and they can be prepared in different media (in paper form, as an e-mail sent to a store retailing system).



You are now able to:

- **Name the main organizational structures in SAP Retail**
- **Name the main differences between a distribution center and a store**
- **Describe how the article master is structured in SAP Retail**

© SAP AG 2004



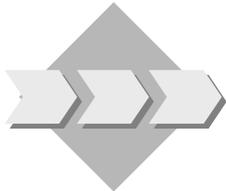
Unit: Basic Concepts

Topic: Site Master in SAP Retail



After completing this exercise you will be able to:

- Describe how the site master is structured in SAP Retail.



You can use selected sites (for example, a store or distribution center) to gather information about the structure of the site master in SAP Retail.

- 1-1 Choose *SAP menu* → *Logistics* → *Retailing*. What menu options are listed under *Retailing*?

- 1-2 Branch to the master data for store **T2##** by choosing *Change site* (## stands for the two-digit number on your computer).

- 1-2-1 Which path do you use to display the site master?

Enter the number of your store.

- 1-2-2 Which distribution chain does your store belong to?

- 1-2-3 Where are the distribution chains for delivering merchandise to the store displayed?

- 1-2-4 Which distribution chain(s) are used by the store for delivering merchandise? Where is this information displayed?

- 1-2-5 How many departments does your store have?

- 1-2-6 Which merchandise category is department **R007** (Sports) assigned to?

1-2-7 Which supplying site is assigned to your store?

1-2-8 Where can you assign supplying sites at store **and** merchandise category level?

1-2-9 On the *POS Data* tab page, assign assortment list profile **0010** with the description *IRT100* to the store.

1-2-10 If necessary, change the language to English on the *Address* tab page for store T2##. Save your data.

Leave the master data for store T2##.

1-3* Display the master data for distribution center **T7##**.

1-3-1 Which distribution chain does the distribution center belong to?

1-3-2 Which distribution chains can the distribution center use to deliver merchandise?

1-3-3 Which additional options are available in the site master record for the distribution center compared to the store master record?

1-3-4 For which purchasing organization is purchasing organization data available?

1-3-5 Exit the master data for your distribution center.

(* Optional exercise)



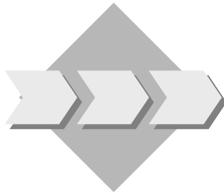
Unit: Basic Concepts

Topic: Merchandise Categories and Hierarchies



After completing this exercise you will be able to:

- Display existing merchandise categories and their settings
- Find information about existing merchandise category hierarchies



Using a specific merchandise category, you find data for the merchandise category and display the merchandise category hierarchy for Retail (R1000).

2-1 Display the master data for merchandise category **R1121**.

2-1-1 Which path do you use to display the merchandise category?

Enter the number for merchandise category **R1121**.

2-1-2 Display the basic header data for the merchandise category by selecting the correct pushbutton. Which merchandise category value-only articles and merchandise category reference articles are assigned to this merchandise category?

What is the next superior merchandise category hierarchy level?

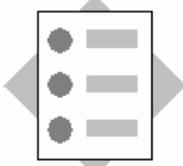
2-1-3 Which articles are assigned to merchandise category **R1121**?

2-1-4 Choose *Environment – Merchandise Categories Usage* and display the merchandise categories, sites, and articles assigned to merchandise category hierarchy **R1000**.



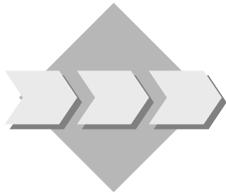
Unit: Basic Concepts

Topic: Article Master in SAP Retail



After completing this exercise you will be able to:

- Describe the views and selected data in the SAP Retail article master.



You use a selected article to gather information about the structure of the article master in SAP Retail.

3-1 Display the master data for article **TA01##**.

3-1-1 Which path do you use to display the article master?

Enter the article number.

3-1-2 Which article master views can be selected on the initial screen?

Select the *Basic Data*, *Purchasing*, and *Logistics: Store* views.

3-1-3 Check if the organizational data from exercise 1-2-2 is defaulted as the validity area. If the correct organizational data is not defaulted, select purchasing organization **R300**, sales organization **R300** and distribution channel **R1** in the *Areas of validity* and save these as default settings using the *Default area of validity* pushbutton.

3-1-4 As you want to look at the purchasing data for your article, you require a vendor that delivers article **TA01##** to your stores. Use F4 Help to search for a vendor.

3-1-5 Confirm your entries to move on to the basic data for the article. Which merchandise category does the article belong to?

3-1-6 Use F1 Help to display the definition of the European Article Number (EAN). What does the article EAN refer to?

3-1-7 Go to the Purchasing view. What is the net price for the article in the selected validity area (purchasing organization and vendor)?

3-1-8 Go to the Logistics view for the stores. Which parameters can, for example, be defined in this view? (Refer to the headers of the individual screen modules).

3-1-9 Exit the article master data.



Unit: Basic Concepts

Topic: Site Master in SAP Retail

- 1-1 **SAP menu** → *Logistics* → *Retailing*. Menu options:
 Master data
 Purchasing
 Merchandise logistics
 Sales
 Info system / Planning
 Distributed retailing
- 1-2 To display the site master data:
- 1-2-1 **SAP menu** → *Logistics* → *Retailing* → *Master data* → *Site data* → *Site* → **Display**
 Enter the site number (T2##) in the *Site* field.
[Enter]
- 1-2-2 Tab page *Organization/calendar*
Sales organization: R300
Distribution channel: R1
- 1-2-3 **Goto** → *Customer*
 See *Sales area data: Distribution chain R300/R5* (other assignments are also possible)
[Back]
- 1-2-4 Store T2## delivers using distribution chain **R300/R1**, choose *Distribution Chains – Site*
- 1-2-5 **R001** to **R008** by selecting: *Extras* → *Departments*
[Back]
- 1-2-6 *Extras* → *Merchandise categories*
Merchandise category R1132 (Sport)
[Back]
- 1-2-7 *Extras* → *Supplying sites*
Supplying site T7## (other assignments are also possible)
[Back]
- 1-2-8 *Extras* → *Merchandise category*,
 Select a *merchandise category* and then choose *Extras* → *Supplying sites*
[Back]

- 1-2-9 Tabstrip *POS data*
Assortment list profile: 0010, Name IRT100
- 1-2-10 Tabstrip *Address*
Language: English
[Save]
- 1-3* **Site → Display**
Enter the site number in *Site* field.
- 1-3-1 Tab page *Organization/calendar*
Sales organization: R300
Distribution channel: R5
- 1-3-2 Tab page *Organization/calendar*
Button **[Distribution chains - site]**
The distribution chains for the site are displayed.
[Back]
- 1-3-3 Goto the customer segment by choosing the *Customer* pushbutton.
- 1-3-4 **Goto → Vendor**
See *Purchasing organization data: Purchasing organization R300* (other assignments are also possible)
[Back]
- 1-3-5 **Site → Exit**



Unit: Basic Concepts

Topic: Merchandise Categories and Hierarchies

2-1 Display merchandise category R1121:

2-1-1 *SAP menu* → *Logistics* → *Retailing* → *Master data* → *Merchandise category data* → *Merchandise Category* → *Display*

Enter merchandise category R1121.

2-1-2 Choose pushbutton *Merchandise category basic data*,

Value-only articles: R1121,

Reference articles: RV1121

Next superior hierarchy level: R1120 Perishables

Pushbutton **[Back]**

2-1-3 Pushbutton **[Article overview]**

| Article | Description |
|---------|-------------|
|---------|-------------|

| | |
|---------|----------------------|
| R100007 | Net of oranges, 4 lb |
|---------|----------------------|

| | |
|---------|--------|
| R100008 | Pepper |
|---------|--------|

| | |
|---------|-----------------------|
| R100031 | Apples "Granny Smith" |
|---------|-----------------------|

| | |
|-------|--------------------------------|
| R1121 | Perishables value-only article |
|-------|--------------------------------|

| | |
|--------|-------------------------------|
| RV1121 | Perishables reference article |
|--------|-------------------------------|

2-1-4 Menu path *Master Data* → *Merchandise Category Data* → *Environment* → *Merchandise Category Usage*

Merchandise category object: R1000,

Select *Hierarchy levels*

Pushbutton **[Execute]**

Expand the nodes until you can see the assigned sites and articles.



Unit: Basic Concepts

Topic: Article Master in SAP Retail

- 3-1 To display master data for an article:
- 3-1-1 **SAP menu** → **Logistics** → **Retailing** → **Master data** → **Article data** → **Article** → **Display**
Enter the article number in the *Article* field.
 - 3-1-2 Subscreen **Views**:

| | |
|------------|---|
| Basic Data | Listing |
| Purchasing | Sales |
| Logistics: | Distribution Center Logistics: Store |
| POS | |

Select the views *Basic Data*, *Purchasing* and *Logistics: Store*.
 - 3-1-3 Subscreen *Areas of validity*: check or enter data as detailed in the exercise. Save the data using the *Default areas of validity* pushbutton. You are currently on the initial screen, not yet in the article master.
 - 3-1-4 Place your cursor on *Vendor* field, select **[F4]**.
On *Vendors by Article* tab page, enter article **TA01##**, choose **[Start search]** or press **[Enter]**.
Select the vendor for purchasing organization **R300 (TS1##)**, choose **[Copy]** or press **[Enter]**.
You are currently on the initial screen, not yet in the article master.
 - 3-1-5 **[Enter]**. You are now in the article master, Basic Data view.
Merchandise category: On the *Groupings* subscreen, field *Mdse category* R1114 (tinned foods)
 - 3-1-6 Place your cursor on column *EAN/UPC*, hit **[F1]**, and select *Glossary*.
An EAN/UPC is a world-wide standard number that uniquely identifies a concrete material. This EAN number always relates to a particular unit of measure or type of packaging. The European Article Number (EAN) is normally issued by the manufacturer of the article. This means that the EAN also uniquely identifies the manufacturer. A company can also supply the EAN using various in-store numbering procedures. Only the company knows the in-store EAN. The EAN corresponds to the Universal Product Code (UPC) in America.

Hit **[Close]**.
 - 3-1-7 Tab page *Purchasing*, subscreen *Conditions*, field *Net price*
0.98 USD per 1 PC

- 3-1-8 Tab page *Logistics: store*, subscreens:
RP parameters *Replenishment parameters*
Forecast parameters *Stock planner/replenishment data*
General control parameters *Physical inventory data*
Storage data
- 3-1-9 [Back] or [Exit]

Contents:

- **Process overview**
- **Requests and quotations**
- **Requirements planning**
- **Purchase order**
- **Handling Unit Management**
- **Goods receipt**
- **Invoice verification**
- **Subsequent settlement**
- **Special requirements planning procedures**
- **Summary**

© SAP AG 2004



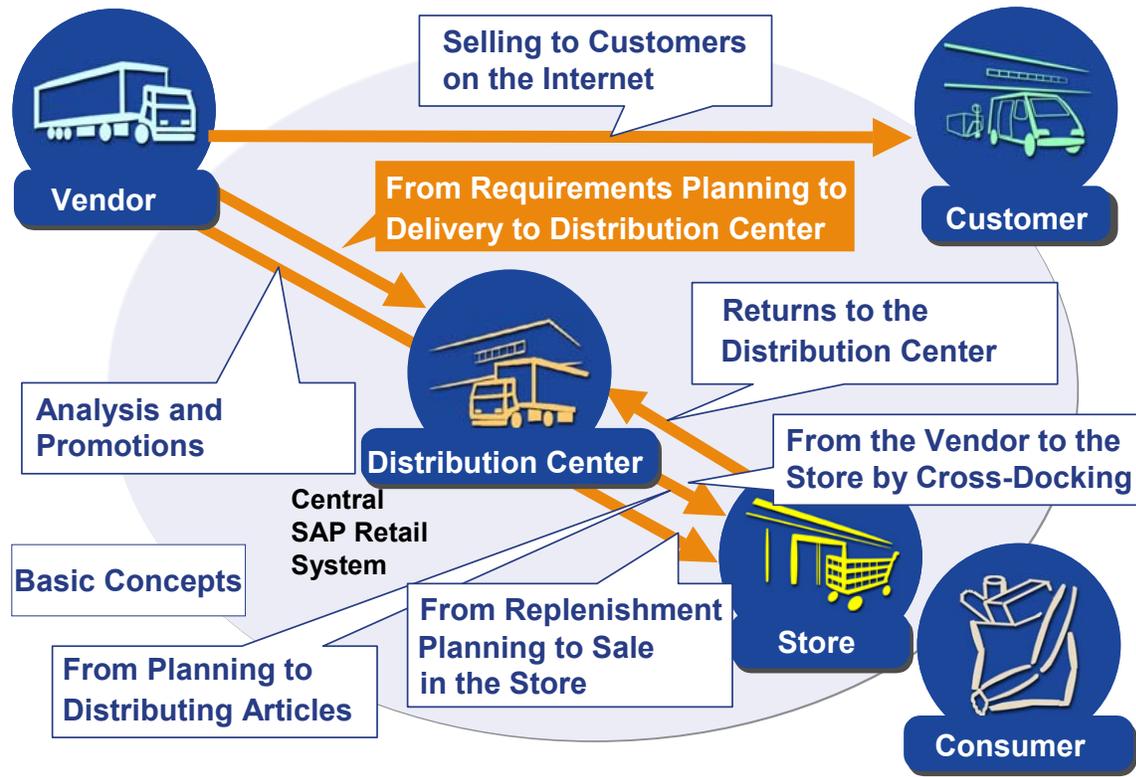
At the conclusion of this unit, you will be able to:

- **Procure merchandise from a vendor for a distribution center in SAP Retail.**
- **Run the following activities:**
 - **Trigger the forecast run and planning run**
 - **Create vendor orders manually**
 - **Create handling units**
 - **Create and check incoming invoices**
 - **Settle volume-rebate arrangements with vendors**
 - **Explain special requirements planning procedures**

© SAP AG 2004

Overview Diagram

SAP



© SAP AG 2004

Internal Use SAP Partner Only

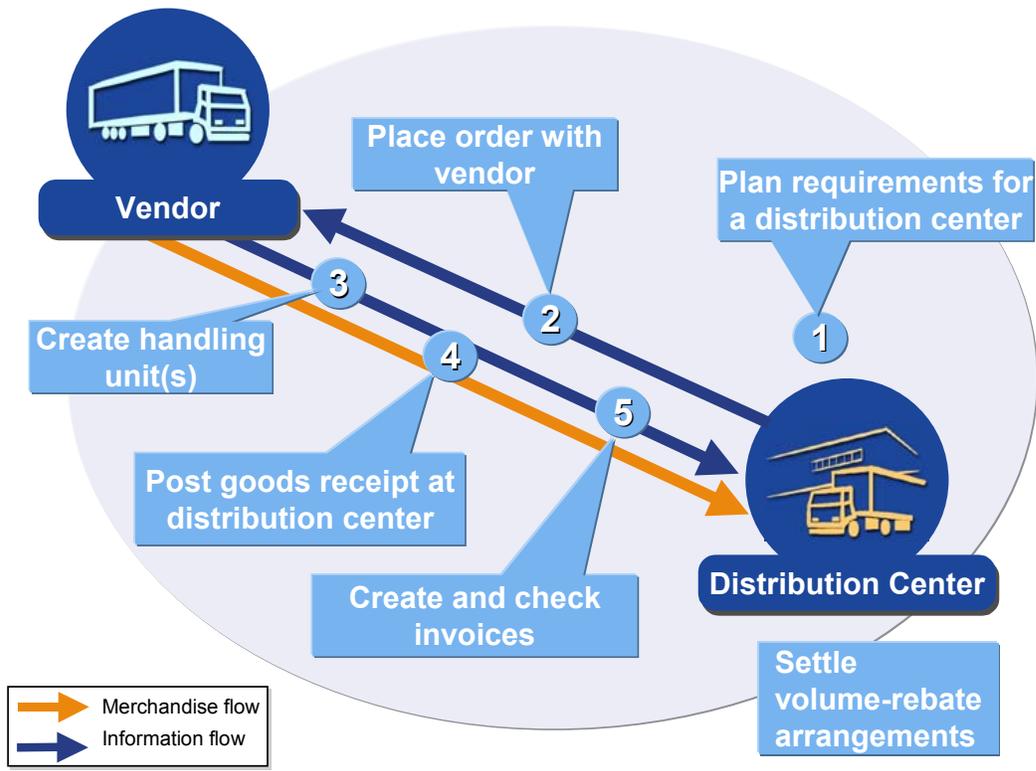
Internal Use SAP Partner Only



- You plan merchandise requirements for your distribution center at regular intervals. Based on the planning that you generate, you then send purchase orders to your vendors.
- The vendors send you the merchandise that you have ordered. It is then entered in your system at goods receipt and you store the merchandise in your warehouse.
- You check the invoices that you receive from your vendors.
- After you have checked the invoices, you update the volume-rebate arrangements that exist between you and your vendors.

© SAP AG 2004

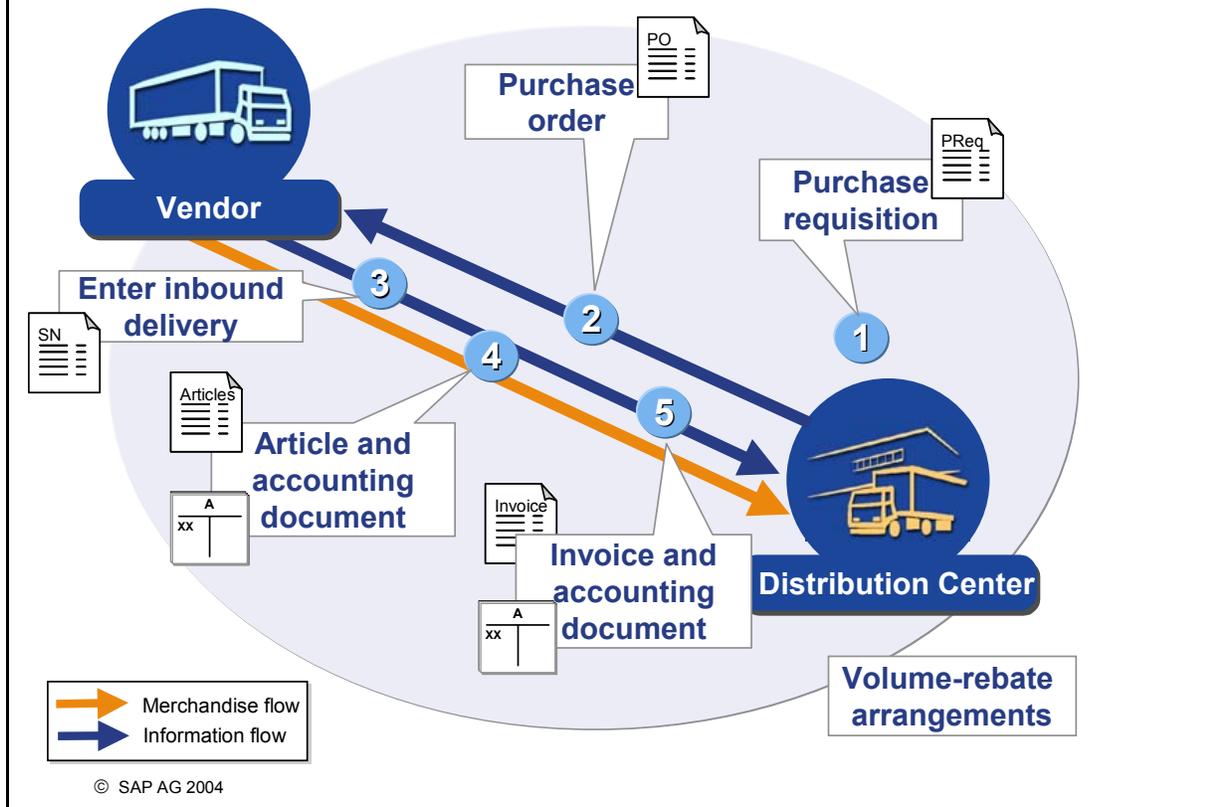
Requirements Planning and Delivery to the Distribution Center: Process Overview



© SAP AG 2004

Internal Use SAP Partner Only

Internal Use SAP Partner Only



- In automatic requirements planning, purchase requisitions are generated by a requirements planning run. You can customize the automatic requirements planning process in such a way that the purchase requisitions created are automatically converted into order proposals and therefore form the basis of purchasing. Requests and quotations are optional documents/functions that you can also use in the area of purchasing.
- Before you post the goods receipt for a purchase order, you have the option of working with confirmations (for example, the shipping notification).
- Additional rebates, agreements and bonuses and so on agreed between external vendors and yourself are not part of this process chain, however, it is possible to map them should you so wish.

Plan requirements for a distribution center

- **Automization of the merchandise supply process at site level**
- **Monitoring of the stock held at a site**
- **Central and decentral implementation**



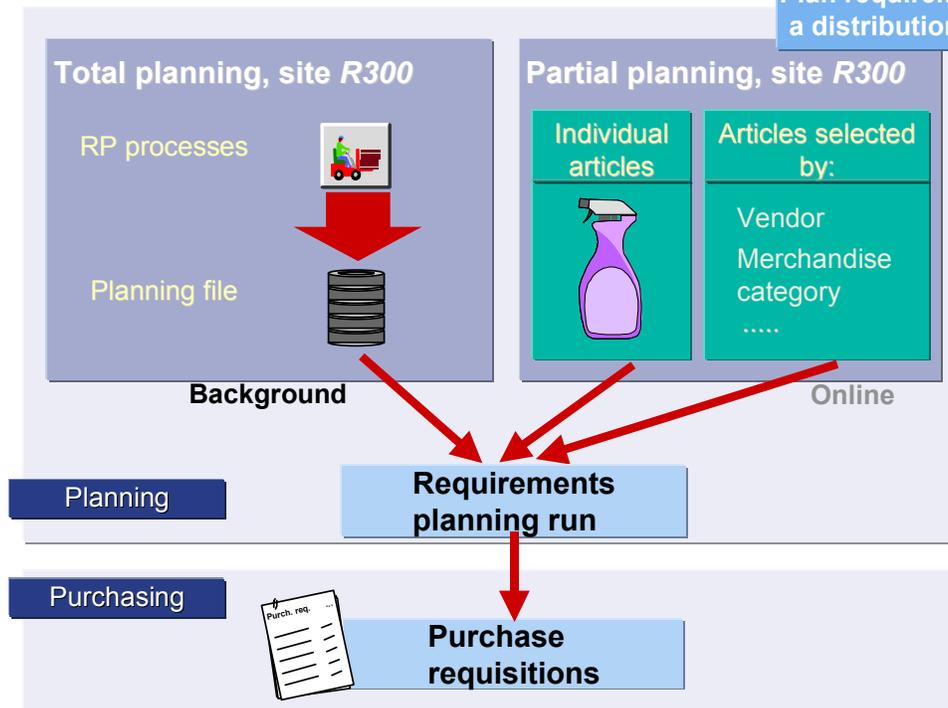
Distribution Center



© SAP AG 2004

- The main task of requirements planning in Retail is monitoring stock and the automatic generation of procurement proposals for Purchasing. Different requirements planning procedures can be used to achieve this target.
- The SAP system allows you to use a procurement policy that is centrally controlled at headquarters as well as allowing the stores to run procurement individually.

Plan requirements for a distribution center



© SAP AG 2004

- Purchase requisitions are generated in requirements planning. Generation is triggered by the planning requirements run.
- There are two possibilities for generating the requirements planning run:
 - **Total planning**
The entries in a planning file are read and requirements planning run for the articles that have been listed in the file for the relevant sites; the entries in the planning file are made when events for requirements planning are triggered (for example, goods receipt, goods issues, master data changes, sales orders ...), when changes are made manually or based on the requirements planning cycle for the relevant article. Total planning can be triggered online or be scheduled to be run in the background.
 - **Partial planning**
Requirements planning is run for individual articles or a quantity of all articles listed for a particular vendor (irrespective of existing entries in the planning file). If requirements planning is being run for a particular vendor, you can, for example, make a selection using vendor subranges (VSR), merchandise categories (MC), purchasing group or stock planner.
- The requirements planning run includes existing documents (for example, purchase orders or sales orders) using planned goods issues and receipts.

No. Normal Pur. Req.

10008480

Supply Source Determination

Header

Texts

Header memo

Item overview

| Item | ... | Articles | Product | Quantity | UoM | ... | Deliv. Date | Merch. Cat. | ... | Site |
|------|-----|----------|---------|----------|-----|-----|-------------|-------------|-----|---------|
| 10 | ... | R100000 | Yogurt | 100 | PC | ... | ... | R1133 | ... | DC R300 |
| 20 | ... | R100008 | Pepper | 100 | CR | ... | ... | R1121 | ... | DC R300 |

Item

Item Details

Article Data
Quantities and Dates
Evaluation
...
Supply Source
...

Agreement

Fixed vendor Allfresh Inc.

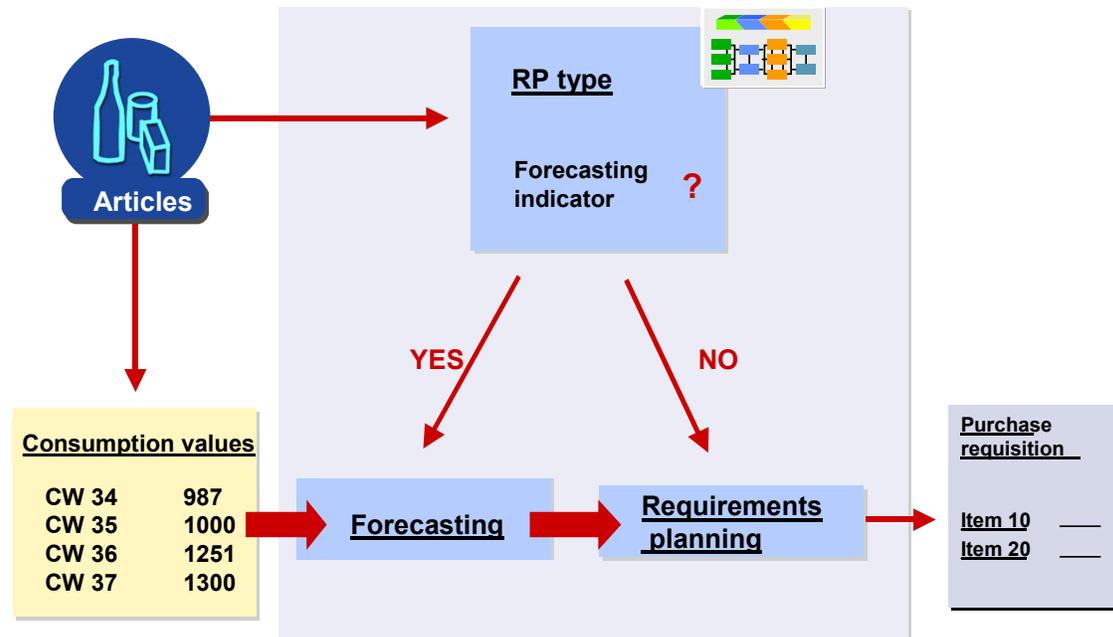
Info record

Desired vendor

Purchasing organization

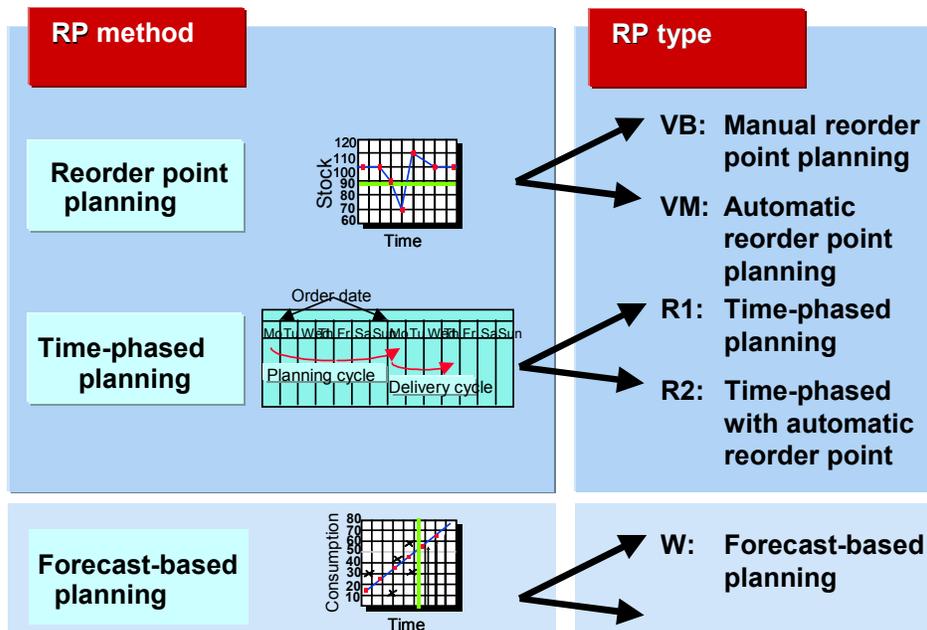
© SAP AG 2004

- Purchase requisitions can be created indirectly using consumption-based requirements planning. The system proposes the articles to be ordered. These proposals are based on previous consumption figures and available warehouse stock. The purchase order quantity and delivery date are determined automatically.
- For the system to be able to determine a source of supply for a certain article automatically, an outline agreement or an info record needs to be created as a possible supply source.
- Fixed vendors are displayed in the detailed view of the purchase requisition item, if
 - a) a vendor in the source list is flagged as a fixed source of supply,
 - b) a vendor in the purchasing view of the article master is flagged as a regular vendor, or
 - c) only one valid info record can be determined as a fixed supply source. This entry is not mandatory, however, it creates a default value for the conversion of a purchase requisition into a purchase order.
- If there is no entry in the detailed view of the purchase requisition item, the source of supply for a purchase requisition item has to be determined or entered manually for conversion into a purchase order. If there are several sources of supply to consider, these are displayed in a dialog box when converting purchase requisitions into purchase orders. You can find the most reasonable vendor using a price simulation.



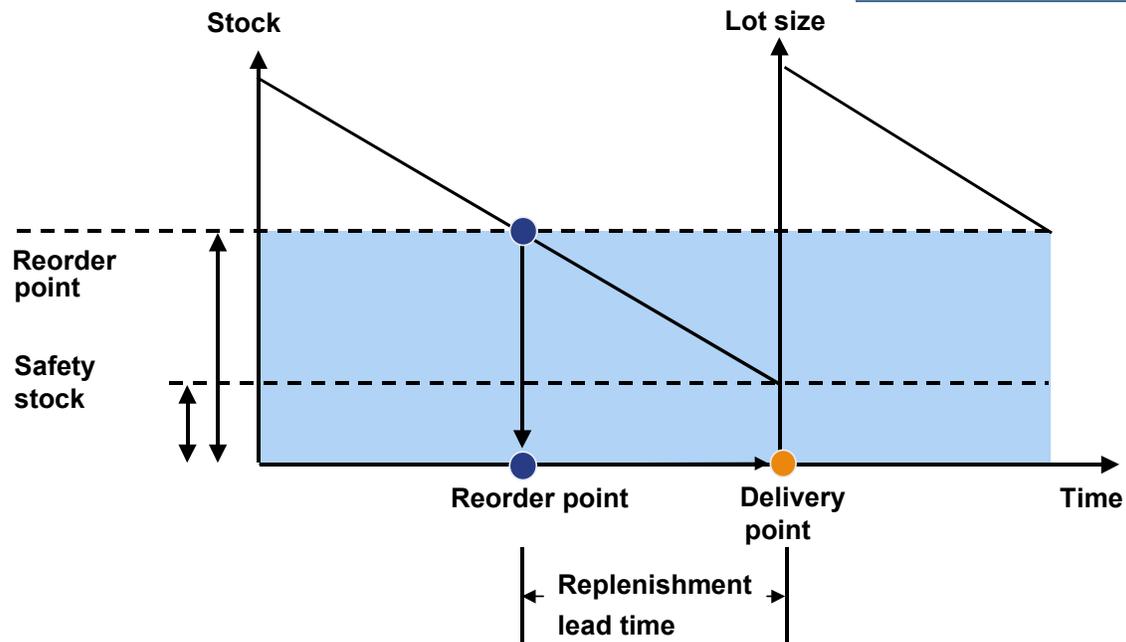
© SAP AG 2004

- The RP type plays a key role in requirements planning. It controls whether a forecast should be generated or not.
- The RP type is assigned in the logistics screen for the article.
- Parameters for the forecast are defined in article master maintenance. The parameters are then used for defining the time interval for forecasting, the historic values that are to be examined, and the number of periods for which forecasting is to be run, amongst other things.
- The following forecasting models can be used:
 - Constant model
 - Trend model
 - Seasonal model
 - Seasonal trend model
- Each of these forecasting models require a certain minimum amount of consumption values. Newly created articles can use the historical values for other articles for a limited period.
- Requirements planning normally results in the generation of a purchase requisition.



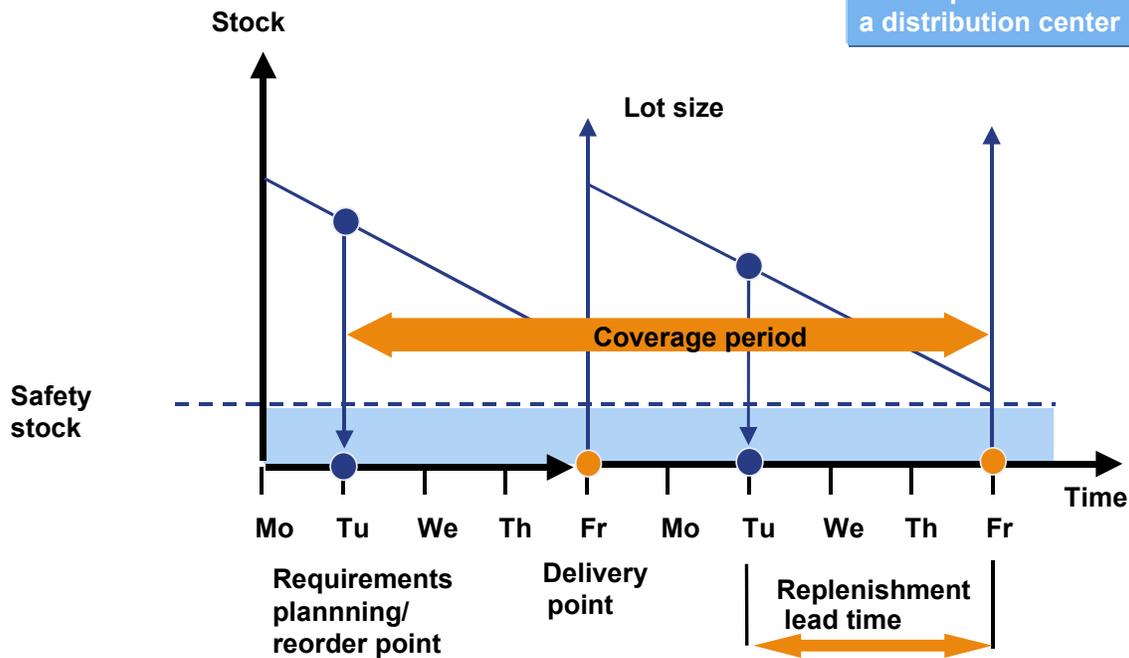
© SAP AG 2004

- Different requirements planning methods are useful for retailers:
- Reorder point planning
With this requirements planning procedure, the available warehouse stock is compared with the reorder point. If the stock available in the warehouse is less than the reorder point, the system generates an order proposal (for example, for stationery).
- Time-phased planning
If a vendor always delivers an article on a specific day, it makes sense to retain the time periods used until now but extended to include the delayed delivery time. This is possible using time-phased planning (for example, for dairy products, beverages).
- Forecast-phased requirements planning
Forecast-phased requirements planning is also based on article consumption. Future consumption values are forecasted. These values are used as the required quantity for the planning run.
- Replenishment planning
Replenishment planning was developed especially for planning purposes in the store and for external customers. Replenishment for customers is used within the framework of Vendor-Managed Inventory (VMI), to carry out the requirements planning as a service.
Replenishment is used to create follow-on documents automatically (for example, purchase requisitions, purchase orders, sales orders and deliveries).



© SAP AG 2004

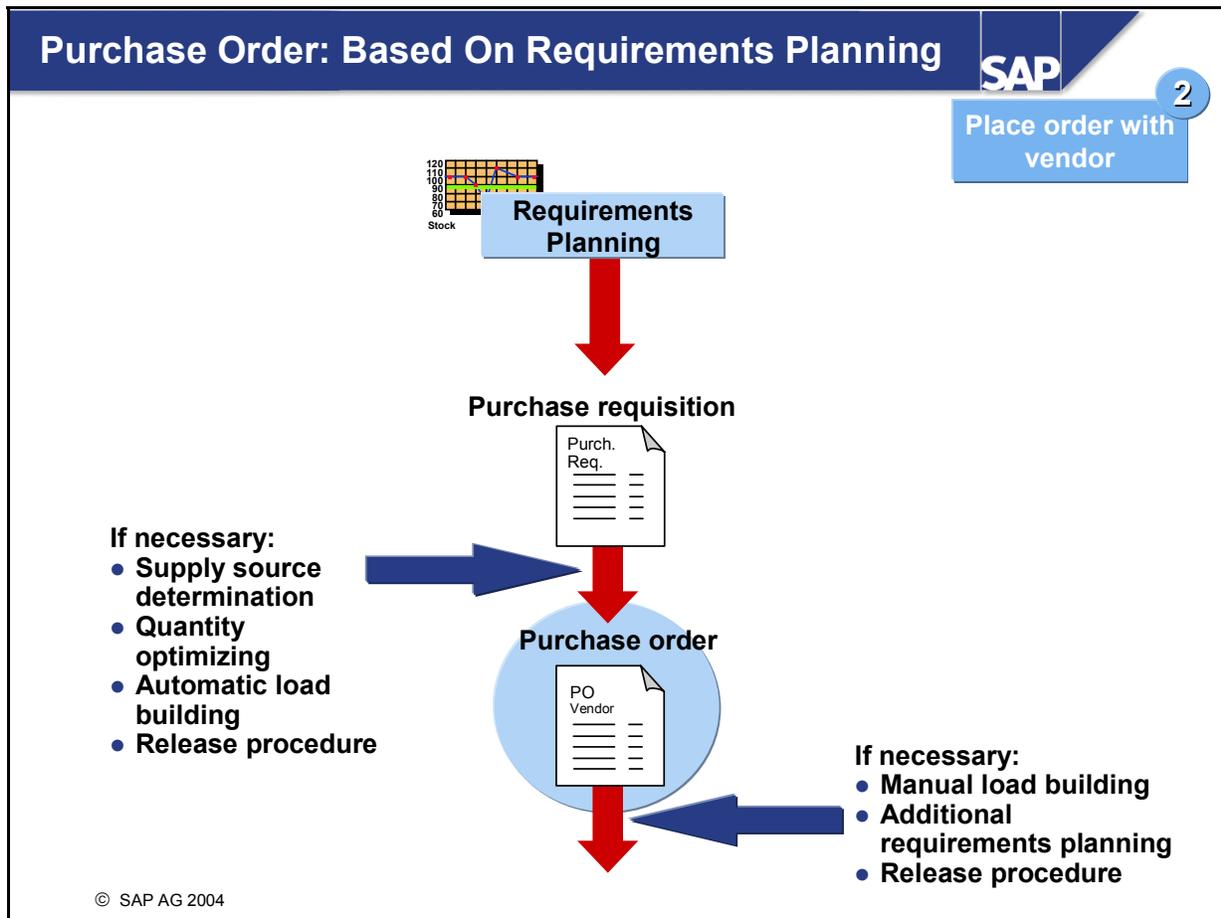
- In reorder point planning, the stock that is available in the warehouse is compared with the reorder point. If the stock available in the warehouse is less than the re-order point, the system generates an order proposal.
- The reorder point is calculated using the safety stock and the expected article requirements during the replenishment lead time. Previous consumption, safety stock, future requirements and the replenishment lead time must therefore be taken into consideration when calculating the reorder point.
- Safety stock is used to cover the extra article requirements during the replenishment lead time as well as the additional article requirements that are generated when deliveries are not on time. Previous consumption, future requirements and vendor punctuality must therefore be taken into consideration when calculating safety stock.
- The replenishment lead time is calculated using the following data:
 - Purchasing department processing time
 - Planned delivery time
 - Goods receipt processing time



© SAP AG 2004

- If a vendor always delivers an article on a specific day, it makes sense to retain this time-phase, extended however to include the delayed delivery time. This can be done using time-phased planning.
- Before you can use time-phased planning for an article, you must enter the RP type for time-phased planning and the planning cycle in the article master data. The planning cycle is entered in the planning cycle field as a planning calendar. You must also define the planned delivery time and the lot size *Exact lot size*.
- Articles that are procured using time-phased planning are assigned a planning date in the planning file. The planning date is reset every time an article master record is created and every time a planning run is executed. The date is the day on which the article is planned. It is based on the planning cycle defined in the article master record.
- This means, therefore, that requirements planning is only run for an article on exactly those days defined by you. If you assign the same planning cycle, for example, to all articles from a vendor, requirements planning will always be executed on this day. Purchase requisitions that are generated when stock is insufficient are processed in purchasing by the relevant stock planner, depending on the vendor concerned.

Place order with vendor



- The process chain detailed above shows how purchase orders are generated using the purchase requisitions that are generated automatically in requirements planning. Both documents can also be created manually, if necessary.
 Note: Before purchase requisitions can be automatically converted into purchase orders, the indicator for the automatic conversion of purchase requisitions into purchase orders must be set in the article master (logistical data for a site), the vendor master (purchasing data for a purchasing organization) and the site master.
- Depending on the way your system has been configured, supply source determination, automatic load building or quantity optimizing are also run when you convert purchase requisitions into purchase orders.
- Purchase orders can be grouped manually (manual load building) at a later date. You can also enhance existing order items by selecting additional articles (additional requirements planning). Purchase orders (and purchase requisitions) can also be included in a release procedure.

Purchase Order: Structure (4/4)

SAP

2

Place order with vendor



Standard PO

Vendor

R3000 Allfresh Inc.

Doc. date

05/25/2002

Header



| Delivery/Invoice | Conditions | Texts | ... | Org. Data | Status |
|-------------------------|------------|--------------------|-----|-----------|--------|
| Purchasing organization | R300 | Retail USA | | | |
| Purchasing group | R30 | Retail Standard US | | | |
| Company code | R300 | IDES Retail INC US | | | |

Item



| Item | ... | Article | Product | PO quantity | OUn | ... | Deliv. date | Net price | ... | Site |
|------|-----|---------|---------|-------------|-----|-----|-------------|-----------|-----|---------|
| 10 | ... | R100000 | Yogurt | 100 | PC | ... | 06.01.2002 | 0.53 | ... | DC R300 |
| 20 | ... | R100008 | Pepper | 100 | CR | ... | 06.01.2002 | 2.56 | ... | DC R300 |

Item [10] R100000, Yogurt



Item Details



| Article Data | Quantity/Weight | Schedule Lines | ... | Del. Address | ... |
|---------------------|-----------------|----------------|-----|--------------|-----|
| Title | | | | | |
| Name | DC R300 | | | | |
| Street/House Number | Desert Road | 17632 | | | |
| Zip Code/City | 98711 | Los Angeles | | | |
| Country | US | USA | | | |

© SAP AG 2004

- A purchase order consists of a header, the item overview in which the individual order items are created, as well as the details view for the individual items. Unlike the 'old' purchase order (transaction ME21), all three display levels are now visible to the user at the same time.
- The Enjoy purchase order, consisting of a header, the item overview in which the individual order items are created, and item details, is displayed in transaction ME21N. Three different display levels are therefore visible to the user.
- A purchase order can be a vendor order (see the process detailed above) or a warehouse order.
- For organizational purposes, a purchase order is assigned to one purchasing organization and one purchasing group only. In addition to this, a purchase order is assigned to one order type only (NB = standard purchase order, UB = stock transport order) for control purposes.

The screenshot displays the SAP Purchase Order interface. At the top, there is a header section with a shopping cart icon, a 'Standard PO' dropdown, a 'Vendor' field containing 'R3000 Allfresh Inc', and a 'Doc. date' field containing '05/25/2002'. Below this are buttons for 'Print Preview', 'Messages', 'Personal Settings', and a three-dot menu. The interface is divided into three main sections: 'Header' (represented by a hat icon), 'Item' (represented by a document icon), and 'Item Details' (represented by a magnifying glass icon). Each section contains a list of fields and options available at that level.

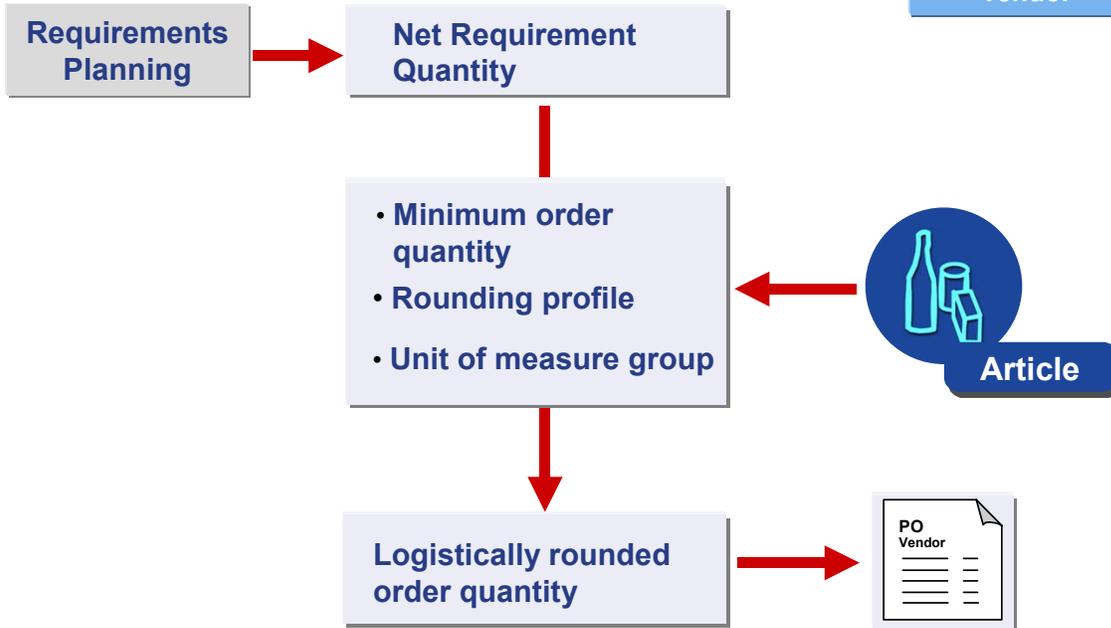
Header
 Terms of payment, document conditions, texts, vendor's address, partner function, collective number, status...

Item
 Article, order quantity, delivery date, merchandise category, recipient, storage location, return items...

Item Details
 Weights, volumes, schedules lines, tolerances, tax code, pricing, delivery address, confirmation control, subsequent settlement, articles on promotion, allocation table relevance...

© SAP AG 2004

- You can access more than one additional functionality when processing purchase orders. You can, for example, do the following at header level of a purchase order:
 - Create additional texts
 - Create partner schemas if the vendors, invoicing parties, and payees are not identical
 - Go to the vendor address and conditions
- At individual item level, you can do the following in a purchase order:
 - Add empties (for example, crates, empty bottles) to an empties article (for example, a crate of beer) as a subitem
 - Create schedule lines
 - Create conditions including free-goods discount
 - Order generic articles using a variant matrix
 - Create return items (for example, for vendor returns, transport packaging, empties, and regular merchandise)



© SAP AG 2004

- Net requirement quantities from requirements planning and manual order quantities can be rounded. When this is done, the following information is taken into consideration: minimum order quantities, defined rounding profiles and groups of logistical units of measure that have been agreed upon with the vendor.
- These settings are made in the purchasing view of the article master record.
- When rounding quantities to logistical units of measure, the system always attempts to place an order for the largest possible unit of measure from a vendor. This is done to ensure that the best possible conditions are achieved. The smallest possible unit of measure for a purchase order is the unit of measure that is identified as the base unit of measure (BUn) in the article master.
- The rounding profile and the unit of measure group that is valid for the vendor are taken into consideration when the permitted unit of measure is being determined. The unit of measure group is used to define the units of measure used by the vendor to order articles. This definition is valid for each vendor and article.

Adjust purchase orders

Place order with vendor

Vendor

Restrictions met?

Restrictions:

- Weight
- Volume
- Net value

Display PO Change PO Split POs Restrictions

Profile Delivery date

Collective number Order date

| Restrictions | | | | | |
|--------------|----------|------------|-----|-----|-------------------|
| OK | Act. Qty | Target Qty | UoM | ... | Restrictions |
| ○○○ | 1825.2 | 50,000 | KG | | Max. gross weight |
| ○○● | 1825.2 | 1000 | KG | | Min. gross weight |
| | | | | | |

| Purchase Orders | | | | |
|-----------------|------|-----------------|-------------|-----|
| Vendor | Name | Purchasing Doc. | Postal Code | ... |
| | | | | |
| | | | | |
| | | | | |

© SAP AG 2004

■ Load building aims to:

- Minimize transport costs by achieving full loads in the method of transport.
- Reduce the number of deliveries thanks to more evenly balanced ordering (purchase orders are filled more evenly according to the range of coverage) - by doing this, the shipment costs, the fixed costs in the purchase order, and the costs at putaway are all reduced.
- Achieve lower purchase prices by using higher scale levels (only possible when purchase requisitions are bundled automatically)

■ There are two types of load building: automatic and manual.

■ Automatic load building serves to assist the procurement of large quantities of merchandise while also taking restrictions for the delivery into consideration. To do this, the system processes all open purchase requisitions or existing purchase orders for each vendor/site. The system creates purchase orders based on this data. Depending on the settings that have been made, purchase orders can be grouped under a specific collective number.

■ The results of automatic load building are documented in a results list and can be controlled there.

■ Manual load building is used to group different purchase orders under a common collective number. It is also possible to change and split the purchase orders. Manual load building can group purchase orders that are intended for different vendors and for different recipients.

Place order with vendor

Calculation Schema
RMISR0

| Level | Counter | Condition Type |
|-------|---------|----------------|
| 1 | PB00 | |
| ... | | |
| 110 | 11 | RL01 |

Purchase Order

| | |
|----------|---------|
| POrg | R300 |
| Vendor | R3002 |
| For site | R300 |
| Article | R100099 |
| 5 PC | ??? |

Condition type: RL01 Vendor discount %
Access sequence: 0006

Access sequence: 0006
Condition tables
1. Condition group (excl.)
2. vendor subrange
3. Vendor

Condition tables
Condition group
No record exists

Condition table
Vendor discount
Vendor R3002 3%
from 500 PC 5%

© SAP AG 2004

- When you create a purchase order, the system searches for existing conditions in the purchasing view for the article (article info record), in contracts (when a contract is called) and in the general conditions. The conditions are then used as default values for the new document.
- Price determination consists of the following steps:
 - The relevant calculation schema is determined using the schema assignment
 - All the condition types listed in the calculation schema are searched to determine if they contain condition records - this can only be done if an access sequence is assigned to a condition type
 - Condition records are searched for in the sequence that is defined using the access sequence
 - The search is complete when a valid condition record has been found. The exclusive indicator in the access sequence gains in importance when this done. The exclusive indicator controls whether the search is cancelled or not when the first valid condition record is located. Alternatively, the last located record is valid.

Place order with vendor

| | |
|--------|-----|
| PO | ... |
| Vendor | ... |
| | |
| | |
| | |
| | |
| | |
| | |

Correct confirmation control key in order item



- Which confirmations (e.g. inb. dlvs)?
- In what sequence?
- Do the confirmation affect requirements planning?
- Monitor confirmations?

Confirmation control key



Purchasing data



Vendor

View: Purchasing

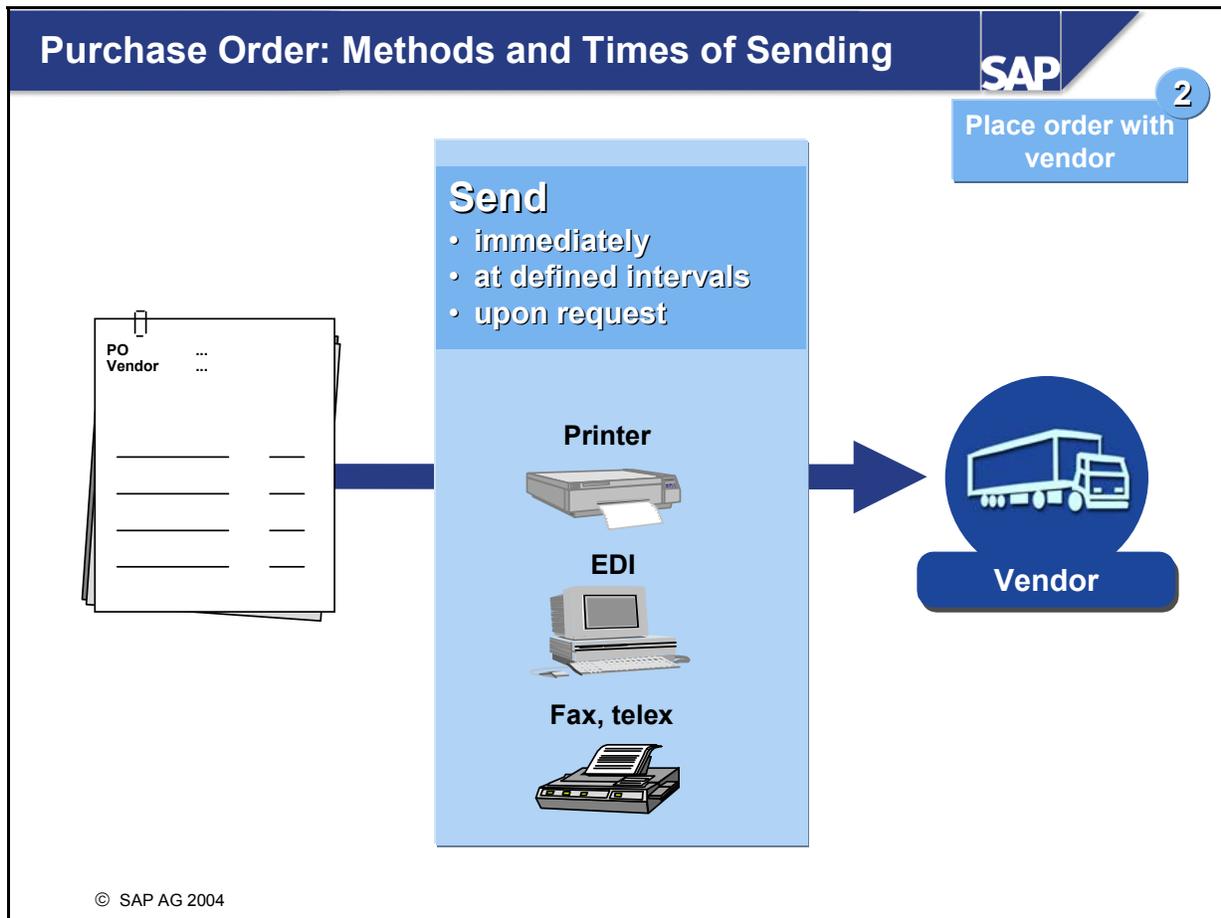


Articles

© SAP AG 2004

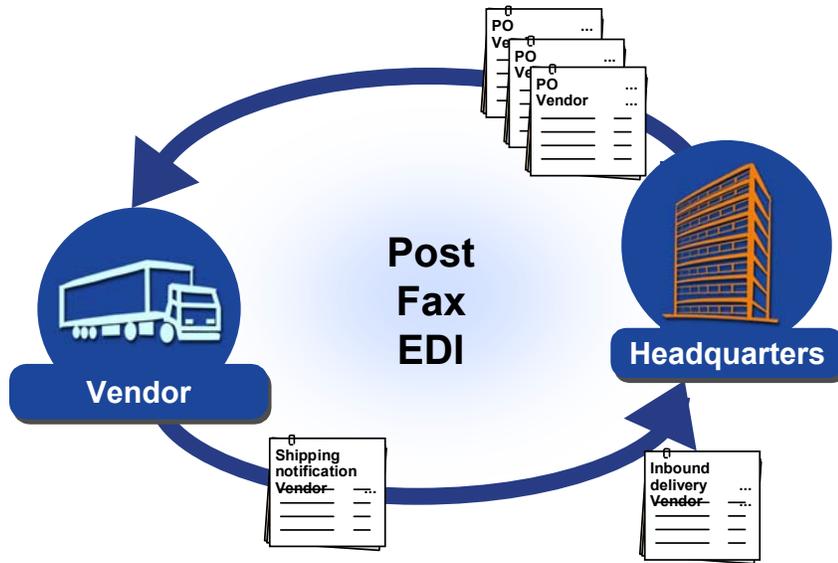
- Use the confirmation control to define the sequence in which the individual confirmations (= confirmation categories) are due to arrive.
- Confirmation categories define:
 - The date and time by which the confirmation must have arrived;
 - The relevancy for requirements planning and goods receipt
- The confirmation control key is defined in Customizing. It can be created in the vendor and/or article master data. It is either copied to the order item from the vendor or article master data, or it can be entered in the order item manually. It is prerequisite for carrying out Handling Unit Management if it contains the relevant confirmation category ANLI (= inbound delivery).
- If you want to generate proof of delivery for the vendor, you must configure the confirmation control key accordingly.
For more information about this topic, see the SAP Library documentation for *Logistics Execution, Goods Receipt Process for Inbound Deliveries*.

Place order with vendor



© SAP AG 2004

- When a purchase order is stored, an output method is created for the purchase order. The sending method represents a message type.
- The message type defines which information is to be sent, the format in which it is sent (for example, printed form, EDI, fax) and the time the message is sent:
 - Immediately after the purchase order is saved
 - At defined intervals as part of a constant processing program
 - Upon request by the user after making a menu selection



© SAP AG 2004

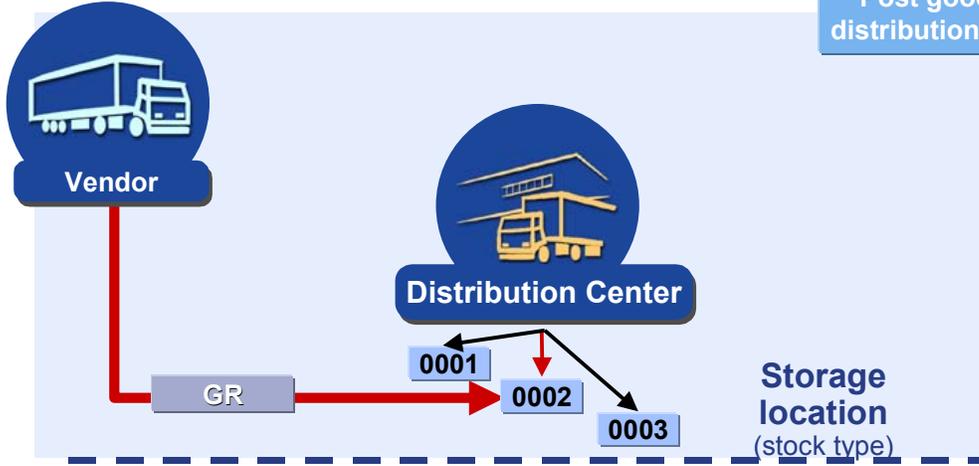
- **Shipping notifications** are used by vendors to announce the delivery of articles. The vendor sends information about the delivery date, delivery time, delivery quantities and the articles that are delivered.
- The shipping notification is based on one or more purchase orders that have been placed with the same vendor. In mySAP Retail, an **inbound delivery** is entered for the shipping notification or created when an EDI is sent. Inbound deliveries can be used as reference documents for the (rough) goods receipt that follows.

Goods Receipt: Alternatives and Process

SAP

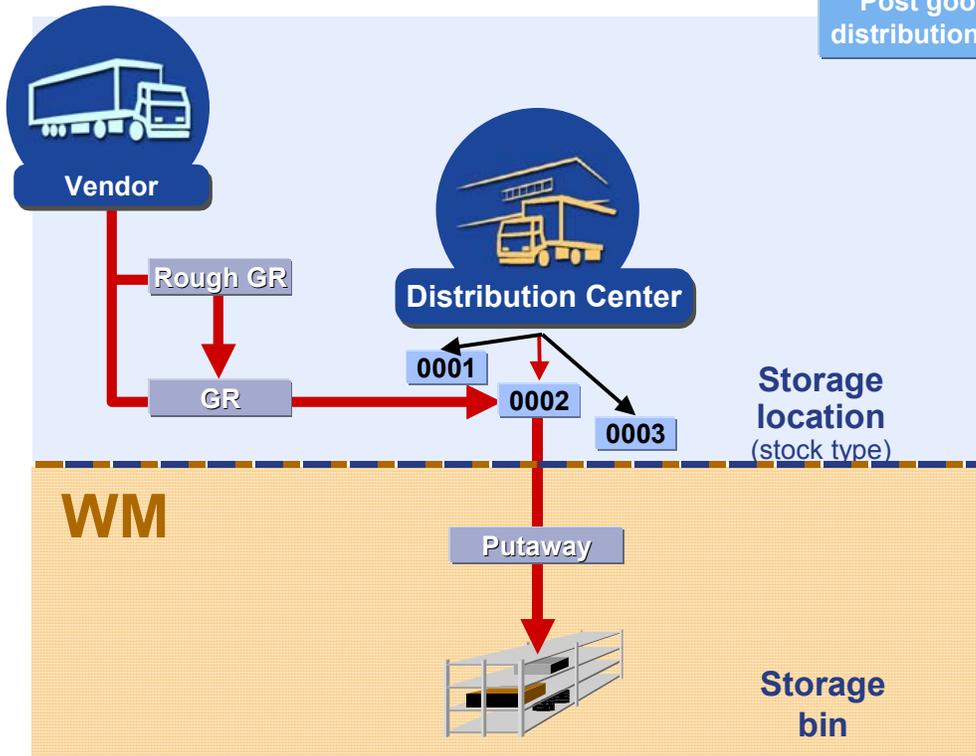
4

Post goods in distribution center



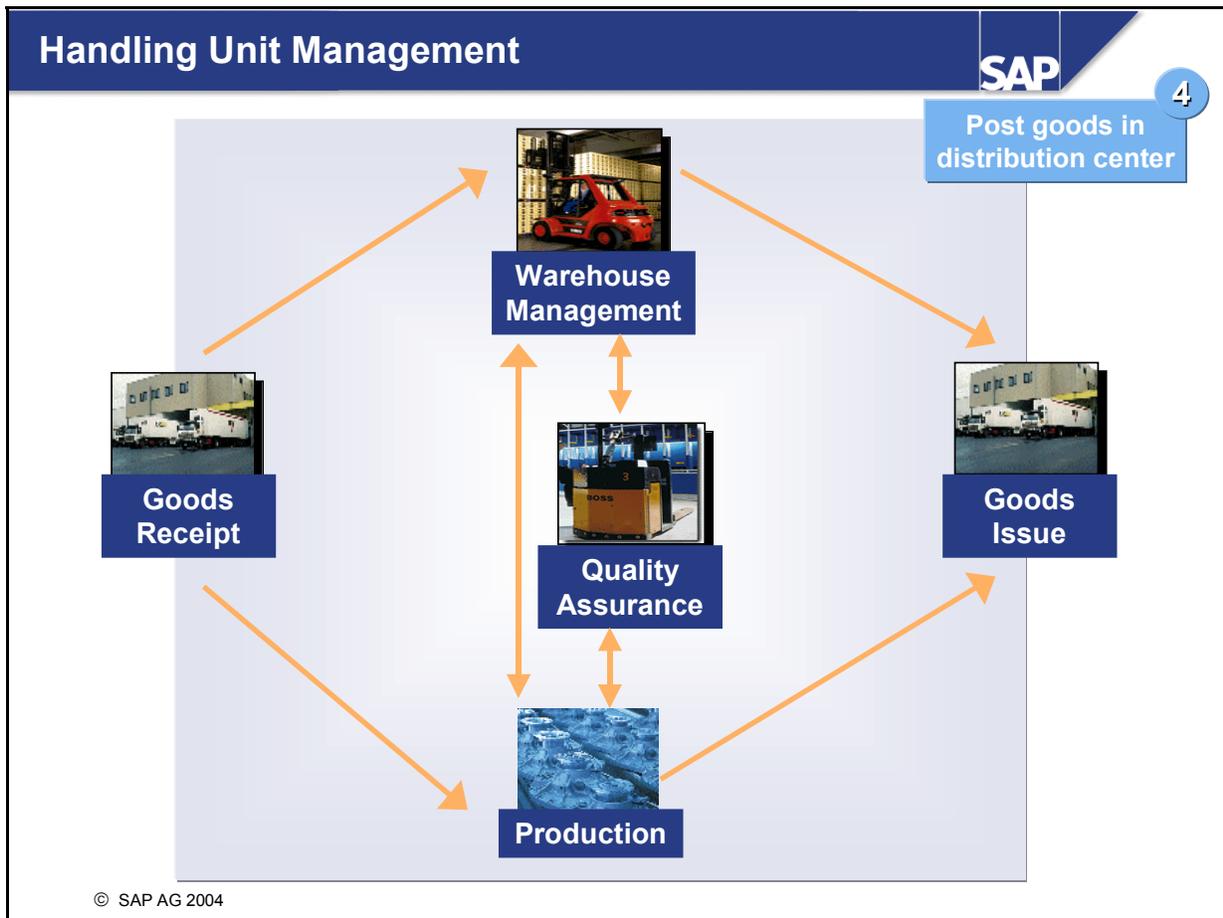
© SAP AG 2004

Post goods in distribution center



© SAP AG 2004

- Goods receipt in a site (distribution center OR store) can be done in one or two steps.
 - One-step
A (complete) goods receipt is executed directly.
 - Two-step
(Rough) goods receipt is run first, followed by goods receipt.
- In both procedures, the merchandise is assigned to a stock type for a storage location at the site that receives the delivery.
- If the destination storage location (for example, a distribution center) is connected to SAP Warehouse Management (WM), articles can be assigned to specific storage bins (putaway). Putaway can be physically restricted to individual storage areas (= a grouping of different storage bins within a storage type for the purposes of putaway).



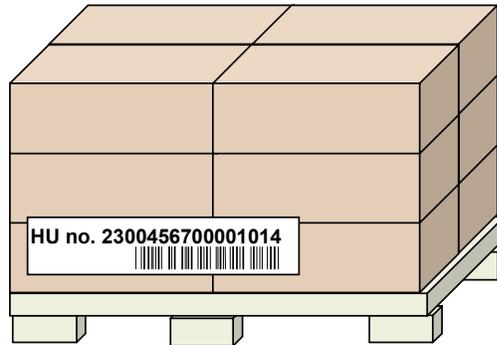
- Using Handling Unit Management, you can map packing-controlled logistics in the SAP system. Here, you do not generally consider individual articles, but instead a number of articles that together make up a package or handling unit. This is mapped with the HUs in the system.
- Mapping the logistics processes on the basis of handling units simplifies the processing of goods movements and therefore optimizes the processes in logistics. The aim is for the HUs to remain unchanged on their way through logistics.
- Once the HUs have been created, all subsequent processes can use this information. In particular, they can be moved through the entire logistics and passed on to partners in the supply chain. If necessary, however, they can also be changed.
- This supply chain includes the purchase order, notification, inbound delivery, storage or putaway, and the goods receipt posting of the ordered merchandise.
- The main advantage of mapping the goods receipt process using an inbound delivery is that you can carry out lots of processes *before* the actual goods receipt is posted. You already know all the information, as the vendor notifies you about the inbound delivery. The inbound delivery describes exactly which articles or which pallets can be accepted at what time.

...

...

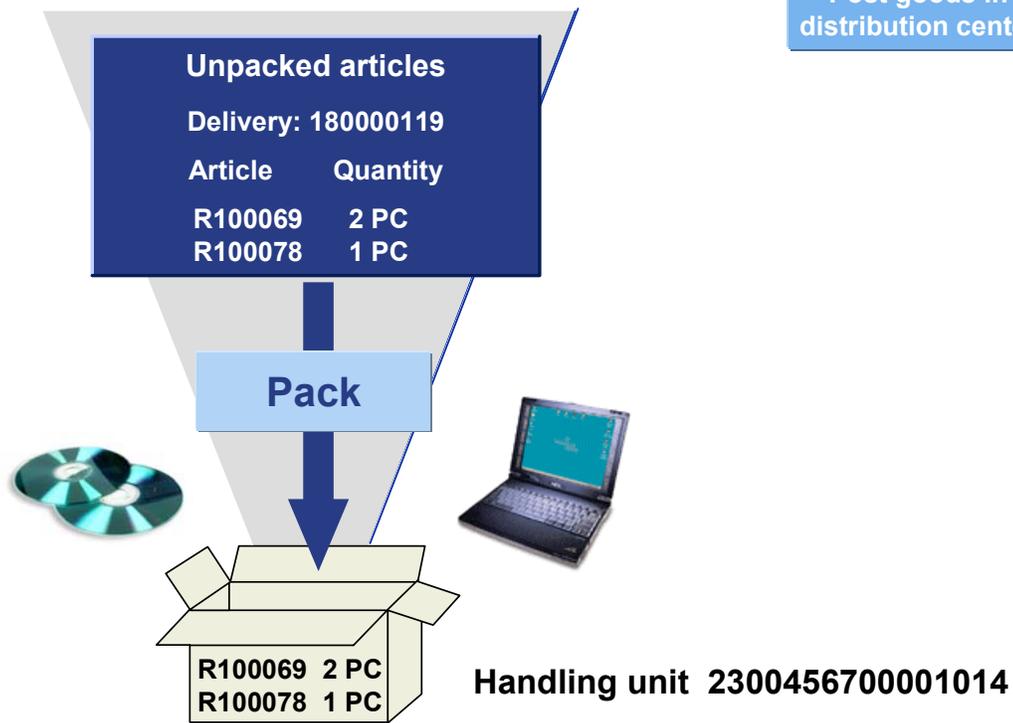
- The following functions are available with the goods receipt process for the inbound delivery:
 - Transfer order for inbound delivery
 - Batch information
 - Inventory management of packaging materials
 - Inbound delivery monitor
 - Determination of goods receiving point
 - Incompleteness log
 - Change documents
 - Document flow for inbound delivery

A handling unit (HU) is a logistical unit consisting of merchandise and packaging. Its unique number means it can be identified across processes.



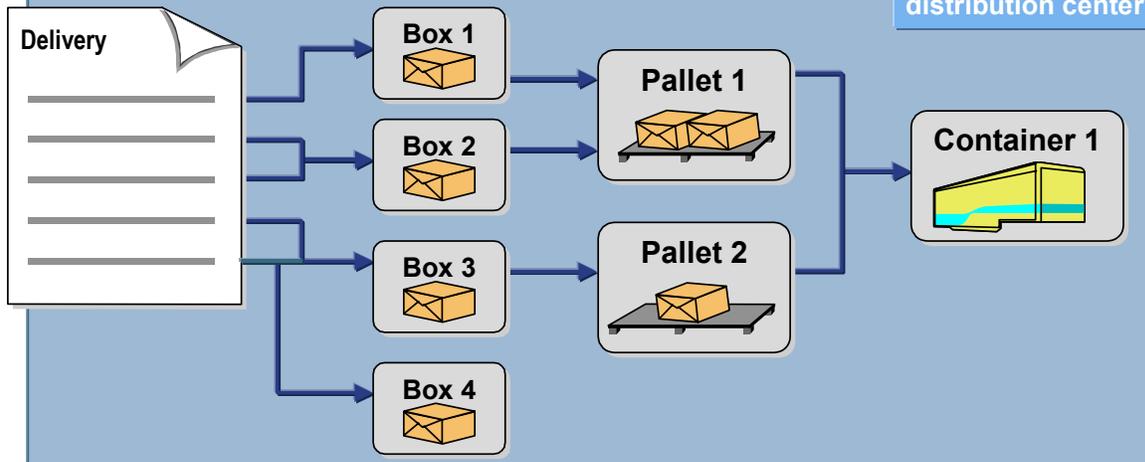
© SAP AG 2004

- *Handling Unit* (HU) is the SAP term for a package (pallet, container, truck) and describes the physical combination of:
 - Packaging material (for example, pallet, box, shrink film, container, truck)
 - Merchandise (that are transported, stored, and consumed and so on)
- Each HU has a unique identification number, making it identifiable in the system. All information can be read using this number.



© SAP AG 2004

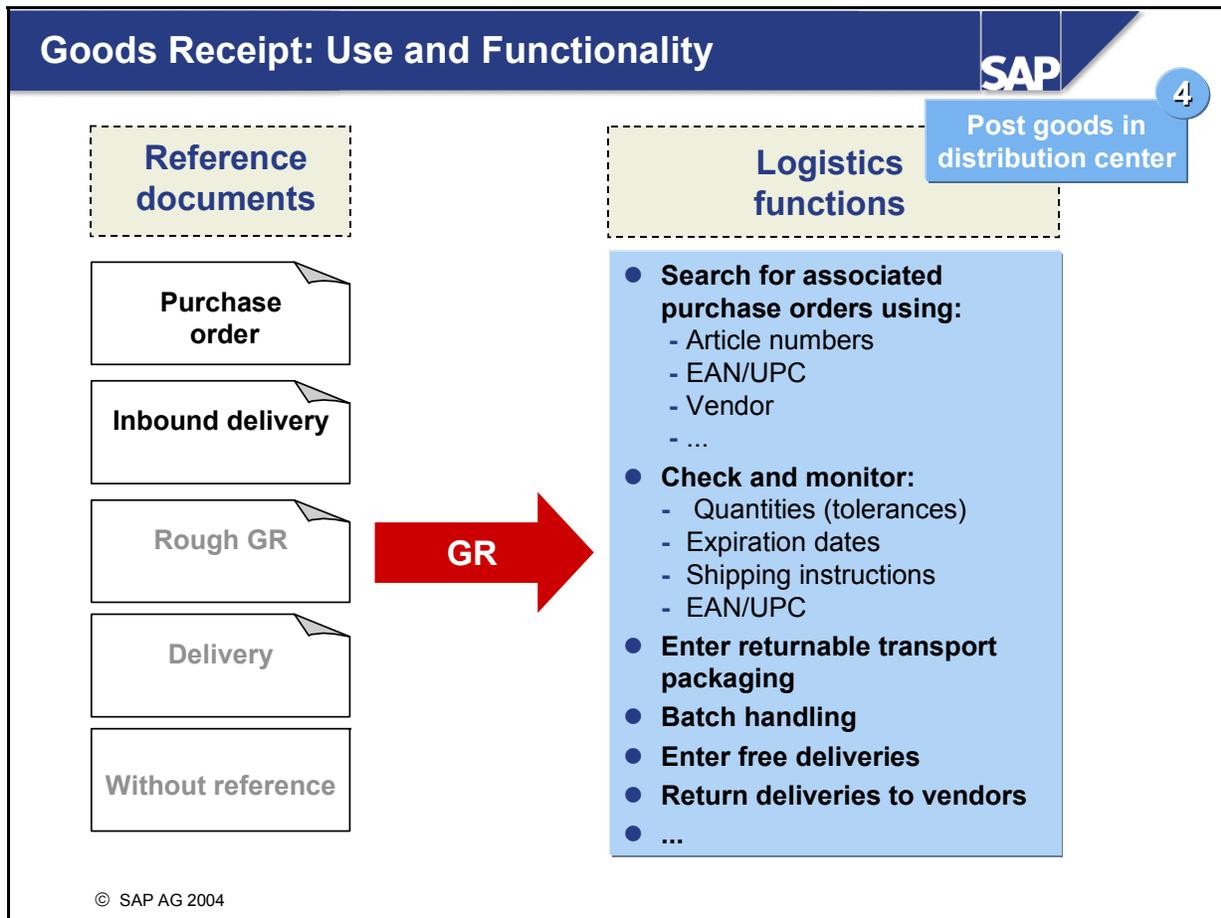
- Handling Unit Management enables you to control packaged stock at storage location level. For each storage location, you can define whether the handling units for the stock in this location keep stock autonomy or not.
- Good movements to storage locations that use handling units are only possible by specifying the handling unit that contains the stock to be posted.
- When handling units are changed, unpacked stock is reposted to non HU-managed storage locations and packed stock is reposted to HU-managed storage locations.
- The handling unit knows the exact stock category of the packed stock.
- In HU-managed storage locations, it is guaranteed that the HU contents matches the IM storage location stock.



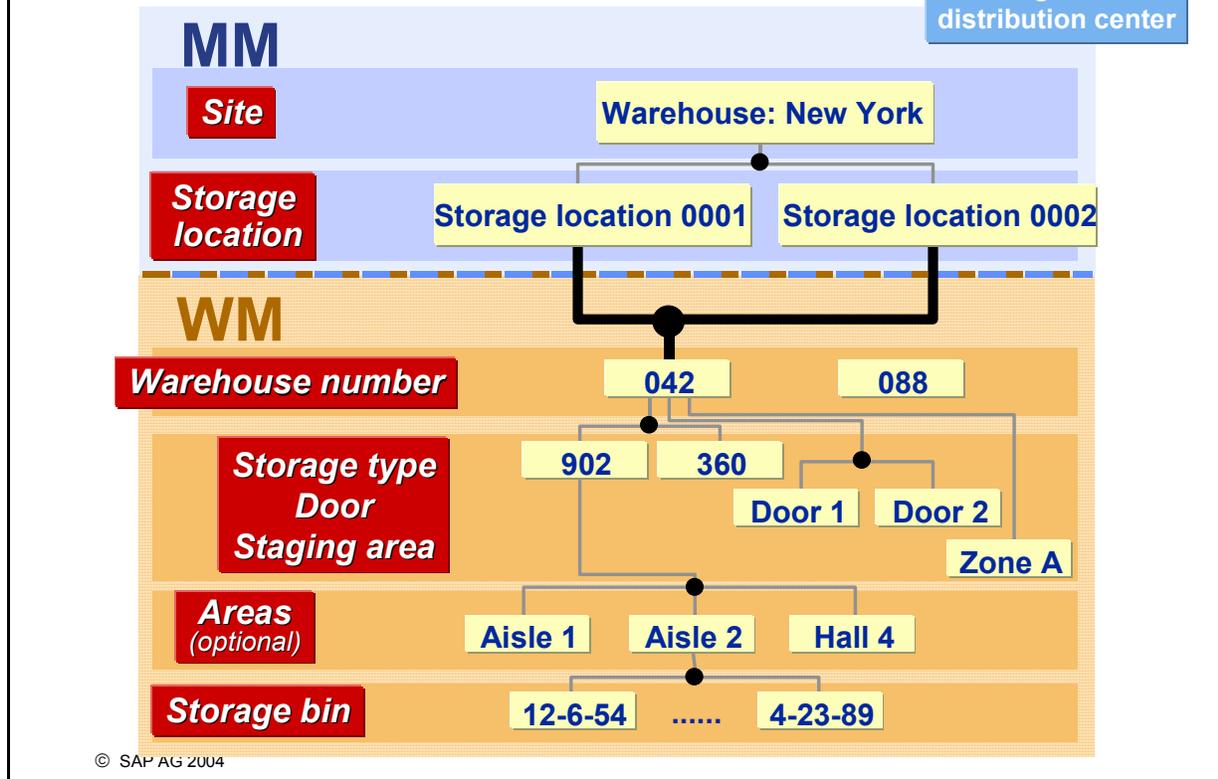
| Pack Articles | Pack HUs | Packing Proposal | Single Entry | Total Content |
|---|---|---|--|--|
| <ul style="list-style-type: none"> • Pack individually, • Empty • Delete | <ul style="list-style-type: none"> • Multilevel packing • Distributed packing | <ul style="list-style-type: none"> • Packing instruction | <ul style="list-style-type: none"> • Packing status • Contents | <ul style="list-style-type: none"> • HU hierarchy • Overview |

© SAP AG 2004

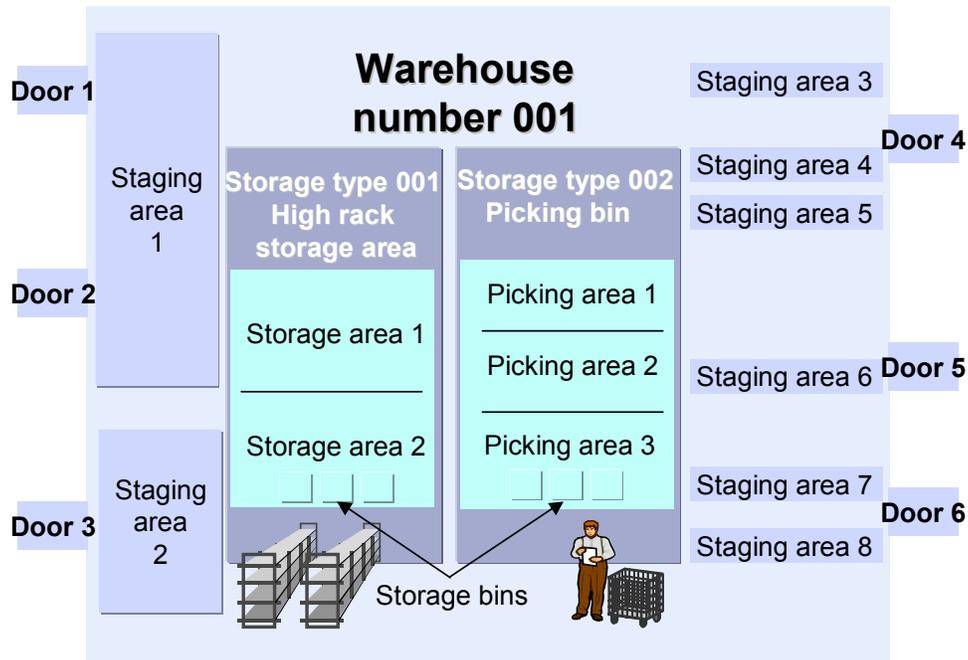
- **Packing** is when delivery items are assigned to packaging materials. The **handling units** that are created can then be packed in further packaging material. This creates new handling units. There is no limitation to the number of levels that can be used (**multilevel packing**). The number of possible packaging levels is 999999.
- In addition to the normal packing of delivery items in HUs, you can also pack a certain quantity automatically distributed amongst several HUs.
- Items that have already been packed can be unpacked again. This also applies to multilevel packed HUs.
- You can also unpack, empty, or delete handling units.
- The **handling unit header** defines the packaging material that was used. The contents overview of the packaging material lists which delivery items or other HUs are contained and in what quantities.
- You can use **packing instructions** when packing articles. You can use one packing instruction for a number of different articles. In this case, you require a reference article, which serves as a representative for all articles that are to be packed using the same packing instructions. A packing instruction is created for this reference material. In addition, the use of reference articles for packing instructions must be activated in Customizing.
- The data defaulted from the article master record for the packaging material can be changed and extended to include an external identification method (for example, the pallet number).



- You can create a goods receipt with reference to purchase orders, a shipping notification (inbound delivery) or a rough goods receipt. The advantages of processing goods receipts with reference documents are:
 - The goods receiving department can check if the delivery actually contains the merchandise that was ordered
 - When the goods receipt is being created, data for the reference document is suggested by the system, thus making it easier to create the goods receipt and also monitor the development of the goods receipt
 - Goods receipt data is updated in purchase order development and vendor evaluation. This means that associates can monitor purchase order development, trigger the dunning procedure, and ensure that quantities and deadlines are adhered to
 - The relevant purchaser is automatically informed about the goods receipt using SAPmail
- At goods receipt, you can also run checks and monitoring (for example, for delivered quantities, expiration dates, shipping instructions, EAN).
- One additional type of goods receipt in SAP Retail is the creation of returnable transport packaging as special stock. Returnable transport packaging can be transport equipment (for example, a pallet) or empties (for example, bottles).
- It is also possible to post **goods receipt without a reference document** for a document that has been created previously in the system. This allows you to generate a purchase order subsequently, thus enabling you to use invoice verification at a later date.
- If a goods receipt is created with a reference to an inbound delivery, proof of delivery can be sent to the vendor in an IDoc.



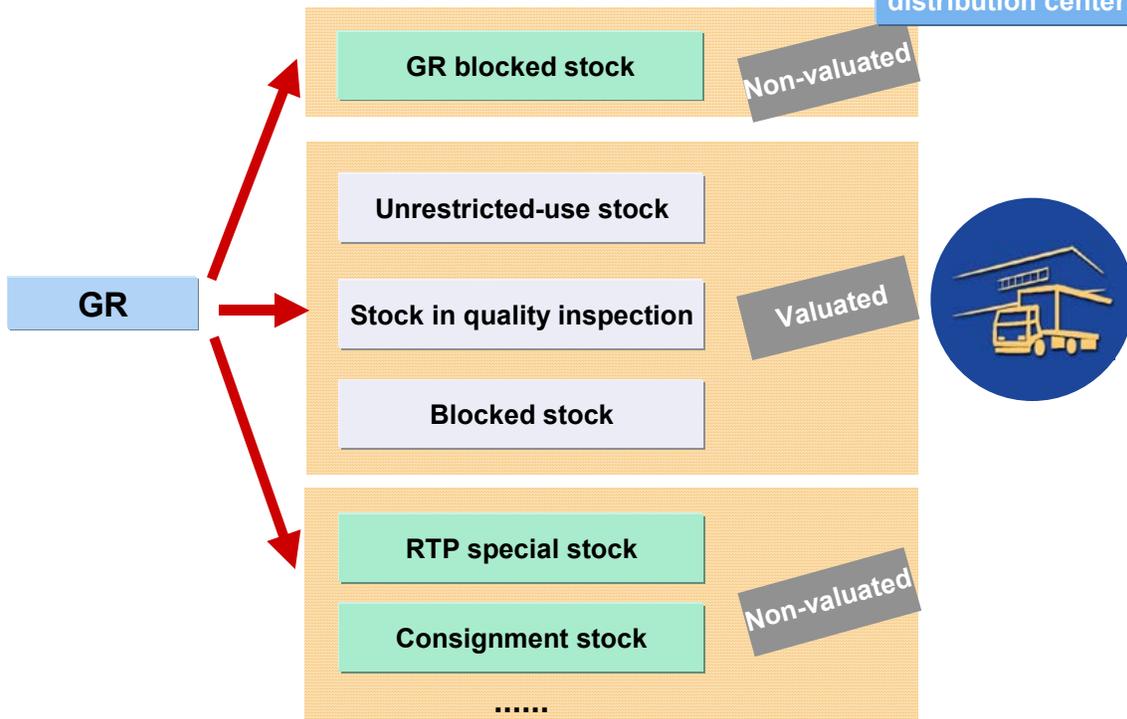
- If stocks are to be managed within a **storage location** for a distribution center (a site) you can use SAP's Warehouse Management (WM) functionality. To do so, you must assign a **warehouse number** to the relevant storage location. The warehouse number represents the entire warehouse structure.
- Storage locations that have different technical or organizational requirements have different **storage types** in the warehouse numbers. Examples: GR zone = storage type 902, high rack storage area, bulk storage, GI zone = storage type 910. To make goods receipt processing and picking easier, you can create different **doors** and **staging areas** below a warehouse number.
- You can also choose to group neighboring storage areas within the same storage type. If you groupings are created based on goods receipts, we refer to **storage areas**. If groupings are created based on picking, we refer to **picking areas**.
- **Storage bins** are found within areas or within storage types for which no specific areas have been defined. The storage bins are identified by three-character, numeric coordinates.



© SAP AG 2004

- This diagram illustrates the use of the following organizational elements in SAP Warehouse Management: warehouse number, storage type, door, staging area, storage section, picking area and storage bin.

Post goods in distribution center



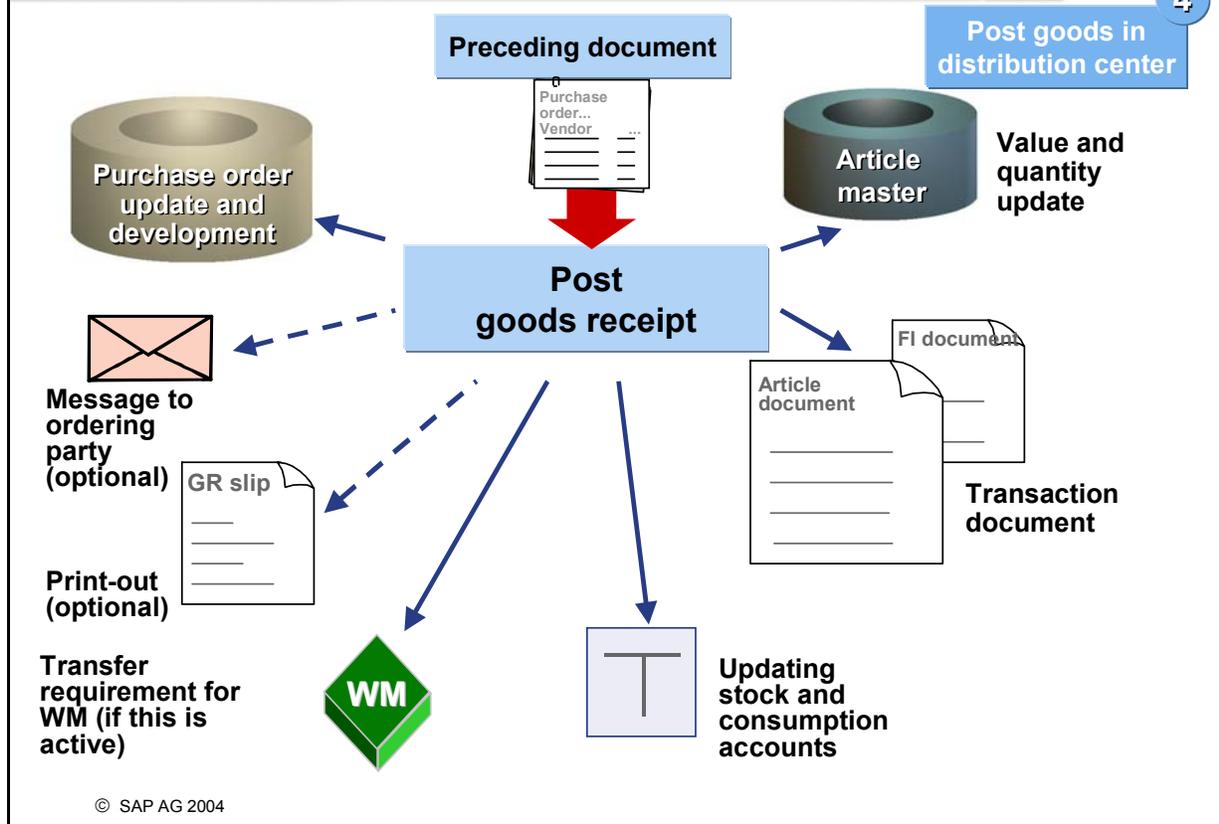
© SAP AG 2004

- At GR, articles can be placed in the following categories in the warehouse:
 - Merchandise is placed in **GR blocked stock** if, for example, the merchandise is to be attached to other items at a later date. This stock is not assigned to a specific storage location.
 - **Unrestricted-use stock** is not limited in any way.
 - Articles in **quality inspection stock** must be moved to unrestricted-use stock before they are removed from storage.
 - **Blocked stock** (the same as stock in quality inspection).
 - RTP special stock : items can also be created for RTP. As RTP is not normally clearly identifiable in purchase orders, goods receipts are posted without any assignments to a specific article. If RTP is returned, it is treated as non-valuated special stock with reference to a specific vendor. If RTP is purchased from a vendor, it is not treated as special stock. It is posted to unrestricted-use stock.
 - Merchandise is posted to **consignment stock** if the customer is provided with merchandise by the vendor but the merchandise is only paid for when it is actually used.

Goods Receipt: Effects

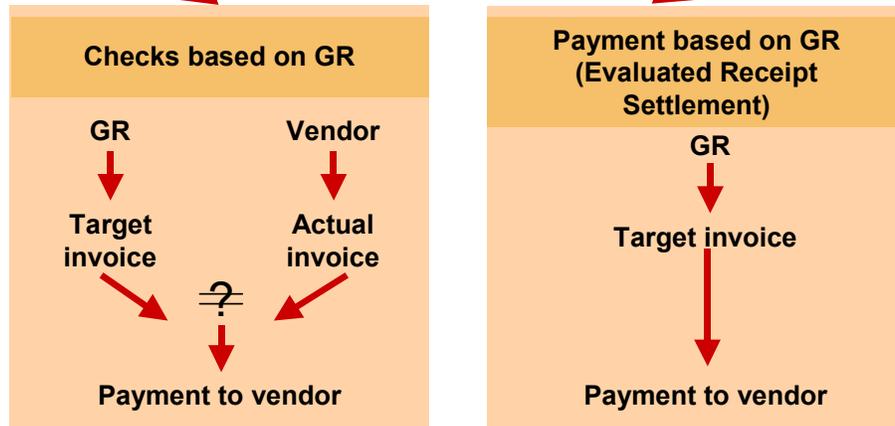
SAP

4



- This slide gives you an overview of the most important effects of goods receipts with reference to a purchase order.

Logistics Invoice Verification



© SAP AG 2004

■ **Logistics invoice verification** can be used in **two ways**:

- **Checks based on goods receipts**

Based on the quantities and articles entered at goods receipt, the system creates a target invoice and compares the actual invoice sent the vendor before any payment to vendors takes place.

- **Payment Based on GR (ERS = Evaluated Receipt Settlement)**

Based on the quantities and articles created, a target invoice is created at goods receipt and the resulting amount paid to the vendors.

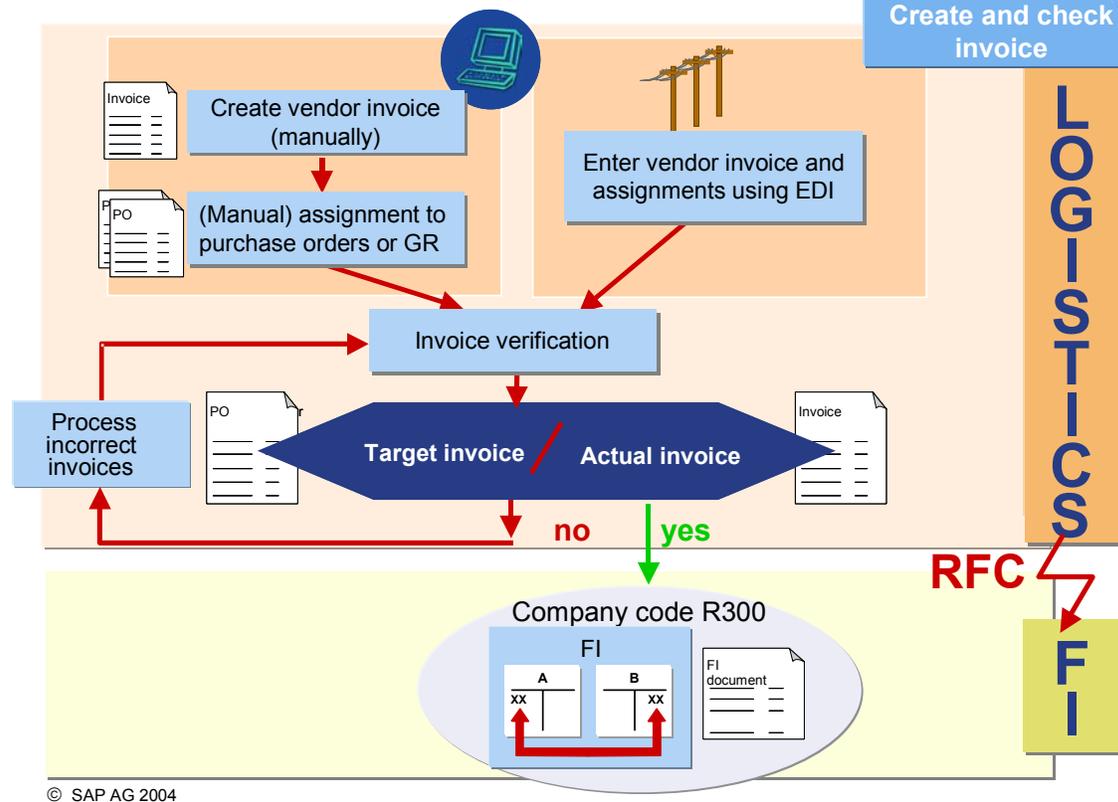
Whether or not a vendor uses ERS for all order items or only for return items is defined in the master record for the vendor (purchasing data).

Logistics Invoice Verification: Procedure in Brief

SAP

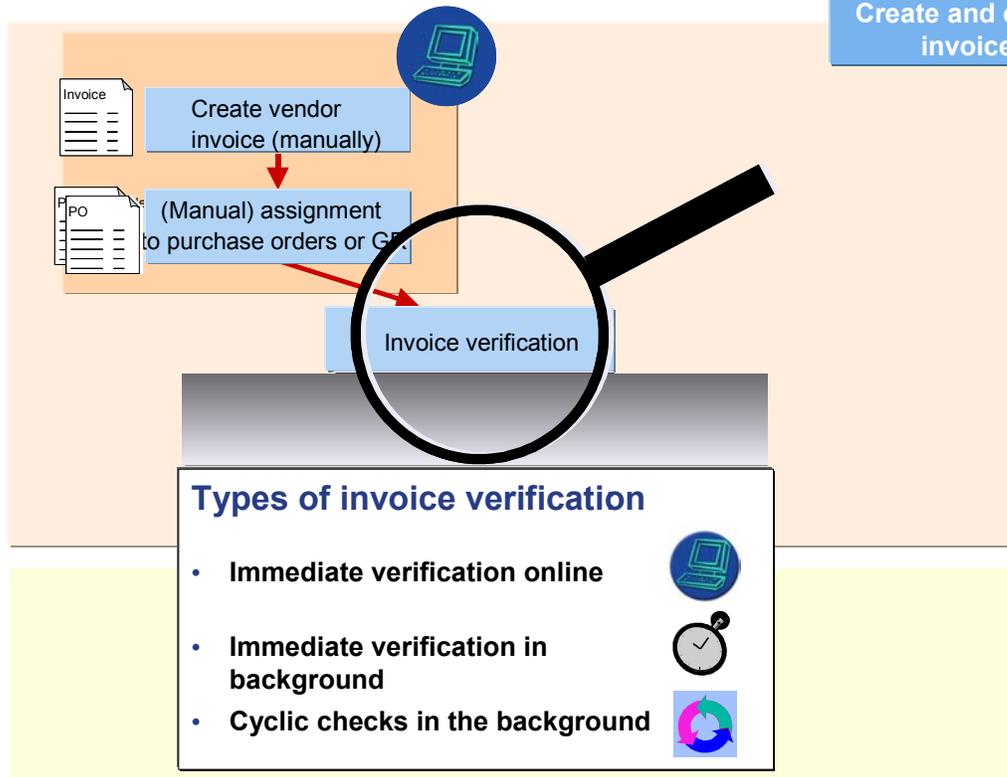
5

Create and check invoice



© SAP AG 2004

- Logistics invoice verification in SAP Retail is separate from Financial Accounting (FI) and thereby allows you to use decentralized invoice verification. It involves the following steps:
 - A vendor invoice is created and purchase orders or goods receipts are assigned. This can be done in two ways:
 - Online in the system
 - With EDI (Electronic Data Interchange); this involves automatically uploading the invoice data, the numbers of the relevant reference documents using IDocs (IDoc type INVOIC01).
 - In Invoice verification, the actual invoice amount is checked against the target invoice amount. Based on a tolerance group, extremely high invoices can be automatically lowered to a definite limit. If this is the case, the relevant vendor is automatically informed using message type REKL. Incorrect invoices must first be processed by the user (for example, changing assignments, correcting conditions...). The invoices are then sent to invoice verification once again.
 - Transfer and posting in Financial Accounting (FI)
 - Correct invoices are sent (using Remote Function Call, RFC) to Financial Accounting as a posting record before being posted. If financial accounting takes place in a different SAP or non-SAP system, the posting records are transferred using Remote Function Call (RFC).



© SAP AG 2004

- If a vendor invoice is created online in the system and assigned to the relevant purchase orders and goods receipts, the user can choose between three different invoice verification types for running invoice verification:
 - **Immediate verification online**
The invoice that has been created is checked online. Users have to wait (in the relevant mode) until checks are complete before continuing with corrections to the invoice or before starting to generate a new invoice.
 - **Immediate verification in the background**
The invoice that has been created is checked in the background and the results entered in a list. Users can already start creating the next invoice in the system and make assignments while checks are running in the background. At a specified time, the users check the results list of the invoice verification that is taking place in the background and then processes the contents of the list.
 - **Cyclic checks in the background**
The invoice that has been created is isolated for cyclic invoice verification. Users can continue to create and assign the next invoices. The isolated invoices are then checked using report RMBABG00 at a time defined by the system administrator. The results of the checks are then placed in a list. At a specified time, the users check the results list of the invoice verification that is taking place in the background and then processes the contents of the list.

Logistics Invoice Verification: Correction Options

SAP

5

Create and check
invoice

Process
incorrect
invoices

Correction options:

- Adjustment of conditions
- Changes to tax code
- Blocking particular purchase orders or articles
- Adjustment of quantities or prices

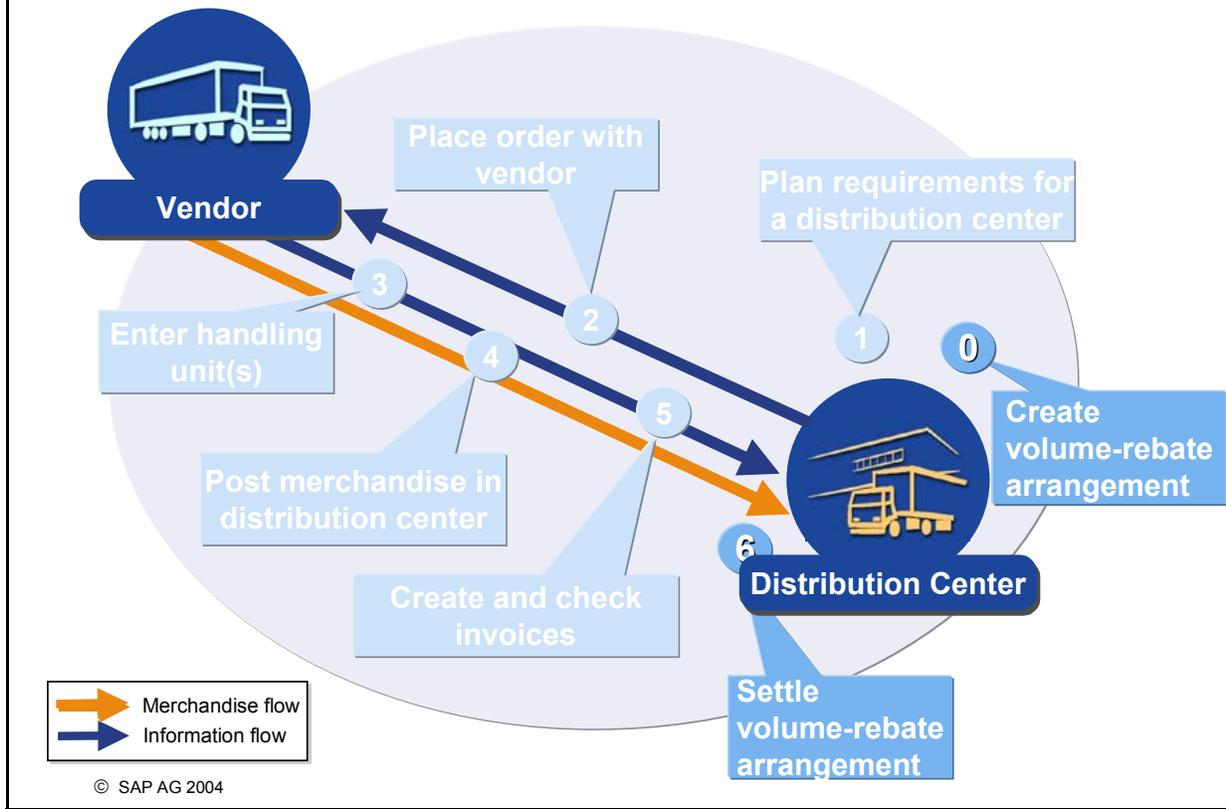
Mail to
purchaser



© SAP AG 2004

- Depending on the fields, incorrect invoices can be corrected as follows:
 - By adjusting conditions
(for example, if a vendor discount has been maintained incorrectly in the system).
 - By blocking particular purchase orders or articles from an invoice
(for example, if an error occurred when assigning vendor invoices to purchase orders)
 - By adjusting quantities or prices
(for example, if the vendor has created an invoice for a quantity that is larger than GR)
 - By changing a tax code
(for example, if a vendor invoice has been created using a tax level that is higher than necessary)
- If an error has been made in an invoice due to incorrect system data (for example, incorrect vendor conditions or tax codes have been maintained), a new message (type EINK) is automatically sent to the purchaser when the error is corrected. This can, however, only be done if the correct settings have been made in Customizing.

Subsequent Settlement: Process Overview



Internal Use SAP Partner Only

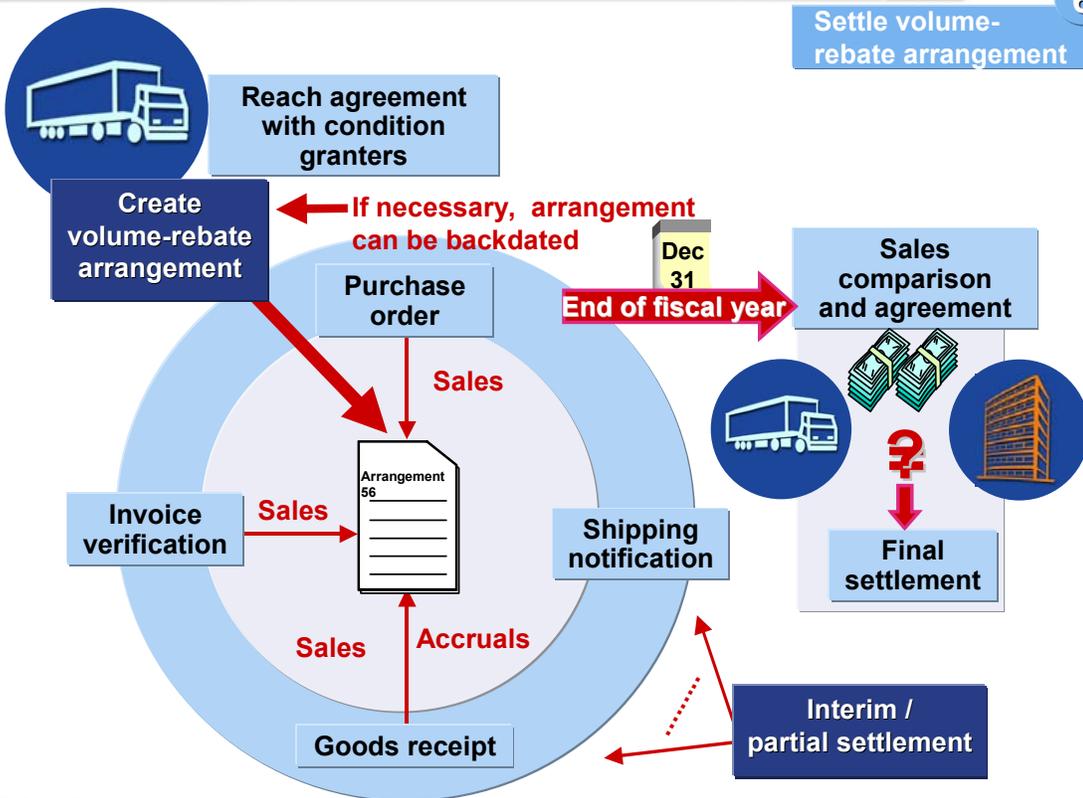
Internal Use SAP Partner Only

Subsequent Settlement: Cycle

SAP

6

Settle volume-rebate arrangement

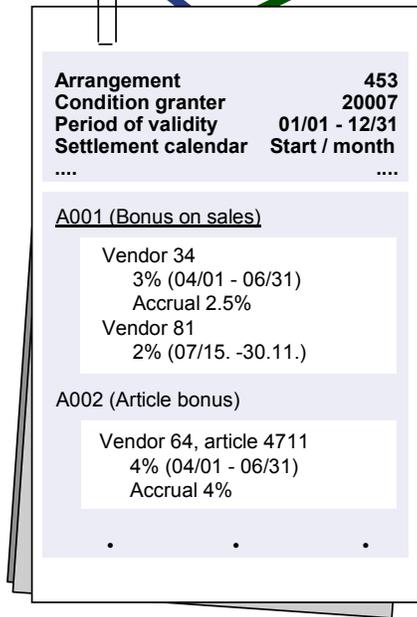


© SAP AG 2004

- Retailers and condition granters meet at regular intervals (for example, at the beginning of the year) to negotiate volume-rebate arrangements for the next business period (normally the next fiscal year). The arrangements are then entered in the system. The starting date for the volume-rebate arrangement can be backdated, meaning that sales from previous periods can be assigned to new arrangements. This can be done by subsequently restructuring the statistics.
- Purchase orders are then posted with the relevant merchandise vendors during the validity period for the relevant volume-rebate arrangement, the relevant goods receipts are posted and the vendor invoices are created and checked.
Depending on the Customizing settings made for the condition types used for the volume-rebate arrangement, accruals (for expected revenue) for the conditions are created when the goods receipts is posted. In addition, sales data relating to the volume-rebate arrangement is updated. The type of arrangement stipulates the time at which data is updated.
- If part of the expected volume-rebate is already posted before the arrangement becomes invalid, the data can be updated using interim / partial settlement. In partial settlement, the conditions that are created are marked as *completed* and are not included in future partial settlements. In interim settlement, this is not the case.
- At the end of the validity period for the volume-rebate arrangement, vendors and retailers can compare their sales figures and final settlement of the volume-rebate arrangement takes place.

Purchasing organization
Purchasing group

Agreement type



Header

1

n

Conditions

1

m

Stipulations

- Purchasing organization / purchasing group
- Agreement type
- Arrangement number
- Condition granter
- Period of validity
- Settlement calendar
- ...
- Condition type
- ...
- Key values
- Condition values
- Scales
- ...

© SAP AG 2004

- Volume-rebate stipulations that are to be settled subsequently are created in the system as volume-rebate arrangements.
- For organizational purposes, a volume-rebate arrangement is assigned to one purchasing organization and one purchasing group only. In addition to this, volume-rebate arrangements are assigned to one arrangement type only (see Customizing) for control purposes.
- Volume-rebate arrangements consist of headers and conditions whose values are defined at one or more levels in the volume-rebate stipulation.
- Before a condition granter can be included in a volume-rebate arrangement, the Subseq. Settlement indicator must be flagged in the purchasing data of the vendor master (for the relevant purchasing organization).

Subsequent Settlement: Example

SAP

6

Settle volume-rebate arrangement

Main Condition

Volume-based rebate for vendor R3001
from 100,000 USD 2%
from 180,000 USD 4%

Sales
achievable

| | |
|-----------------------|--------------|
| Agreement | 314 |
| Validity per. | 08/01- 12/31 |
| Settlement cal. | AM |
| | |
| A001 (Bonus on sales) | |
| Vendor R3001 | |
| 2% (08/01 - 10/31) | |

08/01

10/31

Period conditions

08/01 - 08/31

09/01 - 09/30

10/01 - 10/31

1 %

3 %

2 %

Partial
settlement



© SAP AG 2004

- Within a volume-rebate arrangement, a condition is an individual agreement. It applies on the one hand to merchandise (for example, vendor assortment, merchandise category, article) and on the other hand to enterprise entities such as the store and the distribution center, also called area of validity. If a condition is valid for several articles that do not come from the same vendor subrange, the articles can be grouped in a settlement group.
- Conditions can be described as follows: Every condition contains a remuneration. This consists of the amount (for example, fixed amount, percentage) and the remuneration unit of the amount (for example, USD, %) Each condition is assigned to a condition type. The condition type is defined in Customizing and contains the basic characteristics of a condition, for example, the reference value and calculation rule. You can also set whether a provision is mapped or not in the condition type.
- The reference value determines how the scale is interpreted for scaled conditions. The scale can relate, for example, to a quantity, a value, a weight, a volume or a number of points.
- The calculation rule determines how the remuneration of a condition is calculated. The remuneration can be a fixed amount or a percentage. The amount can relate, for example, to a quantity, a value, a weight, a volume or a number of points.

...

...

- The provision determines whether the expected revenue is included in the evaluation. That is, whether the floating average price is adjusted in the article master when a goods receipt is posted for a purchase order for which a provision-relevant condition is involved in the price determination.
- For conditions that are settled periodically, the main condition indicates the time frame for validity. The validity periods of period conditions cannot not fall outside the validity period of the main condition. The system only uses the period conditions for price determination in the documents.
- Different conditions can be entered for each period. The unit of rebate for the period conditions can be different from that of the main condition. For example, the main condition can be calculated as a percentage and the period condition as a fixed amount. This is preset in Customizing for the condition type, using the calculation rule. When maintaining conditions, you can assign another calculation rule to the period conditions.
- For scaled conditions, the period conditions can be used to settle an assumed value. This assumed value can be determined on the basis of values based on experience or estimations. This means that during the course of the year, this assumed value can be used for partial settlements without having to consider which scale level is actually reached due to the turnover made. This means that revenue can be generated as early as possible and consistently in the validity period of a condition.

Subsequent Settlement: settlement

SAP

6

Settle volume-rebate arrangement

Arrangement 314
 Period of validity 08/01 - 12/31
 Settlement calendar Start / month

A001 (Bonus on sales)
 Vendor R3001
 2% (08/01 - 10/31)

B002 Markup per material group
 Vendor R3001, MC R1121
 100 USD (11/1-12/31)

Volume-based rebate for vendor R3001
 from 100,000 USD 2%
 from 150,000 USD 4 %

Period conditions

| | |
|--------------|----|
| 08/01- 08/31 | 1% |
| 09/01- 09/30 | 3% |
| 10/01- 10/31 | 2% |

| | 08/01 - 08/31 | 09/01-09/30 | 10/01 - 10/31 | Total | 11/1-12/31 |
|---|---------------|-------------|---------------|---------|------------|
| Sales (in USD) | 30,000 | 80,000 | 40,000 | 150,000 | 50,000 |
| Partial settlement | 300 | 2,400 | 800 | 3,500 | - |
| Final settlement for A001: 150,000 x 4% - 3,500 = 6000 - USD 3,500 = USD 2,500 | | | | | |
| Final settlement for B002: ... | | | | | |

Invoice

Credit memo

© SAP AG 2004

- This slide shows the calculation of a volume-rebate arrangement for which vendor R3001 -31.10. receives a bonus of 4% during the period 08/01 - 10/31 after sales of USD 150,000 have been achieved.
- The main condition is period-based, as follows: 1% for 08/01 - 10/31, 4 % from 09/01 - 09/30 and 3 % from 10/01 - 10/31.
- As a result, partial settlement will be run if sales of USD 30,000, USD 80,000 and USD 40,000 are achieved in the periods specified. Partial settlement is therefore used for figures of USD 300, USD 2,400 and USD 800 during the relevant periods.
- In final settlement, the difference between 4 % of overall sales (USD 150,000) and the total from partial settlement (USD 3,500) is cleared.

Internal Use SAP Partner Only

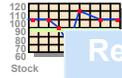
Internal Use SAP Partner Only

Requirements Planning: Special Methods

SAP



Online Planning



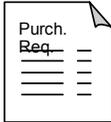
Requirements planning



Plan requirements for a distribution center

Investment Buying

Purchase requisition



If necessary:

- Supply source determination
- Quantity optimizing
- Automatic load building
- Release procedure

Purchase



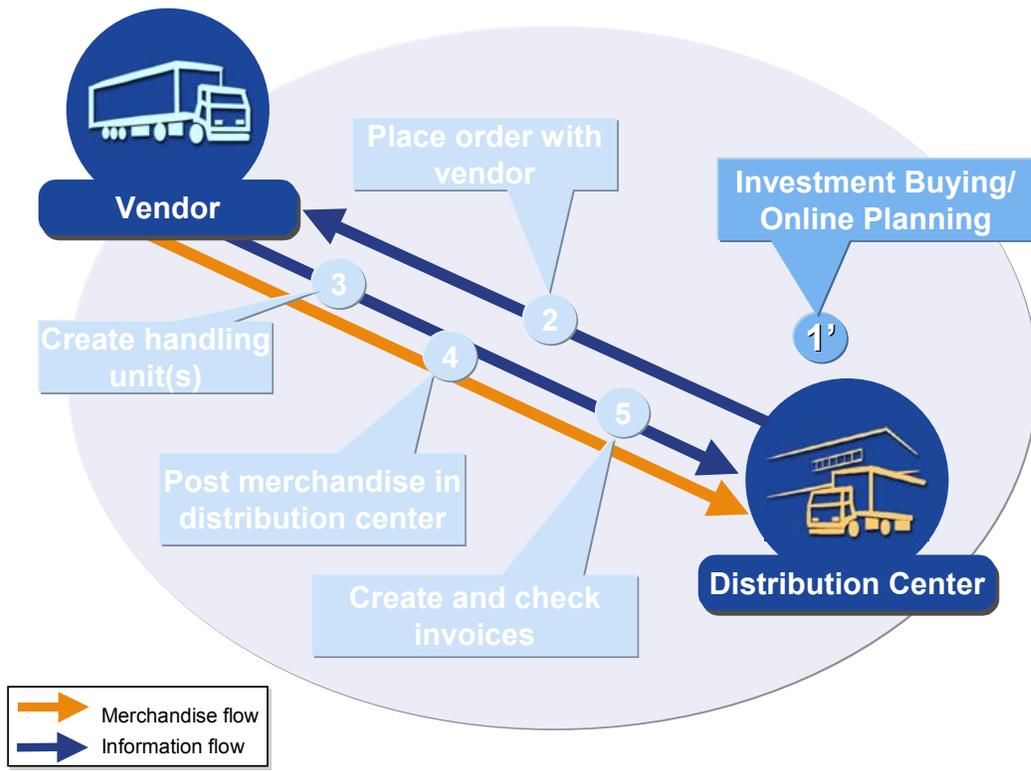
Planning Workbench

If necessary:

- Manual load building
- Additional requirements planning
- Release procedure

© SAP AG 2004

Investment Buying/Online Requirements Planning: Process Overview



© SAP AG 2004

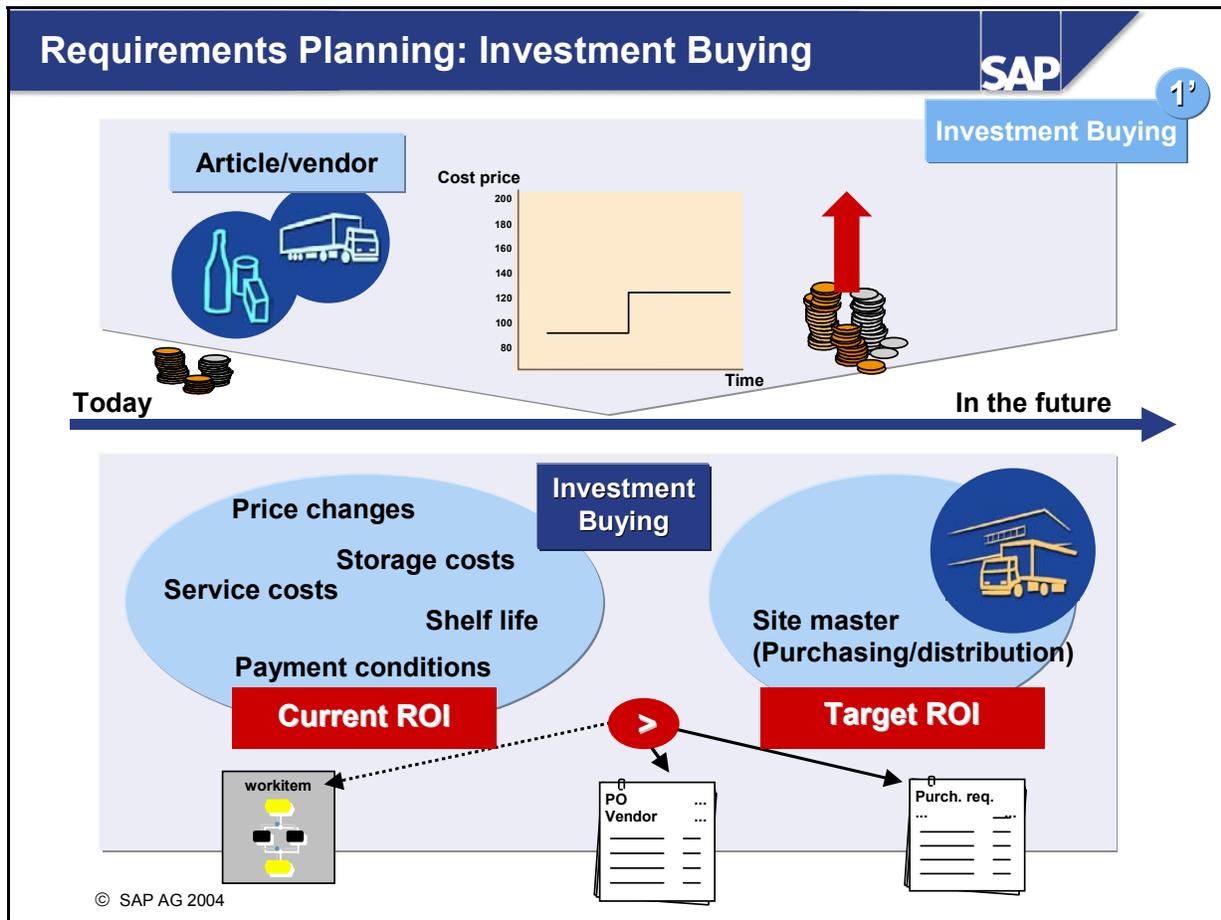
Internal Use SAP Partner Only

Internal Use SAP Partner Only

Requirements Planning: Investment Buying

SAP

1'



- Investment Buying is used to define requirements based on future cost price increases and which are covered by external procurement. The purpose of Investment Buying is to enable the user to buy the required articles, in optimum quantities and as cost-efficiently as possible.
- Investment Buying recognizes future changes to purchasing conditions and suggests the procurement of merchandise even if the article is not required at the time of purchase. The system compares storage and service costs with the price advantage that will be gained. ROI (Return on Investment) is the deciding factor when a procurement suggestion is generated by the system.
- Use the following formula to calculate the current ROI:

$$\frac{100 * 52}{D * W} * (S - D * I * (W - T) - C * W - H) = ROI$$
- S = Price saving per base unit of measure
 D = Original price per base unit of measure
 I = Weekly interest rate, T = Payment target in weeks
 W = Recommended coverage period, H = Warehousing costs
 C = Warehousing costs per base unit of measure
- Expenses (interest, storage costs, warehousing costs) are subtracted from the price saving. The result is compared to the figure for the year and the original price. When you are calculating the current ROI, the recommended period of coverage is extended until the desired minimum ROI is undercut. The next possible value is then included when calculating additional requirement before relevant procurement is proposed.
- Investment Buying generates purchase requisitions or purchase orders as follow-on documents.

Link to Internet services



Worklist

- Individual presentation
- Planning-specific selection
- Which articles should be displayed?
- Default values for order items



Online-Planning

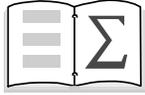
Vendor: Allfresh Inc. PO number:
 Site: DC R300 Restriction profile:

| Restrictions | | | | | |
|--------------|------------|------------|------|-----|-------------------|
| OK | Actual Qty | Target Qty | Unit | ... | Restrictions |
| ○○○ | 1825.2 | 50,000 | KG | | Max gross weight |
| ○○○ | 1825.2 | 1000 | KG | | Min. gross weight |

| Order items | | | | | | |
|-------------|----------------|-------|-------|----------|-------------|-----|
| Articles | Description | MC | Stock | Quantity | Deliv. date | ... |
| R100000 | Natural yoghu | R1121 | CAR | | | |
| R100005 | Pepper | R1121 | CRT | | | |
| R100008 | Net of Orange: | R1121 | CRT | | | |
| R100031 | Granny Smith | R1121 | CRT | | | |

© SAP AG 2004

- Stock planners use the planning workbench to create planning data online and use Internet services. The stock planner can use online planning to plan requirements for external vendors online. He can have vendors proposed to him on the basis of the order days planned (order cycle) and he can see all existing purchase orders. The stock planner can then decide whether to increase quantities or to order extra articles, for example.
- The workbench provides you with a worklist from which you can jump to the application (for example, online planning) at a click of the mouse. This provides with you with easy navigation. You can define how you want the worklist and the application displayed.
- Online planning combines the advantages of defining requirement data automatically and the advantages of a manual order process. The system can propose articles and order quantities for external vendors, which the stock planner can then verify using other information they have. All the information is made available in an overview, for example, a vendor's articles, the available purchase orders for this vendor and information that is relevant for requirements planning, such as the current stock, open purchase orders and sales for the last periods.
- In addition to articles for which there is a requirement, you can also plan articles in online planning for which no requirement exists in order to fulfill certain minimum purchase criteria. With this aim in mind, you can select all the articles that a vendor can supply.



You are now able to:

- **Procure merchandise from a vendor for a distribution center in SAP Retail.**
- **Use the following activities:**
 - **Trigger the forecast run and planning run**
 - **Create vendor orders manually**
 - **Create handling units**
 - **Create and check incoming invoices**
 - **Settle volume-rebate arrangements with vendors**
 - **Explain special requirements planning procedures**

© SAP AG 2004



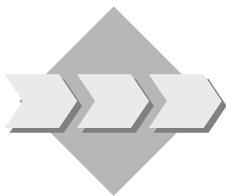
Unit: Requirements Planning and Delivery to the Distribution Center

Topic: Requirements Planning and Purchase Orders



After completing this exercise you will be able to:

- Maintain the most important master data required for running requirements planning and forecasting
- Run requirements planning and forecasting
- Recognize the principles of purchase orders and order optimizing



Today is the day that you can place orders with your vendor. You therefore want to plan requirements for your distribution center with this vendor.

1-1 You want to find out what procedure is normally used for requirements planning for the articles in your distribution center. You therefore display some settings for requirements planning in the site and article masters. Pay attention to the validity areas in the header area.

1-1-1 How do you normally run requirements planning and forecasting for articles **TA03##** and **TA04##** in your distribution centers?

| | TA03## | TA04## |
|-------------------------|---------------|---------------|
| <i>RP type</i> | | |
| <i>Lot size</i> | | |
| <i>Forecast model</i> | | |
| <i>Period indicator</i> | | |

1-1-2 Use the **[RP/Forecast Data]** button to display additional information about requirements planning and forecasting. Find the historical values that are taken into consideration when running forecasting for *Article TA03##* and the number of periods in the future for which requirements can be forecast.

Historical periods:

Forecast periods:

- 1-1-3 On what day of the week are articles for distribution center **T7##** ordered? When are they delivered? You will find the answer to this in the planning cycle or delivery cycle:

Planning cycle (ordering day):

Delivery cycle (day of delivery):

- 1-1-4 Display the historical consumption values and the forecasted consumption values for articles **TA03##** and **TA04##** in *distribution center T7##*. Choose *[Validity Areas]* to get to this validity level.

- 1-2 You want to run requirements planning for the articles that you order from vendor **TS1##** for distribution center **T7##**.

- 1-2-1 Begin with the initial screen for requirements planning for *vendor TS1##* and *purchasing organization R300* in *distribution center T7##*. The planning date should be **Monday/Tuesday this week** so that the requirements planning data that is created is more usable.

Display the articles that can be planned in the article selection for the vendor.

- 1-2-2 Today, you just want to order articles **TA03##** and **TA04##** from this vendor. You therefore select these articles in the article list that is displayed. Run interactive planning for both articles.
Find the following data:

Article **TA03##**:

Current stock in **T7##**:

Required quantity:

Purchase requisition number:

Delivery date for the purchase requisition:

Article **TA04##**:

Current stock in **T7##**:

Required quantity:

Purchase requisition number:

Delivery date for the purchase requisition:

- 1-2-3 Save your planning data.

1-3 You can use the stock/requirements list to get information about your planning results at any time. Go to the list and display data for articles **TA03##** and **TA04##** for distribution center **T7##**. You can choose to access this list using individual access or collective access.

1-4 Generate a purchase order for your vendor, based on the order proposals.

1-4-1 Create the purchase order by converting the purchase requisitions that you created (exercise 1-2-2) into a purchase order. Do this by selecting *Automatically via Purchase Requisition*. Use *purchasing organization* **R300**, *vendor* **TS1##** and *site* **T7##**.
Make a note of the purchase order number.

PO number: _____

1-4-2 Display your purchase order and the print preview.

1-5 Before continuing with the exercises in this unit, create a new standard purchase order for distribution center **T7##** in storage location **lean WM SL (0001)**. Use the following data:

Before creating the articles and quantities in the item overview, take advantage of the option for setting default values (pushbutton [*Default Values*]). Create the following data:

| | |
|--------------------------|-----------------------------------|
| 1-5-1 <i>Deliv. date</i> | Today in two weeks |
| <i>Plant</i> | T7## |
| <i>Storage location</i> | 0001(lean WM storage loc.) |

Create a standard purchase order:

| | |
|--------------------------------|----------------------|
| <i>Vendor</i> | TS1## [Enter] |
| <i>Purchasing organization</i> | R300 |
| <i>Purchasing group</i> | R30 |
| <i>Company code</i> | R300 |

| | |
|----------------|-----------------------|
| <i>Article</i> | TA03## 25 CAR |
| | TA04## 100 CAR |

PO number: _____

This purchase order is to be used for the remaining exercises in this unit.

1-6 Check what has now changed in the current stock stock/requirements lists for both articles in distribution center **T7##**.

1-7* You have an agreement with vendor **TS1##**, which gives you preferential conditions when ordering merchandise. You therefore want to optimize your purchase order before it is dispatched. Use order optimizing to find these conditions and check if your purchase order already fulfills them.

1-7-1 Which restriction profile has been assigned to your vendor?

1-7-2 What does this profile mean?

1-7-3 You want to group purchase orders from your vendor in order to fulfill the conditions stated in the restrictions profile. Make sure that you set the *Include Released POs* flag.

Check if the purchase order you created in exercise 1-4-1 already fulfills the conditions stated in the restriction profile.

1-7-4 Select other purchase orders for your vendor, thereby fulfilling the vendor's conditions and group the purchase orders. You can specify one common delivery date. This must, however, be earlier or the same as the earliest date from the selected purchase orders.

Make a note of the collective number.

1-7-5 Goto the header data for one of the grouped purchase orders and display the collective number on the *Additional data* tab page.

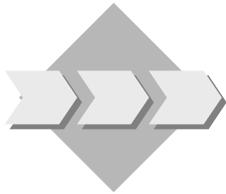


Unit: Requirements Planning and Delivery to the Distribution Center

Topic: Handling Units and Goods Receipt

After completing this exercise you will be able to:

- Create and process shipping notifications, handling units, and goods receipt



The vendor notifies you of the inbound delivery of goods (time and quantity) with reference to your purchase orders in a shipping notification. You create handling unit(s).

The subsequent goods receipt now relates to the handling unit number.

- 2-1 Display the details (*Confirmations* tab page) for both purchase order items in the purchase orders that you created in exercise 1-4-1 (or 1-5-1).
- 2-1-1 Which confirmation documents are expected for the individual items?
- 2-2 You want to pack the articles you ordered in the purchase orders you created in exercises 1-4-1 and 1-5. To do so, you are going to create a handling unit. At the same time, you tell the system that the inbound delivery for the goods you ordered will be notified the day after tomorrow.
- 2-2-1 Create the inbound delivery for your purchase orders by choosing pushbutton *Select Purchase Orders*. Make sure there is no entry in the *Purchase order* field. Start the search for your vendor **TS1##** and today's date for the document date. Delete the entry *Notification* in the selection parameters and any entries in the *Article* field.
Select the four rows in the list *Purchasing Documents per Vendor* and copy them.
You are now in the overview of shipping notification creation. Only accept the two delivery quantities of 25 CAR and 100 CAR; set the other two quantities to zero.
- 2-2-2 Choose the *Pack* pushbutton to create handling units. You are now in handling unit processing. Select the articles that you want to pack and choose the *Pack* pushbutton. Have the system search for permitted packaging materials. Select roll container R100025 as the packaging material and pack all your articles in it. Now display the contents of the handling unit you have just created on the *TotalContents* tab page.
What is the number of your handling unit?
-

From here, go to the *General* detail view and find the packaging material type and category.

- 2-2-3 Before you save, return to the overview of the shipping notification. What has changed on the *Item Overview* tab page? How has the packing status in the status overview changed?

Save the shipping notification and make a note of the number of the document that is generated.

Shipping notification number:

- 2-3 Check what has changed in the stock/requirements lists for both articles in distribution center **T7##** now that you have created a shipping notification.
- 2-4 The merchandise in your purchases orders is now delivered and the goods receipt needs to be posted. The merchandise is delivered with the delivery note **2304##**. The exact quantity notified is delivered.

| | |
|-----------------------|-----------------|
| Delivery note: 2304## | |
| <u>Articles</u> | <u>Quantity</u> |
| TA03## | 25 CAR |
| TA04## | 100 CAR |

- 2-4-1 Create the goods receipt (for a different reference) for distribution center **T7##**. Use movement type *Goods receipt for purchase order into warehouse/stores*. Enter delivery note number **2304##** in the *Delivery Note* field at header level for organizational help.
- You post the goods receipt using handling units and on the following screen you assign your handling unit number from exercise 2-2-2.
- Alternatively, you can use the F4 Help to search for your HU number. To do so choose the *HU Identification by Creator* search template. Enter your user name IRT100-## in the *Created by* field.
- When you have entered the HU number, confirm this with *Copy*. As the data in the delivery note does not differ from the delivered quantities, accept both the items as they are.

Save the goods receipt and note the number of the goods receipt document that is generated.

Number of the goods receipt document:

- 2-4-2 Check what has changed in the current stock stock/requirements lists for both articles in distribution center **T7##**.

Pushbutton [*Vendor Conditions*]

- 2-4-3 Display the purchase order from exercise 1-5-1 for articles **TA03##** and **TA04##** in distribution center **T7##**. How can you tell from the purchase order whether a goods receipt has already been posted for the individual items?

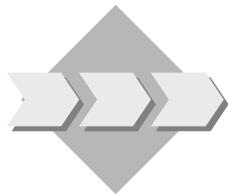


Unit: Requirements Planning and Delivery to the Distribution Center

Topic: Invoice verification

After completing this exercise you will be able to:

- Create, process, and post an vendor invoice



You work in the invoice verification department and have received the vendor invoice for the delivery that was created in the previous exercises. You want to enter the invoice, check its accuracy and then post it.

- 3-1 You have received the following invoice from your vendor. You have to enter the gross invoice amount in your system:

| | | | |
|------------------------------|-----------------|--------------------|----------------|
| Vendor TS1## | | | |
| OMNIMUM INC. | | | |
| Invoice date: (current date) | | | |
| <u>Article</u> | <u>Quantity</u> | <u>Gross price</u> | <u>Total</u> |
| TA03## | 25 CAR | @ 57.00 | 1425.00 |
| TA04## | 100 CAR | @ 30.50 | 3050.00 |
| <u>Gross invoice amount:</u> | | | <u>4475.00</u> |

- 3-1-1 Enter the invoice in *company code* **R300** for *vendor* **TS1##**. Make sure that the invoice will be checked in a batch run in the background, not immediately.. Save the document for background processing.

- 3-2 The invoice has now been created and it has been assigned to the relevant documents. You now want to verify the accuracy of the document.

- 3-2-1 Run program **RMBABG00** by selecting *System* → *Services* → *Reporting*. Enter **TS1##** as the *Vendor/invoicing party* and then run the program. What are the results of the document check?

3-2-2 Return to logistics invoice verification and display all the invoices (including the posted ones) for *vendor TS1##* in the invoice overview.

What is your invoice document number?

What is the status of your invoice?

3-3* Alternative, incorrect invoice:

| | | | |
|------------------------------|-----------------|--------------------|----------------|
| Vendor TS1## | | | |
| OMNIMUM INC. | | | |
| Invoice date: (current date) | | | |
| <u>Article</u> | <u>Quantity</u> | <u>Gross price</u> | <u>Total</u> |
| TA03## | 25 CAR | @ 59.00 | 1475.00 |
| TA04## | 100 CAR | @ 30.50 | 3050.00 |
| <u>Gross invoice amount:</u> | | | <u>4525.00</u> |

Proceed as in task 3-1, but create the invoice with an invoice amount of **USD 4525.00**. Perform the rest of the tasks in the same way. You will now have an invoice containing errors.

Compare the individual items in the invoice with the vendor's invoice document (see exercise 3-1). For which articles is there a difference between the amount displayed and the amount stated in the invoice document?

| Article | Amount from vendor's invoice | Amount from invoice verification |
|---------|------------------------------|----------------------------------|
| | | |

3-3-1 You believe that your conditions have been maintained correctly. The vendor has delivered an article at an incorrect price and you want to reduce the invoiced amount accordingly.

To do this, set the correction indicator (field *Correctn ID*) to *Vendor error: reduce invoice*. You should then switch to the article conditions by hitting the button **[Edit vendor conditions]**. You can then change the gross price of the article to match the price stated in the vendor invoice.

(Note: The correction is only for this item.)

What is the difference amount?

Accept and post the invoice document.

3-3-2 How can you check which follow-on documents have been generated for the above invoice?

3-3-3 The invoice has been changed to reflect the correct amount and will be settled. You want to inform your vendor about the changed invoice amount. You therefore create a message with *output type* **REKL** for *invoicing party* **TS1##** and the *invoicing document number* that you have posted.
Before sending the document to your vendor, check the document.

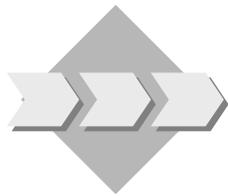


Unit: Requirements Planning and Delivery to the Distribution Center

Topic: Subsequent Settlement

After completing this exercise you will be able to:

- Explain the update of data for volume-rebate arrangements
- Settle volume-rebate arrangements



You have agreed subsequent settlement with your vendor. You therefore want to create a volume-rebate arrangement in the system. After having posted the invoice, you want to update your data in accordance with your volume-rebate arrangement. You then want to check the data in the arrangement and simulate interim billing.

4-1* You have a **vendor rebate arrangement** with vendor **TS1##**. The vendor is condition granter. You want detailed information about the conditions for this arrangement and you want to display the sales figures that have been recorded so far.

4-1-1 Find the number of the vendor rebate arrangement using F4 Help and display the arrangement for the current year.

4-1-2 Which arrangement calendar and settlement calendar are used for this arrangement?

Arrangement calendar:

Settlement calendar:

4-1-3 Find out the conditions for your arrangement and display the period-relevant conditions.

For which key combinations have main conditions been created?

Main condition: _____

Period condition: _____

4-1-4 Check if scales have been defined for the main conditions. If scales have been defined, what are they?

Scales (yes/no):

Which scales?

4-2* You now want to know what business volume has already been posted for your vendor rebate arrangement this month.

4-2-1 Display the business volume data via the *Settlement* menu in the menu bar. Confirm the dialog box for the list output and for the control data.
Business volume: _____

4-2-2 Have you already created provisions?

4-2-3 To check the business volume, display an overview of the individual documents that contributed to the business volume data (detailed statement). Enter this month in the validity period of the condition records.

4-2-4 Run a report to simulate settlement for the arrangements. Choose the first day of the next month as the settlement date and enter today's date as the billing (posting) date.
What provisions have been created?

4-3* You want to create a vendor rebate arrangement for vendor **TS1##**. This vendor is also *condition granter*.

4-3-1 The vendor offers a volume rebate on particular articles. You should therefore select *agreement type* **2000** (material rebate). You work in *purchaser group* **R30** and *purchasing organization* **R300**.
The arrangement is valid from January 1 to December 31 of next year. The settlement currency used is USD. Before settling the arrangement, a comparison of the business volume/final settlement should be carried out with the condition granter.

4-3-2 You have agreed with your vendor that articles **TA03##** and **TA04##** have a discount of 0.10 USD/PC for orders over 100 PC. For orders of 1000 PC and more, this discount is 0.15 USD/PC. Do not press *Enter* until you have entered data in all the required fields. Note that the system proposes the order unit CAR. What tools can you use to map this agreement to your system?

Create the relevant conditions and then save your agreement.



Unit: Requirements Planning and Delivery to the Distribution Center

Topic: Requirements Planning and Purchase Orders



All the steps detailed in these solutions start from the Retailing screen:

SAP menu → Logistics → Retailing

1-1 **Master data → Article data → Article → Display**

- 1-1-1 Enter the article number, do not enter a distribution center
Select the *Logistics: Distribution Center* view, press **[Enter]**

| | TA03## | TA04## |
|-------------------------|--------|--------|
| <i>RP type</i> | R1 | R1 |
| <i>Lot size</i> | EX | EX |
| <i>Forecast model</i> | D | D |
| <i>Period indicator</i> | W | W |

- 1-1-2 Press **[RP/forecast data]** pushbutton.
Field group *Number of periods required*
Historical periods: **60**
Forecast periods: **12**
Go back to the logistics data overview **[Back]**.

1-1-3 **Edit → Switch area of validity**

| Field name or data type | Values |
|----------------------------|-------------|
| <i>Distribution Center</i> | T7## |

[Enter]

Planning cycle 001: Ordering day is Monday.

Delivery cycle 002: Delivery day is Friday.

- 1-1-4 Press pushbutton **[Consumption vals]**
[Back]
Press pushbutton **[Forecast values]**
[Enter]
[Back] to the SAP Easy Access menu.

1-2 **Purchasing → Requirements planning**

1-2-1 **Requirements planning → Plan by vendor**

| Field name or data type | Values |
|-------------------------|--------------|
| <i>Vendor</i> | <i>TS1##</i> |
| <i>Purchasing Org.</i> | <i>R300</i> |
| <i>Site</i> | <i>T7##</i> |

Press **[Enter]** twice.

1-2-2 Select articles **TA03##** and **TA04##** in the list.

Requirements planning → Interactive planning

Set the planning date to **this Tuesday** to ensure that useable planning data is generated. The table is read row by row. The current stock is shown the *Available Quantity* column and has the RP element *stock* (site stock).

The second row contains the requirement quantity determined in the *Receipt/Requirements* column with the RP element *PurRqs* (purchase requisition). The number of the purchase requisition created is displayed in the column *RP element data*. This entry is relevant for planning for the specified date (left-hand column).

Planning → Save (for the first article)

1-2-3 **Planning → Save** (for the second article)
[Back] to the SAP Easy Access menu.

1-3 **Logistics → Purchasing → Requirements planning → Requirements planning → Stock/requirements list**

Article **TA03##**, distribution center **T7##**

The results of the planning run are displayed.

The table is read row by row. The current stock is shown the *Available Quantity* column and has the RP element *stock* (site stock).

The second row contains the requirement quantity determined in the *Receipt/Requirements* column with the RP element *PurRqs* (purchase requisition). The number of the purchase requisition created is displayed in the *RP element data* column. This entry is relevant for planning for the specified date (left-hand column).

1-4 Generate a purchase order for your vendor, based on your order proposal.

1-4-1 **Purchasing → Purchase order → Purchase Order → Create → Automatically Via Purchase Requisition**

| Field name or data type | Values |
|--------------------------------|--------------|
| <i>Purchasing organization</i> | R300 |
| <i>Vendor</i> | TS1## |
| <i>Site</i> | T7## |

Program → Execute

Double-click on the *Purchase order number* to display the purchase requisition number.

[Back] x2

1-4-2 **Purchasing → Purchase order → Purchase Order → Display Purchase order → Other purch. order**

Enter the number of your purchase order from 1-4-1. Press **[Enter]**

Goto → Print preview

[Back] to the SAP Easy Access menu

1-5 Create a purchase order:

1-5-1 **Purchasing → Purchase order → Purchase Order → Create → Vendor/Supplying Site Known**

| Field name or data type | Values |
|-------------------------|--------------------|
| <i>Order type</i> | Standard PO |
| <i>Vendor</i> | TS1## |

[Enter]

Enter the following header data on the *Org.data* tab page (before doing this, you may be required to hit the **[Expand]** button):

| Field name or data type | Values |
|-------------------------|-------------|
| <i>Purchasing Org.</i> | R300 |
| <i>Purchasing group</i> | R30 |
| <i>Company Code</i> | R300 |

Item overview (before doing this, you may be required to hit the *[Expand]* button):

| Field name or data type | Values |
|-------------------------|---------------------------|
| <i>Article</i> | TA03## |
| <i>PO quantity</i> | 25 |
| <i>OUn</i> | CAR |
| <i>Deliv. date</i> | <i>Two weeks today</i> |
| <i>Site</i> | T7## |
| <i>Storage location</i> | Lean WM SL [Enter] |
| <i>Article</i> | TA04## |
| <i>PO quantity</i> | 100 |
| <i>OUn</i> | CAR [Enter] |
| <i>Deliv. date</i> | <i>Two weeks today</i> |
| <i>Site</i> | T7## |
| <i>Storage location</i> | Lean WM SL [Enter] |

**Purchase order → Save
[Back]**

1-6 **Logistics → Purchasing → Requirements planning → Requirements planning → Stock/requirements list**

Article **TA03##**, distribution center **T7##**

The current plant stock is displayed in the column *Available Quantity* and has the RP element *Stock*. This has not changed.

In the second row, the RP element *PurRqs* (purchase requisition) has become *POitem* (purchase order delivery schedule line). The number of the purchase order created is now displayed in the *RP element data* column. This entry is also relevant for planning for the specified date (left-hand column).

Creating a second purchase order results in a second entry with the RP element *POitem*.

1-7* **Purchasing → Purchase order → Order Optimizing → PO-Based Load Building → Manual Load Building**

| Field name or data type | Values |
|--------------------------|--------------|
| <i>Vendor</i> | <i>TS1##</i> |
| <i>Site</i> | <i>T7##</i> |
| <i>Site category</i> | <i>B</i> |
| <i>Only complete POs</i> | ✓ |

Program → Execute

- 1-7-1 *Profile 0001* is assigned to the vendor.
- 1-7-2 The profile contains a weight restriction. Your purchase order must have a minimum weight of 2000 lb and a maximum weight of 40000 lb.
- 1-7-3 Select the row containing your purchase order from exercises 1-4-1
Edit → Update restrictions
- 1-7-4 Select additional purchase orders
Edit → Update Restrictions
All restrictions have been fulfilled when the red light turns to green.
(You can enter a delivery date in the *Common Delivery Date* field)
Purchase orders → Save
Confirm the dialog box that appears with YES

[Back] to the SAP Easy Access menu.



Unit: Requirements Planning and Delivery to the Distribution Center

Topic: Handling Units and Goods Receipt

- 2-1 **Purchasing** → **Purchase order** → **Purchase Order** → **Display**
If necessary, **Purchase order** → **Other purchase order**

Enter the number of your purchase order from 1-4-1 and press **[Enter]**.

- 2-1-1 In the item details subscreen (you may be required to select **[Expand]**).
In the item screen for both articles, tabstrip **Confirmations**,
Conf. control = **Inbound delivery** meaning that an inbound delivery is expected.

[Back]

- 2-2 Create shipping notification

- 2-2-1 **Merchandise logistics** → **Goods receipt** → **Inbound delivery** → **Create**

| Field name or data type | Values |
|---------------------------------------|---|
| <i>Vendor</i> | TS1## |
| <i>Select [Purchase order] button</i> | <i>Search according to vendor and document date</i> |
| <i>Delivery date</i> | <i>The day after tomorrow</i> |

Create the inbound delivery for your purchase orders by pressing pushbutton **Select Purchase Orders**. Make sure there is no entry in the **Purchase order** field. Start the search for your vendor **TS1##** and today's date for the document date. Delete the entry **Notification** in the selection parameters and any entries in the **Article** field.

Select the four rows in the list **Purchasing Documents per Vendor** and copy them.

You are now in the overview of shipping notification creation. Only accept the two delivery quantities of 25 CAR and 100 CAR; set the other two quantities to zero.

2-2-2 **[Pack]**

Choose the *Pack* pushbutton to create handling units. You are now in handling unit processing. Select the articles that you want to pack and choose **[Pack]**. Have the system search for permitted packaging materials.

Select roll container R100025 as the packaging material and pack all your articles in it. Now display the contents of the handling unit you have just created on the *TotalContent* tab page.

Select the row with the handling unit number, **[Gen.]** General detail view, *Status* tab page:

Packaging material type: Container

Packaging material category: Packaging Material

2-2-3 Before you save, return to the overview of the shipping notification. What has changed on the *Item Overview* tab page?

The unit of measure *CAR* is grayed out.

How has the packing status in the status overview changed?

PS (packing status) is C

[Save].

2-3 Logistics → Purchasing → Requirements planning → Requirements planning → Stock/requirements list

Article TA03##, **distribution center** T7##

The RP element is changed to ShpgNt and the date of the row entry also changes.

Note: The shipping notification is flagged as relevant for planning in Customizing.

2-4 Goods receipt posting

2-4-1 **Merchandise logistics → Goods receipt → Goods Receipt for Other Reference**

| Field name or data type | Values |
|---------------------------|---------------|
| <i>Movement Type</i> | 101 |
| <i>Site</i> | T7## |
| <i>Vendor</i> | TS1## |
| <i>Delivery note</i> | 2304## |
| <i>Via Handling Units</i> | X |

[Enter]

In the *Handling Unit* field, assign your HU number from exercise 2-2-2. Alternatively, you can use the F4 Help to search for your HU number. To do so choose the *HU Identification by Creator* search template. Enter your user name IRT100-## in the *Created by* field.

[Copy] and **[Save]**.

2-4-2 **Logistics → Purchasing → Requirements planning → Requirements planning → Stock/requirements list**

Article **TA03##**, distribution center **T7##**

Posting a goods receipt causes the site stock and the available quantity to change. The quantity increases by the quantity posted. The row containing the RP element *ShpgNt* disappears as it is completed by posting the goods receipt.

2-4-3 **Purchasing → Purchase order → Purchase Order → Display**

If necessary, **Purchase order → Other purchase orders**

Enter the number of the purchase order created in 1-5-1

[Enter]

If necessary, **[Expand]** the item details subscreen.

In the *Purchase order history* tabstrip, you can see that a goods receipt has already been posted for this item (a goods receipt document exists).

[Back]



Unit: Requirements Planning and Delivery to the Distribution Center

Topic: Invoice verification

3-1 Logistics Invoice Verification

3-1-1 *Purchasing → Logistics invoice verification → Document Entry → Enter Invoice for Invoice Verification in Background*

| Field name or data type | Values |
|-------------------------|--------------------|
| Company code | <i>R300</i> |
| <i>Invoice date</i> | <i>Today</i> |
| <i>Amount</i> | <i>4475.00 USD</i> |

Select *Delivery note*:

| | |
|----------------------|---------------|
| <i>Delivery note</i> | <i>4711##</i> |
| <i>Vendor</i> | <i>TS1##</i> |

Invoice document → Schedule verification in background

3-2 Check invoice

3-2-1 *System → Services → Reporting*

| Field name or data type | Values |
|-------------------------|-----------------|
| <i>Program</i> | <i>RMBABG00</i> |

Program → Execute

| Field name or data type | Values |
|-------------------------|--------------|
| <i>Vendor</i> | <i>TS1##</i> |

Program → Execute

The invoice document is **posted/completed**.
[Back] to the SAP Easy Access menu.

3-2-2 **Purchasing → Logistics invoice verification → Further Processing → Invoice Overview**

Do not change any of the selection criteria.

[Execute]

To display, double-click on the *document number* or hit the **[Display]** button in the *Item* column

Status of the invoice: Completely Posted.

3-3* Alternative, incorrect vendor invoice:

| Field name or data type | Values |
|-------------------------|--------------------|
| Company code | R300 |
| Invoice date | Today |
| Amount | 4525.00 USD |

Select *Delivery note*:

| | |
|---------------|---------------|
| Delivery note | 4711## |
| Vendor | TS1## |

Invoice document → Schedule verification in background

| Article | Amount from vendor's invoice | Amount from invoice verification |
|---------|------------------------------|----------------------------------|
| TA03## | 1475 | 1425 |

3-3-1 For article **TA03##** (Shampoo), set the *Correctn ID* field to **Vendor Error: Reduce invoice**

Pushbutton **[Vendor conditions]**

Change the value for **PB00** from **57** to **59**.

[Back]

Confirm both dialog boxes with **[Enter]**.

The difference is now: **0**

Edit → Accept and post

3-3-2 In the invoice overview, select the rows, and choose

Environment → Follow-on docs.

[Back] to the SAP Easy Access menu.

(To get to the overview from the SAP Easy Access menu, proceed as follows:

Purchasing → Logistics invoice verification → Further Processing → Invoice Overview

Selection criteria: Select *Invoice status posted*.)

3-3-3* *Purchasing* → *Invoice verification* → *Environment* → *Messages* → *Output*

| Field name or data type | Values |
|--------------------------------|-----------------------|
| <i>Output type</i> | <i>REKL</i> |
| <i>Sort order</i> | <i>01</i> |
| <i>Editing mode</i> | <i>1</i> |
| <i>Document number</i> | <i>Invoice number</i> |
| <i>Fiscal year</i> | <i>Current year</i> |
| <i>Company Code</i> | <i>R300</i> |

Program → ***Execute***

Select document lines

Goto → ***Display***

[Back] to the SAP Easy Access menu.



Unit: Requirements Planning and Delivery to the Distribution Center

Topic: Subsequent Settlement

4-1* To display vendor rebate arrangements:

4-1-1 **Purchasing** → **Subsequent settlement** → **Vendor rebate arrangements** → **Rebate Arrangement** → **Display**

Position your cursor in *Agreement* field and press **[F4]**

Enter the vendor on the *Arrangements by condition grante* rtab page:

| Field name or data type | Values |
|--------------------------|--------------|
| <i>Condition granter</i> | <i>TSI##</i> |

Start search by pressing **[Enter]**

Select the arrangements that are valid for the time period

Copy by pressing **[Enter]**

4-1-2

| Field name or data type | Values |
|-----------------------------|-----------|
| <i>Arrangement calendar</i> | <i>AJ</i> |
| <i>Settlement calendar</i> | <i>AM</i> |

4-1-3 **Goto** → **Conditions**

Double-click on **A001**

Main conditions **6%**

Goto → **Period-spec. condit.**

4-1-4 **[Back]** to **Bonus Overview**

Goto → **Scales**

Scales exist:

100,000 USD 6.0 % -

200,000 USD 8.0 % -

500,000 USD 10.0 % -

Hit **[Back]** to get to the SAP Easy Access menu for SAP Retail.

4-2* Sales for volume-rebate arrangement

4-2-1 **Purchasing → Subsequent settlement → Vendor rebate arrangements → List Displays → Business Volume Data**

Enter the rebate arrangement number

Program → Execute

Line *Business volume according to statistics*

4-2-2 In the column *Provisions for income*, you can view the provisions that have been created.

Hit **[Back]** until you return to the SAP Easy Access menu.

4-2-3 **Purchasing → Subsequent settlement → Vendor rebate arrangements → List Displays → Detailed Statement**

Enter rebate arrangement number

Program → Execute

Drill-down to the months with documents

Hit **[Back]** until you return to the SAP Easy Access menu.

4-2-4 **Purchasing → Subsequent settlement → Vendor rebate arrangements → Rebate Arrangement → Create Settlement Document → Via Report**

| Field name or data type | Values |
|----------------------------------|---|
| <i>Volume-rebate arrangement</i> | <i>Arrangement number</i> |
| <i>Condition granter</i> | <i>TS1##</i> |
| <i>Settlement date</i> | <i>First day of the following month</i> |
| <i>Invoice/Posting date</i> | <i>Today</i> |

Program → Execute

[Back] to the SAP Easy Access menu.

4-3* Create volume-rebate arrangement

4-3-1 **Purchasing** → **Subsequent settlement** → **Vendor rebate arrangements** → **Rebate Arrangement** → **Create**

| Field name or data type | Values |
|-------------------------|-------------|
| <i>Agreement type</i> | 2000 |

[Enter]

Also possible:

| Field name or data type | Values |
|--------------------------------|-------------|
| <i>Purchasing organization</i> | R300 |
| <i>Purchasing group</i> | R30 |

[Enter]

| Field name or data type | Values |
|---------------------------|---|
| <i>Condition granter</i> | TS1## |
| <i>Currency</i> | USD |
| <i>Validity period</i> | <i>1. January 1 of next fiscal year</i> |
| <i>To</i> | <i>31. December 31 of next fiscal year</i> |
| <i>Comp. BV necessary</i> | <input checked="" type="checkbox"/> Final settl. |

4-3-2 **Goto** → **Conditions**

(Note: Do not press enter until you get to the end of a line)

| Field name or data type | Values |
|-------------------------|---------------|
| <i>Article</i> | TA03## |
| <i>Amount</i> | 0.10 |
| <i>Unit</i> | USD |
| <i>Per</i> | 1 |
| <i>Unit of measure</i> | PC |

Goto → **Scales**

| Field name or data type | Values |
|----------------------------|------------|
| <i>Scale quantity from</i> | 100 |

| | |
|---------------------------------|-------------|
| <i>Next scale quantity from</i> | 1000 |
| <i>Amount</i> | 0.15 |

[Enter]

[Back]

(Note: Do not press Enter until you get to the end of a line)

| Field name or data type | Values |
|-------------------------|---------------|
| <i>Article</i> | TA04## |
| <i>Amount</i> | 0.10 |
| <i>Unit</i> | USD |
| <i>Per</i> | 1 |
| <i>Unit of measure</i> | PC |

Goto → Scales

| Field name or data type | Values |
|----------------------------|------------|
| <i>Scale quantity from</i> | 100 |

| | |
|---------------------------------|-------------|
| <i>Next scale quantity from</i> | 1000 |
| <i>Amount</i> | 0.15 |

Agreement → Save

[Back] to the SAP Easy Access menu.

Contents:

- **Process overview**
- **Sales price calculation**
- **Downloading article data**
- **Uploading POS data and generating stock transport orders**
- **Goods issue processes**
- **Summary**

© SAP AG 2004



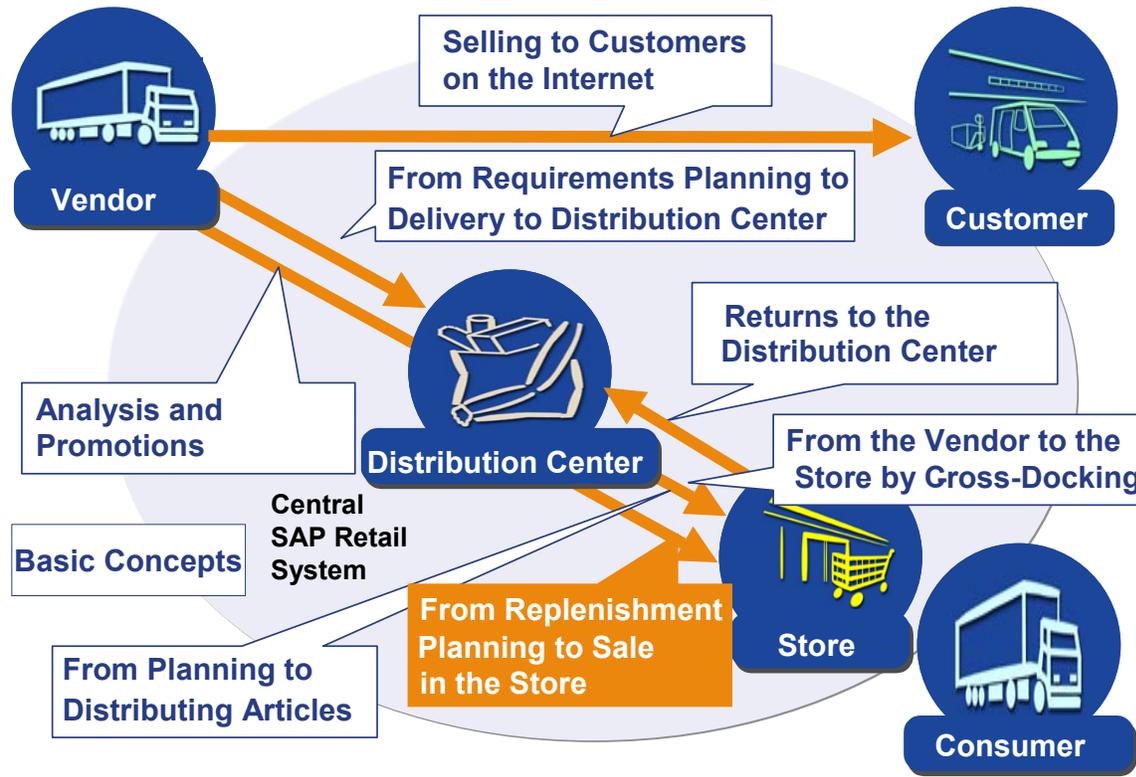
At the conclusion of this unit, you will be able to:

- **Use the sales price calculation in SAP Retail**
- **Explain automatic requirements planning for stores and display the basic steps involved in delivering merchandise to a store from the distribution center**
- **Explain the basic principles of the replenishment and store order functions**
- **Explain the goods issue processes in a distribution center**
- **Post goods receipt in the store**
- **Summary**

© SAP AG 2004

Overview Diagram

SAP



Internal Use SAP Partner Only

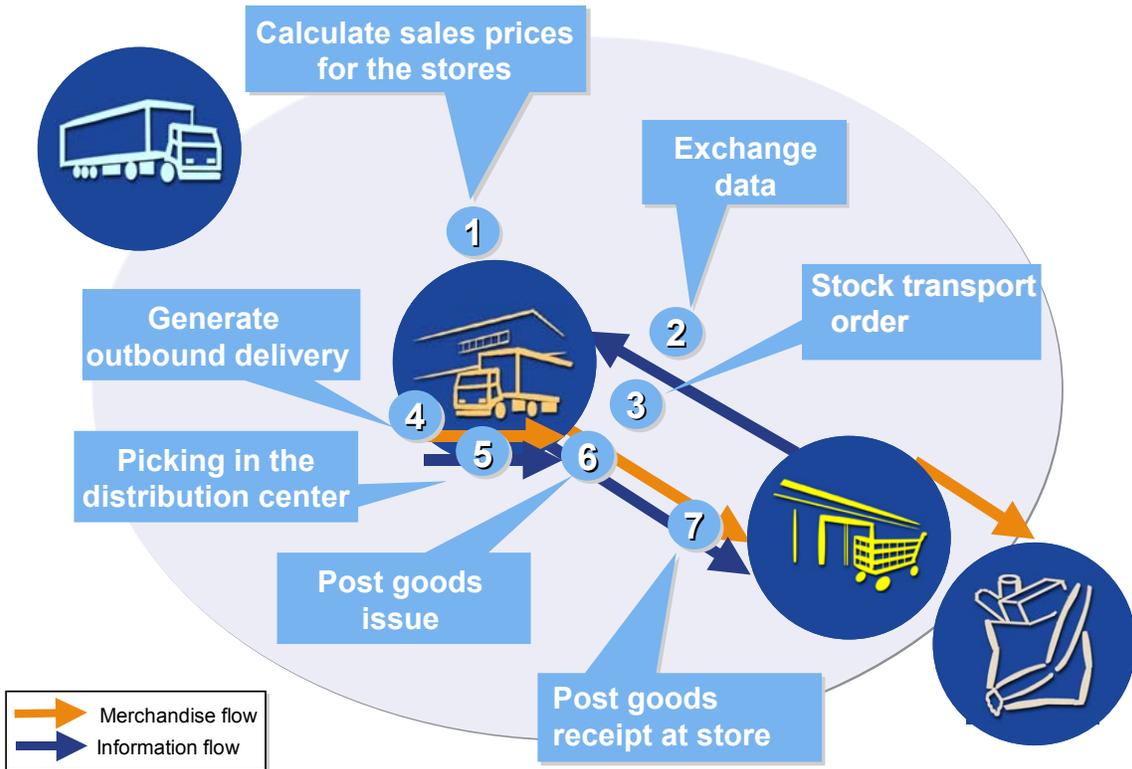
Internal Use SAP Partner Only



- **Using sales price calculation, you maintain the sales prices for articles and stores.**
- **The POS systems are supplied with important data via the download.**
- **A stock transport order is generated for the articles sold by uploading the sales data and using the replenishment/store order functions. It is directed at the supplying site that is determined, a distribution center.**
- **The merchandise is picked in the warehouse of this distribution center.**
- **You follow the goods issue processes and post the goods receipt in the store.**

© SAP AG 2004

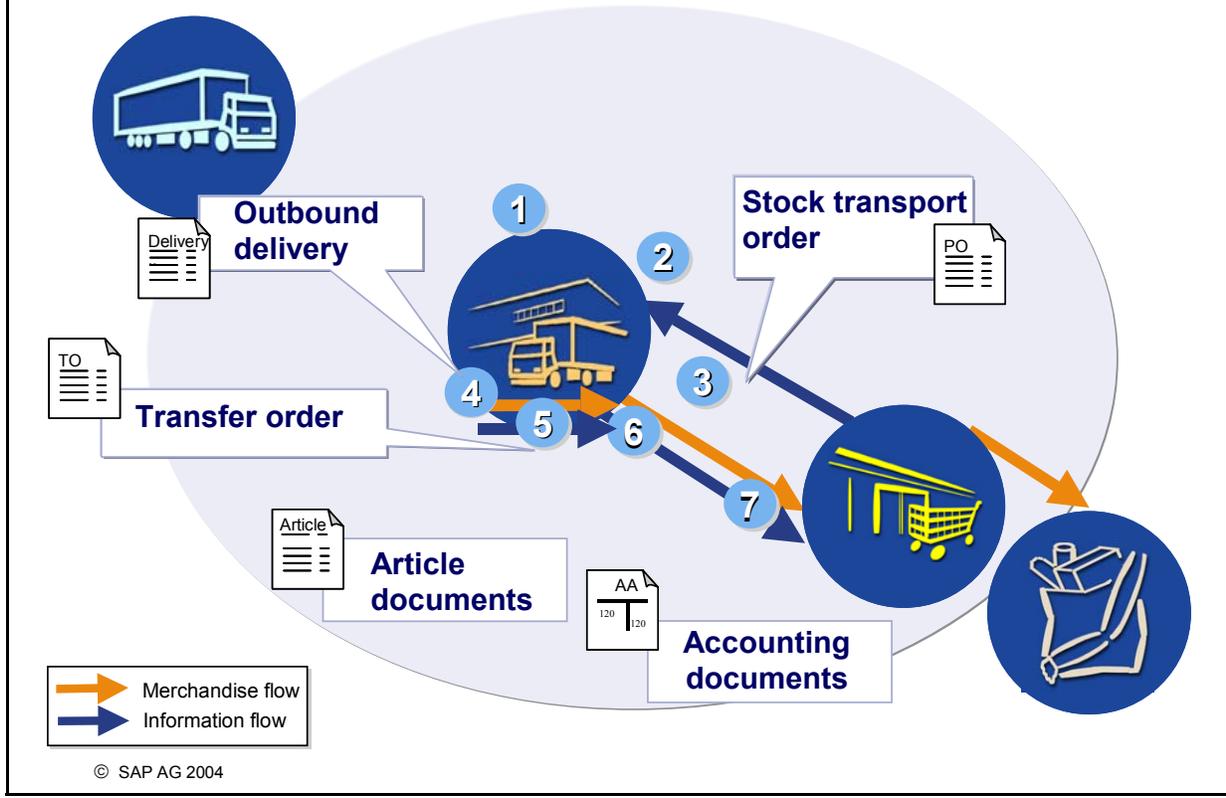
From Replenishment Planning to Sale in the Store: Process Overview



© SAP AG 2004

Internal Use SAP Partner Only

Internal Use SAP Partner Only



Internal Use SAP Partner Only

Internal Use SAP Partner Only

Single-Step Price Calculation

SAP

1

Calculate sales prices
for the store



Vendor

Purchase price



Store

Sales price



Consumer

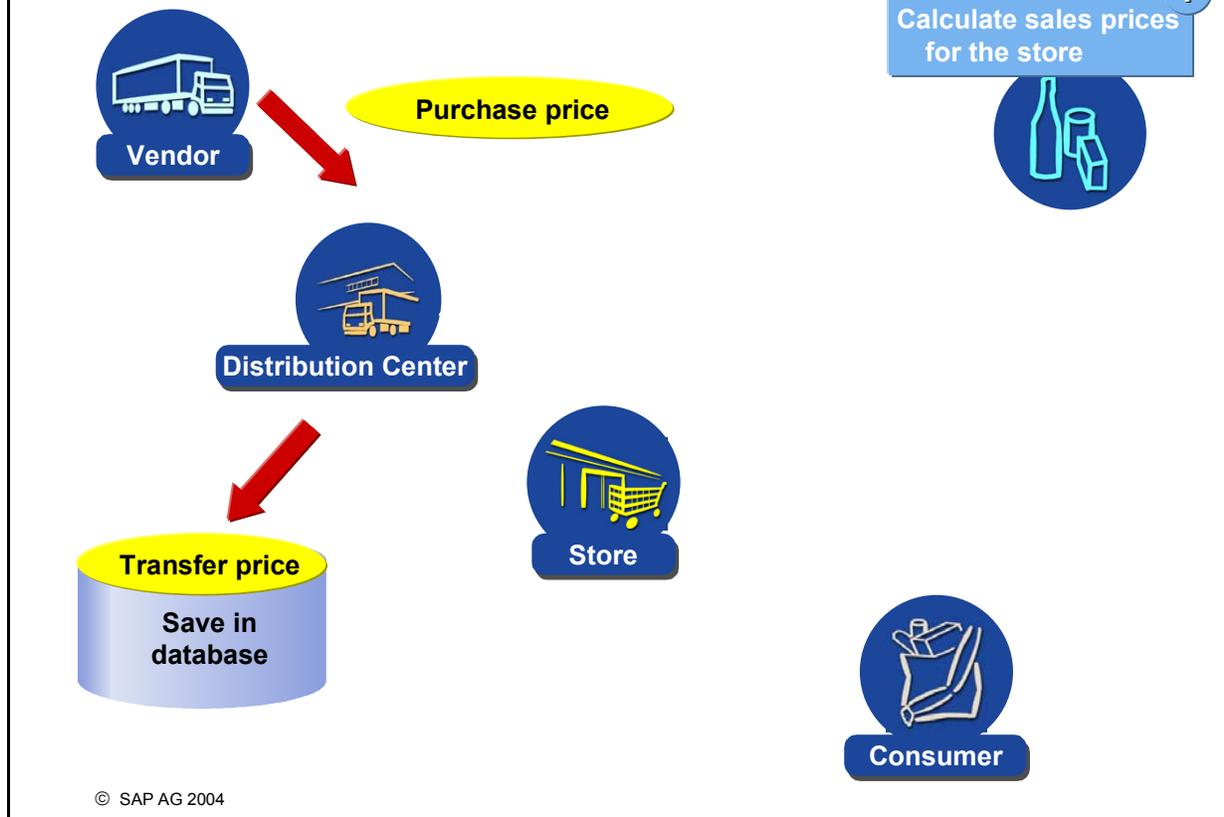
© SAP AG 2004

- When sites are supplied directly from vendors, a sales price calculation called "one-step price calculation" is used. The calculation of the sales prices for the stores is based on the purchase price from the external vendor. You may therefore end up with different purchase prices for stores, for example, from different store-dependent basic purchase prices or vendor discounts.
- It is also possible to perform the sales price calculation based on the sales price you want to use. The system will then automatically calculate different factors, such as the margin.
- The actual markup that is determined can also be overwritten.

Two-Step Price Calculation (1/2)

SAP

1



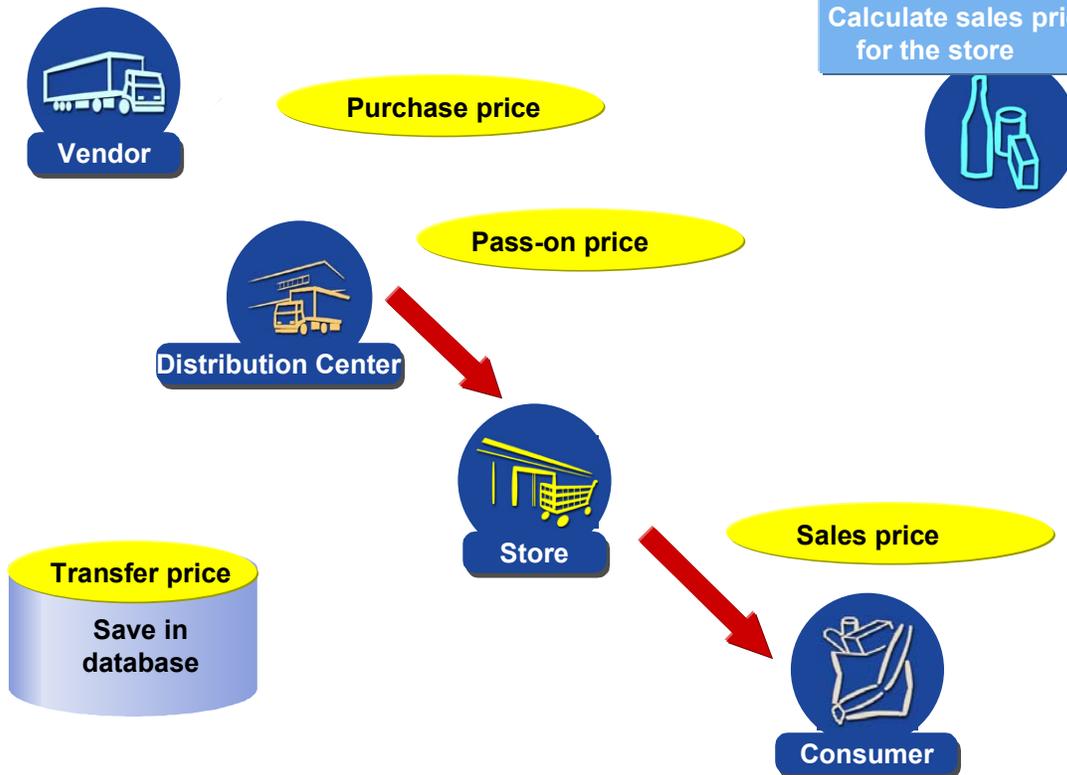
- In addition to stores being supplied directly by an external vendor, you also find another process in the logistics of a retail company: the vendor first sends the articles to a distribution center, from where they are then distributed within the company to stores and franchisees.
- To map this two-step logistics process, a two-step price calculation can also be performed in the sales price calculation. In this case, the purchase prices of the stores are based on the transfer price of the distribution center.

Two-Step Price Calculation (2/2)

SAP

1

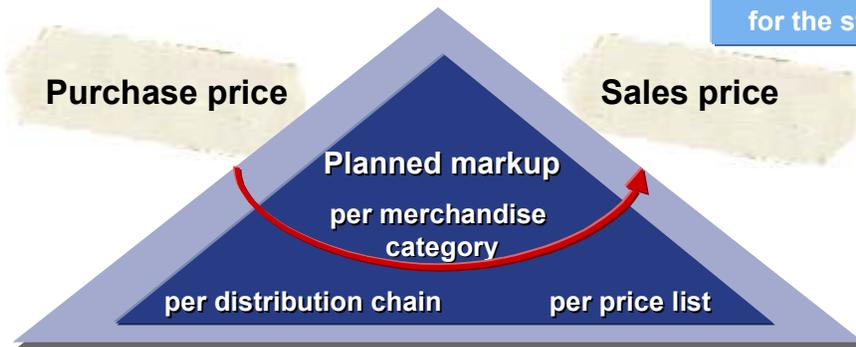
Calculate sales prices for the store



© SAP AG 2004

- If you are calculating prices for a store that is supplied internally, but not for the distribution center at the same time, and there is no sales price for the distribution center in the system, a calculation for the distribution center is generated in the background. The transfer price that is determined is used for the calculation for the store.

Calculate sales prices for the store



- **Displayed as list**
- **Prices can be modified**
- **Detailed information**

| Article/ Organizational Level | Vendor | Purchase Price | Planned Markup | ... |
|-------------------------------------|--------|----------------|----------------|-----|
| <input type="checkbox"/> | | | | |

© SAP AG 2004

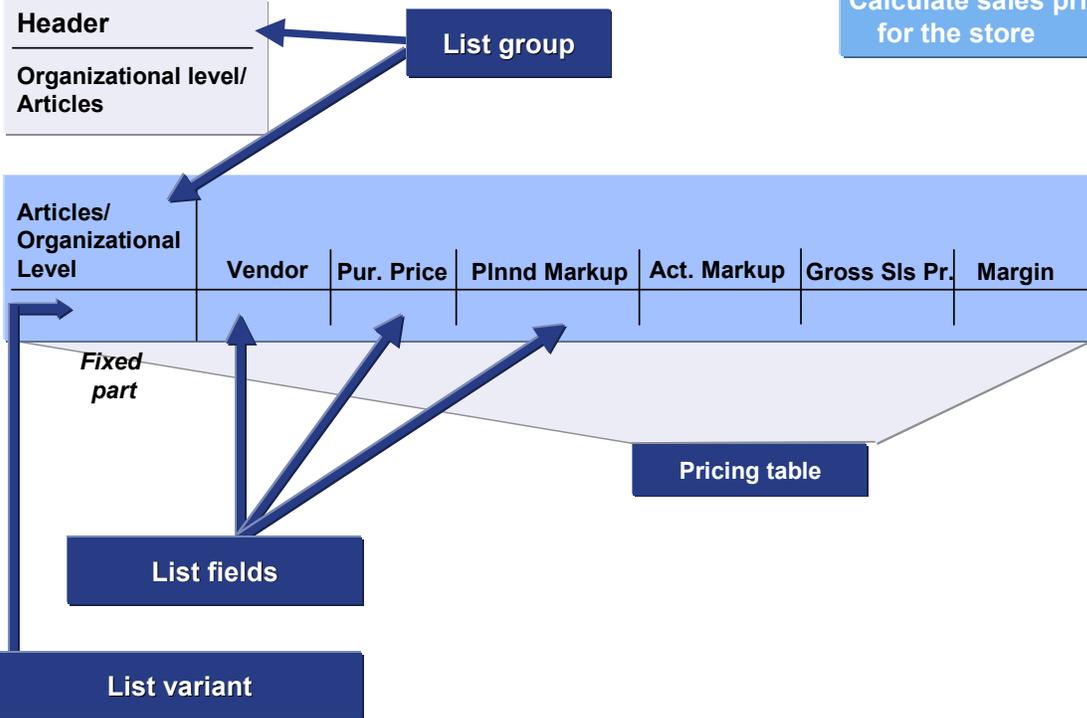
- The point of sales price maintenance is to maintain the final sales prices for an article in a store or group of stores, or to maintain transfer prices in a warehouse or distribution center.
- The calculation of the sales prices is based on purchase prices and predefined markups. Sales prices can be maintained for individual articles or for a group of articles (mass maintenance). The prices are always stored at single article level and site/distribution chain or price list level.
- Within sales price determination, the markup calculation is *one* method of determining a proposal for the sales price. Planned markups can be saved in the system for the markup calculation.
- **Planned markups** increase the purchase price (net/net). They reflect the profit that the company aims to make by selling certain articles, and general cost components.
- You would normally define a planned markup (as a percentage) for a combination of sales organization, distribution channel, and merchandise category. In wholesale, planned markups can also be defined for different price lists. As planned markups are condition types, however, you can also define them for other organizational levels, for example, for individual articles.

Sales Price Calculation: Display

SAP

1

Calculate sales prices for the store



© SAP AG 2004

- On the initial screen of the sales price calculation, you determine the layout on the screen. The layout is determined by the:
 - List group and
 - List variant
- The list group controls which data is displayed in the header section and which is displayed in the fixed part of the pricing table.
- List variants are used to define the layout of the list screen on which the calculation is carried out (pricing table).
- You can use list variants to define which list fields should be visible in the pricing table.
- The list variant controls the selection and sequence of the table columns on the list screen. The column number defines the order of the columns in the table.
- To customize the list in the sales price calculation further, you can also enter your own texts for the fixed list fields. These texts become the titles of the columns in the table.

Linking a Store to SAP (1/3)

SAP

2

Exchange data



Headquarters



Store

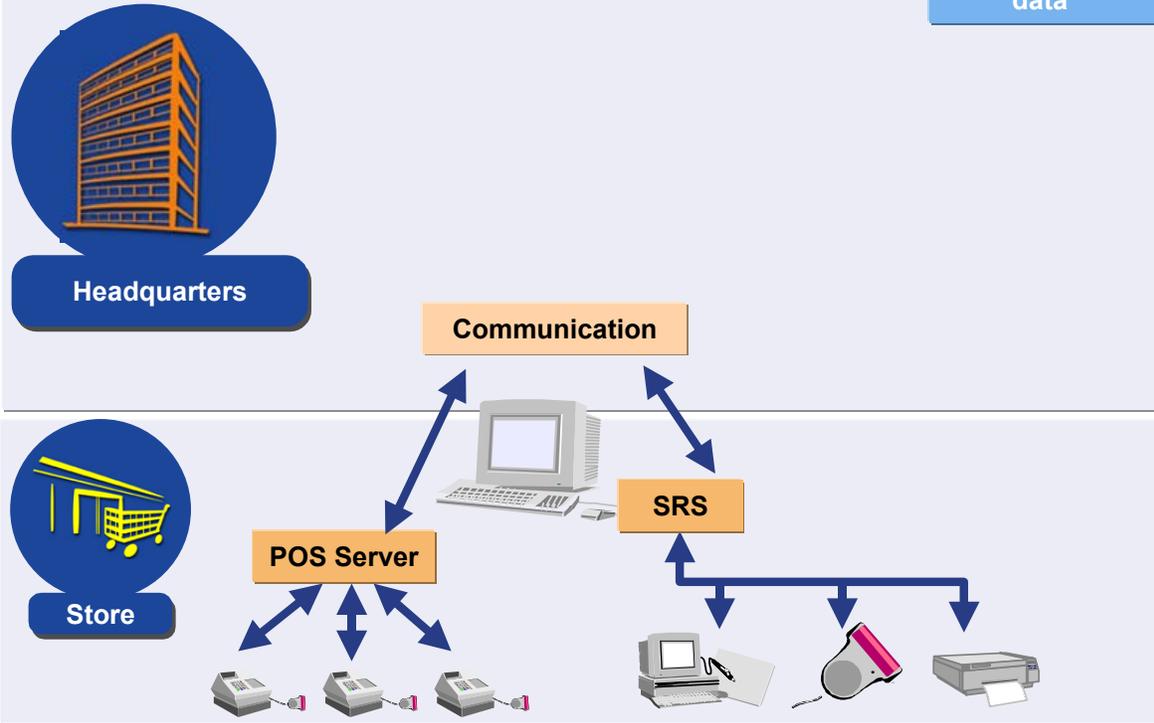


© SAP AG 2004

Internal Use SAP Partner Only

Internal Use SAP Partner Only

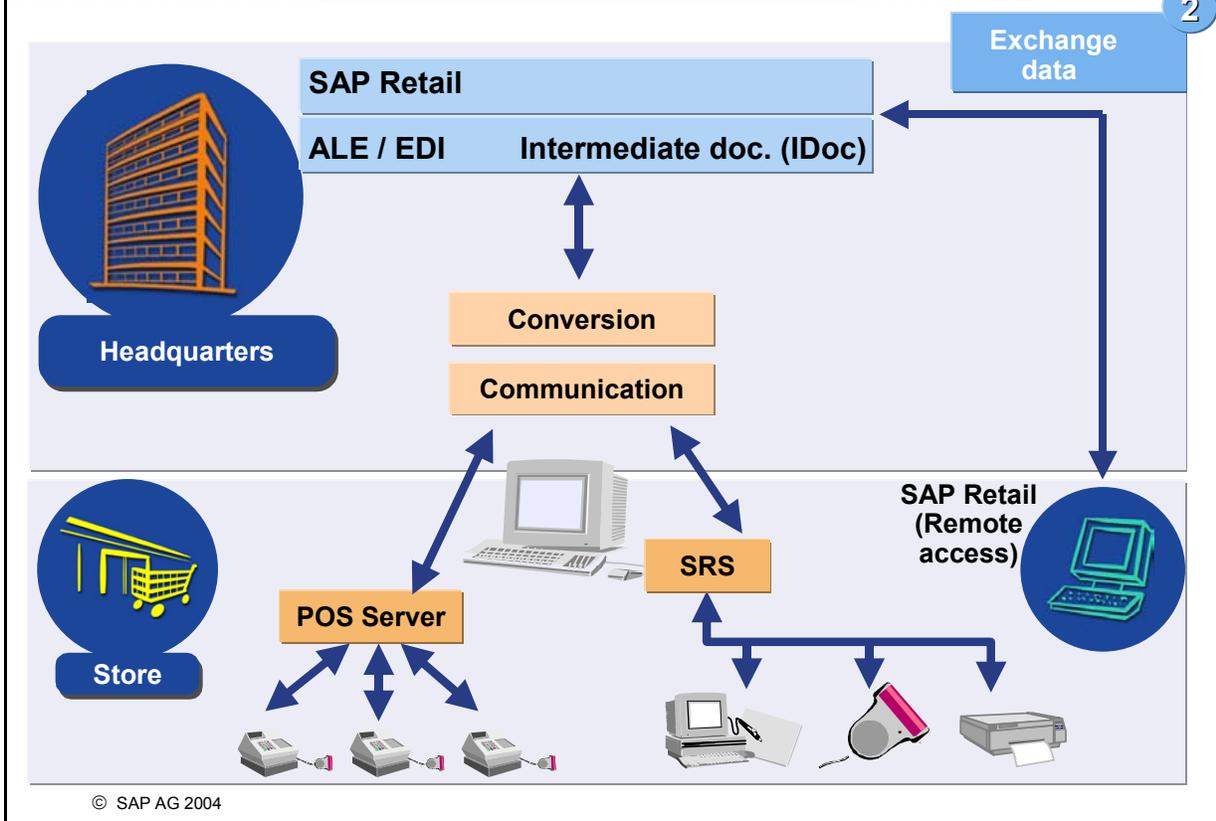
Exchange data



© SAP AG 2004

Internal Use SAP Partner Only

Internal Use SAP Partner Only



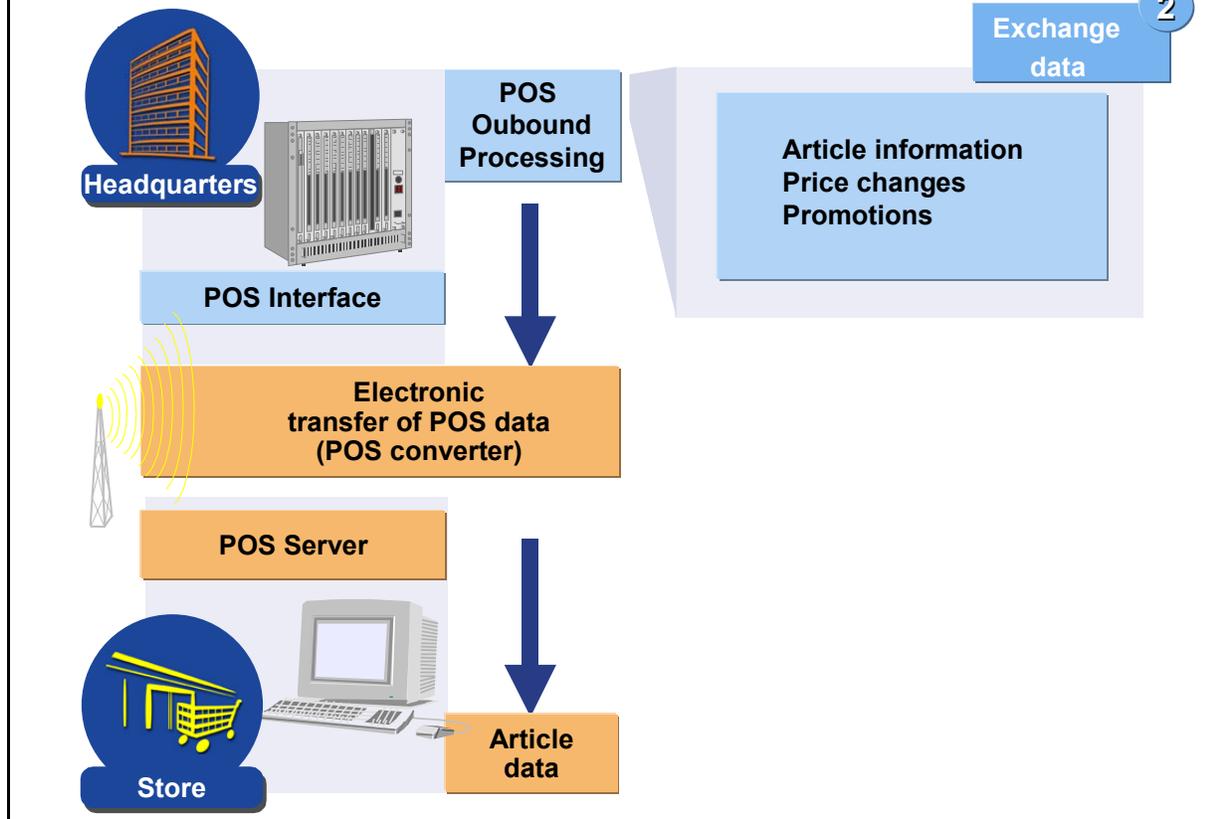
- Most retailing systems in a store can be linked to SAP Retail, for example,
 - POS server with retailing functions
 - Store retailing system
- The in-store systems are linked to SAP Retail as follows:
 - Using a certified converter or communication interface combined with the POS Interface in SAP Retail (as recommended by SAP)
 - Using a customer-specific converter / communication interface combined with EDI and SAP IDocs (Intermediate Documents)
- Some data can be downloaded directly to the retailing systems using SAP Standard Application Link Enabling (ALE). SAP Retail applications allow you to transfer messages with EDI as standard.
- Access to the central SAP Retail system can be provided using a remote connection via a store terminal.

POS Outbound Processing

SAP

2

Exchange data



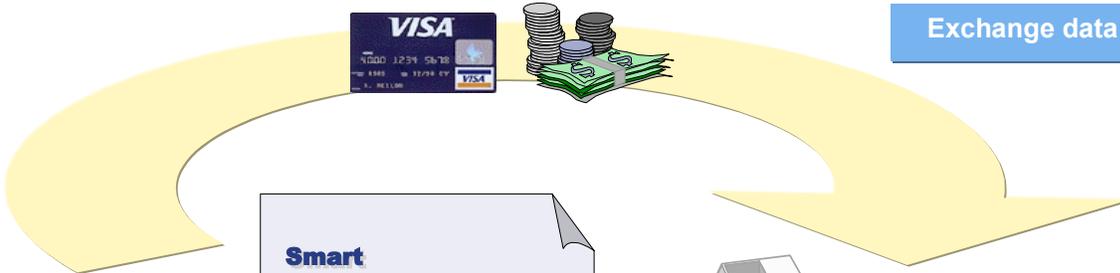
- The sales entered at the store POS server are sent to the **POS interface** in the central SAP Retail System using a POS converter.
- This is where **POS inbound processing** is run.
 - The stocks of the articles sold in the stores concerned are updated here. According to the replenishment procedure that you choose to use, POS inbound processing is done in replenishment-based inventory management or in material management-based inventory management.
 - This is also when payment data (for example, credit card data, payment card data, cash sales) that has been gathered is forwarded to Accounting.

Payment Processing at POS

SAP

1

Exchange data

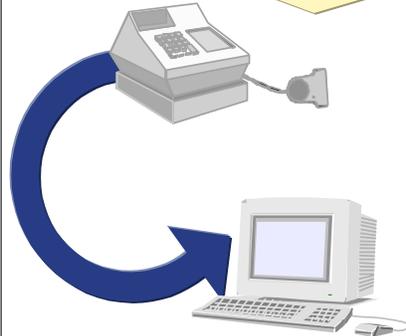


Smart

Store - New York
Cash register 12 02/29/2002

| | |
|----------------|-------|
| 5 Yogurt | 3.45 |
| 2 Margarine | 2.38 |
| 1 3-pack pizza | 9.79 |
| Fresh meat | 26.87 |
| | ----- |
| | 42.49 |

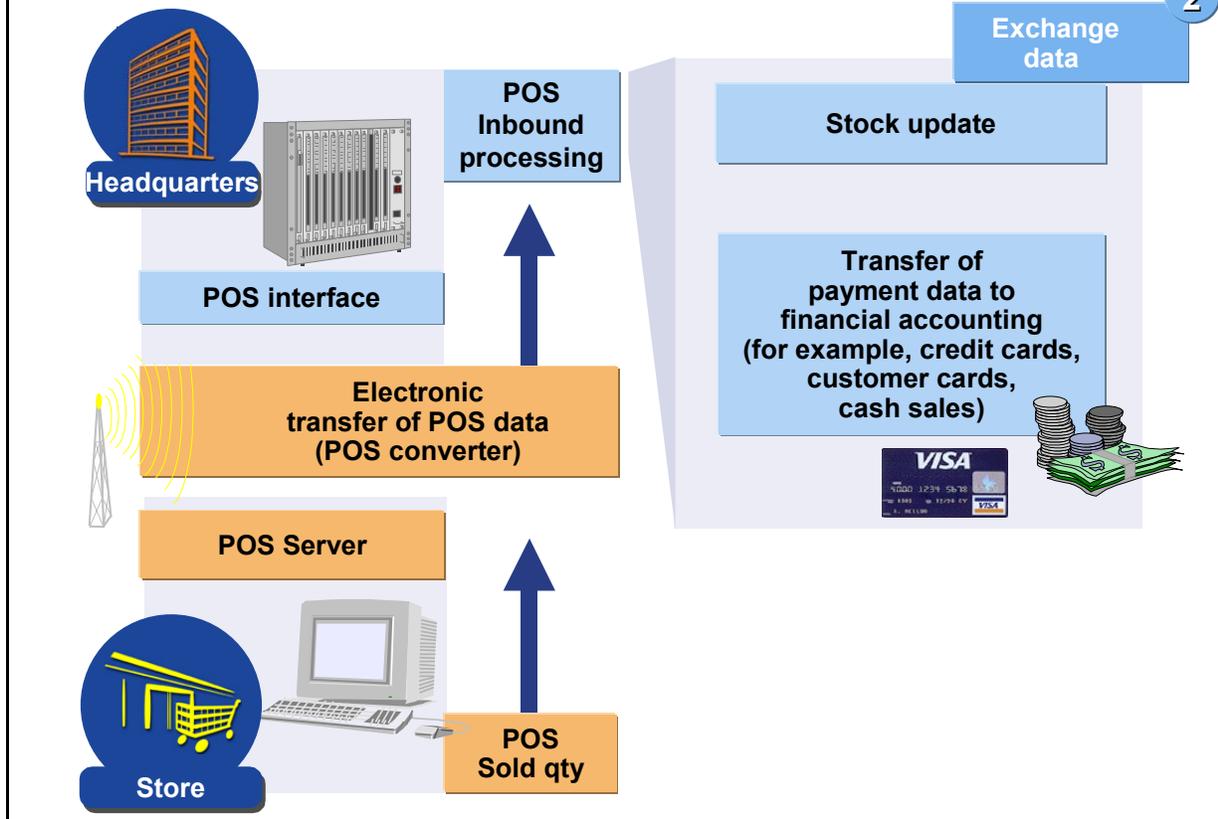
Thank you for shopping with us.



© SAP AG 2004

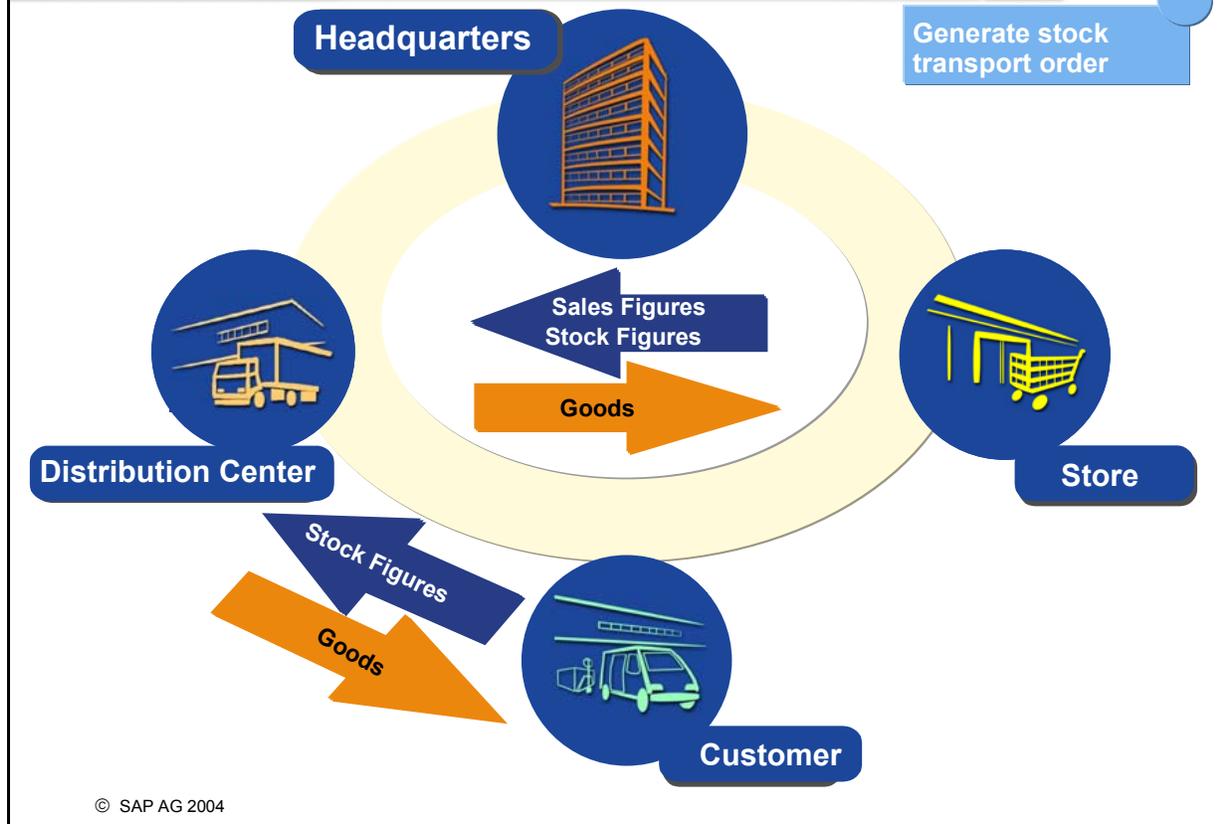
Internal Use SAP Partner Only

Internal Use SAP Partner Only



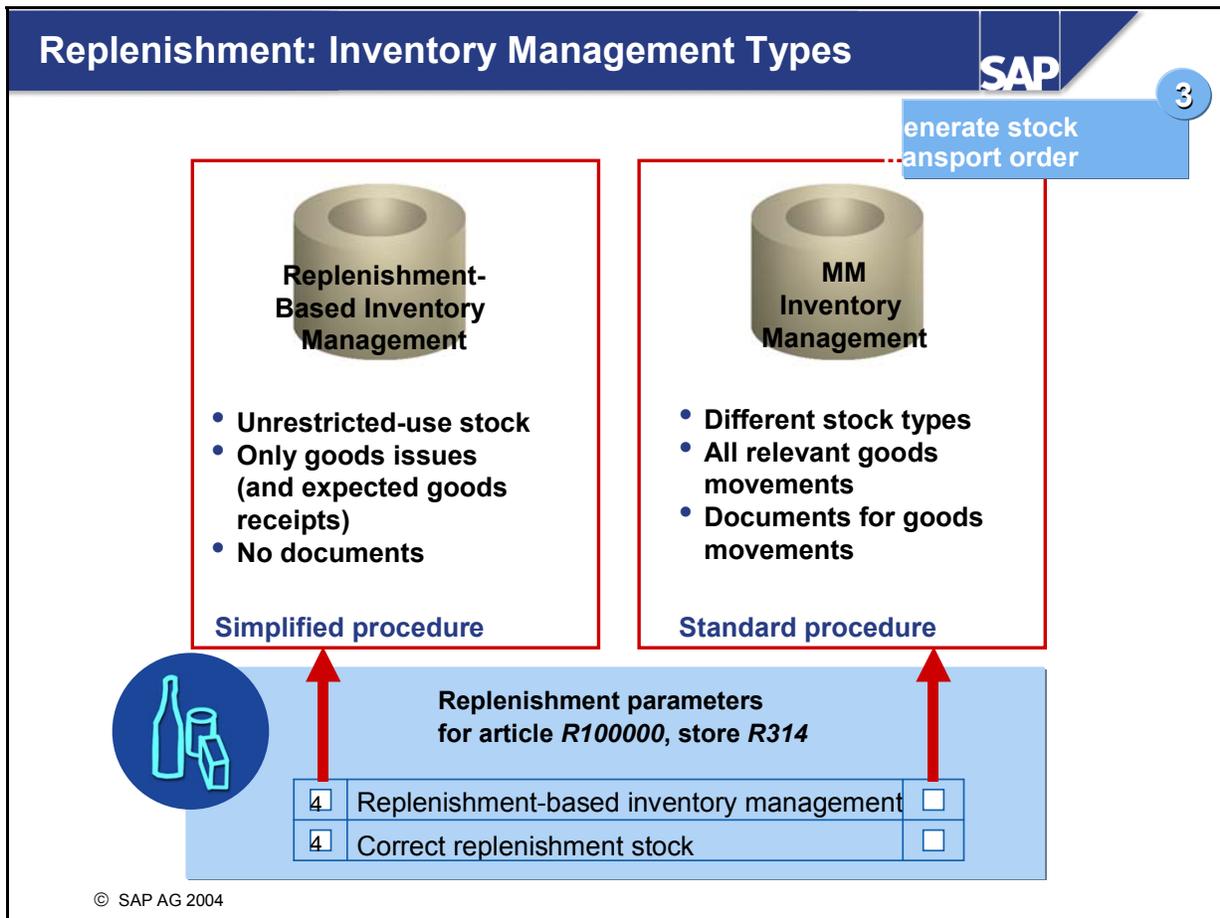
- The sales entered at the store POS server are sent to the **POS interface** in the central SAP Retail System using a POS converter.
- This is where **POS inbound processing** is run.
 - The stocks of the articles sold in the stores concerned are updated here. According to the replenishment procedure that you choose to use, POS inbound processing is done in replenishment-based inventory management or in material management-based inventory management.
 - This is also when payment data (for example, credit card data, payment card data, cash sales) that has been gathered is forwarded to Accounting.

Generate stock transport order



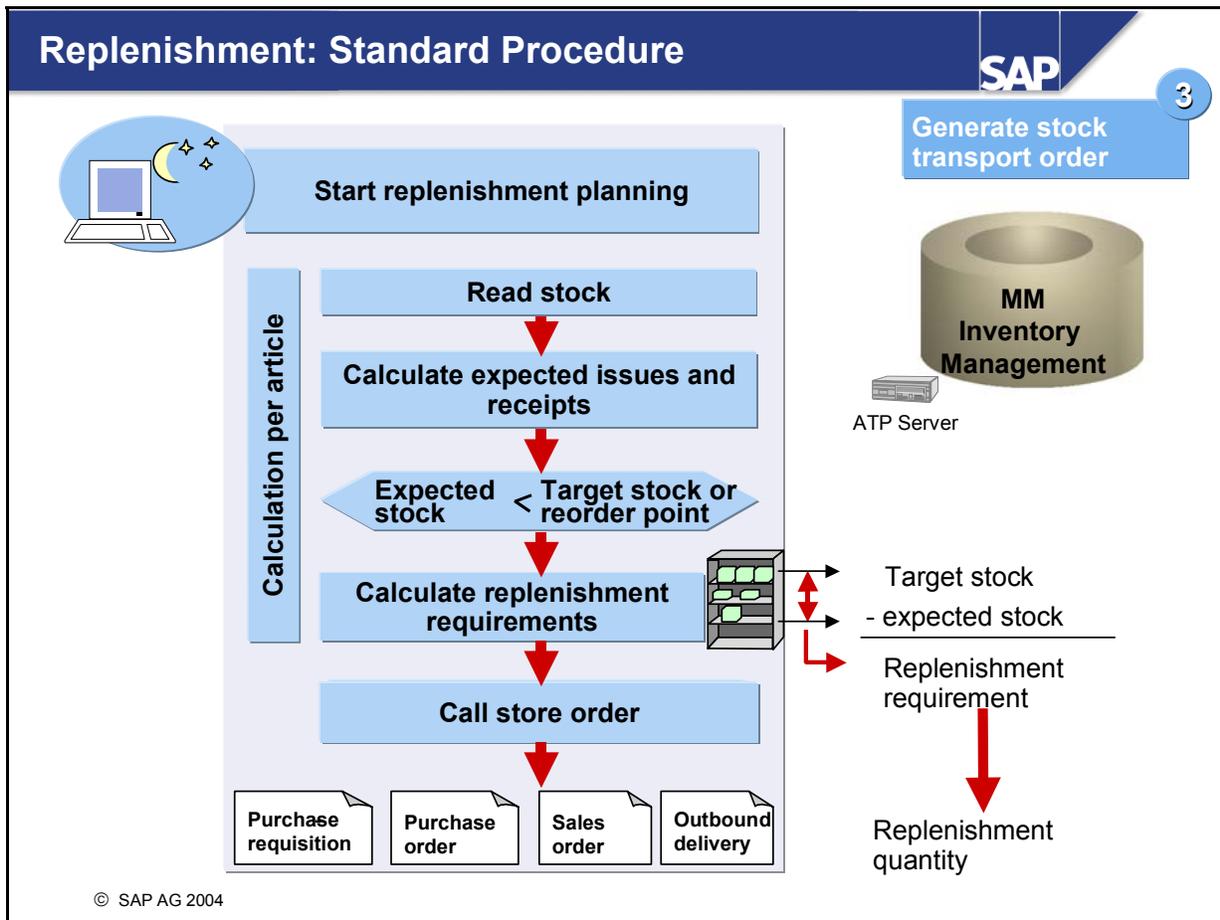
© SAP AG 2004

- Replenishment is a procedure for the demand-oriented merchandise supply of recipients (sites or external customers). When planning replenishment, the requirements are determined using the stock situation and then follow-on documents (for example, purchase requisitions, purchase orders, sales orders and outbound deliveries) are generated automatically for the merchandise supply.
- Replenishment for customers is used within the framework of Vendor Managed Inventory (VMI), to carry out the requirements planning as a service.

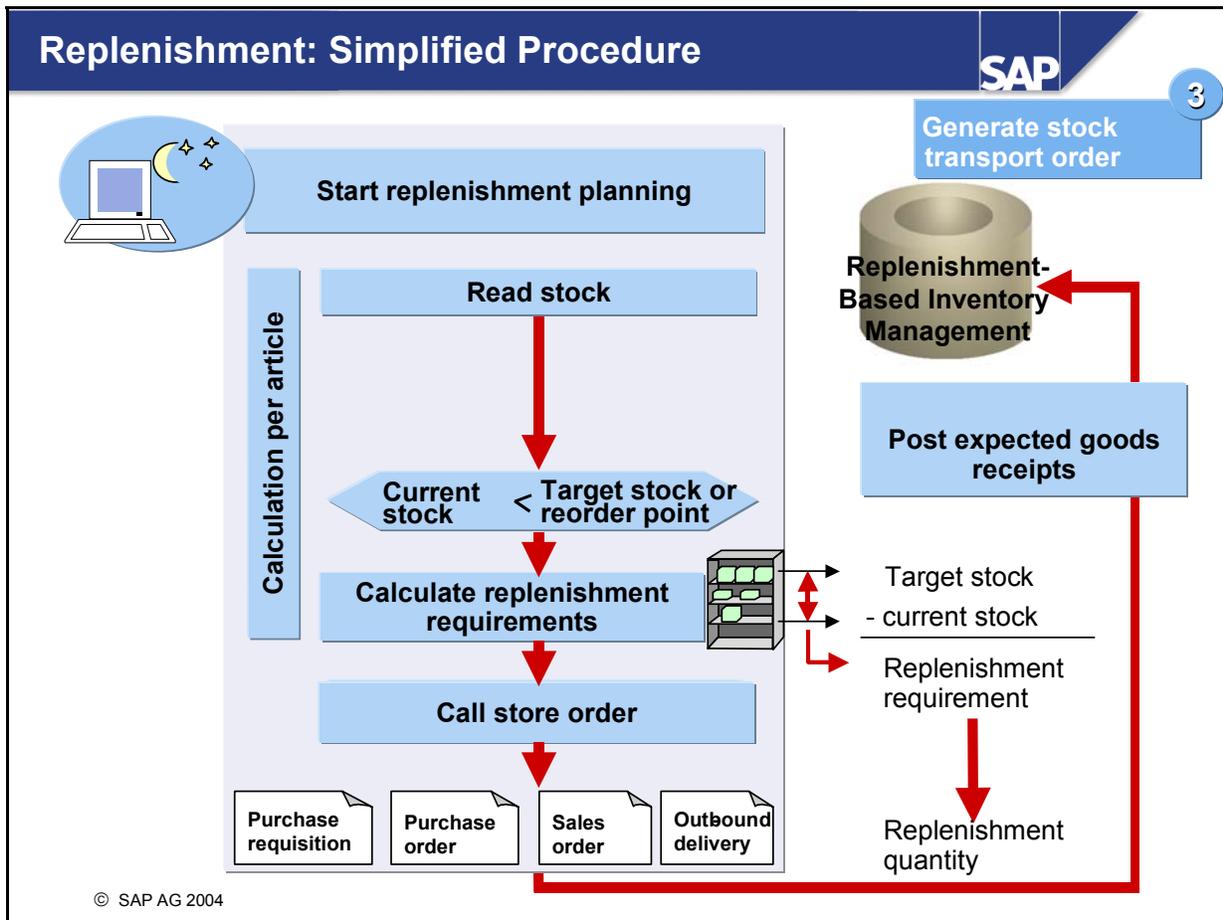


© SAP AG 2004

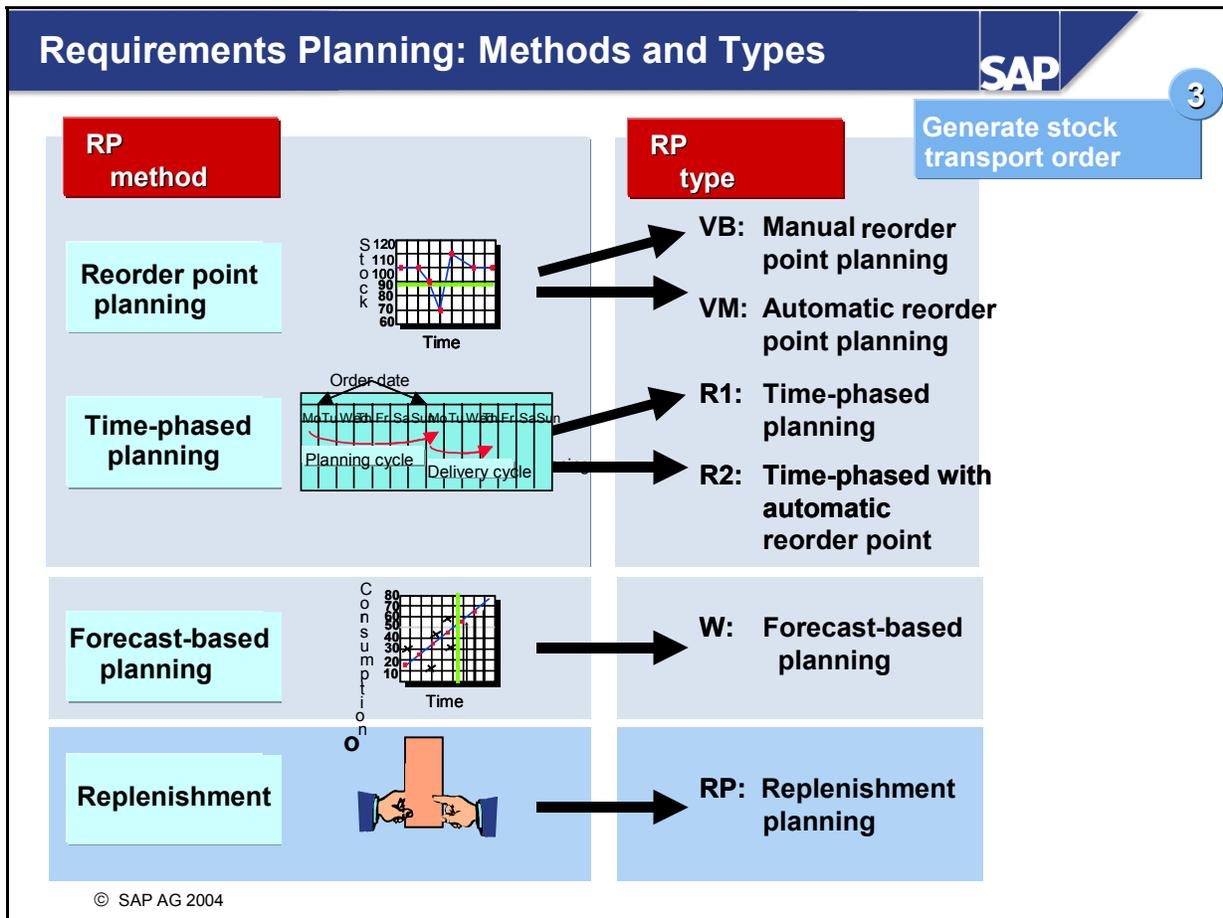
- Replenishment gives you the option of accessing **detailed MM inventory management** or a simplified form of **replenishment-based inventory management** that reduces the necessary level of maintenance and offers improved performance. Replenishment-based inventory management also enables you to use inventory management on an article basis for articles that can normally only be created on a merchandise category level in MM inventory management for the relevant stores.
- Two procedures can be used to **run replenishment**: the **standard procedure** and the **simplified procedure**. The simplified procedure has been conceived for a simplified system environment; it is based solely on the sales quantities recorded at POS and can therefore be used without involving additional goods movements. The simplified procedure can only be used in conjunction with replenishment-based inventory management. The standard procedure should only be used with MM inventory management.
- Before running replenishment for an article in a store, the article master (store logistics view) must contain master data for requirements planning and replenishment. The *Replenish. IM* indicator in the store logistics screen enables you to switch from MM inventory management and replenishment-based inventory management. Setting the indicator *Correct RS* ensures that goods receipts are deducted when the procurement document is generated.



- Procurement in the replenishment process can be triggered online and in the background. If replenishment is run online, users specify the store (or store group) and an approximate procurement time for the merchandise (replenishment lead time). For more information on background processing, see *Basics, Background Processing* in the SAP Retail documentation.
- In the **standard procedure**, the current stock for all the relevant articles are read from **MM Inventory Management** as well as the **issues** and **receipts** expected during the replenishment lead time. The system uses historic article consumption data to create forecasting data for future issues and the ATP (Available-To-Promise) server to determine the planned issues and receipts (for example, purchase orders, reservations). The expected stock at the end of the replenishment lead time is then calculated using the following formula:
expected stock = current stock + expected receipts - expected issues
- If the expected stock is less than the **target stock** and the **reorder point** that have been calculated for the relevant store and article (if indeed the latter has been defined), the system then calculates the replenishment requirement using the following formula:
replenishment requirement = target stock - expected stock
- The resulting quantity is then sent to the *Store order* function. Once the source of supply has been successfully determined and, if necessary, the order quantity has been optimized, this function generates a purchase order for an external vendor, for example.



- Replenishment is triggered in the same way for both the simplified procedure and the standard procedure.
- In the **simplified procedure**, the current stock for all relevant articles are read out of replenishment inventory management.
In the simplified procedure, the expected stock is equal to current stock.
- Replenishment requirements and replenishment quantities are calculated in the same way as in the standard replenishment procedure.
- With the simplified procedure, the **expected goods receipts** are finally posted to the replenishment-based inventory management, if the corresponding setting was made in the article master.



- There are four different basic procedures in requirements planning that are relevant for retailers:
- **Reorder point planning**
With this requirements planning procedure, the available warehouse stock is compared with the reorder point. If the stock available in the warehouse is less than the reorder point, the system generates an order proposal.
- **Forecast-based requirements planning**
Forecast-based requirements planning is also based on article consumption. Future consumption values are forecasted. These values are used as the required quantity for the planning run.
- **Time-phased planning**
If a vendor always delivers an article on a specific day, it makes sense to retain the time periods used until now but extended to include the delayed delivery time. This can be done using time-phased planning.
- **Replenishment planning**
Replenishment planning was developed especially for planning purposes in the store and for external customers. Replenishment for customers is used within the framework of Vendor-Managed Inventory (VMI), to carry out the requirements planning as a service.
Replenishment is used to create follow-on documents automatically (for example, purchase requisitions, purchase orders, sales orders and deliveries).

Generate stock transport order



Logistics Store

| Parameter Overview | | | | | | |
|--------------------|---------|----------|-------|--------------|---------------|------------|
| Customer | Article | Pl. Char | Stock | Target stock | Reorder point | Replen. IM |
| T200 | R100000 | RP | 70 | 1500 | 300 | - |
| T200 | R100008 | RF | 0 | 1000 | 700 | x |

replenishment requirement = target stock - expected stock

© SAP AG 2004

- The master data needed for the replenishment run is maintained in the article master in the store logistics view and displayed in the parameter overview.
- For replenishment based inventory managed articles, a correction quantity can be entered in the parameter view for each recipient, whereas for MM inventory managed articles the parameter overview is only for display purposes.
- In order to facilitate mass maintenance of part of the replenishment master data (target stock, reorder point, safety stock, minimum target stock, maximum target stock) for a large number of articles and stores, SAP Retail provides the possibility of using requirement groups (which can be defined in Customizing). As a result of this, combinations of stores and merchandise categories, which are expected to have similar requirement behavior, are grouped together. In order to be able to use requirements groups, the replenishment data needs to be maintained at article/requirements group level and the requirements group needs to be assigned at store/merchandise category level.

Generate stock transport order



Replenish. req.

= target stock

- expected/current stock

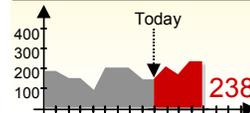
Static (RP)

- Maintain target Stock (per requirement group)



Dynamic (RF)

- Create forecasting data
- Run forecast



Parameter Overview

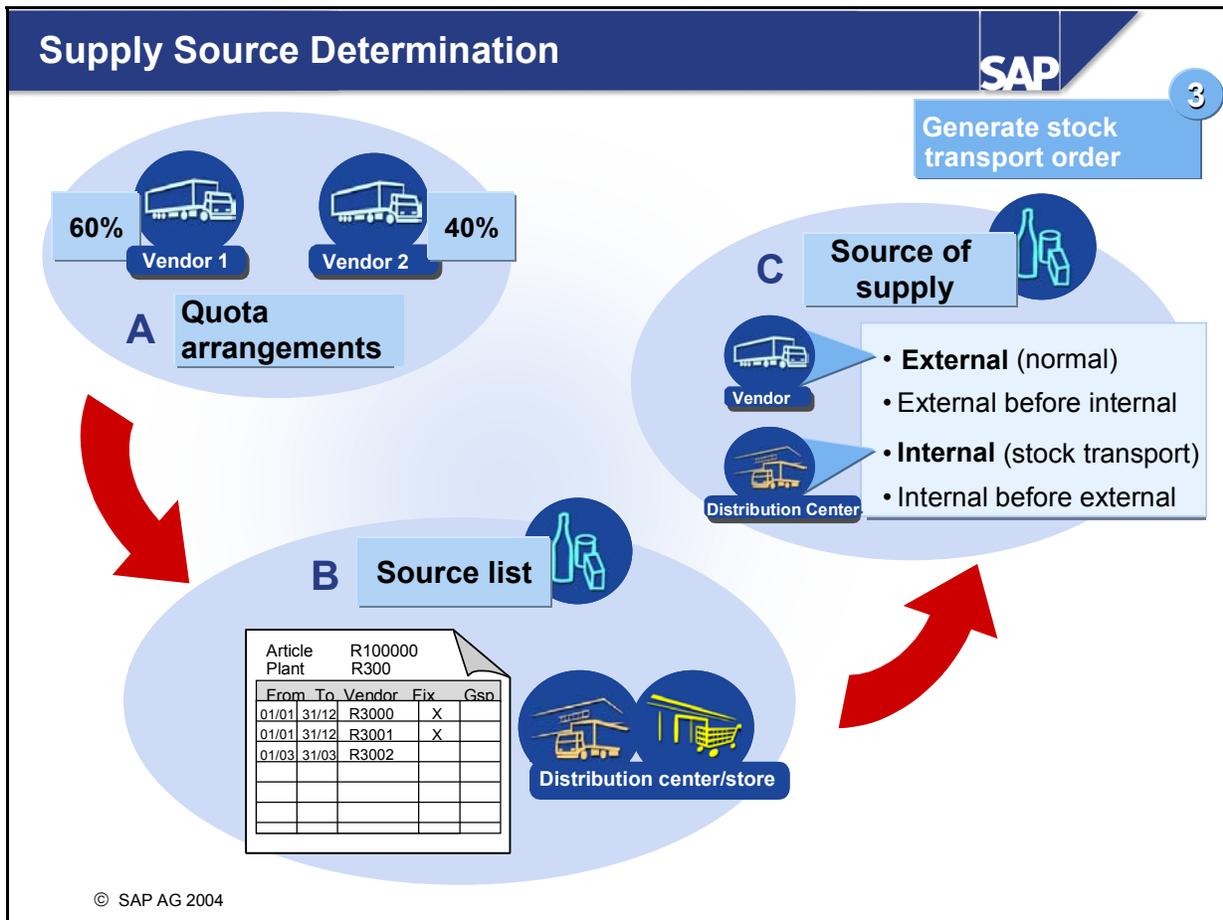
| Customer | Article | Pl. Char | Stock | Target stock | Minimum stock | Minimum target stock | Maximum target stock |
|----------|---------|----------|-------|--------------|---------------|----------------------|----------------------|
| T200 | R100000 | RP | 70 | 1500 | | | |
| T200 | R100008 | RF | | | 50 | 100 | 500 |

| Purchase order | |
|----------------|------|
| R100000 | 1430 |
| R100001 | 288 |

- The target stock used for calculating the replenishment requirement of an article in a store (or for a customer) can be maintained in two ways:
 - Statically (MRP type)

In this case, a figure based on previous experience is entered in the system as the target stock in the store logistics view of the article master for the article and store in question (or the relevant customer).
 - Dynamically, using forecasting (MRP type RF)

To use this procedure you must first enter the requirements planning, forecasting and replenishment parameters for the article and store (or customer) in question in the article master data (store logistics view). When this is complete, the (consumption) forecast can be run; the system automatically calculates the total consumption for the periods that are to be included in the forecasting procedure and then increases this figure by the safety stock that has been defined for the relevant article and store (or customer). A minimum and maximum target stock figure limits this value from undercutting or exceeding certain levels. The value determined is used in procurement processes but it is neither written to the article master nor displayed in the parameter overview.

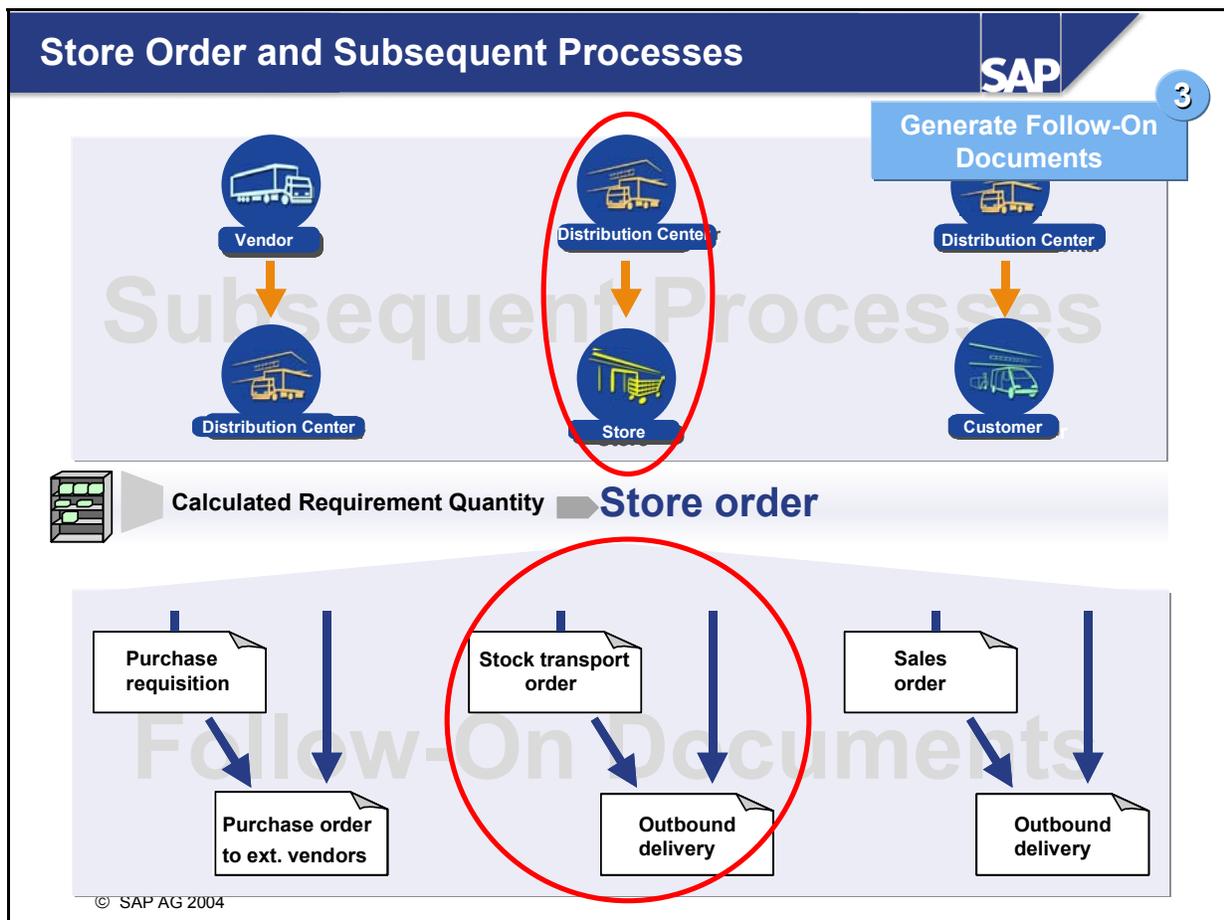


- Possible supply sources are defined by the system with the following priority and then displayed on the screen as suggestions:
 - The system then checks if a quota arrangement exists and if its period of validity actually covers the delivery date stated in the purchase requisition. If you want to procure an article from different sources of supply, you can provide the individual sources of supply with a quota, which allocates a proportion of the requirement to each source of supply. A quota arrangement is agreed for a specific period of time. A quota arrangement does not divide up a requirement. The entire quantity demanded in a purchase requisition is assigned to one source of supply according to the quota arrangement.
 - If no quota arrangement is available, the system uses the source list to determine a suitable supply source: The sources of supply that are allowed (and not allowed) for an article in a certain site and during a specified period are listed in the source list. Each source of supply is defined by a source list record. If the source list contains neither a vendor nor an outline agreement, the systems tries to find a contract or a delivery schedule for the article. Any outline agreements that exist for the article in question are suggested as possible supply sources.
 - The Supply source field in the article master is analyzed if no supply source has been determined up to this point. The following options can then be chosen:
 - The system uses outline agreements, info records and the regular vendor indicator to search for an external source of supply (external vendor), or
 - The system uses stock transfer scheduling agreements or delivery sites (distribution center) to determine a supply source, or
 - Both methods can be used one after another.
- In addition, you can deactivate supply source determination in your system and use a user exit to implement your own supply source determination method.

Store Order and Subsequent Processes

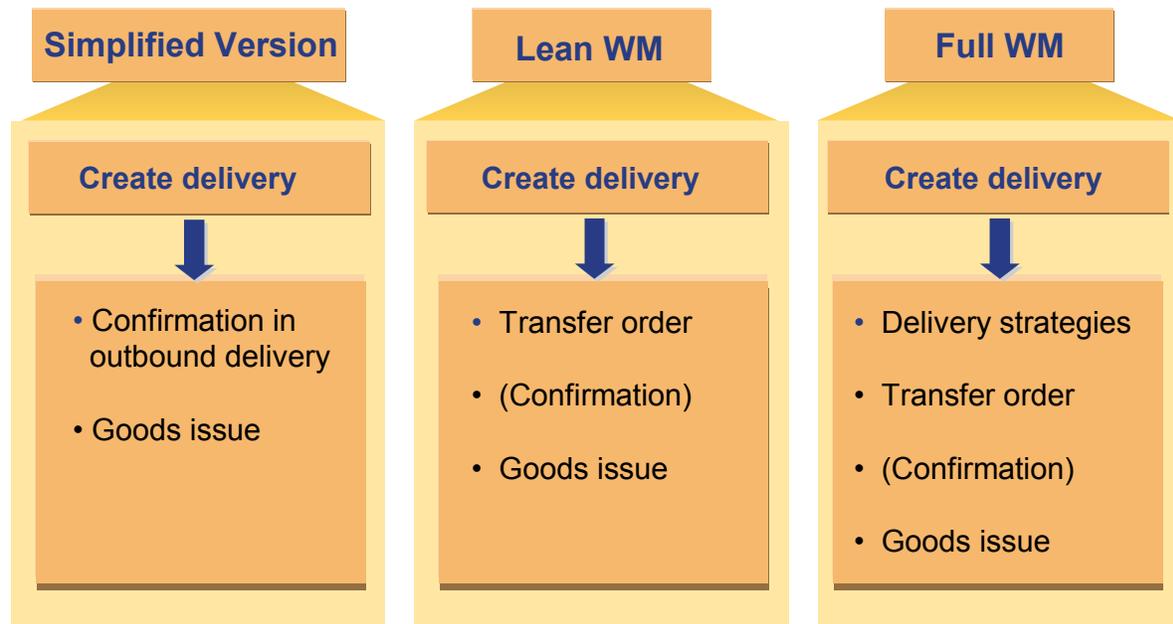
SAP

3



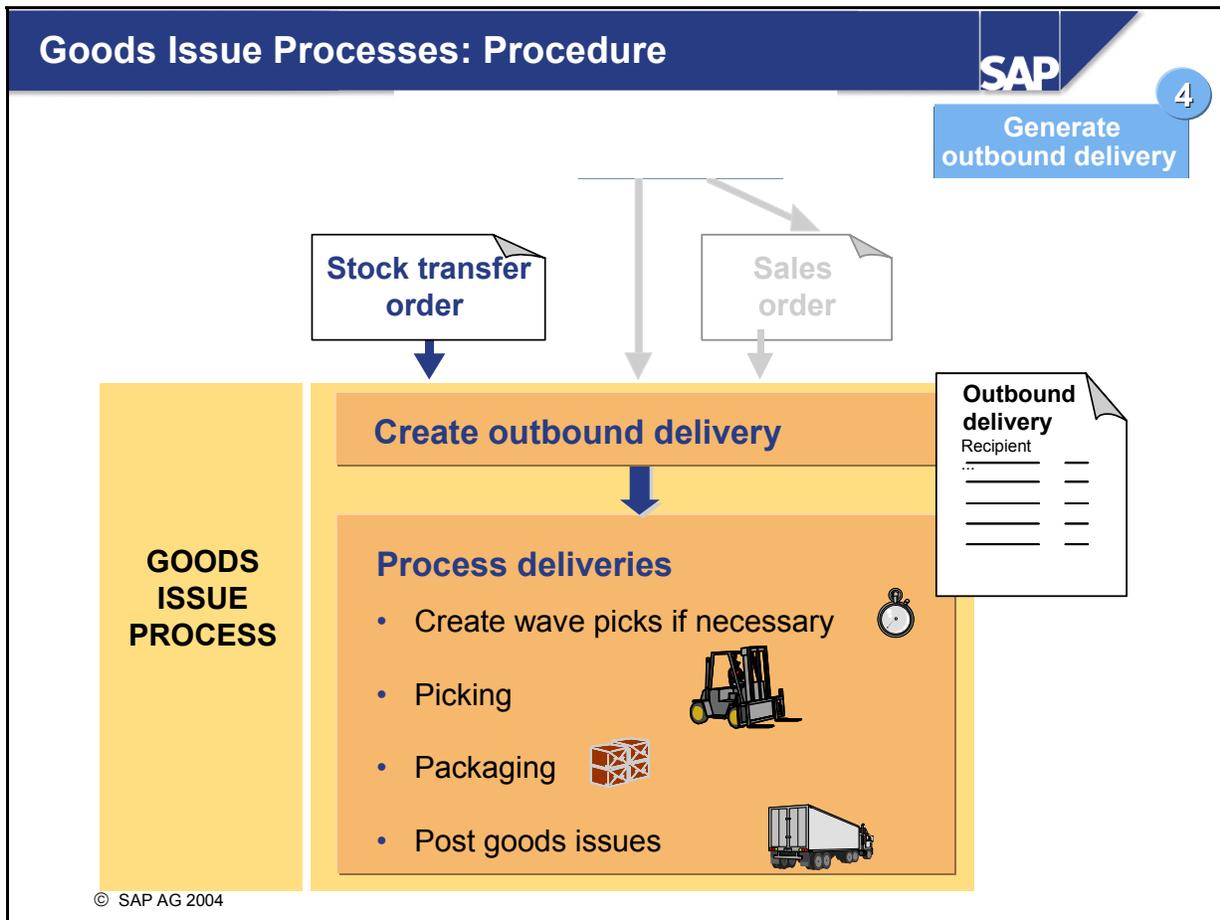
- Store orders generate different types of documents, depending on the system settings.
- These documents are normally:
 - Purchase requisitions if the system could not clearly identify a vendor.
 - Purchase orders for procuring merchandise from an external vendor for a distribution center or for a store. Alternatively, merchandise can be procured from a distribution center using a warehouse order.
 - Outbound deliveries for procuring merchandise from a distribution center.
 - Sales orders; store orders are used in the same way for both external customers and stores.
- The following documents are exceptions but can be used nonetheless:
 - Purchase order copies if the store has placed an order directly with the vendor.
 - If there is insufficient merchandise available in the DC to fulfill a stock transport order, the order can be sent to different DCs (delivery sites for the store in question) or to a specific external vendor (third-party purchase order).

GOODS ISSUE PROCESSES



© SAP AG 2004

- Using lean WM (WM = Warehouse Management), you can pick using transfer orders, even if no storage bins are managed in the system. In lean WM, no goods receipts or goods issues are processed as follow-up processes in WM. This means that storage bin data and stocks are not updated at storage bin level using quants. Instead, this process is carried out at storage location level.
- Storage bins are not managed in lean WM but you can assign a fixed storage bin to the article in the article master, which will then be printed on the transfer order as information for the picker.
- The processes in lean WM are fundamentally the same as those in normal Warehouse Management. You work with outbound deliveries and create transfer orders for them. The other structures in WM (storage types, doors, staging areas, storage sections) can be mapped in lean WM in exactly the same way as in WM.

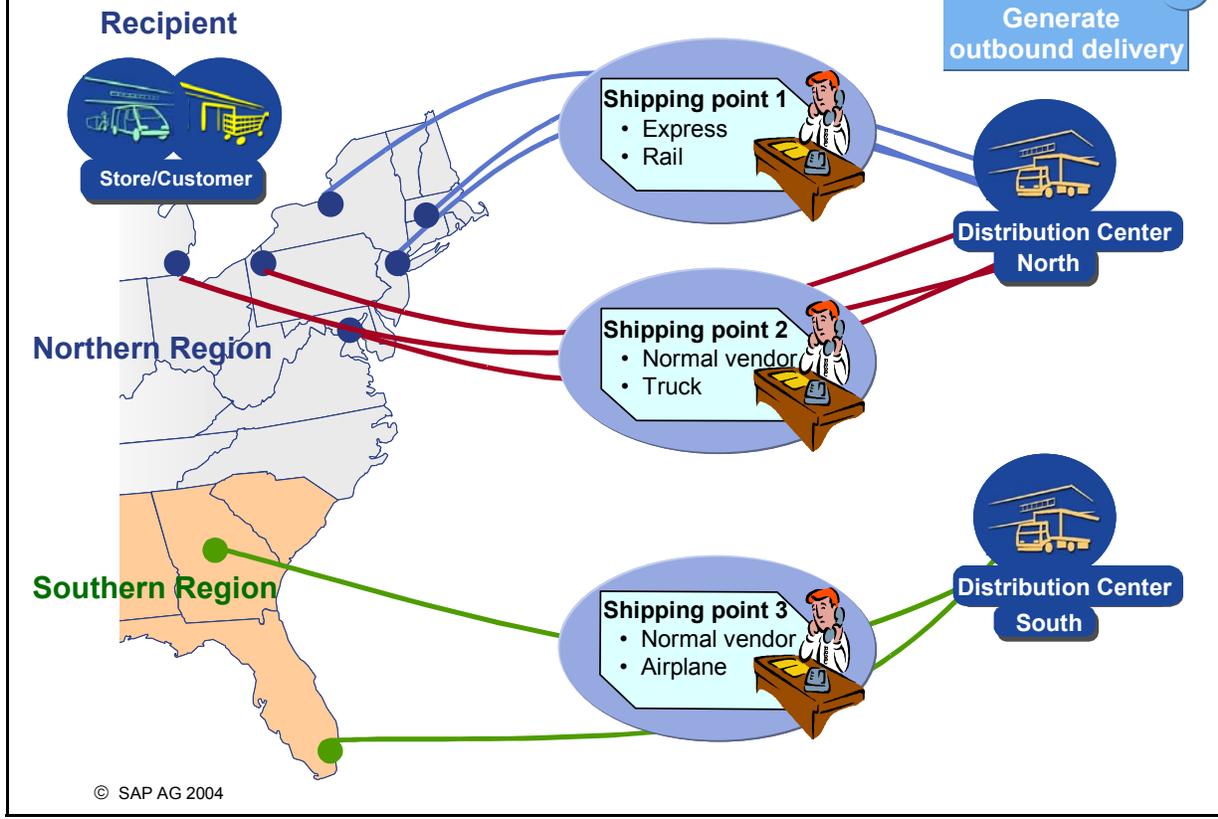


- Delivery documents are central tools in shipping. Delivery documents are the basis for additional shipping activities, such as picking, merchandise packaging (part of the process chain that is not covered in this unit) and goods issues.
- After creating delivery documents (normally for stock transport orders or sales orders, but in this case as a follow-on document for an allocation table) they can be grouped together in wave picks (= units for the goods issue processes that are to be processed in a specified time interval) if necessary. Picking is then run for the deliveries. They are then, if necessary, packaged and sent to goods issues.

Shipping Point

SAP

4



- The **shipping point** is the organizational unit in the SAP system that is responsible for processing goods issue processes (and deliveries).
- Before you can give your customer a delivery date for a particular article, the system needs to know all the necessary leadtimes for the different part processes in the goods issue and transport processes.
- You can define times for preparation and loading merchandise for the shipping point.
- The shipping point is normally determined automatically for each item in the sales document. You can change the default value manually if you want to use an alternative shipping point.

Structure of the Outbound Delivery Document

SAP

4

Outbound delivery

Change delivery 80004893: Overview

Outbound delivery: 80004893
Recipient: R311

Item overview

Picking

Loading

Transportation

All items

| | | | | | | |
|----|---------|---------|---|----|-----|--|
| 10 | R100013 | Shampoo | 5 | PC | TAN | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Header:

for example, recipients, shipping point, route

Detailed header info:

Total weight, total volumes, appointments ...

Items:

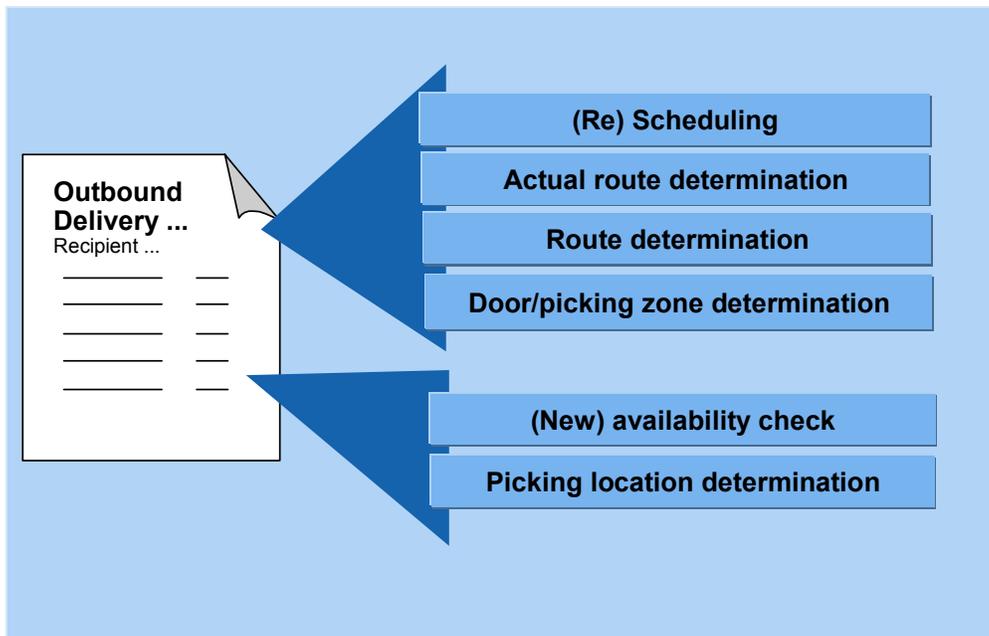
for example, articles, quantities

Detailed item info:

Storage location, warehouse number, picking status, goods movement status...

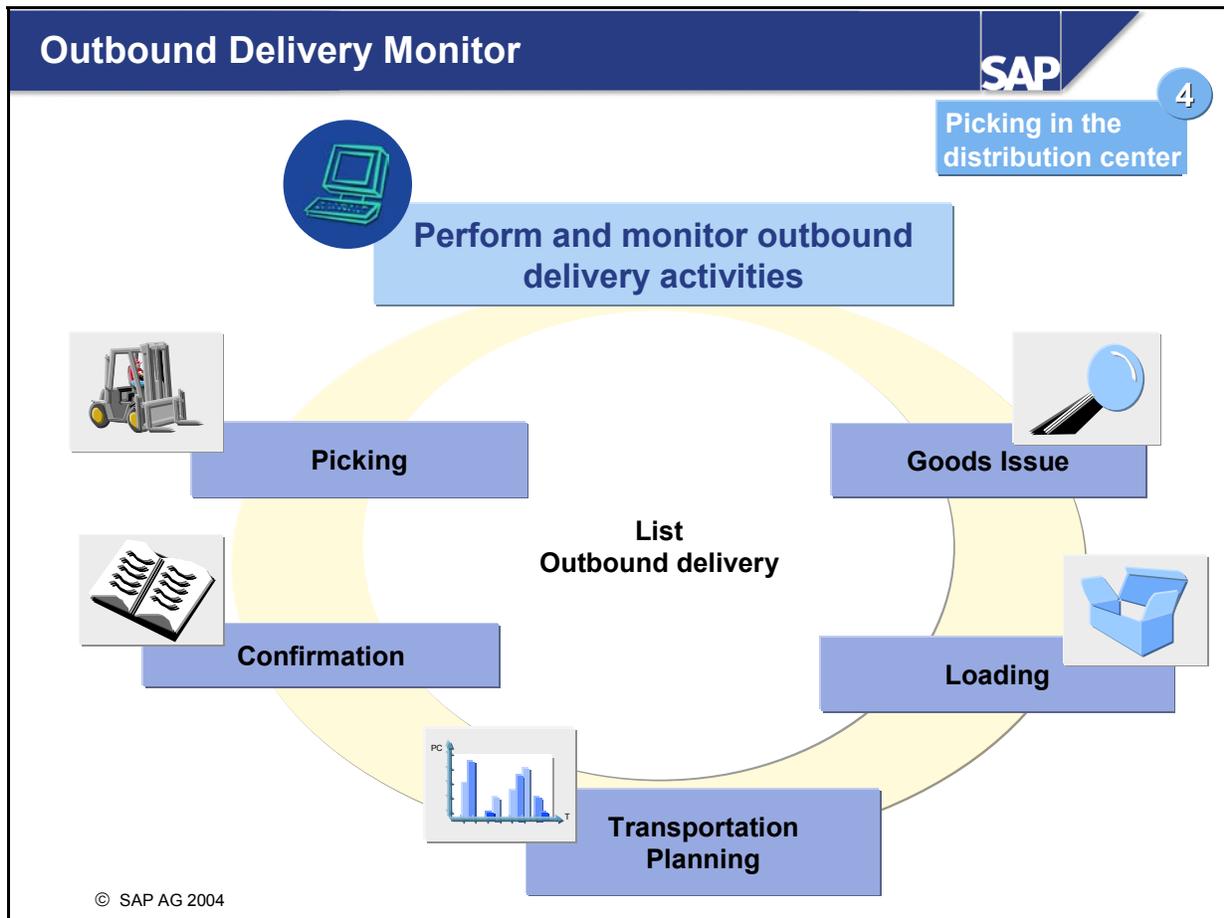
© SAP AG 2004

- Outbound delivery documents consist of a **header** and any number of **items**.
- The header contains data that is valid for the entire document. This includes, for example, the recipient, the shipping point and the route for each individual delivery.
- The items mostly contain information about the articles that are going to be delivered.
- The information in the outbound delivery document is displayed in different screens: The **overview screen** contains some header and item data; this is grouped thematically under different **tab pages**. This enables the user to find important data on the same screen.
- Additional screens are also used to display **detailed information** at **header level** and **item level**. This data is also grouped together under tab pages according to the process it refers to. At header level, this information is, for example, about handling, picking, loading, transport, customs/foreign trade, texts, partners, messages, packet processing, and conditions, among other things.
The detailed item information screen contains similar tab pages containing item-related information.

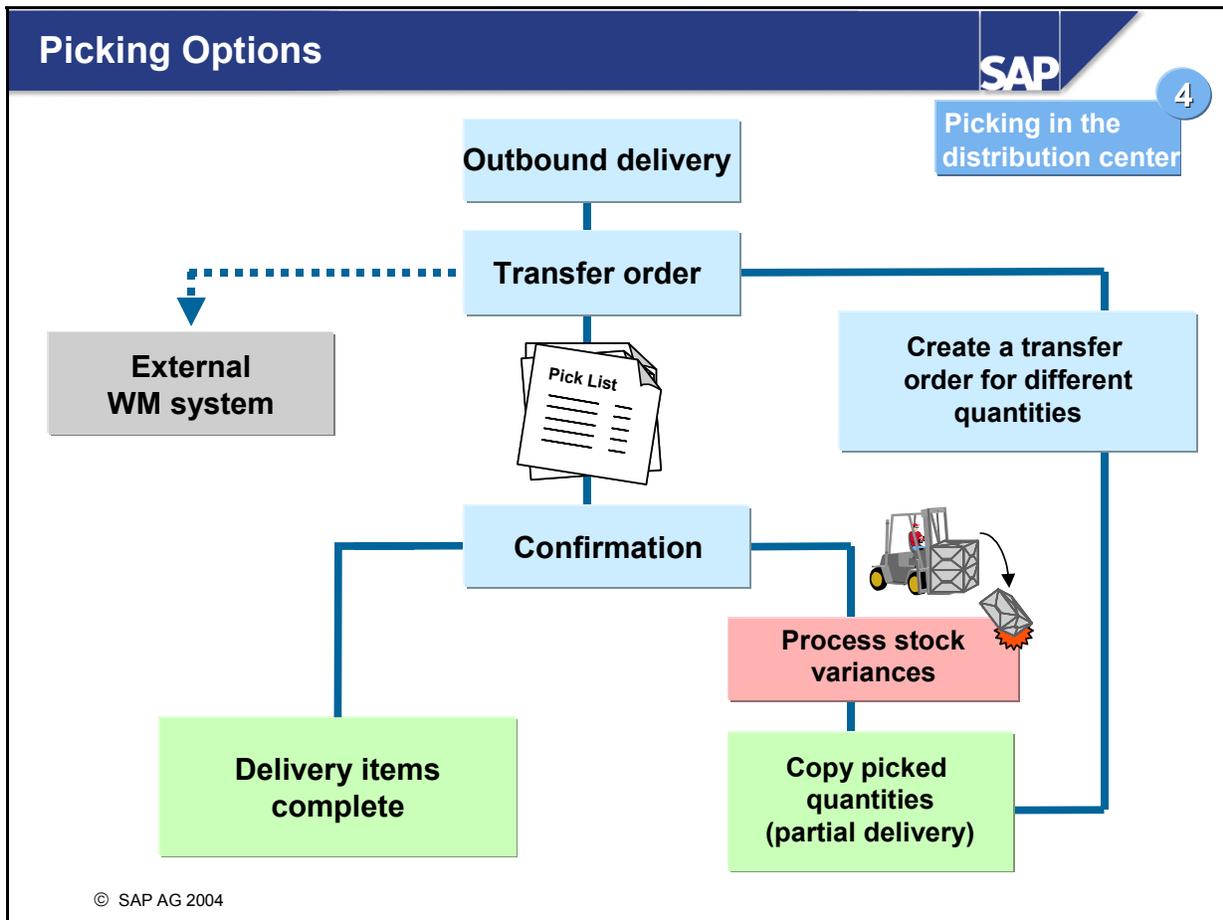


© SAP AG 2004

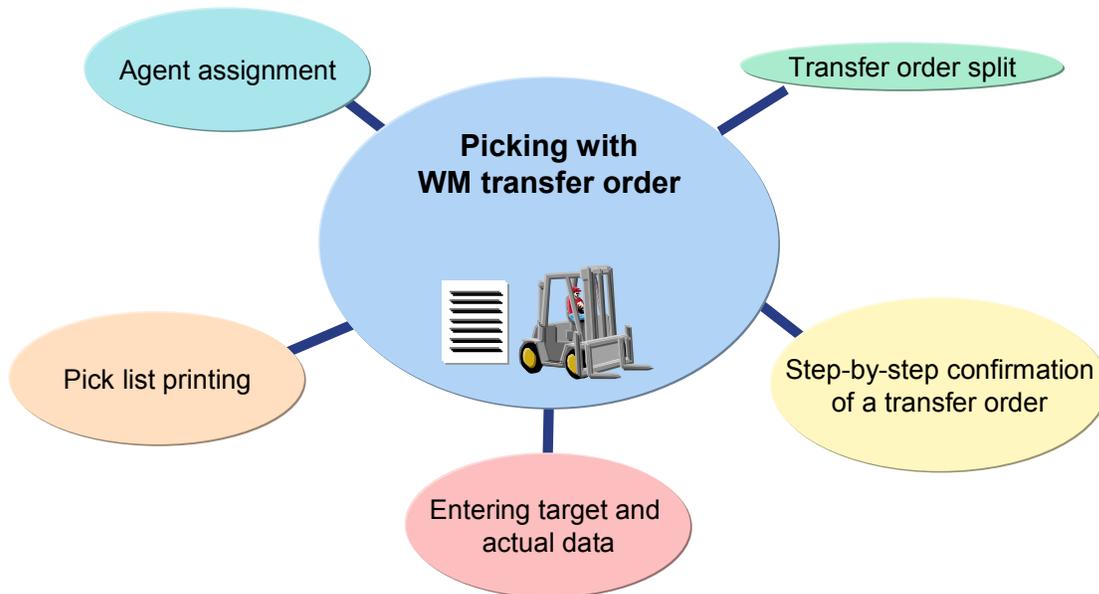
- During (automatic or manual) outbound delivery creation, your system runs the following function, depending on the Customizing settings that have been made:
 - **(Re)scheduling**
Depending on the vendor, (re) scheduling is run for backlogged preceding documents (in this example, warehouse orders).
 - **(Actual) route determination**
New routes are determined depending on the delivery type. The route stated in the preceding document (here the warehouse order) may then be overwritten.
 - **Route determination**
If the shipping point in the system has been configured to allow routes to be used, yet no route was determined in the preceding document, a delivery date is found to match the route that has been chosen for the delivery.
 - **Door/picking zone determination**
 - **(New) availability check**
Availability is checked once again, if necessary, for the delivery item category.
 - **Picking location determination**
If no storage location has been entered for a delivery item in the preceding document (in this case the warehouse order), the system automatically finds a storage location from which the article in the delivery item is picked. This is, however, only the case if the setting has been made for the delivery item category.



- The outbound delivery monitor has a function for displaying outbound deliveries that are still to be processed or are already completed.
- Numerous criteria exist for selecting the desired documents. You will receive a list of the selected deliveries and can start the subsequent functions for further processing from the list. This also includes the processing of messages that occur during the goods issue processes (for example, delivery notes). In addition, information in the delivery environment can also be called.
- You can create user-specific variants for selecting and for displaying the documents (selection variants or display variants).
- With the outbound delivery monitor you can also run important subsequent functions in the collective processing in the background (for example, the creation of transport requests for picking, posting goods issue).
- The outbound delivery monitor provides you with an analog functionality for monitoring and performing outbound delivery activities.

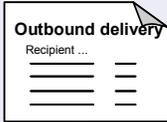


- You can print the picking list(s) for the warehouse from the transfer order. This step can be performed automatically.
Instead of printing the pick list, you can, for example, pass the transfer order data to an external warehouse management system using mobile data capture (MDC) units.
- If you have not run automatic confirmation, you can also confirm picked quantities manually when monitoring and checking the picking process. You can also confirm deviating quantities and show the reason for the variance by setting a variance indicator.
- If the entire quantity cannot be picked, you can
 - Run picking for the open quantities using an additional transfer order
 - Reduce the quantities for delivery by copying the picked quantity



© SAP AG 2004

- If you use the Warehouse Management System (WMS) for picking, additional functionalities for WM transfer orders can be used. This is also true of lean WM. This also enables you to use one single processing procedure when picking from fixed storage bins or badly organized warehouses.
- You can generate more than one transfer order from a single delivery. This is useful if, for example, you want to split quantities according to picking areas or split the workload among different agents.
- Personnel numbers are used to identify the processing agent for transfer orders.



| Article | Delivery qty | Pick qty | Pick status | Status WM-act. |
|---------|--------------|----------|-------------|----------------|
| R100000 | 10 PC | | A | A |
| R100008 | 20 PC | | A | A |

© SAP AG 2004

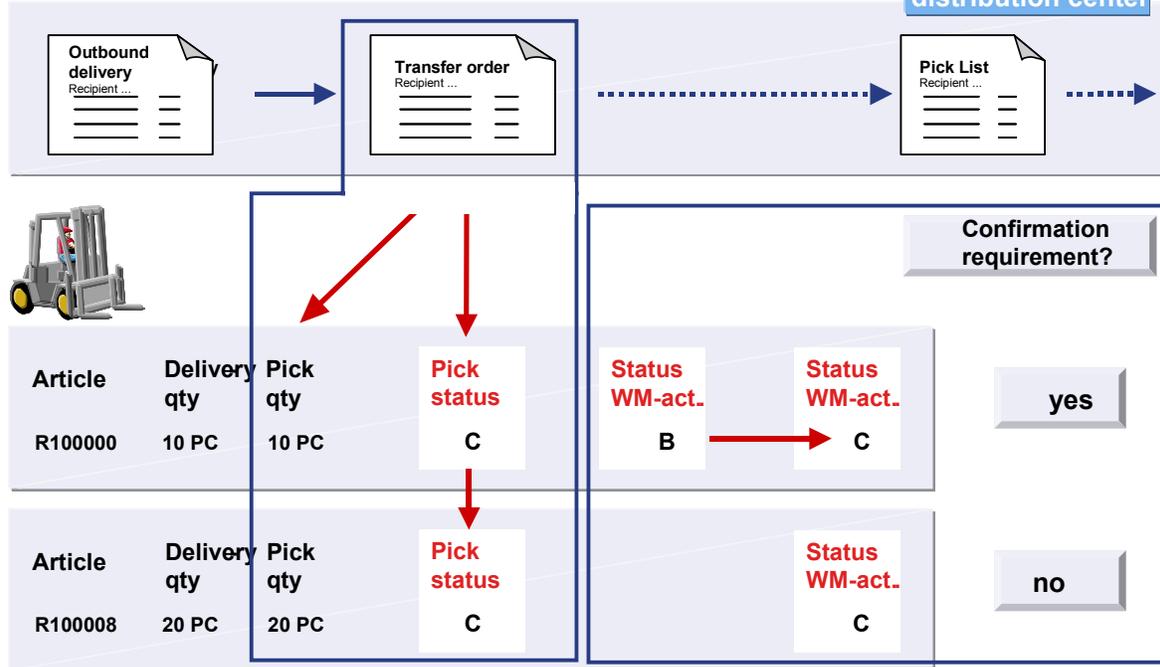
- When you generate the transfer order, the system uses the delivery quantity as the pick quantity. This means that the pick status is set to C, meaning that picking is complete.
- If you require the complete picking procedure to be registered in your system, you can use confirmation requirement.
- Transfer orders and picked quantities (*Pick quantity* field) are confirmed before the goods issue is posted.
- If you can guarantee that changes to deliveries occur very rarely as a result of the picking process, thus allowing confirmation to take place on time, this step can be limited to deliveries that have to be changed by working without confirmation requirements.
- Quantities with quantity variances can also be confirmed. The reason for the quantity variance can be established by configuring your system to display the variance indicator.
- As soon as confirmation is complete, the WM activity status is set to C, irrespective of the quantity reported back. The pick quantity only influences the picking status.
- The confirmation requirement is defined for each storage type in Customizing. It is sufficient for removal from storage from the "from" storage type or putaway in the "to" storage type to be configured in such a way as to indicate that confirmation is required.

Confirming Transfer Orders (2/2)

SAP

4

Picking in the distribution center



© SAP AG 2004

- When you generate the transfer order, the system uses the delivery quantity as the pick quantity. This means that the pick status is set to C, meaning that picking is complete.
- If you require the complete picking procedure to be registered in your system, you can use confirmation requirement.
- Transfer orders and picked quantities (*Pick quantity* field) are confirmed before the goods issue is posted.
- If you can guarantee that changes to deliveries occur very rarely as a result of the picking process, thus allowing confirmation to take place on time, this step can be limited to deliveries that have to be changed by working without confirmation requirements.
- Quantities with quantity variances can also be confirmed. The reason for the quantity variance can be established by configuring your system to display the variance indicator.
- As soon as confirmation is complete, the WM activity status is set to C, irrespective of the quantity reported back. The pick quantity only influences the picking status.
- The confirmation requirement is defined for each storage type in Customizing. It is sufficient for removal from storage from the "from" storage type or putaway in the "to" storage type to be configured in such a way as to indicate that confirmation is required.



- Manual (change delivery)
- Transfer order confirmation
- Using the delivery monitor
- ...

Picking completed?

Outbound Delivery ...
 Recipient ...



Goods Issue

Outbound Delivery ...
 Recipient ...

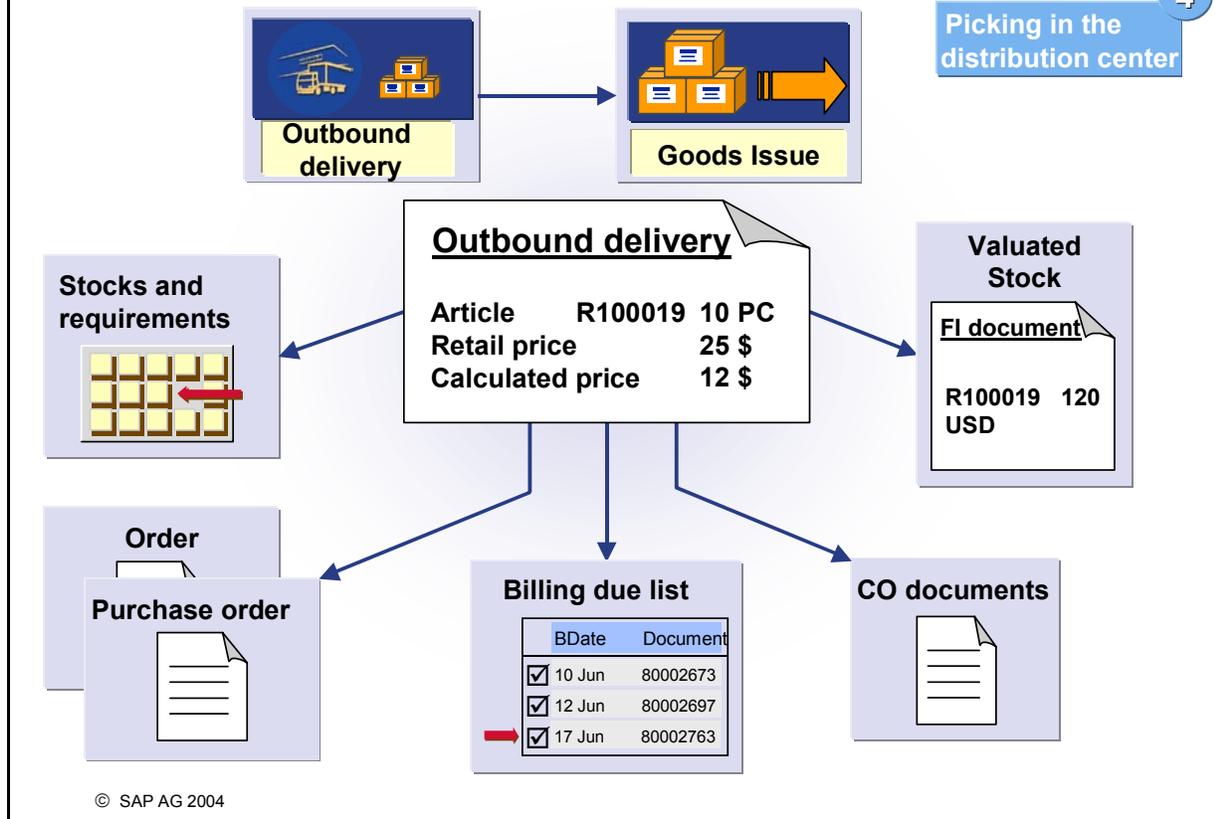
© SAP AG 2004

- Goods issue activities are complete when the goods issue for a delivery is posted.
- Goods issue can only be posted if all the compulsory activities in the goods issue processes have been performed. If you use pick relevance and confirmation requirements, these steps must be completed before the goods issues can be posted.
- A goods receipt can be posted by changing an individual delivery. Alternatively, you can use the collective processing function to first of all select all the deliveries that have to be posted at goods issue and then actually post the necessary deliveries. You can also use the delivery monitor or the wave pick monitor to do this.
- It is also possible to post a goods issue when you confirm a transfer order.
- Situations where errors arise are logged, for example, if data is incomplete or items have only been partially picked. If an error occurs, no goods issue is posted.

The Effects of a Goods Issue

SAP

4

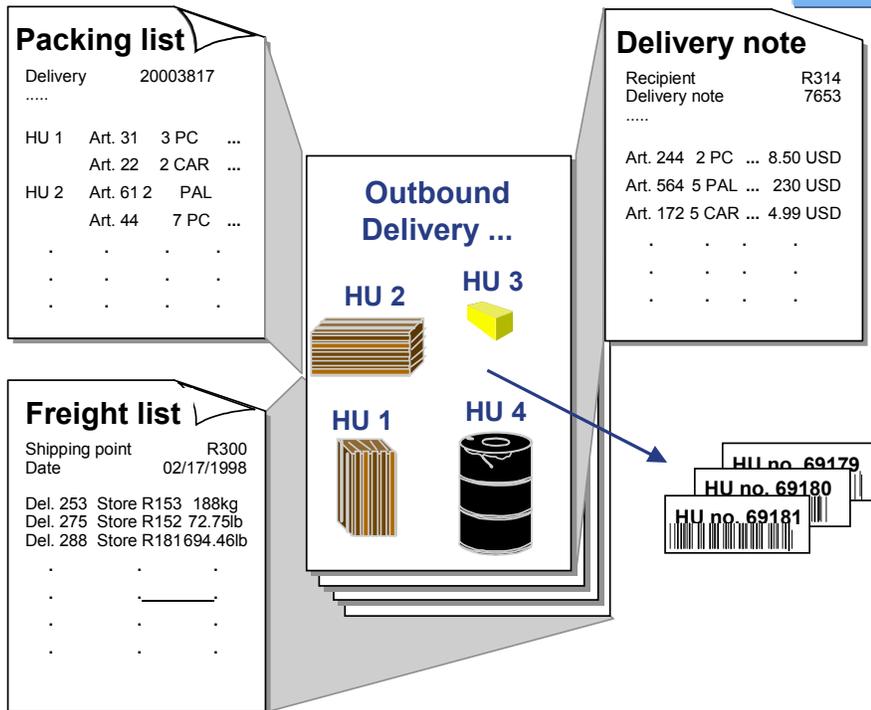


■ Goods issue:

- reduces **warehouse stock**;
- posts the **value changes** in the stock accounts in article financial accounting;
- reduces delivery requirements;
- includes status information in the delivery;
- is entered in the document flow;
- generates a **worklist for billing**;
- posts goods receipt in the store at the same time if Customizing recognizes one-level stock transfers.

■ The **changeability** of deliveries is **limited** when goods issues are posted. Quantities, in particular, cannot be changed. The delivery must be an exact match of the order as stated in the system at goods issue.

■ If billing is to be executed using the *Create billing document* transaction, you can make a setting in the copy control for the billing document in Customizing.



© SAP AG 2004

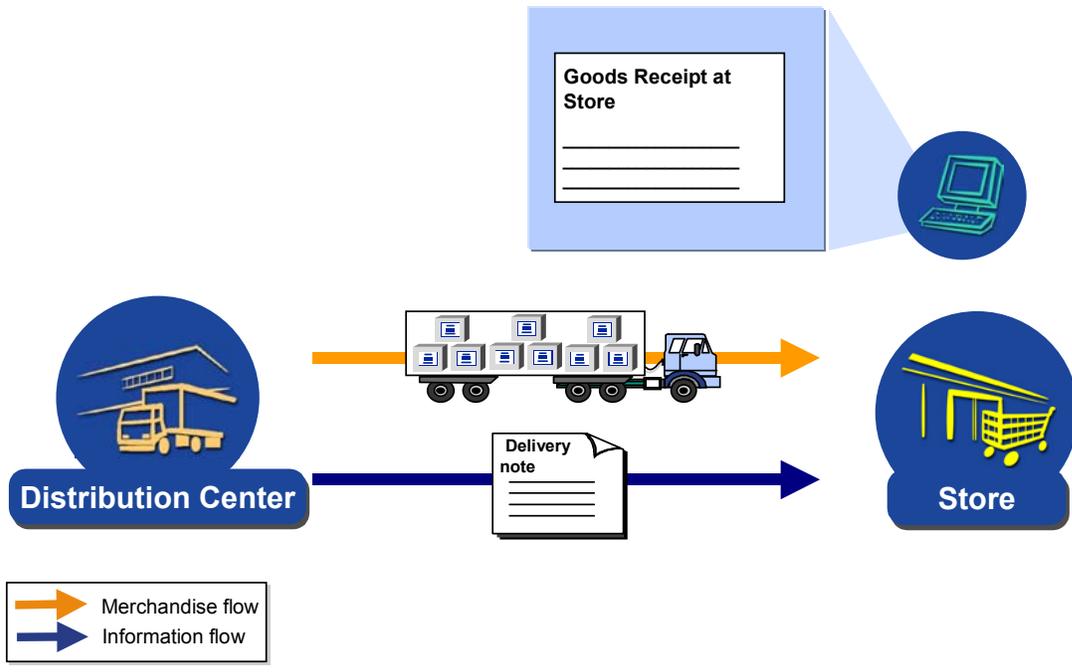
- Delivery notes can be printed for an outbound delivery before goods issue.
A delivery note normally contains the delivery note number, the delivery date, the recipient and the individual delivery items.
Delivery notes can also be sent using EDI.
- The layout of the delivery note can be created flexibly using suitable forms. The retail price for each item can also be detailed in the delivery note, thereby making price marking easier in the store.

Posting Goods Receipt at Store

SAP

Post goods receipt at store

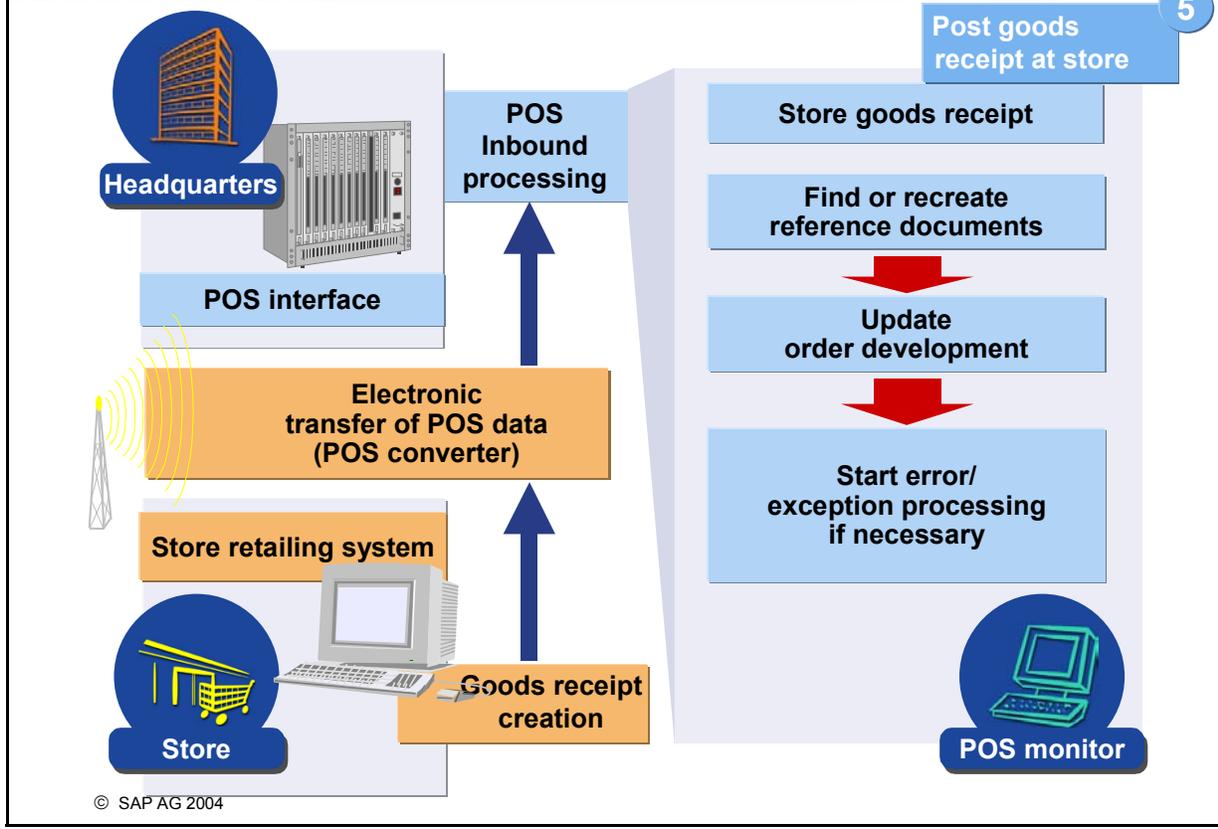
5



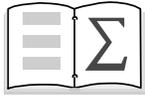
© SAP AG 2004

Internal Use SAP Partner Only

Internal Use SAP Partner Only



- The inbound delivery from the distribution center arrives at the store.
- **Store goods receipt** is one of the transactions in SAP Retail in which a goods receipt created in a non-SAP retailing system can be posted in the central SAP System. A prerequisite of this is that inventory management is run for the relevant store in the central SAP System.
- Store goods receipts are generally created and processed as follows:
 - Goods receipts are created in the store: the merchandise that has been received is counted and checked. The goods receipt items are assigned to the relevant reference documents (deliveries or purchase orders) in the external retailing system. The data that is created here is then sent to the central SAP Retail System in an IDoc using the POS converter.
 - Inbound (IDoc) processing is done in the central SAP System. A purchase order is found as a reference document in the chain of processes described here (purchase orders can be regenerated at a later date if additional data is delivered separately). The development of the purchase order can be updated and error processing can be triggered using the POS Monitor. Exception handling can also be triggered by the workflow.



You are now able to:

- **Use sales price calculation in SAP Retail**
- **Explain automatic requirements planning for stores and display the basic steps involved in delivering merchandise to a store from the distribution center**
- **Explain the basic principles of the replenishment and store order functions**
- **Explain the goods issue processes in a distribution center**
- **Post goods receipt in the store**
- **Summary**

© SAP AG 2004



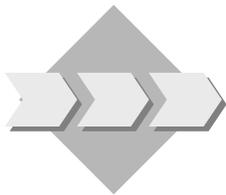
Unit: From Replenishment Planning to Sale in the Store

Topic: Pricing



After completing this exercise you will be able to:

- Maintain prices for each distribution chain in pricing
- Use the price overview to find out about article prices



You want to make price changes for certain articles of a distribution chain in pricing. You then display the sales prices using a price overview.

1-1 You want to change the sales prices for articles **TA25##** and **TA26##** for distribution chain **R300/R1** (department store). To do this, you want to perform a new calculation in pricing:

1-1-1 Perform a new calculation with the following data:

| | |
|--------------------|---------------------------------|
| Articles | TA25## and TA26## |
| Distribution chain | R300, R1 and R5 |
| Validity | today until end of the month |

Copy all the other settings and enter pricing.

1-1-2 Create a markup of 10% for article **TA25##** from distribution chain R300/R5, and a final price of 1.99 for distribution chain R300/R1. Article **TA26##** should then have a final price of 3.99. What data is displayed for the articles in pricing?

| | Distribution chain | TA15## | TA16## |
|-------------------|--------------------|--------|--------|
| Vendor | R300/R5 | | |
| Planned markup | R300/R1 | | |
| Curr. final price | R300/R1 | | |
| Final price | R300/R1 | | |

1-1-3 You then select both lines and save your entries.

How do you know if this is a case of one-step or two-step pricing?

1-1-4 From pricing, choose *Environment* → *Articles* to go to article master record TA25##. In the store logistics view you display the *Source of Supply* field:

1-1-5 You then go to the price overview (*Pricing* → *Conditions* → *Price Overview*) and display the new prices you have created:

Articles **TA25##** and **TA26##**

Distribution chain R300/R1 and R5

Copy all other settings and enter the price overview.

What data is displayed for the articles in the price overview?

| | Distribution chain | TA15## | TA16## |
|----------------|---------------------------|---------------|---------------|
| Curr. month | R300/R1 | | |
| Remaining time | R300/R1 | | |
| Curr. month | R300/R5 | | |

Exit the price overview.



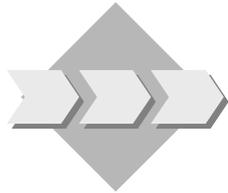
Unit: From Replenishment Planning to Sale in the Store

Topic: Replenishment



After completing this exercise you will be able to:

- List the master data required for replenishment
- Run replenishment in SAP Retail and monitor the documents that are generated



You want to generate future purchase orders automatically in your warehouse, based on the sales data in your system.

1-2 You plan to supply store **T2##** with merchandise, using the replenishment function. Before doing so, use the parameter overview to display the articles that are procured for *Recipient T2##* using replenishment.

1-2-1 Which RP type is assigned to articles **TA25##** and **TA26##**?

1-2-2 Which replenishment master data has been maintained for the following articles?

| | TA25## | TA26## |
|---------------|---------------|---------------|
| Stock | | |
| Target stock | | |
| Reorder point | | |
| Safety stock | | |

1-2-3 How do you know if replenishment-based Inventory Management is activated for an article?

1-2-4 For which articles is replenishment-based Inventory Management activated?

1-2-5 What function does the reorder point play in SAP Retail?

1-2-6* Go from the parameter overview (double-click) to the site master for customer **T2##**. In the merchandise category overview, check if Inventory Management can be run on a merchandise category basis for merchandise category **R1121** (Perishables), and which value-only article is used for posting stock.

What does this setting do?

1-3 Trigger procurement of articles **TA25##** and **TA26##** for recipient **T2##**, by running replenishment planning. Note that data may be locked by other training course participants.

1-3-1 What article quantities are suggested for procurement?

| | TA25## | TA26## |
|---------------------------|---------------|---------------|
| Replenishment requirement | | |

1-3-2 Generate the follow-on documents and view the results in the replenishment monitor.

Go to the view for the generated document.

What type of follow-on document has been generated?

Order type:

Which *supplying site* has been identified? And why?

Note the purchase order number: _____

1-3-3 What quantities of these articles do you want to order?

| | TA25## | TA26## |
|-------------|---------------|---------------|
| PO quantity | | |

1-3-4 Which article master data was used to calculate these PO quantities? (To find this information, go to the article master for both articles and check the units of measure).

1-4 For the remaining exercises in this unit, create a new purchase order (stock transport order) using the following data:

| | | |
|-------|---------------------------------|-----------------------------|
| 1-4-1 | <i>Order type:</i> | Stock transport ord. |
| | <i>Supplying site:</i> | T7## |
| | <i>Purchasing organization:</i> | R300 |
| | <i>Purchasing group:</i> | R30 |
| | <i>Company code:</i> | R300 |
| | <i>Order items:</i> | TA25## 80 CAR |
| | | TA26## 40 CRT |
| | <i>Delivery date:</i> | Day after tomorrow |
| | <i>Site:</i> | T1## |
| | <i>Storage location:</i> | Standard |

PO number: _____

This order is to be used for the remaining exercises in this unit.



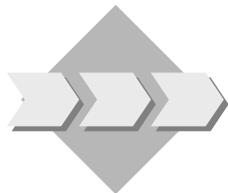
Unit: From Replenishment Planning to Sale in the Store

Topic: Goods Issue Process



After completing this exercise you will be able to:

- Process goods issues in the distribution center



To guarantee replenishment in the store, you want the merchandise to be delivered directly from the warehouse of the distribution center to the store. You have therefore generated a stock transport order as a follow-on document of the store order.

You now use stock transport orders to generate deliveries and process the necessary goods issue activities.

2-1 Goods Issue Process

2-1-1 Which documents have to be generated from the stock transport order to enable goods issues activities to be performed?

2-1-2 Go to **Collective Processing of Documents Due for Delivery** → **Purchase Orders** in Merchandise Logistics/Logistics Execution via Goods Issue Processes. Select **R300** as the *shipping point/receiving point* and use the purchase order number to select your stock transport order (see exercise 1-3-2 and 1-4).

Select the items and create the deliveries.

How many deliveries have been generated? Why is this? (Note: You can view the deliveries via the log and the document display function.)

Note the numbers of the deliveries:

2-1-3 Display one of the deliveries in the document display and determine which data is important for processing your goods issue (for example, in the header data on the *Purchase orders* tab page).

When does picking begin (*Picking*)?

(Date and time) _____

When is the merchandise scheduled to leave your warehouse (*Planned GI date*)?

(Date and time) _____

- 2-1-4 You can perform all the other goods issues activities using the delivery monitor (delivery/list and log).
In the delivery monitor, display all the deliveries intended for picking in your warehouse **T##**.

What overall status for picking and WM activities do your deliveries show?

| | Overall status of picking | Overall status of WM activities |
|---------------------|---------------------------|---------------------------------|
| Outbound delivery 1 | | |
| Outbound delivery 2 | | |

- 2-1-5 Picking of articles takes place using transport requests. Create transport orders for both deliveries using the subsequent functions of the monitor. Select both items. You want to use the delivery quantity in the delivery as the picking quantity.
- 2-1-6 Finally, post the goods issue for your deliveries for warehouse number **T##** from the delivery monitor. Flag the deliveries that appear and post the goods issue using the appropriate subsequent function. Accept the actual goods movement date that is displayed.
- 2-1-7* You want to add a delivery note to your outbound deliveries. Create the delivery note using the subsequent functions with message type **LD00**. Confirm that you want to run *First processing*. Display the print preview and then return to the monitor.
Exit the delivery monitor.

2-2* Goods Receipt at Store

- 2-2-1 Post the goods receipt in store **T2##** for which replenishment planning is carried out.
To do this, use the transaction **Goods receipt for other reference** and use the outbound delivery in your selection (see exercise 2-1-2; Note: The delivery number is stated on the delivery note, see exercise 2-1-7*).



Unit: From Replenishment Planning to Sale in the Store

Topic: Pricing



All the steps detailed in these solutions start from the Retailing screen:

SAP menu → Logistics → Retailing

- 1-1 You want to change the sales prices for articles **TA25##** and **TA26##** for distribution chain **R300/R1** (department store). To do this, you want to perform a new calculation in pricing:

1-1-1 **Master Data → Pricing → Create**

| Field name or data type | Values |
|-----------------------------|--------------------------------------|
| <i>Articles</i> | TA25## and TA26## |
| <i>Sales organization</i> | R300 |
| <i>Distribution channel</i> | R1 and R5 |
| <i>Validity</i> | Today until end of this month |

Copy all other settings and enter pricing.

Program → Execute or [F8].

- 1-1-2 Create a markup of 10% for article **TA25##** from distribution chain R300/R5, and a final price of 1.99 for distribution chain R300/R1. Article **TA26##** should then have a final price of 3.99.

| | Distribution chain | TA15## | TA26## |
|--------------------------|--------------------|--------------|--------------|
| <i>Vendor</i> | <i>R300/R5</i> | <i>R3000</i> | <i>R3000</i> |
| <i>Planned markup</i> | <i>R300/R5</i> | <i>10%</i> | <i>0.0</i> |
| <i>Curr. final price</i> | <i>R300/R1</i> | <i>0.59</i> | <i>3.19</i> |
| <i>Final price</i> | <i>R300/R1</i> | <i>1.99</i> | <i>3.99</i> |

1-1-3 You then select both lines and save your entries.

How do you know if this is a case of one-step or two-step pricing?

If you enter a new price in the second line (distribution chain R300/R5) of the ready for input column Final Price, this has an effect on the first line and accordingly the sales price for distribution chain R300/R1.

1-1-4 From pricing, choose *Environment* → *Articles* to go to article master record TA25##. In the store logistics view you display the *Source of Supply* field:

The prerequisite for two-step pricing is the correct source of supply key. Either 2 or 4 must be entered here.

1-1-5 You then go to the price overview (*Pricing* → *Conditions* → *Price Overview*) and display the new prices you have created:

| Field name or data type | Values |
|-----------------------------|--------------------------|
| <i>Articles</i> | TA25## and TA26## |
| <i>Sales organization</i> | R300 |
| <i>Distribution channel</i> | R1 and R5 |

Copy all other settings and enter pricing.

***Program* → *Execute* or [F8].**

What data is displayed for the articles in the price overview?

| | Distribution chain | TA15## | TA26## |
|-----------------------|---------------------------|---------------|---------------|
| <i>Curr. month</i> | <i>R300/R1</i> | <i>1.99</i> | <i>3.99</i> |
| <i>Remaining time</i> | <i>R300/R1</i> | <i>0.79</i> | <i>3.19</i> |
| <i>Curr. month</i> | <i>R300/R5</i> | <i>4.95</i> | <i>25.60</i> |

Leave the price overview.



Unit: From Replenishment Planning to Sale in the Store
Topic: Replenishment



All the steps detailed in these solutions start from the Retailing screen:
SAP menu → Logistics → Retailing

1-1 **Sales → Replenishment → Overview → Parameters**

| Field name or data type | Values |
|-------------------------|--------------------|
| <i>Recipient</i> | T2## |
| <i>Articles</i> | R100000 to R100008 |

Program → Execute or **[F8]**.

- 1-1-1 The RP type is found in the *RP type* column. RP type **RP** is assigned to articles R100000 and R100008.
- 1-1-2 The following values exist in the system:

| | R100000 | R100008 |
|---------------|----------------|----------------|
| Stock | 70 | 0 |
| Target stock | 1500 | 1000 |
| Reorder point | 300 | 700 |
| Safety stock | 250 | 250 |

- 1-1-3 Replenishment-based Inventory Management is activated for the articles for which the fields *Replenishment-based IM* and *Correct RS* are flagged.
- 1-1-4 Replenishment-based Inventory Management is activated for article **R100008**.
- 1-1-5 To display the definition of reorder point, place the cursor on field *Reorder pt* and choose **[F1]**.

1-1-6* **Double-click** on field **T2##**

Extras → **Merchandise categories**

Inventory Management is run on a merchandise category basis for merchandise category R1121 (the field in column *M* is flagged). Stock is posted using merchandise category article **R1121** (column *MC article*).

If you make this setting in your system, Inventory Management is no longer run on a value and quantity basis for the selected articles. Instead, Inventory Management is run on a value basis for the total of all articles in the relevant merchandise category.

[Back] to the *SAP Easy Access* menu.

1-2 **Sales** → **Replenishment** → **Replenishment Planning** → **Execute**

| Field name or data type | Values |
|-------------------------|---------------------------|
| <i>Recipient</i> | T2## |
| <i>Articles</i> | R100000 to R100008 |

Program → **Execute**

1-2-1

| | R100000 | R100008 |
|---------------------------|----------------|----------------|
| Replenishment requirement | 1430 PC | 1000 LB |

1-2-2 **Replenishment requirements** → **Generate follow-on documents**

Confirm the dialog box with **[Enter]**.

Double-click on the *purchase order (Pur. order)*.

Order type: **UB** (stock transport order)

Supplying site: **T7##**

1-2-3

| | R100000 | R100008 |
|-------------|----------------|----------------|
| PO quantity | 143 CAR | 100 CRT |

1-2-4 Select an item and go to the article master by choosing **Environment** → **Material**. In the article master, select the *Basic Data* view and choose **[Enter]**.

The warehouse unit of issue is used for the stock transport order. The purchase order quantity is calculated by dividing the replenishment quantity by the number of base units of measure in the warehouse unit of issue.

Choose **[Back]** to return to the *SAP Easy Access* menu for SAP Retail.

1-4 **Purchasing → Purchase order → Purchase Order → Create → Vendor/Supplying Site Known**

1-4-1

| Field name or data type | Values |
|-------------------------|-----------------------------|
| <i>Order type</i> | Stock transport ord. |
| <i>Supplying site</i> | T7## |

[Enter]

Enter the following header data in the tab page *Org.data* (before doing this, you may be required to choose the **[Expand]** pushbutton):

| Field name or data type | Values |
|--------------------------------|-------------|
| <i>Purchasing organization</i> | R300 |
| <i>Purchasing group</i> | R30 |
| <i>Company code</i> | R300 |

Enter the following item data (before doing this, you may be required to choose the **[Expand]** pushbutton for the item overview):

| Field name or data type | Values |
|-------------------------|---------------------------|
| <i>Articles</i> | R100000 |
| <i>PO quantity</i> | 80 |
| <i>OU_n</i> | CAR |
| <i>Deliv. date</i> | Day after tomorrow |
| <i>Site</i> | T1## |
| <i>Storage location</i> | Standard |
| <i>Article</i> | R100008 |
| <i>PO quantity</i> | 40 |
| <i>OU_n</i> | CRT |

[Enter]

Purchase order → Save



Confirm warning messages by choosing **[Enter]**.



Unit: From Replenishment Planning to Sale in the Store
Topic: Goods Issue Process

2-1 Goods Issue Process

Start the goods issues activities each time using the following path: **Logistics → Retailing → Merchandise logistics → Logistics execution → Outbound Process → Goods Issue for Outbound Delivery...**

2-1-1 Deliveries are to be generated from the stock transport order.

2-1-2 **...Outbound Delivery → Create → Collective Processing of Documents Due for Delivery → Purchase Orders**

Shipping Point: R300

Clear *Deliv.creationdate* and *CalcRuleDefltDlvCrDt* (rule for calculating delivery creation date)

Tab page *Purchase Order: Purchase order/scheduling agreement*: Purchase Order from 2-1-2

Program → Execute

Select all items

Choose **[Create deliveries in background]** pushbutton.

If a dialog box appears, confirm it

Choose **[Delivery creation log]** pushbutton (**Shift + F4**)

Place cursor on the number of the group, **Goto → Documents**

Two deliveries (one for each goods recipient) are generated (for numbers, see column *SD documents*)

2-1-3 Place cursor on the delivery number, **Environment → Display document**

Goto → Header → Processing

Field group *Appointments*

Note picking date and planned goods issue date

6x **[Back]** to get to the *SAP Easy Access* menu

2-1-4 **Delivery → Lists and Logs → Outbound Delivery Monitor**

Pushbutton **[For picking]**

Picking date: 4 weeks from today

Warehouse number: T##

Program → Execute

Select delivery

Pushbutton: **[Detail]**

Overall status of picking: A

Overall status of WM activities: A

2-1-5 **Delivery** → **Lists and Logs** → **Outbound Delivery Monitor**
Pushbutton [*For picking*]

Picking date: 4 weeks from today

Warehouse number: T##

Program → **Execute**

Select deliveries

Subsequent functions → **Create transfer order**

Confirm "**Pick. quantity: 1**" dialog box with [*Enter*]

2-1-6 Post goods issue

Delivery → **Lists and Logs** → **Outbound Delivery Monitor**
Pushbutton [*For confirmatn*]

Edit → **All selections**

Planned goods movement date: 4 weeks from today

Warehouse number: T##

Select deliveries

Subsequent functions → **Post goods issue**

Confirm "**Enter actual goods issue date**" dialog box with [*Enter*]

2-1-7* Print delivery note

Delivery → **Lists and Logs** → **Outbound Delivery Monitor**
Pushbutton [*For confirmatn*]

Edit → **All selections**

Planned goods movement date: 4 weeks from today

Warehouse number: T##

Field group *Message default*, field *Message type*: **LD00**

Program → **Execute**

Select deliveries

Subsequent processing → **Delivery messages**

Confirm "**Message processing mode**" dialog box with [*Enter*]

Subsequent functions → **Delivery messages**

Confirm the confirmation prompt on processing mode Initial processing

Select deliveries, **Goto** → **View**

5x [Back] (to the monitor)

2-2* **Goods Receipt at Store**

2-2-1 *Merchandise logistics* → *Goods receipt* → *Goods receipt for other reference*

Movement type: **101**

Site: **T1## (or T2##)**

Delivery: Delivery number from exercise 2-1-2

[Enter]

Goods receipt → *Post*

[Back]

Contents:

- **Process Overview**
- **Merchandise and Assortment Planning (MAP)**
- **Allocation Table**
- **Follow-On Documents for Allocation Tables**
- **Prepack Allocation and Planning**
- **Summary**

© SAP AG 2004



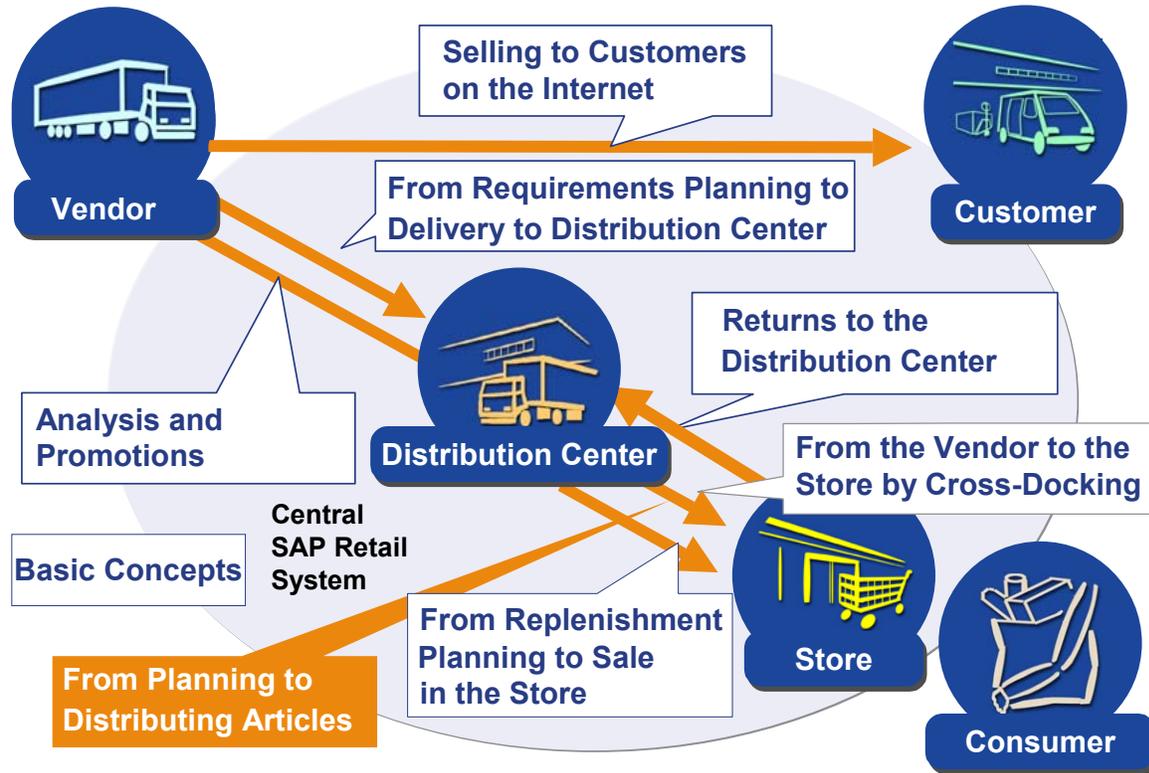
At the conclusion of this unit, you will be able to:

- **Look at planning data in Merchandise and Assortment Planning (MAP)**
- **Create an allocation table and trigger its subsequent functions**
- **Name the most important functions for allocation tables**
- **Create prepacks and generate a prepack allocation table**

© SAP AG 2004

Overview Diagram

SAP



© SAP AG 2004

Internal Use SAP Partner Only

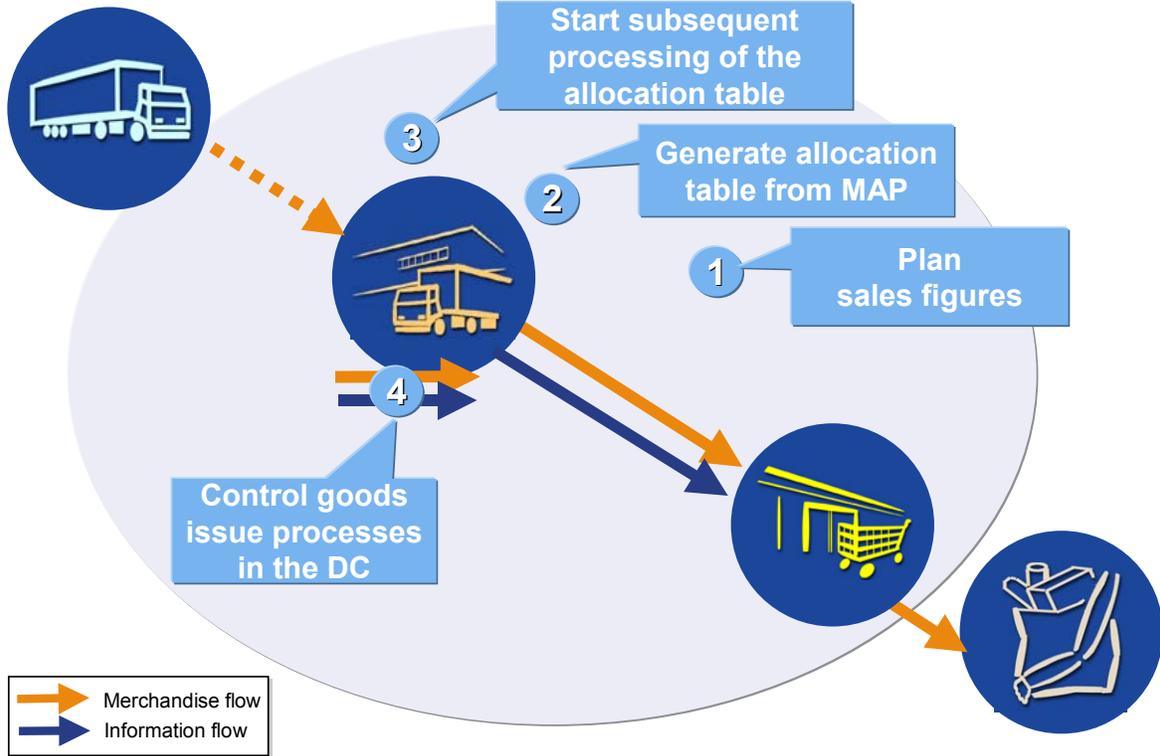
Internal Use SAP Partner Only



- **Using a planning scenario, you plan sales quantities for the articles in your stores.**
- **You create an allocation table from manual planning.**
- **Then you generate the relevant follow-on documents from the allocation table.**

© SAP AG 2004

From Planning to Distributing Articles: Process Overview



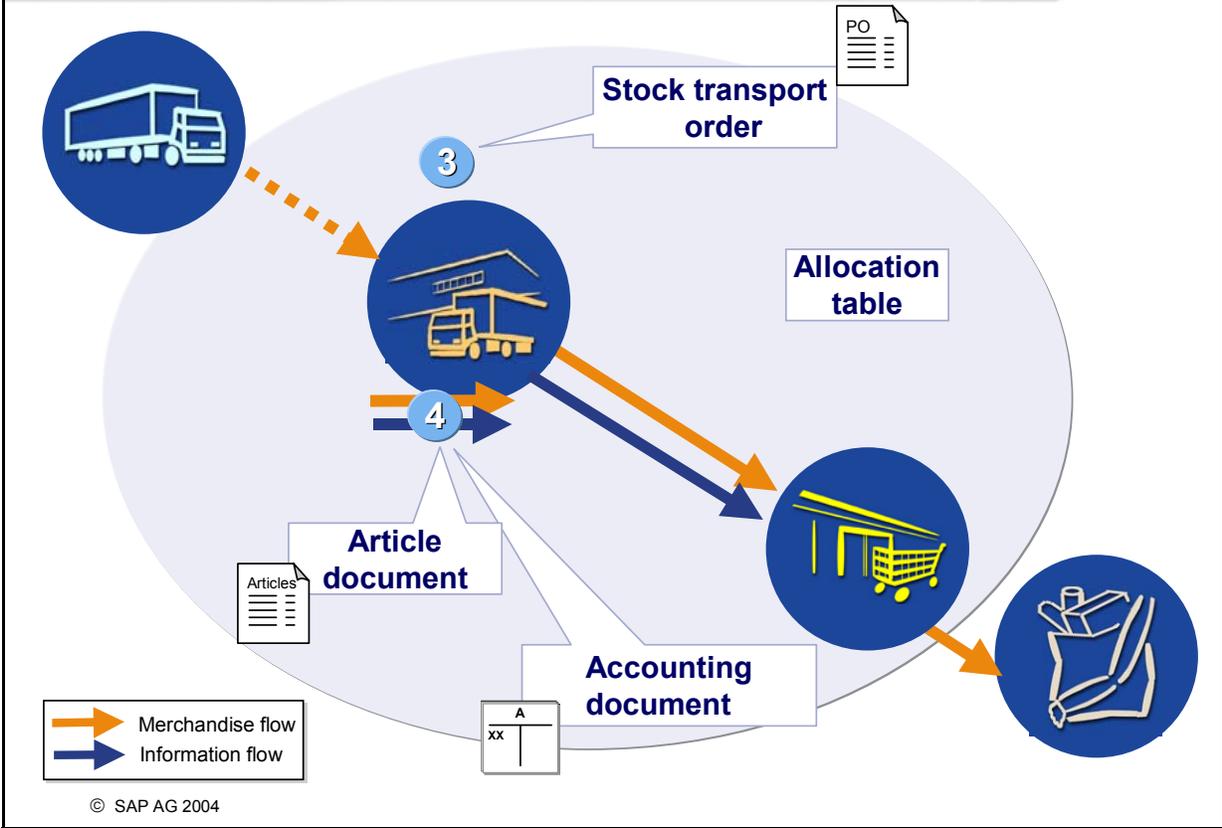
© SAP AG 2004

Internal Use SAP Partner Only

Internal Use SAP Partner Only

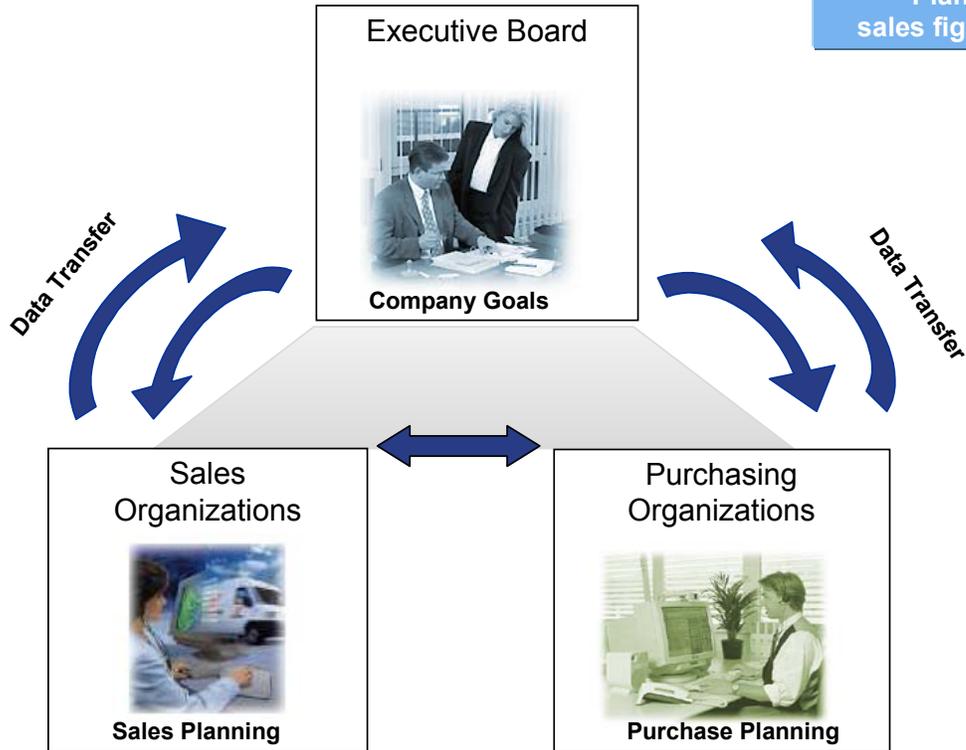
Overview: Documents

SAP



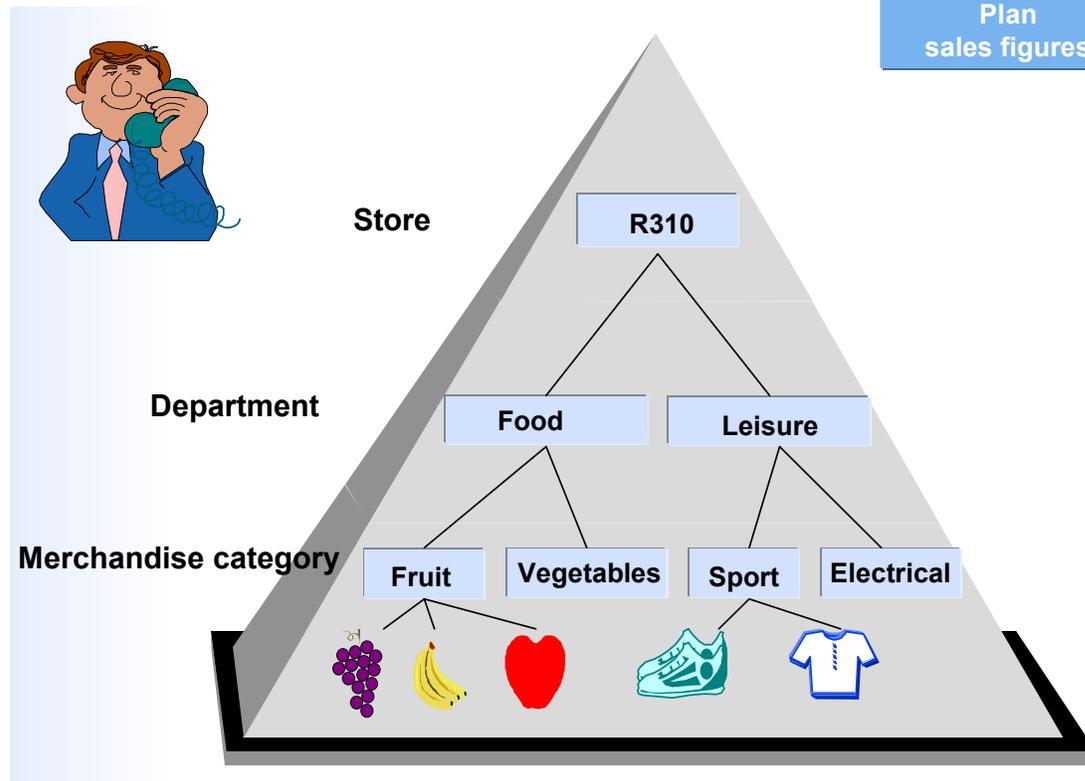
Internal Use SAP Partner Only

Internal Use SAP Partner Only



© SAP AG 2004

- Merchandise and Assortment Planning (MAP) for SAP Retail provides the following functions for a flexible planning system:
 - MAP enables you not only to record planning data but also to chart the entire planning process.
 - A graphical network provides a comprehensible user guide.
 - Authorization objects ensure that only certain people have access to the planning system. You can also use a workflow to support this.
 - SAP provides you with a large number of predefined planning key figures.
 - Planning data can be entered in different currencies.
 - MAP is linked to the SAP Document Management System to enable Office documents and graphics to be stored.



© SAP AG 2004

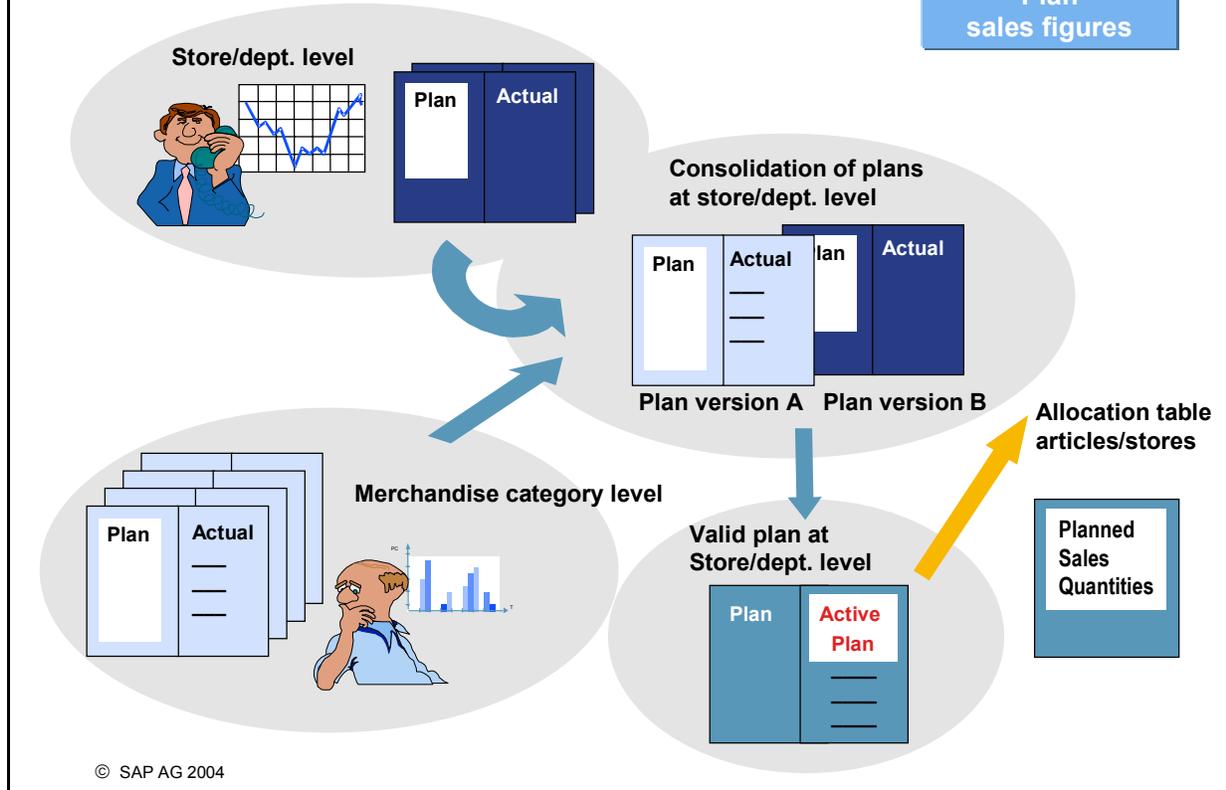
- For the sake of simplicity, we will look at the planning for a single store in a sample scenario. You want to plan sales and goods usage for a department store on two different levels:
 - One planning level makes up the entire store and allocation of goods to the different departments in the store.
 - The second planning level is the merchandise category level. Because you want an allocation table to be generated directly for some of the articles, a few selected articles are included in the planning hierarchy.
 - You can use the planning data that is created as the basis of planning for a second, new store. When you have finished planning, you start the procurement of articles from the leisure department for the old or for the new store, using an allocation table.
- Note that, although detailed planning is possible down to article level, to ensure optimum system performance it should only be carried out for select articles, such as very expensive or exclusive articles.

Example Scenario: Planning Process

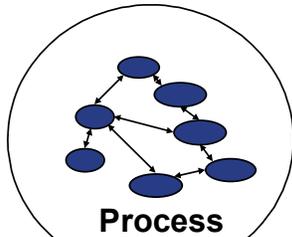
SAP

1

Plan sales figures



- In this example, the planning process might look as follows:
- Independent sets of planning data are drawn up after analyzing the actual values from the previous year. This can be done at different levels; in this example scenario, it is done at store/department level and at merchandise category level. In both cases, planning data is created with different approaches (for example, pessimistic, optimistic version). The data can then be processed on the different levels (copying, deletion of versions).
- The different planning versions are compared and a valid version of the planning data is established.
- The planning data is copied to the valid plan and is then available for the planner to approve. The planner cannot make any further changes to the planning data.
- Once value-based merchandise planning has been completed, an allocation table can be generated directly for the old and new stores for individual articles using quantity planning.

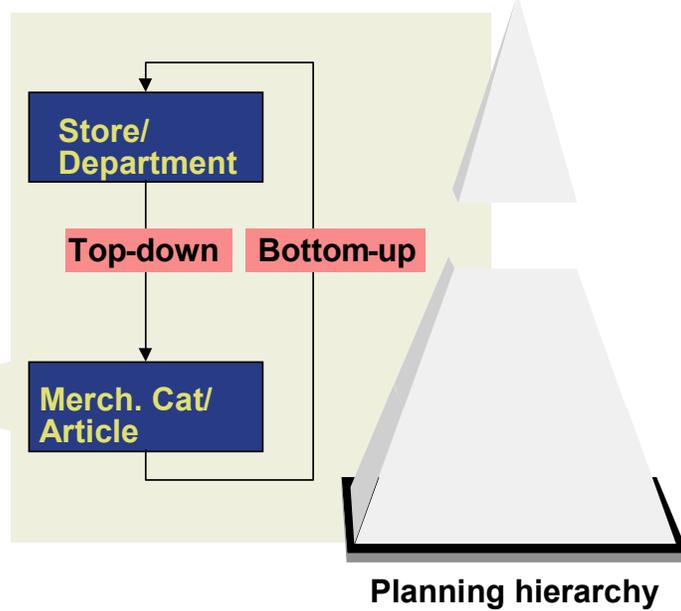


Process



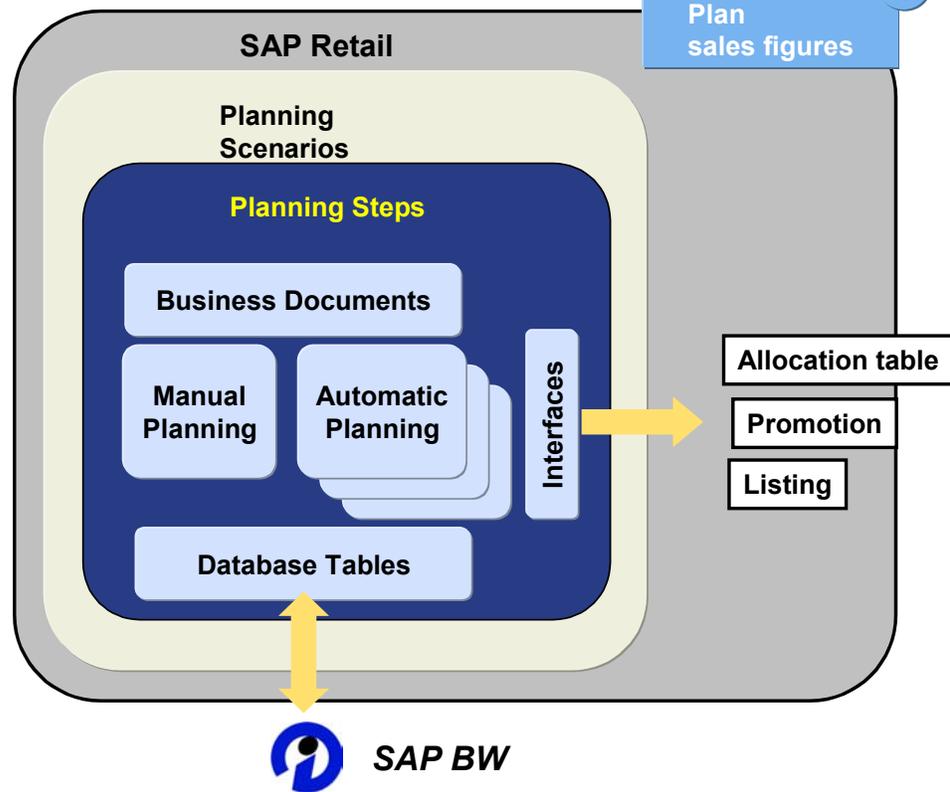
Designer

Planning scenario:



© SAP AG 2004

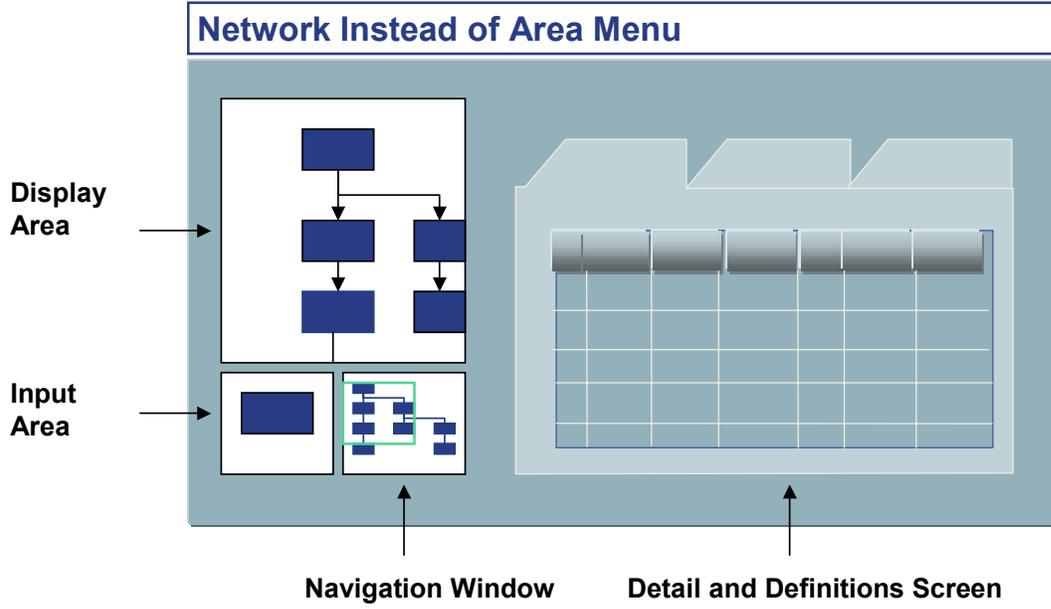
- Configuration of the example scenario in MAP:
- Before you can start creating planning data, a designer has to develop a planning scenario with the relevant planning steps and links, and configure it in the system.



© SAP AG 2004

■ The most important components of MAP are:

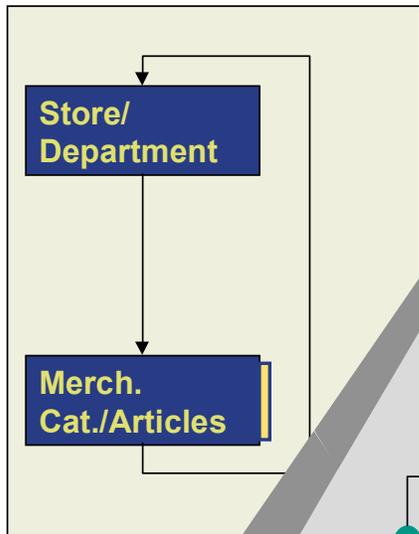
- The planning scenario, which can contain one or more planning steps.
- At planning step level, documents and plan data can be created using manual planning. Plan data can, for example, be deleted or copied between different plan versions using automatic planning programs.
- Plan data is saved in information structures.
- Plan figures can be transferred to the allocation table or to a promotion via interfaces.



© SAP AG 2004

- The SAP System provides a user-friendly graphical network for Merchandise and Assortment Planning.

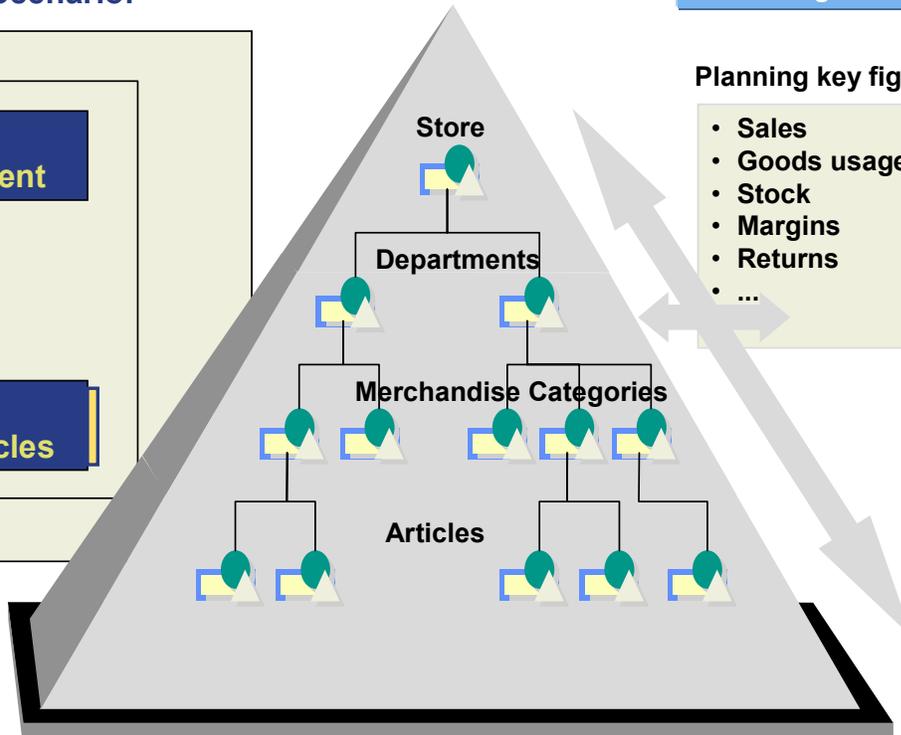
Planning Scenario:



Plan sales figures

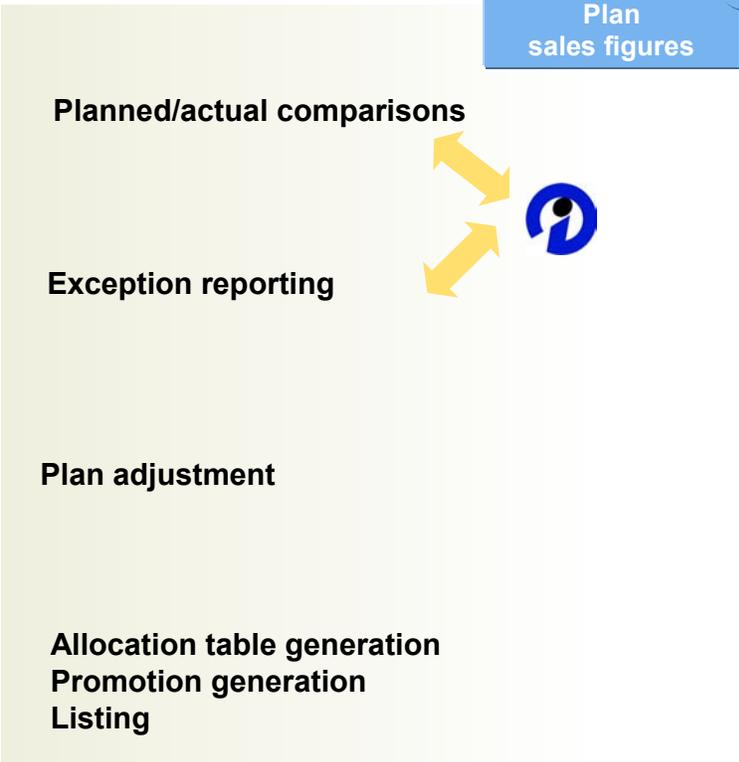
Planning key figures:

- Sales
- Goods usage
- Stock
- Margins
- Returns
- ...



© SAP AG 2004

- A planning hierarchy is assigned to each planning step. This contains all the planning levels to be planned in the planning steps.
- The planning levels contain the characteristics and their properties.
 - Planning levels are, for example, purchasing organizations, sales organizations, stores or merchandise categories.
 - Specifications of characteristics are, for example, the specific purchasing organization R300 or the store R310.
- Key figures such as sales, margins, returns and stock are planned in a scenario. It is also possible to carry out a value-based planning and then to convert it to the unit Quantity using the additional key figure, Average Retail (and vice versa).
- In the planning hierarchy, you also determine how the key figures are disaggregated or distributed structurally over the different levels, and on a time basis over the periods.



© SAP AG 2004

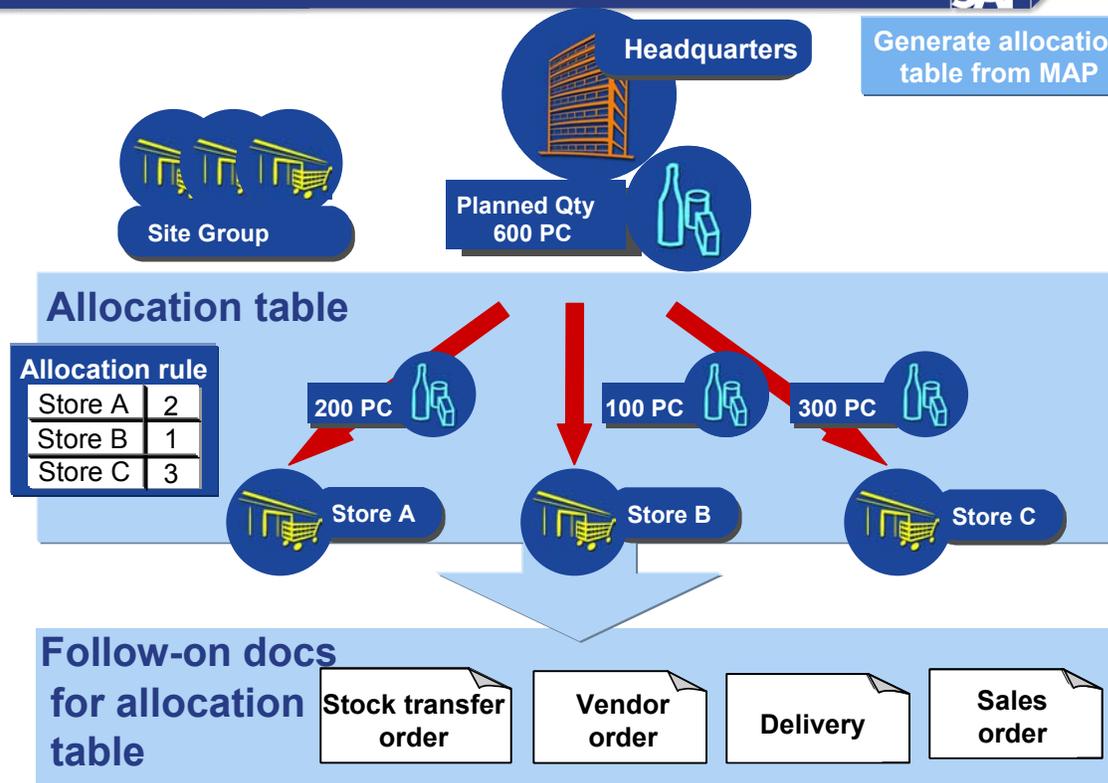
- During the course of a fiscal year, the plan data can be used for planned/actual comparisons or for analyzing exceptions (Early Warning System). You can upload plan data to SAP Business Warehouse (SAP BW), and display actual data from SAP BW within MAP.
- There is a direct link from MAP to logistical processes. This means that an allocation table, a promotion or listing can be initiated directly using plan data from MAP.

Allocation Table

SAP

2

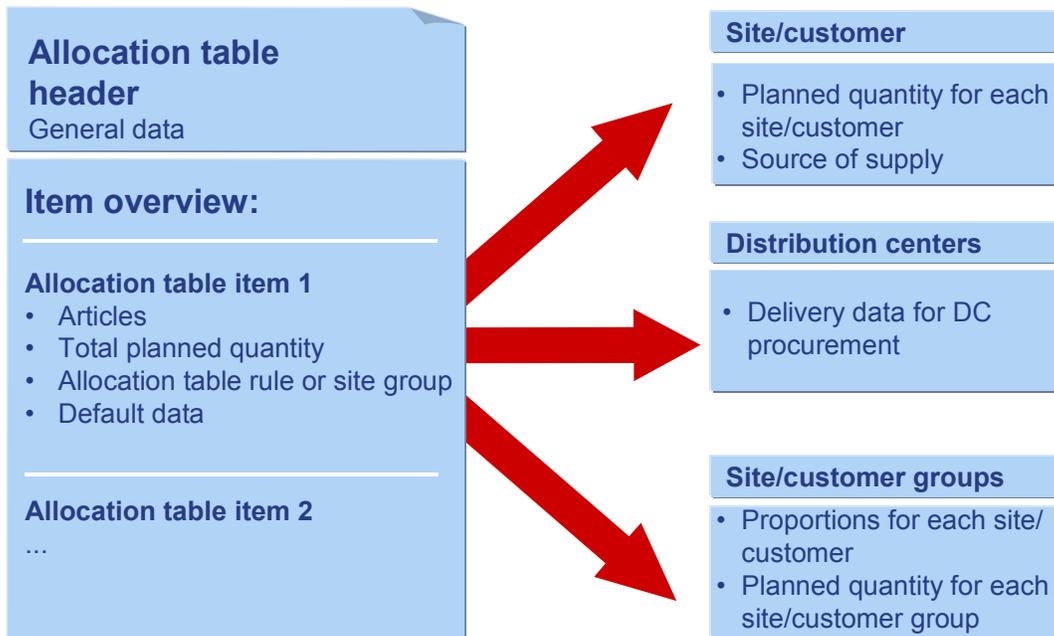
Generate allocation table from MAP



© SAP AG 2004

- Allocation is used at headquarters for planning, controlling and monitoring site (stores, distribution centers) and customer supplies. Your implementation areas are for example, the initial distribution of articles, the distribution of promotional goods, stocks and centrally procured imported goods.
- You can process the distribution of articles online using a site/customer group. You can, however, also use an allocation rule that contains either fixed quantities or relative promotions for each site in the site group, or each customer in the customer group.
- Allocation rules can be created manually or be generated from an information system using key figures. You can use planning data and statistical data for this. You also have the option of using self-defined information structures.
- According to the business transaction (controlled by the item category), you can generate logistics documents as subsequent processing for allocation tables. If you are reducing your stock, you can generate stock transfer orders or deliveries.

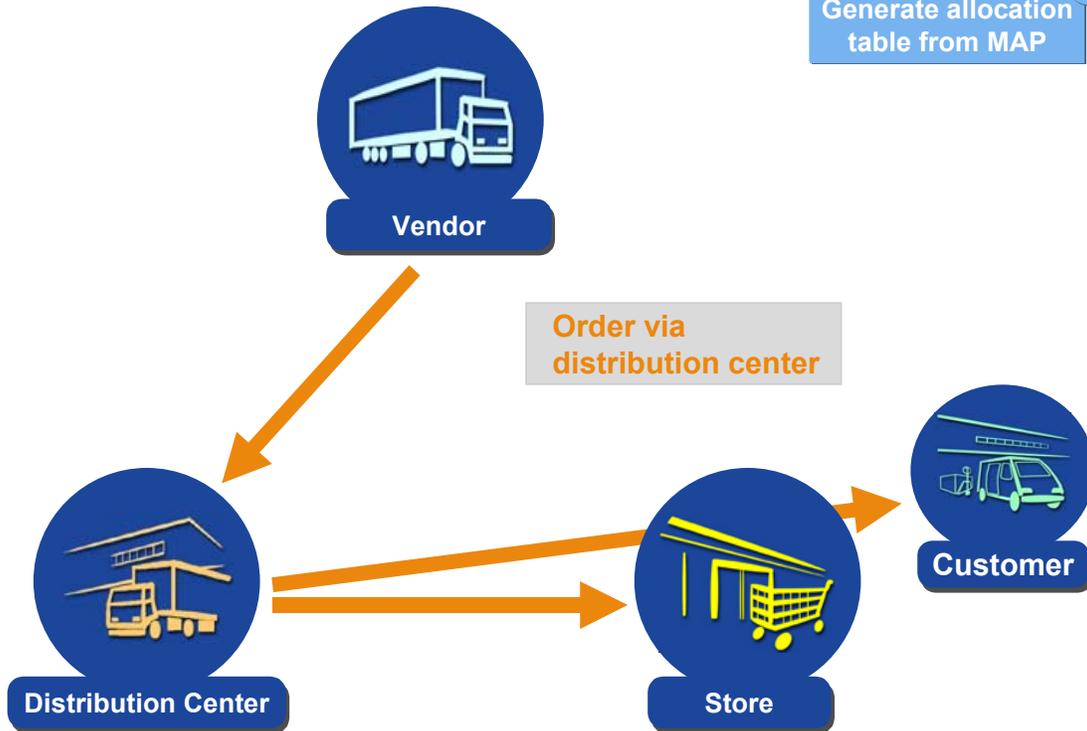
Generate allocation table from MAP



© SAP AG 2004

- Allocation tables consist of different structural elements. The most important elements are:
 - Allocation table header: The header contains information such as the allocation table number, the organizational levels (purchasing organization and purchasing group) and a header text.
 - Allocation table item: An item is assigned to the allocation table header and contains information, such as item category, article number, planned quantity, allocation table rule, site/customer group, and status information.
 - Site/customer group: A site/customer group is assigned to an allocation table item. Each site/customer group contains information such as the number of the site group, the number of sites/customers assigned to the group, proportions and planned quantities.
 - Site/customer: A site/customer is assigned to a site/customer group. You receive site/customer information for each allocation table item, such as site or customer number, planned quantity, source of supply and delivery date.
 - Distribution center: Each distribution center is assigned to one or more sites/customers as a delivery site. You receive distribution center information for each allocation table item, such as distribution site number, planned quantity, and external vendors.

Generate allocation table from MAP



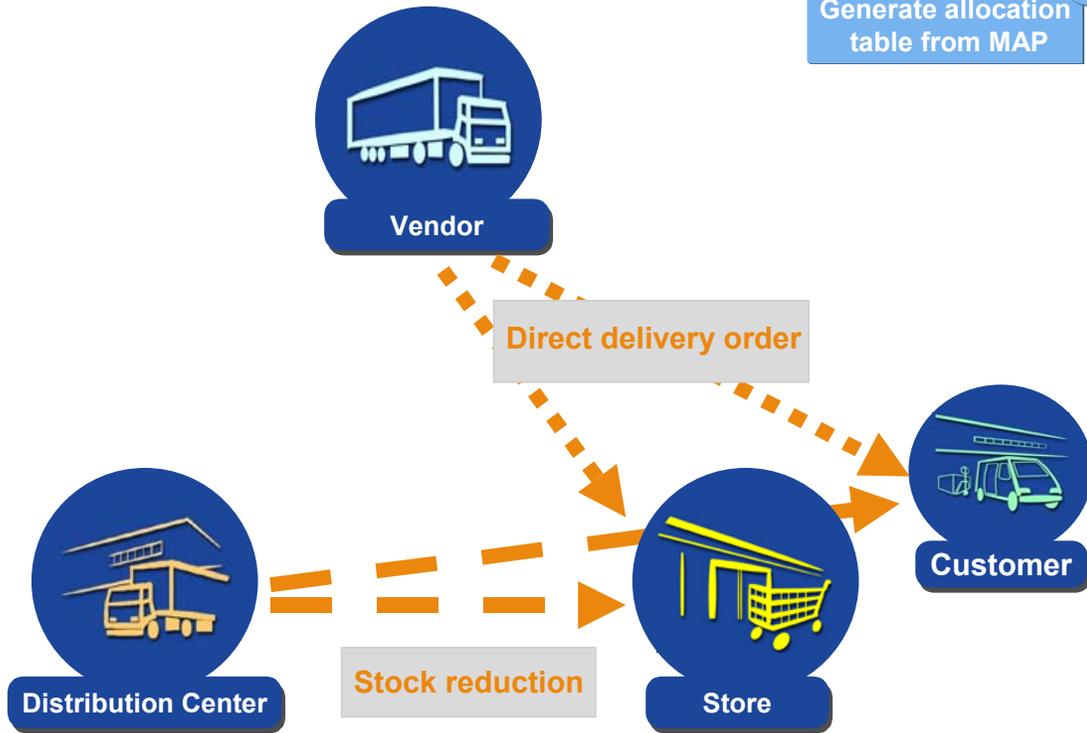
© SAP AG 2004

■ Order via distribution center

This type of order can be divided into two steps:

- Step one involves placing a purchase order for a distribution center with an external vendor. The vendor then delivers the ordered merchandise to the distribution center.
- Step two contains the merchandise flow from the distribution center to the store/customer. This is triggered by a stock transfer order or delivery.

Generate allocation table from MAP



© SAP AG 2004

■ Stock reduction

- In stock reduction, no purchase orders are placed with external vendors. The sites or customer(s) defined in the allocation table are supplied with data from the warehouse stock for the distribution center.
- Stock can be reduced using stock transfer orders or deliveries.
- Supply source determination for a particular site/customer(s) is limited solely to the definition of a distribution center.

■ Direct delivery order

- The purchaser sends the vendor order for the sites to the external vendor. The vendor is asked to deliver the merchandise directly to the sites/customers for whom the order was placed.
- Supply source determination is limited to external vendors only.

Generate allocation table from MAP



Allocation table header

Item overview

Item 1

Item 2

Item 3

Alloc. tbl type

Which parameters do you want to default for the items?

- Allocation strategy
- Business transaction (item category)
- Notification category

Which rules for calculating quantities do you want to use?

Item category

What type of business transaction?

- Direct Delivery Order
- Stock reduction
- Purchase Orders via Distribution Centers
- Customer delivery
- Returns Processing

How is merchandise to be distributed at DC?

Which follow-on documents are generated? And when?

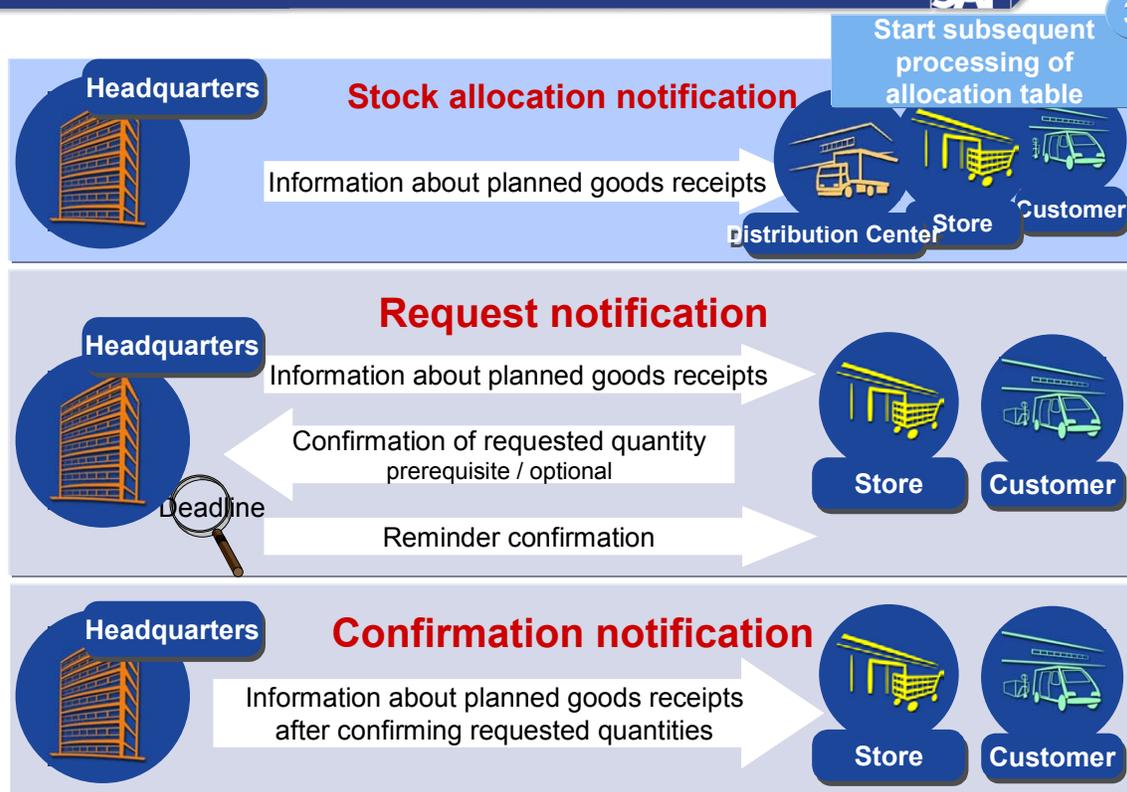
© SAP AG 2004

- The allocation table type defaults the following parameters for quantity calculations for allocation tables:
 - Rounding is the same as when quantities are calculated for sites; you can make a setting that takes rounding profiles into consideration.
 - Distribution of remaining quantities – how the quantity remaining after quantities have been calculated is allocated.
 - Can minimum quantities and maximum quantities be taken into consideration by the allocation table?
- The item category for the allocation table defines the business transaction. It defines which follow-on documents are to be generated using the allocation table. The item category plays a very important role when it comes to defining the merchandise flow.
- Specific item categories exist for controlling merchandise movements (merchandise distribution) in the distribution center (cross docking, flow through) which can be used specifically for purchase orders that are placed with the distribution center.
- You can make the generation of follow-on documents dependent on the notification. Do you want to generate follow-on documents immediately after the allocation table is posted or wait until the notification procedure has been completed?

Store Communication / Notification

SAP

3



© SAP AG 2004

- Different notification methods are available due to the different retail procedures:
 - Headquarters notifies the stores/customers: Stock allocation notification, request notification, request notification with confirmation notification
 - Headquarters notifies the distribution center: Stock allocation notification distribution center
- In addition to these notifications, sites/customers also receive change notifications that provide the stores with additional information about changes (quantities, delivery dates) made at a later date by headquarters. Change notifications only contain information about changed allocation table items. Change notifications are created for stock allocation notifications, request notifications, confirmation notifications and stock allocation notifications for distribution centers.
- You can define the notification form by selection the notification category indicator in the subitems for the allocation table (for each article and site) or for each allocation table item (for each article).
- Reminder: The notification "Reminder confirmation" is intended to remind sites that they have not responded to a request from headquarters (for example, your requested quantities have not been transferred).
- The notification can be sent in printed form or as an IDoc.

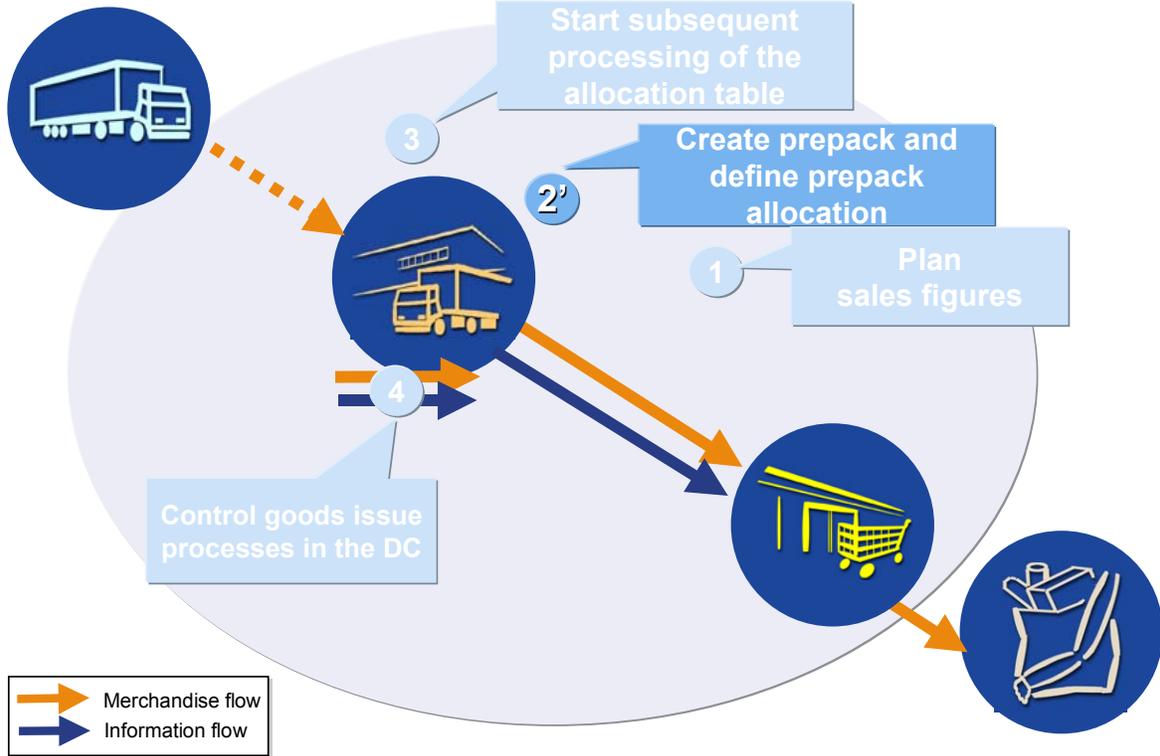
Start subsequent processing of allocation table



© SAP AG 2004

- In allocation, you can use site-customer groups that are created using the classification system.
- When you create an allocation table, you can create a reference to a shipping notification, a purchase order or a contract.
- If you use an allocation table to plan the merchandise flow from the vendor to the recipient via a distribution center, merchandise distribution data is updated in the system when follow-on documents are generated. The data is then used later to control merchandise distribution (cross-docking/flow-through) in the distribution center.
- You can then inform your sites about the allocation of merchandise by post or by EDI (IDocs). The sites can, if necessary, declare the quantities they require (using store retail systems).
- You can use follow-on document generation to create vendor orders (or contract release orders), stock transfer orders, deliveries, and, as of SAP R/3 Enterprise Retail 1.10, also sales orders from an allocation table.
- The system can then run an optional check to ensure that the article to be allocated is actually listed for the store in question. If necessary, you can run listing in the allocation table or only use the sites that have already been listed.
- You can generate allocation tables in subsequent processing for a promotion or for requirements planning for perishables.
- You can use data from the Business Information Warehouse to generate allocation rules.

Prepack Allocation: Process Overview



© SAP AG 2004

Internal Use SAP Partner Only

Internal Use SAP Partner Only

Create prepack and define prepack allocation

Example of a prepack:



44 x size 7



42 x size 5



40 x size 3

Define composition of the prepack article

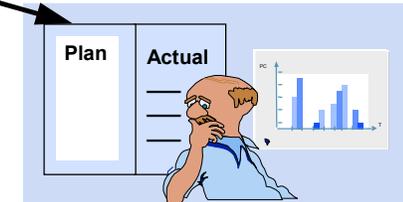
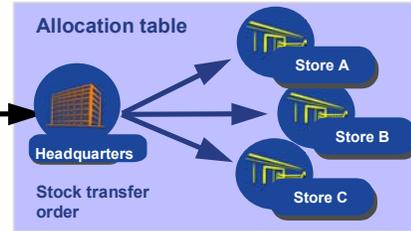
Allocation of the prepack article to the stores

Compare allocation plan with MAP data

Header data
Generic articles **R100018**

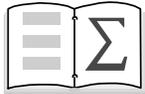
Prepack definition

| Size | 3 | 5 | 7 |
|-------|----|----|----|
| Blue | 40 | 45 | 47 |
| Brown | 42 | 35 | 53 |
| Beige | 38 | 41 | 53 |



© SAP AG 2004

- Variants of one or more generic articles are grouped together in a prepack. The prepack and its components must belong to the same merchandise category.
- As of SAP R/3 Enterprise Retail 1.10, there is a new transaction available for prepack allocation planning. This transaction enables you to link several prepack articles to a generic article and to determine the composition of these prepack articles. You can determine the components of a prepack article using a matrix. You can process generic articles with up to two characteristics. The first characteristic (for example, the color) is displayed in the rows of the matrix, and the second (for example, the size) in the columns. Both characteristics are determined by the order in which they were defined in Customizing.
- You can determine the stores that are going to sell the articles concerned using assortments or allocation rules to which you assign the corresponding prepacks. You can also determine delivery phases specifically for a certain combination of store group and prepack article. You can also plan stock (putaway) to be kept in the distribution center for replenishment purposes during a season. The planned quantities for the article concerned according to row characteristic and assortment can be sent to the MAP transaction using an interface, so that you can check whether the allocated quantities match the planned quantities.
- The component list for a prepack article can be changed provided the Customizing settings allow this. You can create new prepacks and include them in the allocation; you can also remove existing prepacks from allocation.
- The transaction for prepack allocation planning enables you to trigger the creation of purchase orders as follow-on documents for the allocation table. If you make changes to the allocation table at a later date, the purchase orders will be changed automatically to reflect these changes.



You are now able to:

- **Look at planning data in Merchandise and Assortment Planning (MAP)**
- **Create an allocation table and trigger its subsequent functions**
- **Name the most important functions for allocation tables**
- **Create prepacks and generate a prepack allocation table**

© SAP AG 2004



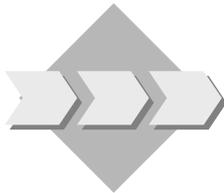
Unit: From Planning to Distributing Articles

Topic: Merchandise and Assortment Planning (MAP)



After completing this exercise you will be able to:

- Find out about planning steps, scenarios and layouts
- Define the allocation table interface for a planning step
- Create an allocation table from manual planning



You are the designer for the MAP project team and you want to find out about the plans that are configured. You plan sales for your department store, and for the individual departments. When planning is completed, you want to initiate the procurement of sports and hi-fi articles using an allocation table.

- 1-1 You want to make changes to an existing planning scenario. To do this, choose the following path on the SAP Easy Access Retail screen:

Retailing → Info System/Planning → Merchandise and Assortment Planning → Planning → Network Entry

- 1-1-1 Enter **IRT100MAP** as the planning scenario and choose the *Change* pushbutton. On the left-hand side of the network you will see planning step **IRT100S1**. Double-click on it.

Go to the *Manual Planning* tab page on the right-hand side. Select the layout *Allocation Table* with your cursor and choose the *Manual Planning* pushbutton in the bottom section.

Create the following characteristics for manual planning:

| | |
|--------------|----------------|
| Article 1 | TA11## |
| Article 2 | TA12## |
| Store groups | 50 + ## |
| Version | T## |
| Fiscal year | 2005 |

Enter manual planning by choosing the *Overview Screen* pushbutton.

Enter the following plan data for both articles in the first column called *Qty Str Grp 1*: **1200**. The planning unit of measure is PC.

What do you note when you go to the period screen (*Period Screen* pushbutton)?

The *Overview Screen* takes you back to the cumulative display.

1-2* You also want to generate an allocation table in a second planning, however, you want to change the distribution of the planned quantities to sites **T1##** and **T2##**.

1-2-1 To do this, choose:

Retailing → **Info system/Planning** → **Merchandise and Assortment Planning** → **Master Data** → **Store Groups** → **Create/Change Store Assignments**. Enter the merchandise category **R1132** in the merchandise category field. In the *Rel. Prop.* column, enter a distribution of from 30 to 70 (0.3 and 0.7) to sites **T1##** and **T2##**. Save your data.

1-2-2 Carry out manual planning as detailed in exercise 1-1. Answer the following questions by checking the quantities you have planned in the new allocation table.

1-2-3 What are the planned quantities suggested for articles **TA11##** and **TA12##**?

TA11##: _____
TA12##: _____

1-2-4 What are the planned quantities suggested for sites **T1##** and **T2##**?

T1##: _____
T2##: _____



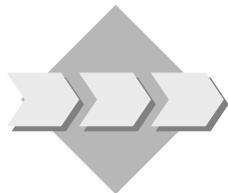
Unit: From Planning to Distributing Articles

Topic: Allocation Tables and Subsequent Processing for Allocation Tables



After completing this exercise you will be able to:

- Explain the most important functions of an allocation table
- Create follow-on documents for allocation tables



To distribute your merchandise to stores more efficiently, you use the allocation table generated from MAP and start subsequent processing. You generate stock transport orders as follow-on documents of this allocation table.

2-1 Allocation table

- 2-1-1 As you want to take a closer look at the allocation table created in the planning step, you enter the display mode for your allocation table.
- 2-1-2 View the quantities of the article and the supplying sites in the individual stores by selecting the site view.
- 2-1-3 From there, go to the detail view of a store to determine the site status of the allocation table.

2-2 Follow-on documents for the allocation table

- 2-2-1 Now go to the allocation table display
Select the item and choose *Allocation Table* → *Create Follow-On Documents* → *Warehouse Orders*.

What influences the type of follow-on documents that can be generated?

- 2-2-2 Now generate the follow-on documents.
How many warehouse orders are generated? _____

- 2-2-3 Check how the status of the whole allocation table has changed in the allocation table item overview (header area): _____
Also go to the site view for the item and from there to the detail view of a store and check the site status of the allocation table there too. _____.

Where can you display the generated stock transport order?



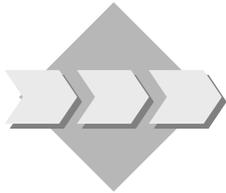
Unit: From Planning to Distributing Articles

Topic: Prepack Allocation Planning



After completing this exercise you will be able to:

- Create a prepack consisting of variants of selected generic articles.
- Plan how the prepacks are to be allocated to the stores.



In the ladieswear fashion sector, you want to define prepacks for a ladies linen shirt and then distribute these among your stores using an allocation table.

3-1 Prepack definition

You want to create new prepacks. To do this, go to the article master data and then to **Maintain Prepack Allocation Planning**.

3-1-1 **Generic article:** TA07##
Season year: no entry
Season: no entry

Once you are familiar with the header data, you can hide it so that you can see more information on the screen.

3-1-2 You can define new prepacks on the *Prepack Definition* tab page (lower subscreen). Choose one mixed prepack, and then select all the colors in the dialog box that appears.

What is the article number of your new prepack?

Next, select all the lines for your newly created, mixed prepack and the existing quota scale *Fashion*, and then choose the *Quota Scale* pushbutton. What copy activity has the system performed?

3-1-3 You want to change the short text of the new prepack. How do you do this?

You want to find out the purchase prices of the individual components of the new prepack and, if necessary, change these manually. How do you do this?

You now want to generate your prepacks. To do this, go to the header data of the reference prepack **R100020**.

Once you have saved, check whether the new prepacks have actually been created. To check this, go to the article master (Change/display article) and to your prepack articles **TA07##L01**.

3-2 **Prepack Allocation**

To perform prepack allocation you need to assign a season on the initial screen.

3-2-1 **Generic article:** TA07##
Season year: the current year
Season: 0001 (spring/summer)
Rollout None

3-2-2 Go to the *Allocation Table (Header Data)* tab.

POrg: R300
Purchasing group: R30
Vendor: TS2##

Allocation Table Type: 0008
Site delivery date: Four weeks from today
DC delivery date: three weeks from today

Go to the *Allocation Planning (Item Data)* tab. Choose allocation by *Assortment/Store* by selecting assortment **IRT100**. Start the assignment of prepacks on the right-hand side. Select your prepack by setting the *Assigned* flag. Next, enter the following prepack quantity:

Prepack quantity: 10

Which stores are included in store group IRT100?

Check allocation table type **0008** on the *Allocation Table* tab (header data).

3-2-3 Save the prepack allocation. Display the allocation table generated. What number was assigned to the allocation table?



Unit: From Planning to Distributing Articles

Topic: Merchandise and Assortment Planning (MAP)



All the steps detailed in these solutions start from the Retailing screen:

SAP menu → Logistics → Retailing

1-1 **Retailing → Info system/Planning → Merchandise and assortment planning → Planning → Network Entry**

1-1-1 Planning Scenario: **IRT100MAP**

Pushbutton: Change

Planning Step: **IRT100S1** Double-click

Tab page *Manual Planning*: Select the *Allocation Table* layout, *Manual Planning* pushbutton.

Characteristics for manual planning:

Article 1 **TA11##**

Article 2 **TA12##**

Store groups **50 + ##**

Version **T##**

Fiscal year **2005**

Overview Screen pushbutton, enter the following plan data in column *Qty Str Grp1*: **1200**

What do you note when you go to the period screen (pushbutton: *Period Screen*)?

The total planned quantity of 1200 PC is distributed across 12 months, 100 PC each month.

You use the *Next Combination* pushbutton to switch to the second article

TA12##. The *Overview Screen* pushbutton takes you back to the cumulative display.

- 1-1-2 Select column *Qty Str Grpl*, go to the additional parameters, by choosing *Extras → Interfaces → Create Allocation Table*. Enter your distribution center (**T7##**) here. In the delivery phase area enter:

Date **1**
 Deliv. date **1st of the following month**
 Percent **100**

Create the allocation table and make a note of the allocation table number.

- 1-1-3 *Extras → Interfaces → Last Allocation Table*.

1-1-4 **TA11##: 1200 PC**
TA12##: 1200 PC

1-1-6 **T1##: 600 PC**
T2##: 600 PC

- 1-2* You also want to generate an allocation table in a second planning, however, you want to change the distribution of the planned quantities to sites **T1##** and **T2##**.

- 1-2-1 *Retailing → Info Systems/Planning → Merchandise and Assortment Planning → Master Data → Store Groups → Create/Change Store Assignments*

Merchandise Category field: Enter **R1132**, in the *Rel. Prop.* column, enter 30 to 70 (0.3 and 0.7) for distribution ratio to sites **T1##** and **T2##**. Save.

- 1-2-2 Carry out manual planning as detailed in exercise 1-1. Answer the following questions by checking the quantities you have planned in the new allocation table.

- 1-2-3 What are the planned quantities suggested for articles **TA11##** and **TA12##**?

TA11##: 1200 PC
TA12##: 1200 PC

- 1-2-4 What are the planned quantities suggested for sites **T1##** and **T2##**?

T1##: 360 PC
T2##: 840 PC



Unit: From Planning to Distributing Articles

Topic: Allocation Tables and Subsequent Processing for Allocation Tables

2-1 **Allocation table**

2-1-1 *Purchasing → Allocation → Allocation Table → Display [Enter]*

2-1-2 Select the item and then *Goto → Sites → Sites in Item, Distribution Center* column

2-1-3 Select the item(s) and then choose *Goto → Sites → Sites in Item*, select item(s), choose pushbutton *[Detail]*, tab page *Admin. Data*
Warehouse order 1 = not created
Notification 1 = not created

2-2 **Follow-on documents for the allocation table**

2-2-1 *Purchasing → Allocation Table → Allocation Table → Display [Enter]*

Select items, *Allocation Table → Create Subsequent Documents → Warehouse Orders*

The item category determines what types of follow-on documents can be created. Item category F stands for allocation out of stock (STO – stock transport order).

2-2-2 **One** stock transport order is generated.

2-2-3 In the header area of the item overview for the allocation table, how the status of the entire allocation table has changed: 4 = complete

Select item(s), choose *Goto → Sites → Sites in Item*, Select item(s), choose pushbutton *[Detail]*, tab page *Admin. Data*

Warehouse order 2 = created

Notification 1 = not created

Where can you display the generated stock transport order?

Select the item(s), choose *Goto → Sites → Sites in Item*, select item(s), choose pushbutton *[Detail]*, tab page *Dates, Warehouse Orders* column.



Unit: From Planning to Distributing Articles

Topic: Prepack Allocation Planning

3-1 Prepack definition

Master data → Article data → Article → Prepack Allocation Planning → Maintain Prepack Allocation Planning [Enter]

3-1-1 **Generic article:** TA07##
Season year: no entry
Season: no entry

Once you are familiar with the header data, you can hide it so that you can see more information on the screen.

3-1-2 In the *Prepack Definition/Prepack* subscreen you can define new prepacks by selecting the *Create new prepack(s)* button. Choose *One mixed prepack* and then select all the colors in the dialog box that appears. Next, select the existing quota scale *Fashion*, all lines of the new prepack, and press the *Quota Scale* button.

Quantity allocation from the quota status *Fashion*, is copied to the individual components of the prepack.

3-1-3 You want to change the short text of the new prepack. Choose the *Change description* button in the Prepack subscreen after selecting the line with the new prepack (for example, TA07##L01).

You want to find out the purchase prices of the individual components of the new prepack and, if necessary, change these manually. Choose the *Change purchase price* button in the Prepack subscreen after selecting the line with the new prepack (for example, TA07##L01).

You now want to generate your prepacks. To do this, go to the header data of the reference prepack R100020.
[Save]

Once you have saved, check whether the new prepacks have actually been created. To do this, go to the article master (for example, TA07##L01).

Article Data → Article → Display Article

Enter prepack number, for example, ***TA07##L01***, view(s): ***Basic Data***

3-2 Prepack Allocation

To perform prepack allocation you need to assign a season on the initial screen.

3-2-1 **Generic article:** TA07##
Season year: the current year
Season: 0001 (spring/summer)
Rollout: None

3-2-2 Go to the *Allocation Table (Header Data)* tab and make the following settings.

POrg: R300
Purchasing Group: R30
Vendor: TS2##

Allocation Table Type: 0008
Site delivery date: Four weeks from today
DC delivery date: Three weeks from today

Go to the *Allocation Planning (Item Data)* tab. Choose allocation by *Assortment/Store* by selecting assortment **IRT100**. Start the assignment of prepacks on the right-hand side, by choosing the *Assign Prepacks* pushbutton. Select your prepack by setting the *Assigned* flag. Next, enter the following prepack quantity:

Prepack quantity: 10

Which stores are included in the store group IRT100?

Right-click on IRT100 → *Check store groups* → *Site*

| | |
|-------------|----------------|
| R314 | Group 1 |
| R315 | Group 1 |
| R316 | Group 1 |

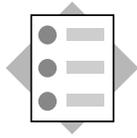
3-2-3 Save the prepack allocation: *[Save]*

Finally, display the allocation table generated by returning to Prepack Allocation Planning and taking the allocation table number from the *Allocation Table (Header Data)* tab. The *Display allocation table* pushbutton takes you straight to the allocation table.

Contents:

- **Process Overview**
- **SAP Retail Store**
- **Using collective purchase orders to procure merchandise**
- **Distribution of merchandise in distribution center**
- **Store goods receipt using SAP Retail Store**
- **Perishables planning**
- **Summary**

© SAP AG 2003



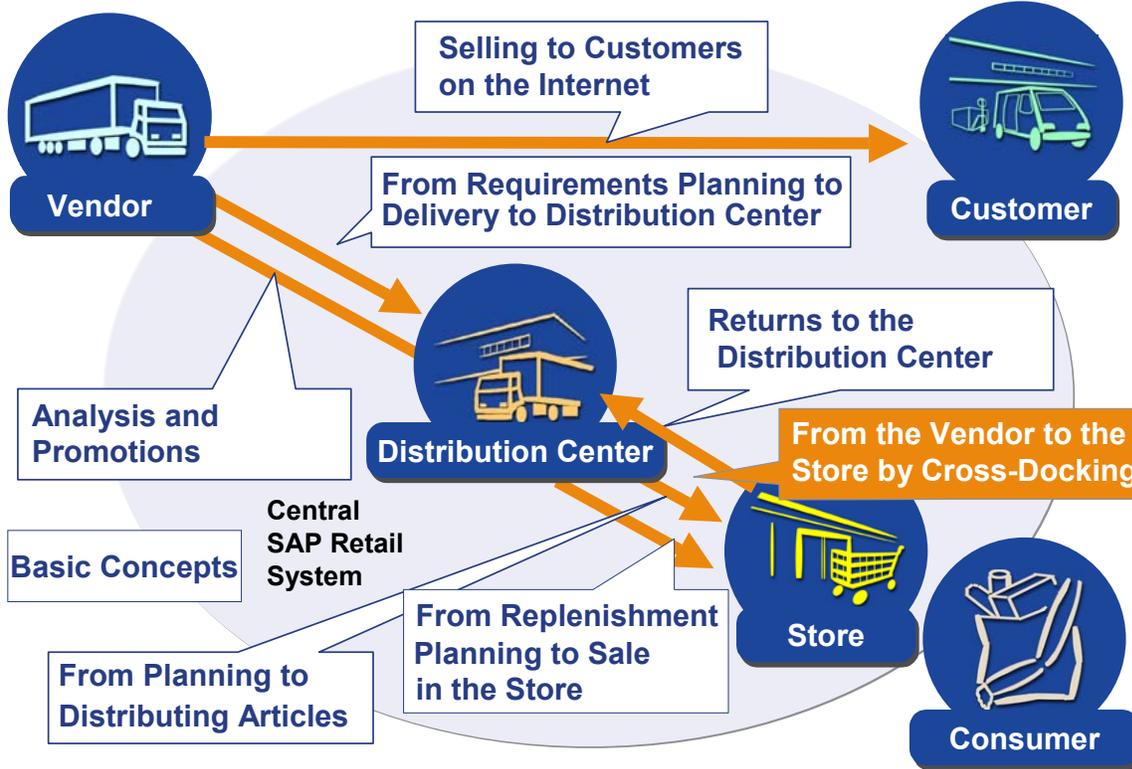
At the conclusion of this unit, you will be able to:

- **Create a stock transport order in the SAP Retail Store using the store order**
- **List the most important steps for generating a collective purchase order**
- **Name the advantages of using cross-docking and flow-through**
- **Post goods receipt in the store using SAP Retail Store**
- **Use the functions of the perishables planning list**

© SAP AG 2003

Overview Diagram

SAP



© SAP AG 2003

Internal Use SAP Partner Only

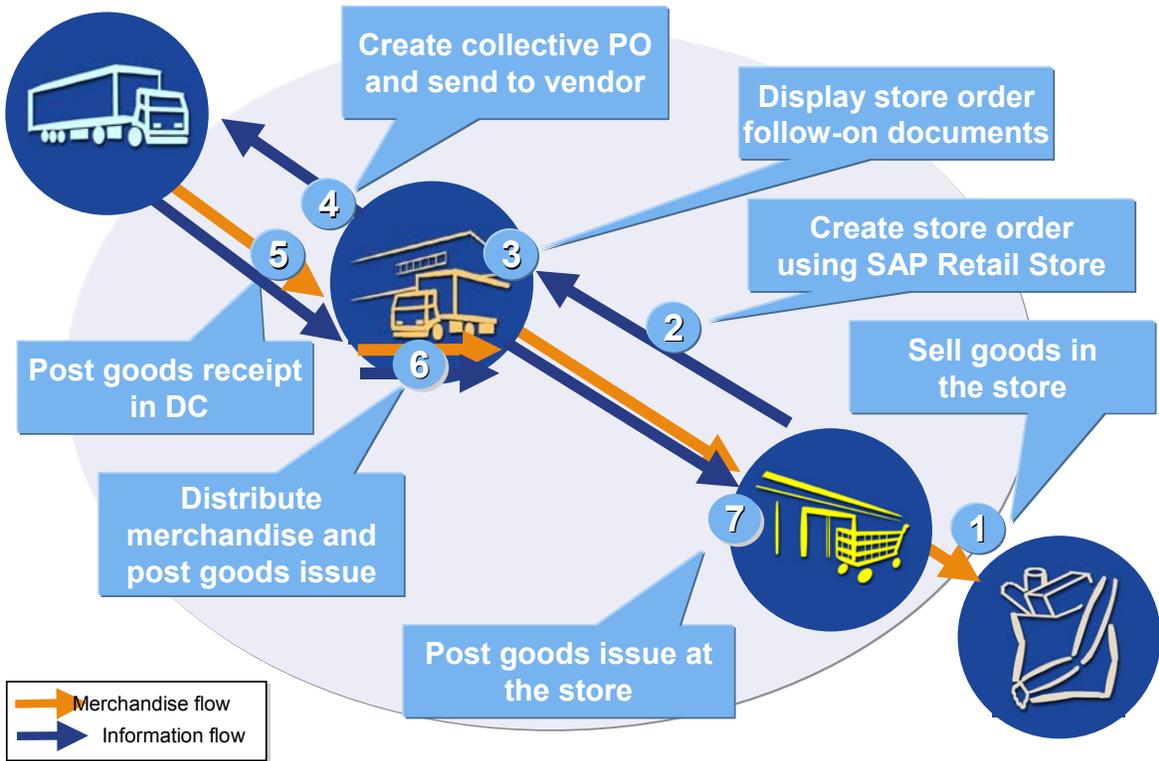
Internal Use SAP Partner Only



- **After planning by visual inspection in the store, you, a store employee, create a stock transport order for the articles sold.**
- **At headquarters, stock transport orders are grouped into collective purchase orders and sent to external vendors.**
- **The articles are delivered to the distribution center and guided through using cross-docking. The goods issue is then posted.**
- **The ordered articles are sent from the warehouse to the store.**

© SAP AG 2003

From the Vendor to the Store by Cross-Docking: Process Overview

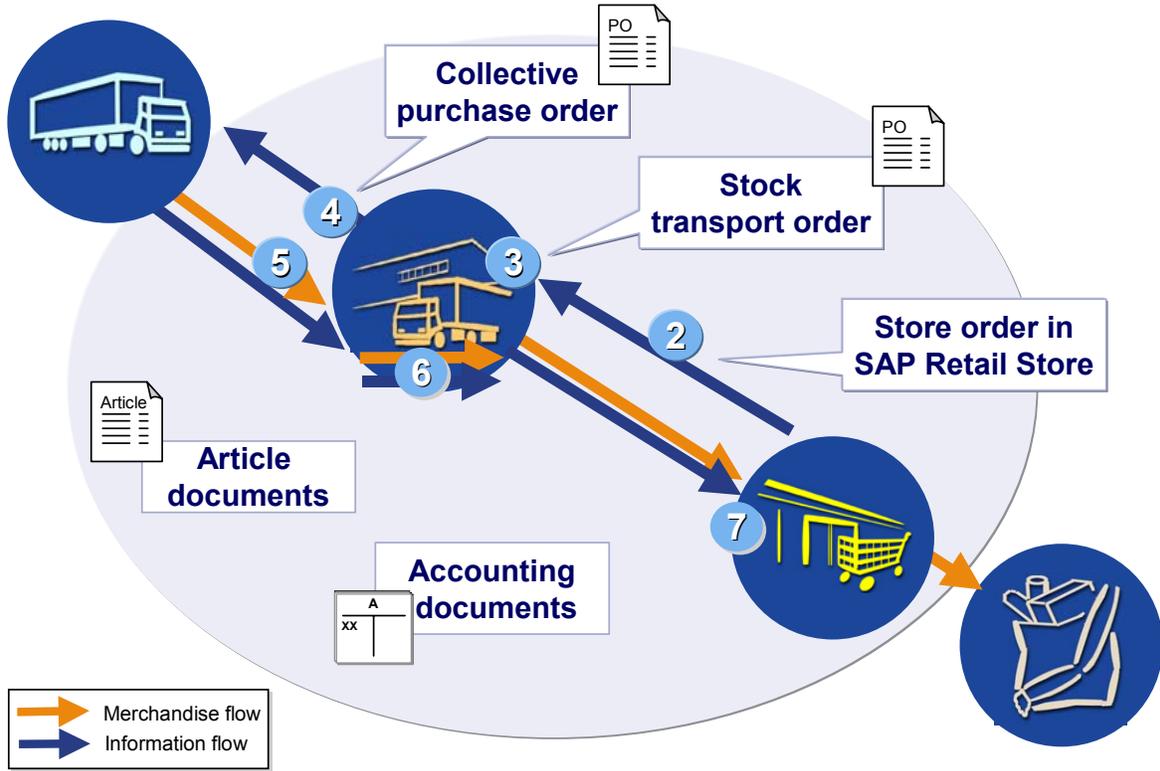


© SAP AG 2004

Internal Use SAP Partner Only

Internal Use SAP Partner Only

Overview: Documents



© SAP AG 2004

Internal Use SAP Partner Only

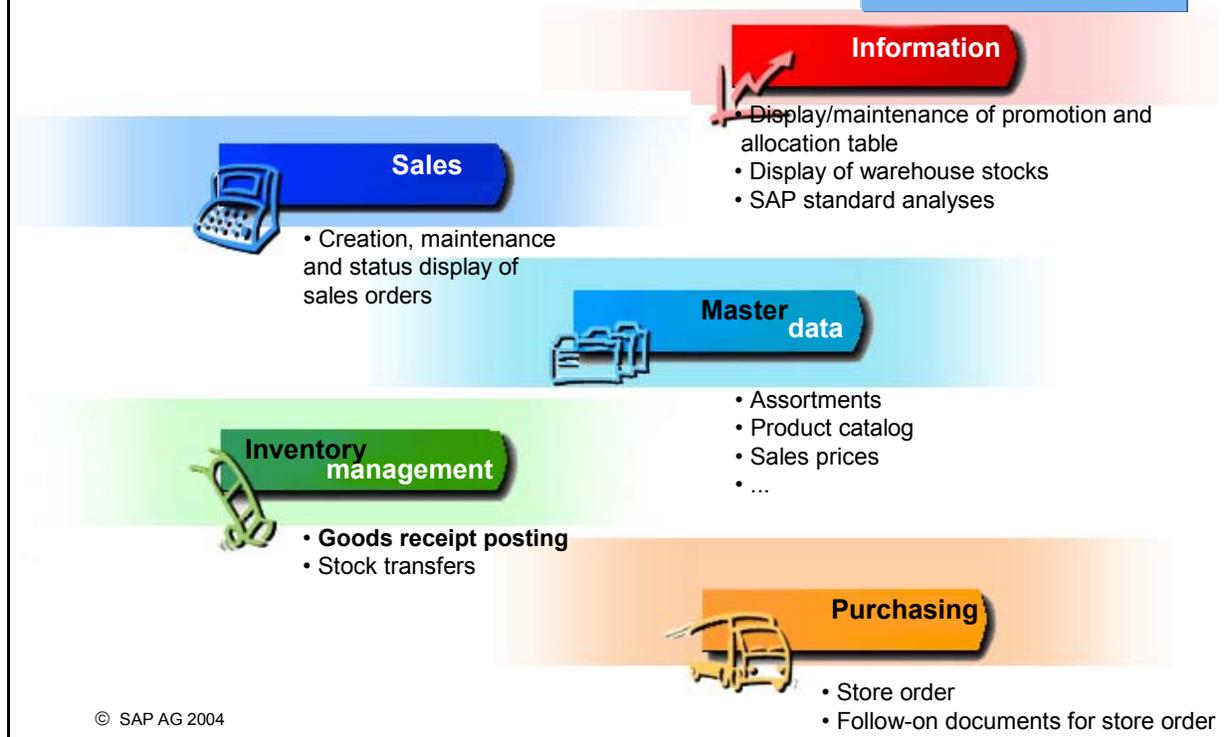
Internal Use SAP Partner Only

The Functions of SAP Retail Store

SAP

3

Generate store order
using SAP Retail Store

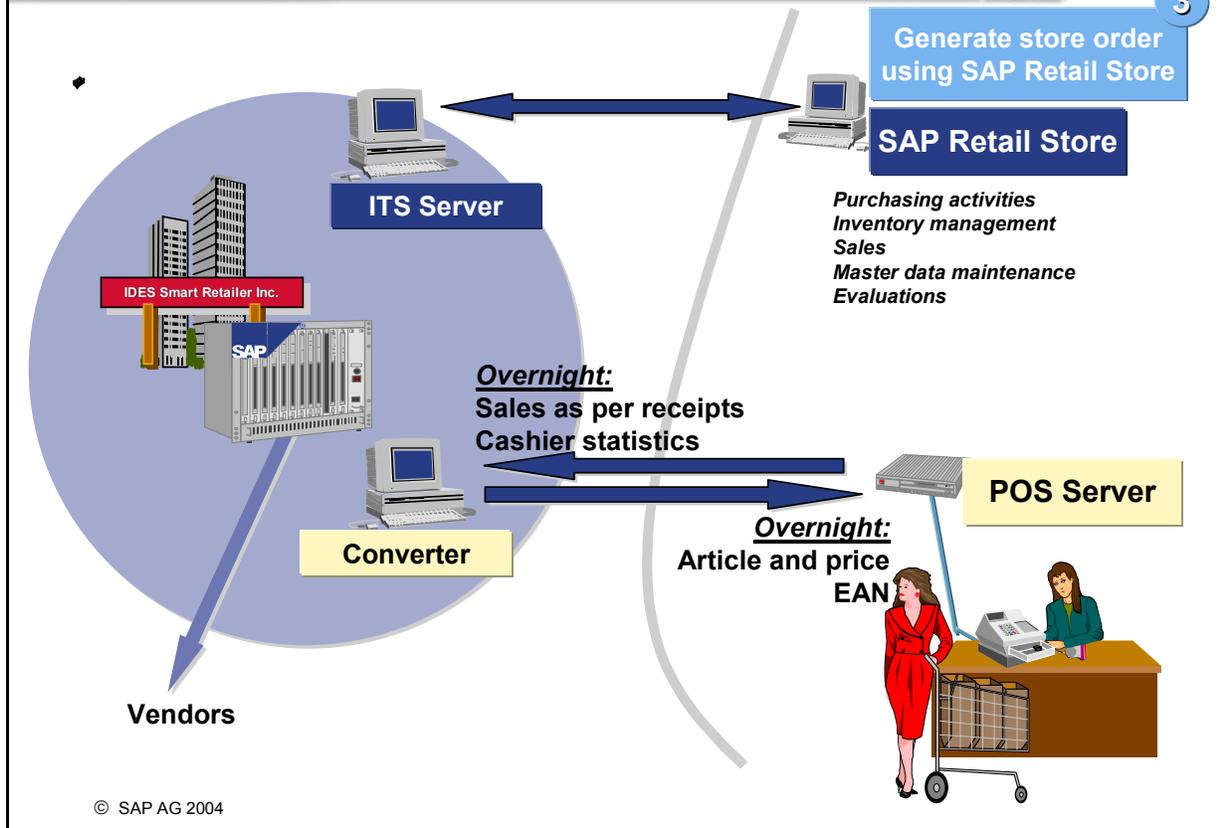


- SAP Retail Store is a separate product that is based on SAP Retail and which, together with the central SAP Retail system, forms a complete retailing system. It is intended for use in small to medium-sized stores in which the business procedures are of limited complexity. These stores only require the functions of SAP Retail to a limited extent. Therefore simplified screens and function processes are sufficient for handling the business processes.
- The procurement, goods movement and sales postings make up the mass business of a store. With SAP Retail Store these postings can be carried out immediately by store employees. The user interface of SAP Retail Store is deliberately very easy to maintain thanks to the usability of the dialogs. This means that the staff in the store can quickly learn to use the system efficiently.
- All the functions available in SAP Retail Store are grouped together in a graphical menu. You do not always need to use all the functions that are available. SAP Retail Store allows you to include in the menu only the functions that you actually want to use.
- You can change the interface at any time even with a minimal knowledge of HTML. You can, for example, include your own graphics or links with additional pages, change individual columns and replace the SAP Store logo with your own company logo.

SAP Retail Store: Sample Usage

SAP

3

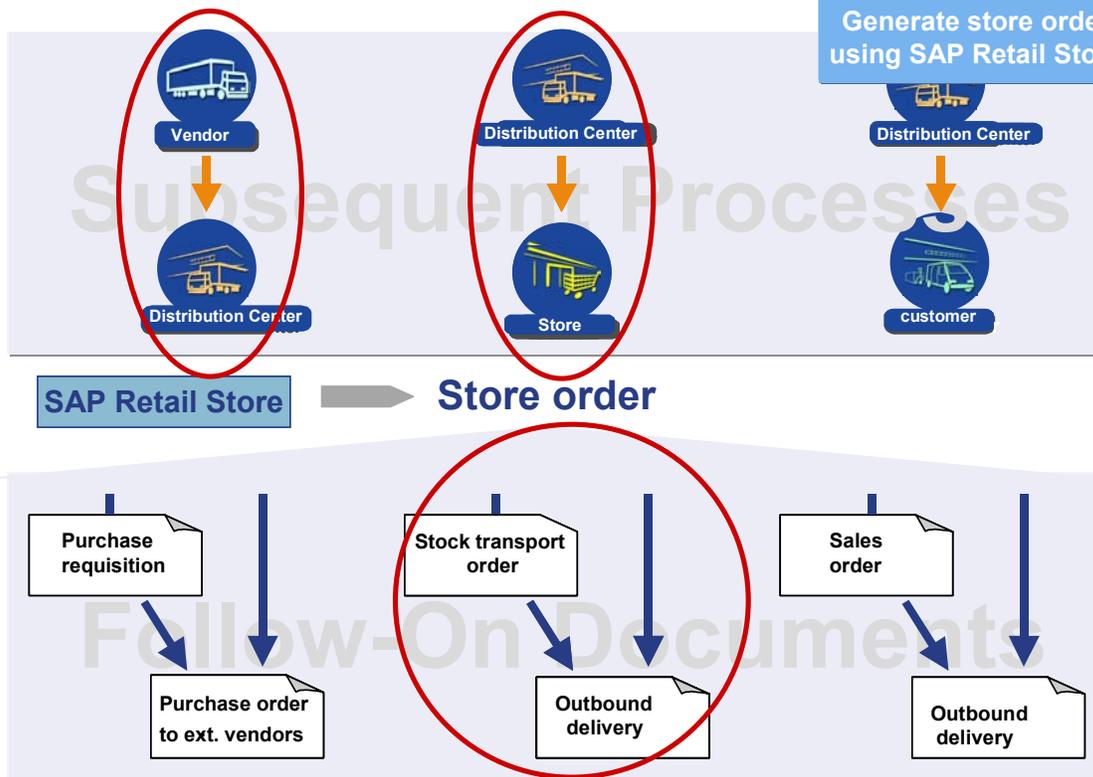


- By using SAP Retail Store you can, except in the case of POS systems, avoid having to link in external components for decentralized store control, since SAP Retail Store is fully integrated into the SAP Retail System.
- There must be a data connection to the central SAP System when accessing SAP Retail Store. You should use ISDN connections for the stores to communicate with headquarters.
- The software package is run on an SAP Retail application server at headquarters and then started on the SAP System when the stores access it. An Internet Transaction Server (ITS) makes the functions available via Internet Application Components (IACs). It communicates on the one hand with the SAP System using Business Application Program Interfaces (BAPIs) and on the other hand with standard web browsers in the stores over your Intranet or the Internet.
- In combination with SAP Retail, SAP Retail Store enhances and optimizes existing tools for handling store-oriented processes by providing staff in the stores with the store retail functions already available in SAP Retail, as well as some specially developed functions. It has an Internet-based user interface which is tailor-made to the requirements of the stores. This interface combines the intuitive accessibility of a Web browser with the specific store-related transactions of the central SAP Retail System. This makes it quick to learn and simple to use even for part time or casual staff with very little training.

Store Order and Subsequent Processes

SAP

3



© SAP AG 2004

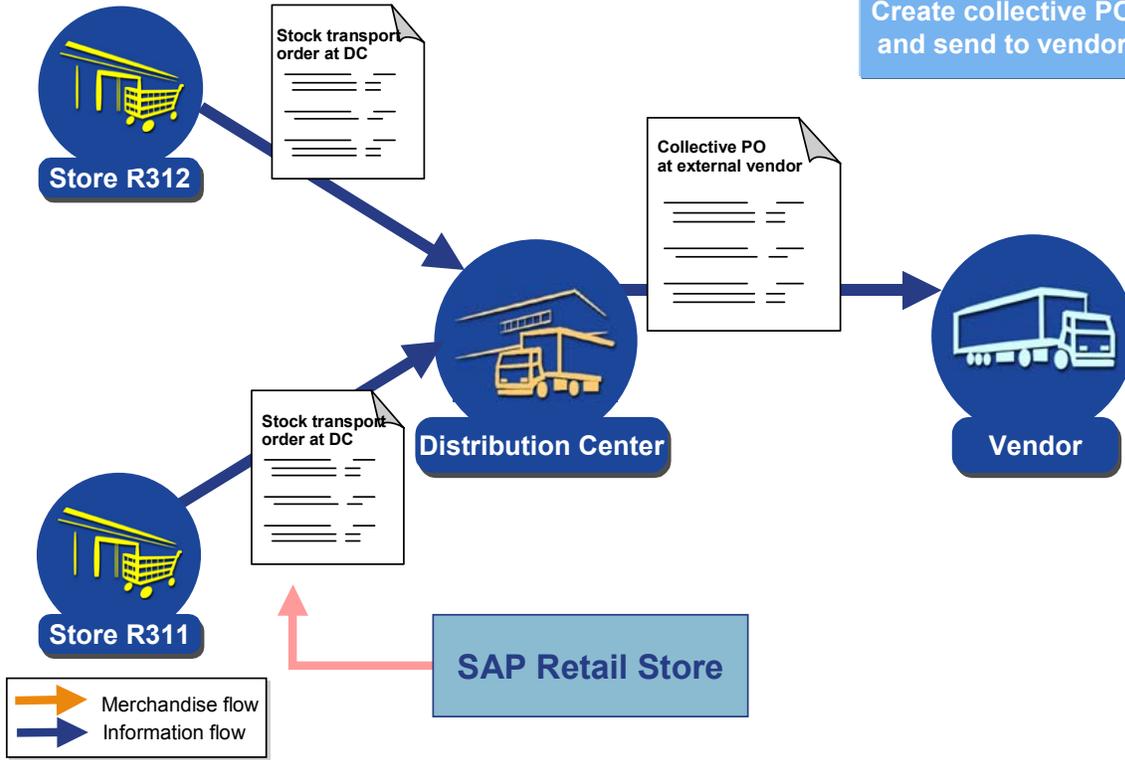
- **Store orders** generate **different types of documents**, depending on the settings that have been made in your system.
- These documents are **normally**:
 - Purchase requisitions** if the system could not clearly identify a vendor.
 - Purchase orders** for procuring merchandise from an external vendor for a distribution center or for a store. Alternatively, merchandise can be procured from a distribution center using a **stock transport order**.
 - Outbound deliveries** for procuring merchandise from a distribution center.
 - Sales orders**; store orders are used in the same way for both external customers and stores.
- The following documents are **exceptions** but can be used nonetheless:
 - Purchase order copies** if the store has placed an order directly with the vendor.
 - Attempt stock transport order**; if there is insufficient merchandise available in the DC to fulfill a stock transport order, the order can be sent to different DCs (delivery sites for the store in question) or to a specific external vendor (third-party purchase order).

Merchandise Distribution: Overview (1/3)

SAP

4

Create collective PO and send to vendor



© SAP AG 2003

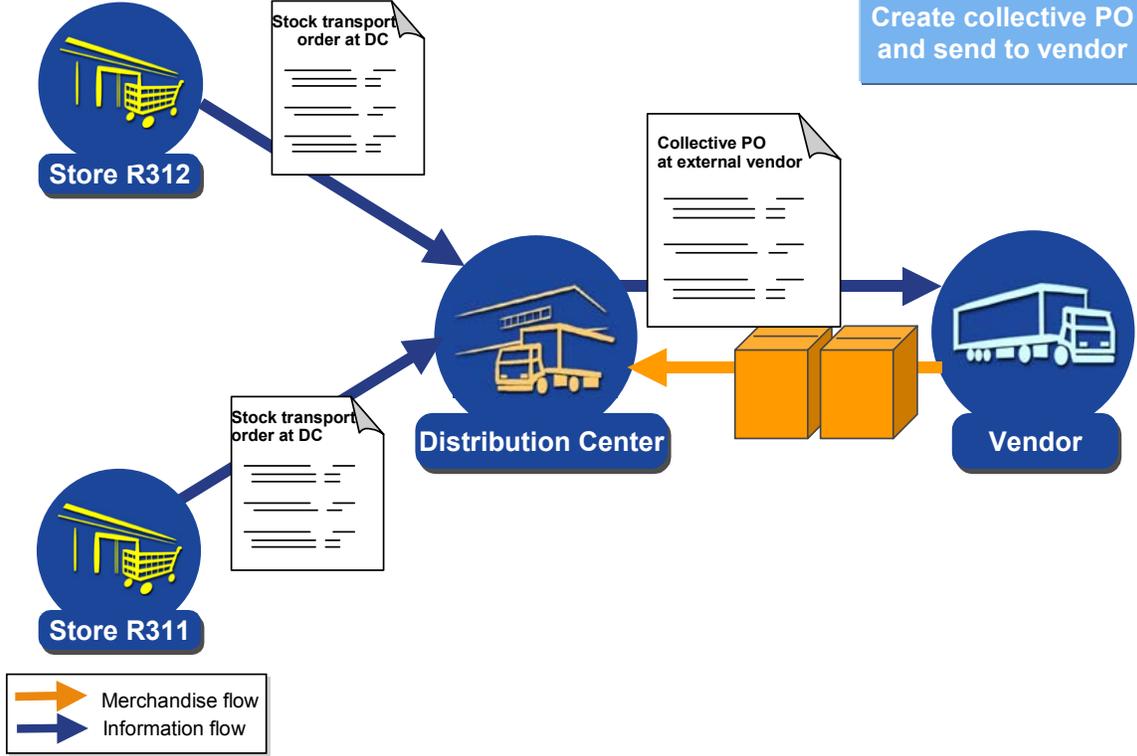
Internal Use SAP Partner Only

Internal Use SAP Partner Only

Merchandise Distribution: Overview (2/3)

SAP

4

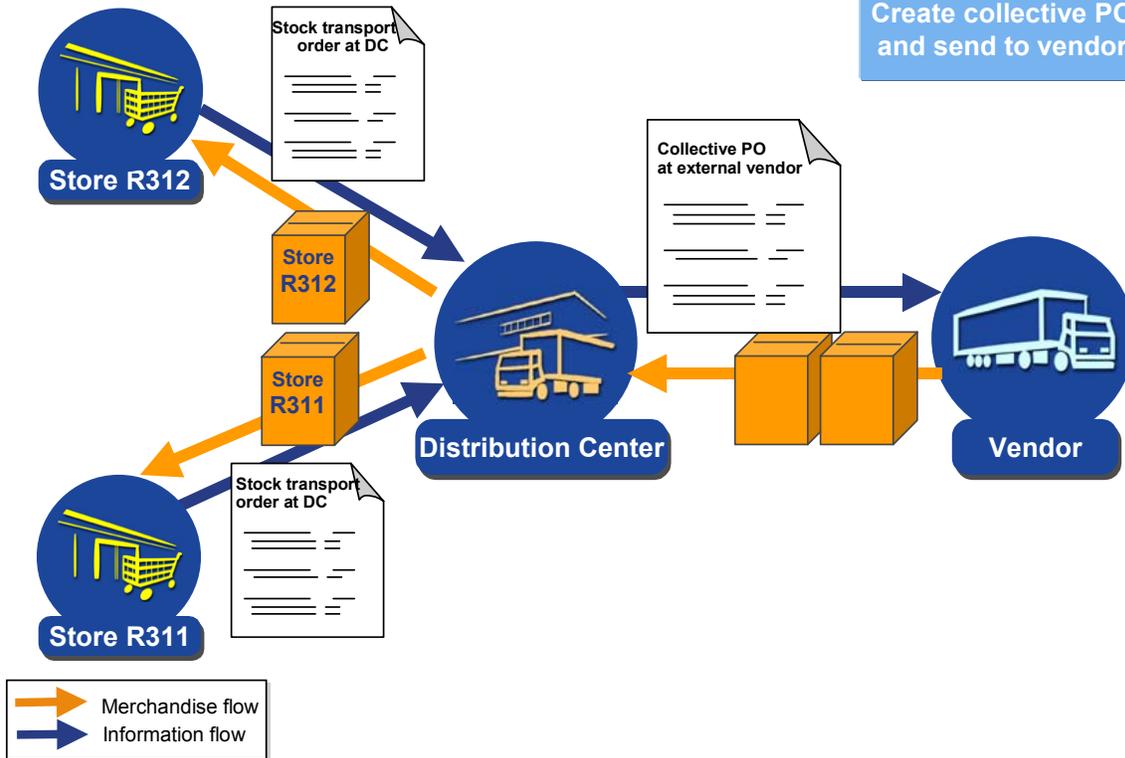


© SAP AG 2003

Internal Use SAP Partner Only

Internal Use SAP Partner Only

Create collective PO and send to vendor



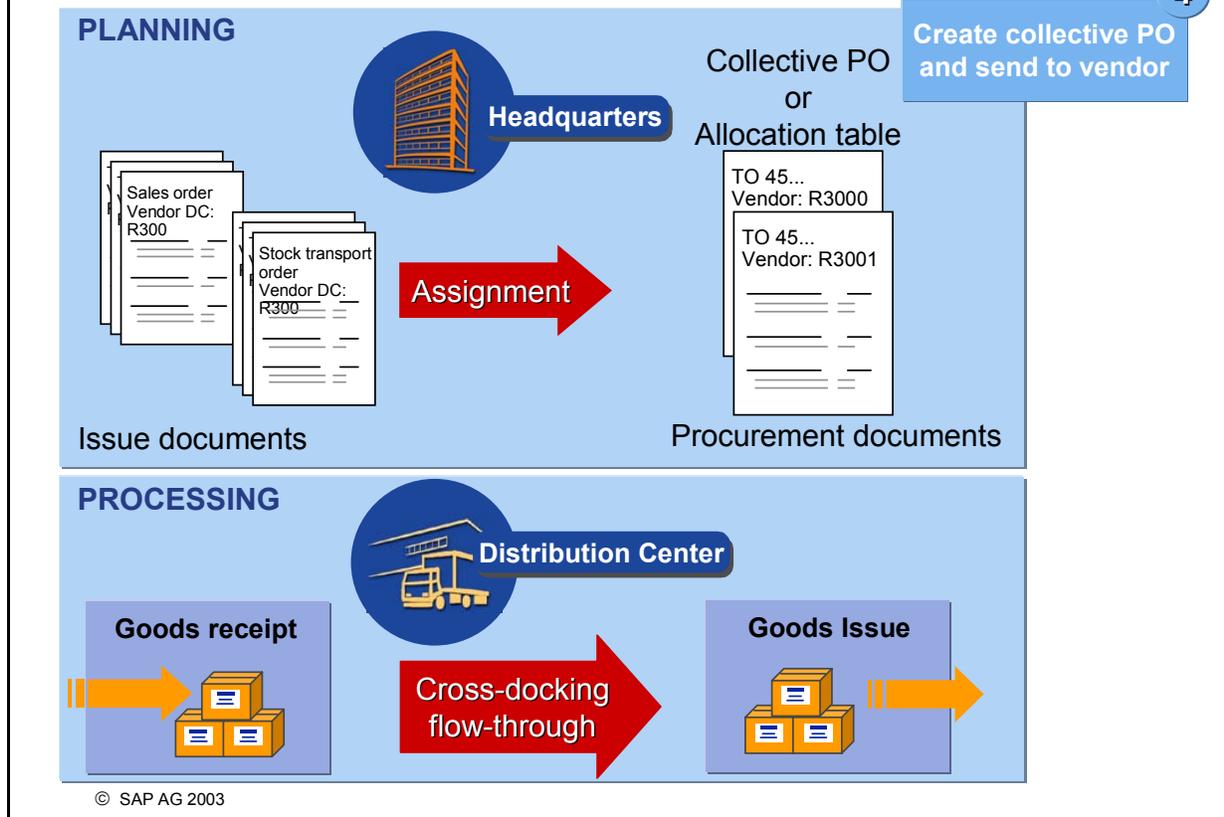
© SAP AG 2003

- The stock transport orders (= store purchase orders at the distribution center) generated from SAP Retail Store (or created manually) are grouped together centrally into a collective purchase order at the external vendor.
- The vendor delivers the articles ordered to the distribution center.
- Once at the distribution center, all the articles delivered are assigned back to the original documents from the stores (stock transport orders), shared out among the individual stores in accordance with these documents, and then delivered.

Two Phases of Merchandise Distribution

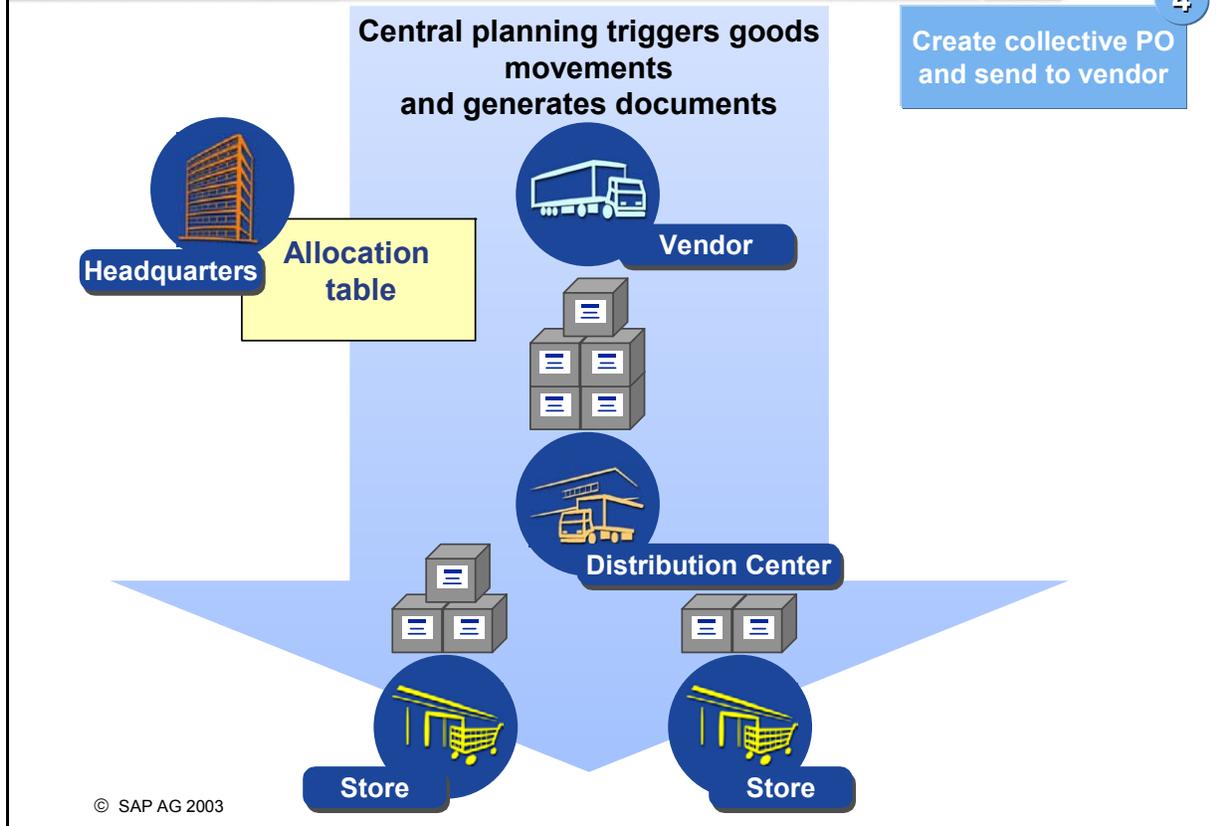
SAP

4



- The merchandise distribution process is broken down into planning and processing phases.
- Planning for merchandise distribution is done centrally, either using an allocation table or a collective purchase order. Distribution data is updated during planning. The data generates assignments between procurement and issue documents.
- Merchandise distribution is processed in the distribution center. The distribution data is adjusted to match the quantities actually available at goods receipt. The merchandise is then distributed to recipients using different processes or placed in storage, as required. The merchandise is then moved to the goods issue zone where the goods issue is then posted.

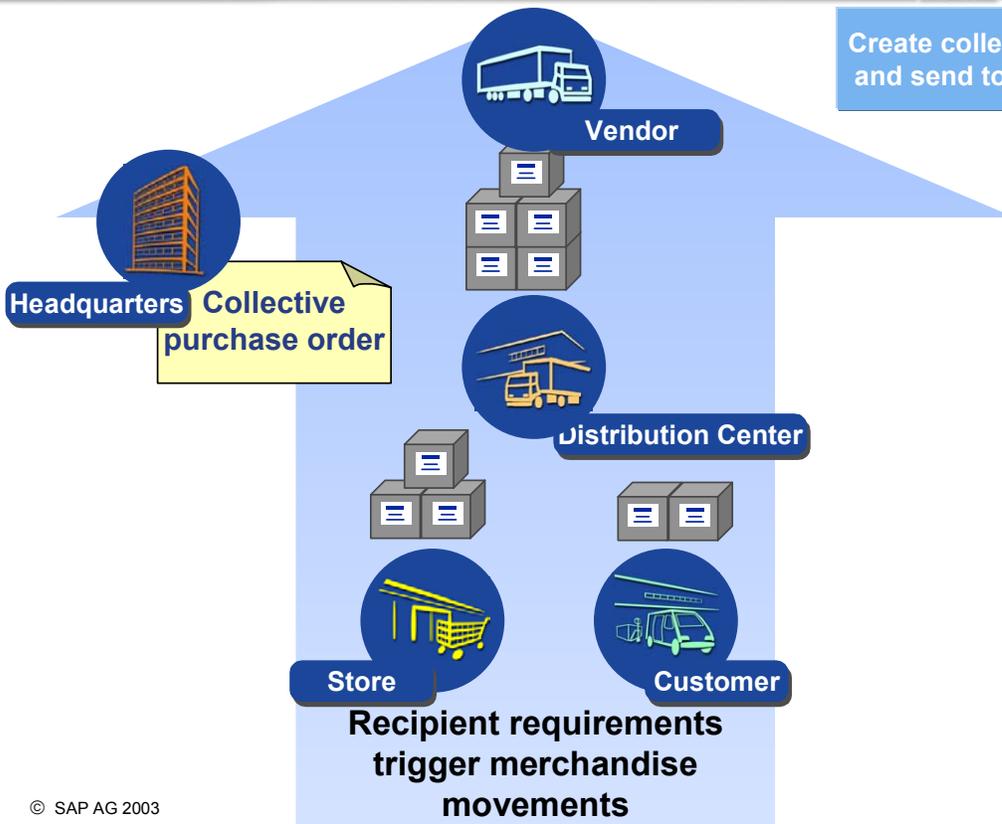
Create collective PO and send to vendor



© SAP AG 2003

- In the **push concept** planning for merchandise distribution is carried out using an allocation table. The procurement documents (vendor orders) and issue documents (stock transport orders or deliveries) are then generated as follow-on documents for the allocation table.
- The distribution data is updated in the system when follow-on documents are generated. This data is then used to control the merchandise flow in the distribution center after goods receipt. If the allocation table is created with a link to a purchase order or a shipping notification, a procurement document already exists, meaning that issue documents are generated as follow-on documents.

Create collective PO and send to vendor



© SAP AG 2003

- Issue documents (sales orders or stock transport orders) for the recipients normally exist for the **pull concept**. Collective purchase orders are created as procurement documents in which the issue document quantities are totaled for each article and distribution center. Data from the merchandise distribution is also updated in the system when collective purchase orders are generated. The data is then used to control and oversee the distribution of merchandise to the recipients when using the pull concept.

Distribute merchandise and post goods issue



Distribution Profile for the Article

- Which processing procedure?
- What happens with quantity variances?

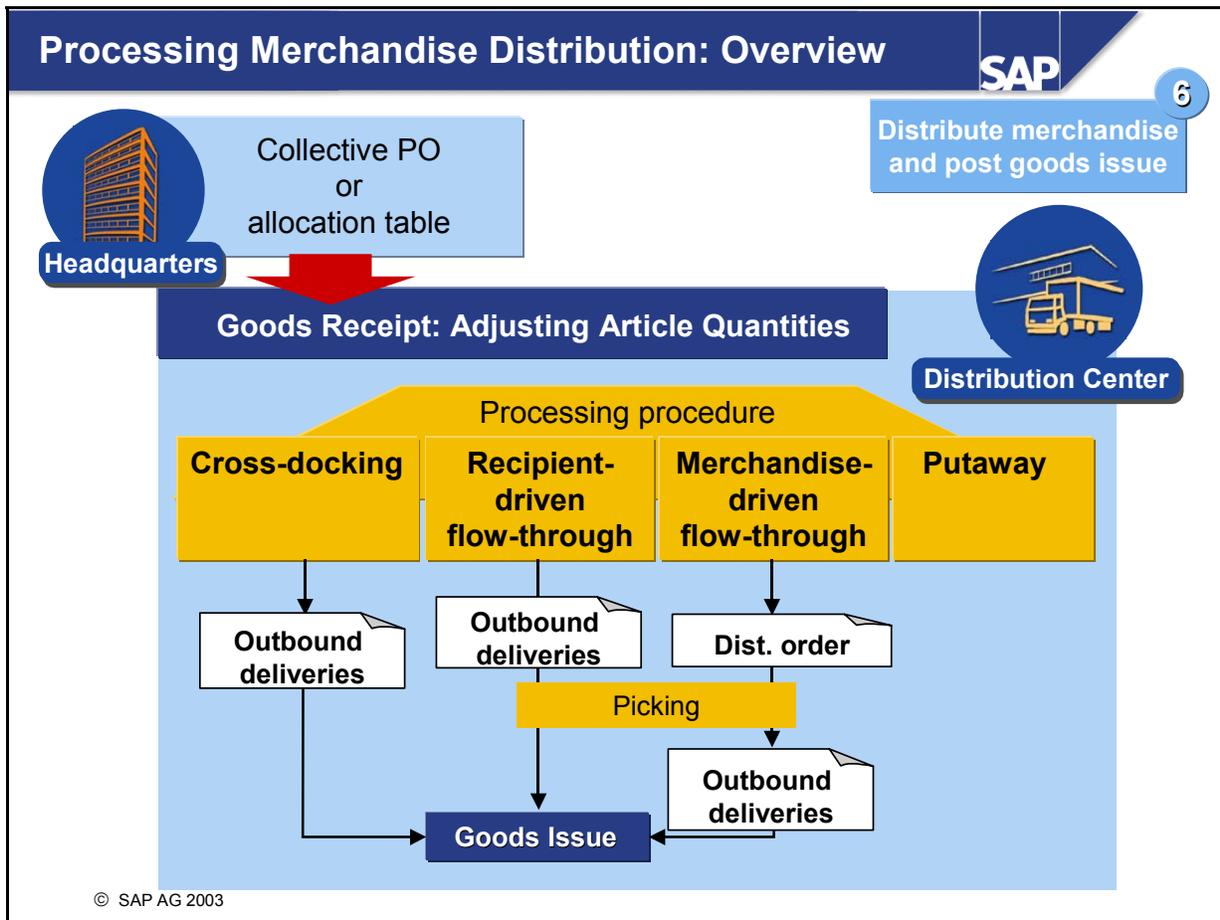


Distribution Profile for the Site

- Is cross-docking and/or flow-through possible in the distribution center?
- When/how are the follow-on documents generated?

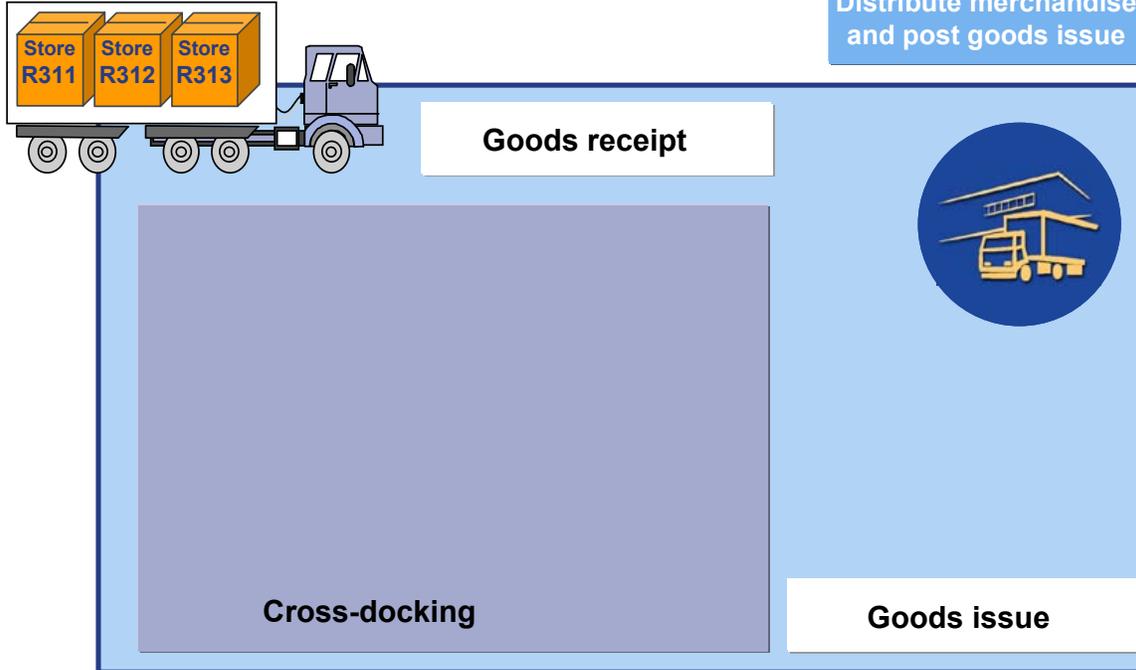
© SAP AG 2003

- The **article distribution profile** defines the processing method and the quantity adjustments that are made at goods receipt. The assignment of the distribution profile to the article (logistics data view) is a prerequisite for handling the article within merchandise distribution.
- You can also define the percentage variance between the planned quantity and the actual delivered quantity so that the planned quantities to be distributed can be automatically adjusted at goods receipt.
- The **site distribution profile** is used for defining the basic characteristics of a site for merchandise distribution:
 - Do you plan to use cross-docking/flow-through for handling merchandise in your site?
 - Do you want to use picking for deliveries in cross-docking?
- You can define the times for adjusting distribution data and follow-on document (delivery, distribution order) generation for each business process (push, pull, returns), for example:
 - Automatically at goods receipt
 - Automatically with quantity variance adjustment
 - Manually.



- The **processing procedure** for merchandise distribution defines how the merchandise in the distribution center is handled after goods receipt, and which follow-on documents are then generated.
 - **Cross-docking:** Merchandise is moved from goods receipts to goods issue without being placed in temporary storage. Deliveries are generated, and picking is not required.
 - **Recipient-driven flow-through:** Deliveries are generated for recipients after goods receipt. Picking is then carried out for these deliveries.
 - **Merchandise-driven flow-through:** In the distribution center, merchandise is picked based on distribution orders. A delivery containing the contents of the handling unit (for example, a pallet) is generated when a handling unit has been filled. This procedure can only be used in conjunction with Lean Warehouse Management.
 - **Putaway:** Merchandise is only posted to one storage location. Deliveries are then generated and used when merchandise is removed from storage at a later date.
- To be able to use different units of measure (for example, pallets and cartons) and also use procurement for large handling units, you can use optimized procurement methods.

Distribute merchandise and post goods issue



© SAP AG 2003

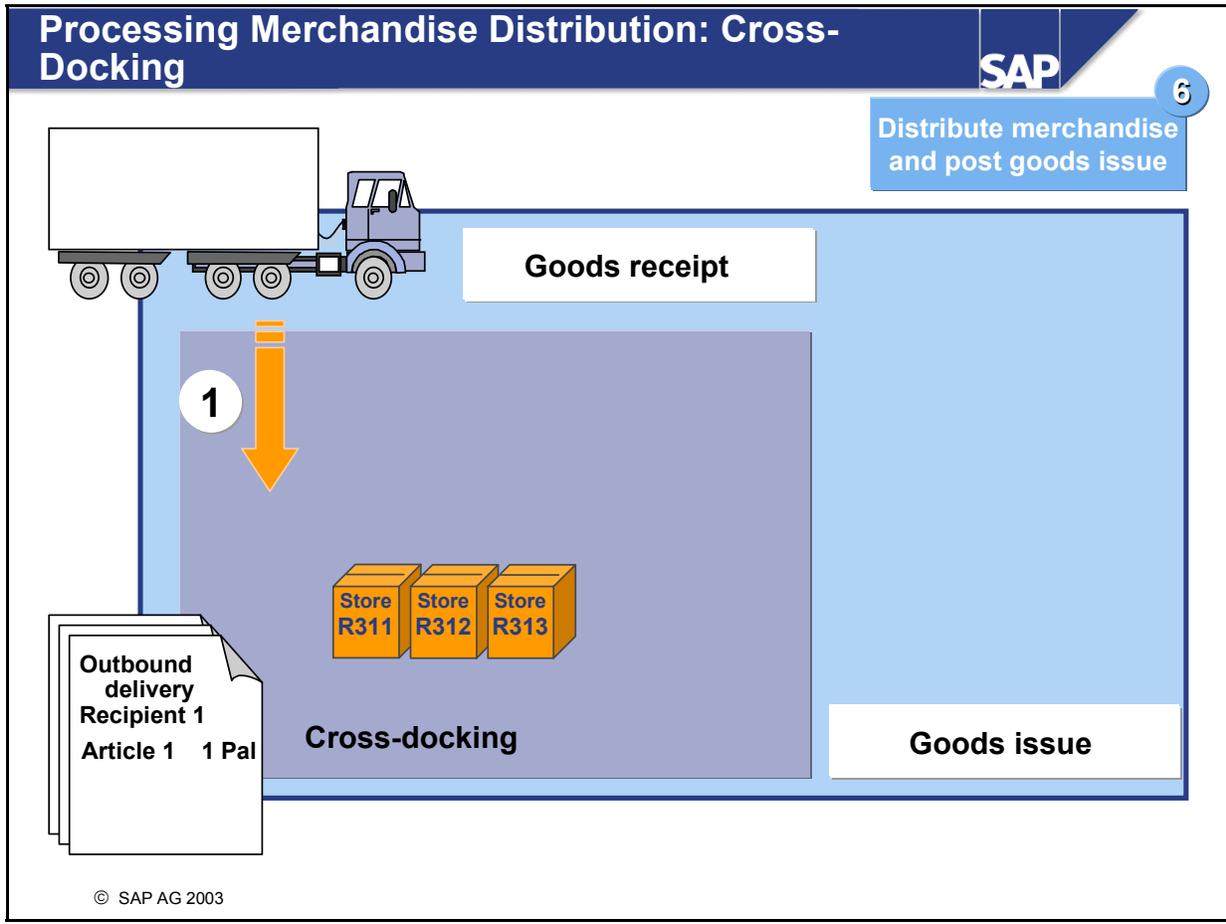
- The merchandise arrives at GR for the distribution center and is posted to a cross-docking storage location. Deliveries are then generated, and picking is not required.
- **Pre-Picked Cross-Docking:**
For pre-picked cross-docking, the vendor must be told the quantities ordered by the individual recipients. This is shown in the system using the SLS function (Supplementary Logistic Services).
- In the case of non-mixed packages, the recipients (customer/store) may not always receive complete packages. For this reason it is also possible for the vendor to pre-pick the goods: The vendor creates packages, which are already picked by the vendor for each recipient, but are actually delivered to the recipient from the distribution center. These packages can therefore contain different articles.

Processing Merchandise Distribution: Cross-Docking

SAP

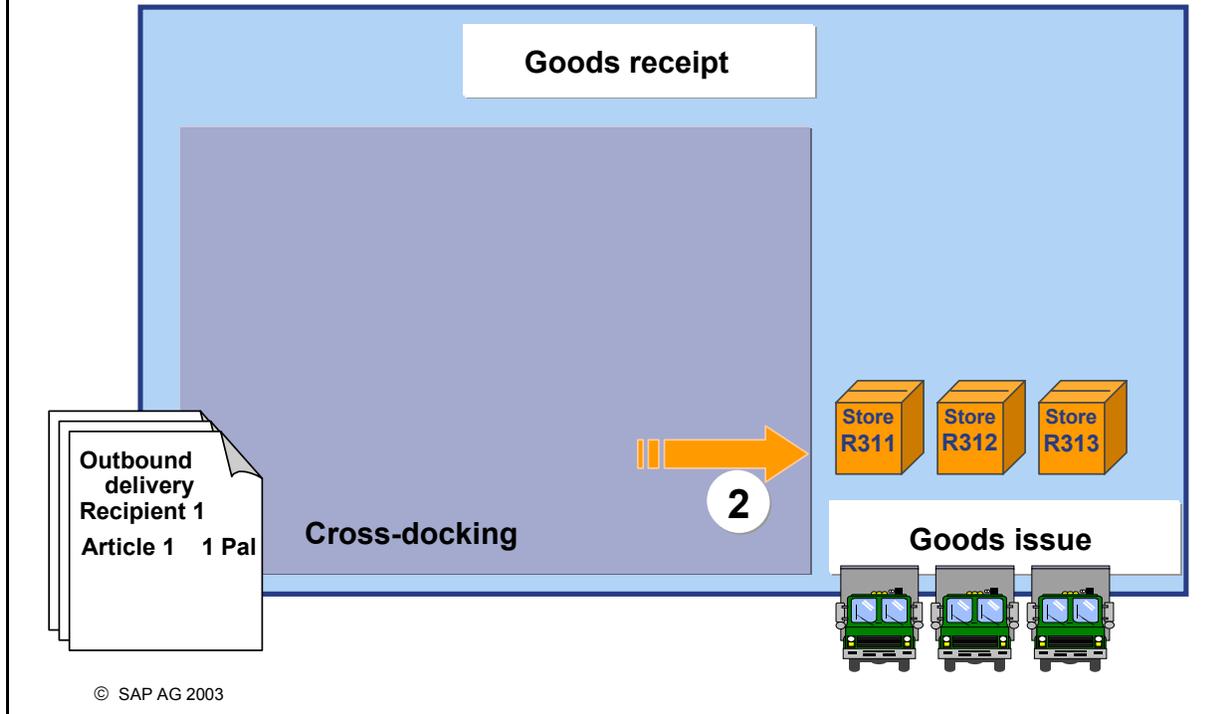
6

Distribute merchandise and post goods issue



- These packaged articles are not repacked between processing at goods receipt and goods issue in cross docking.

Distribute merchandise and post goods issue



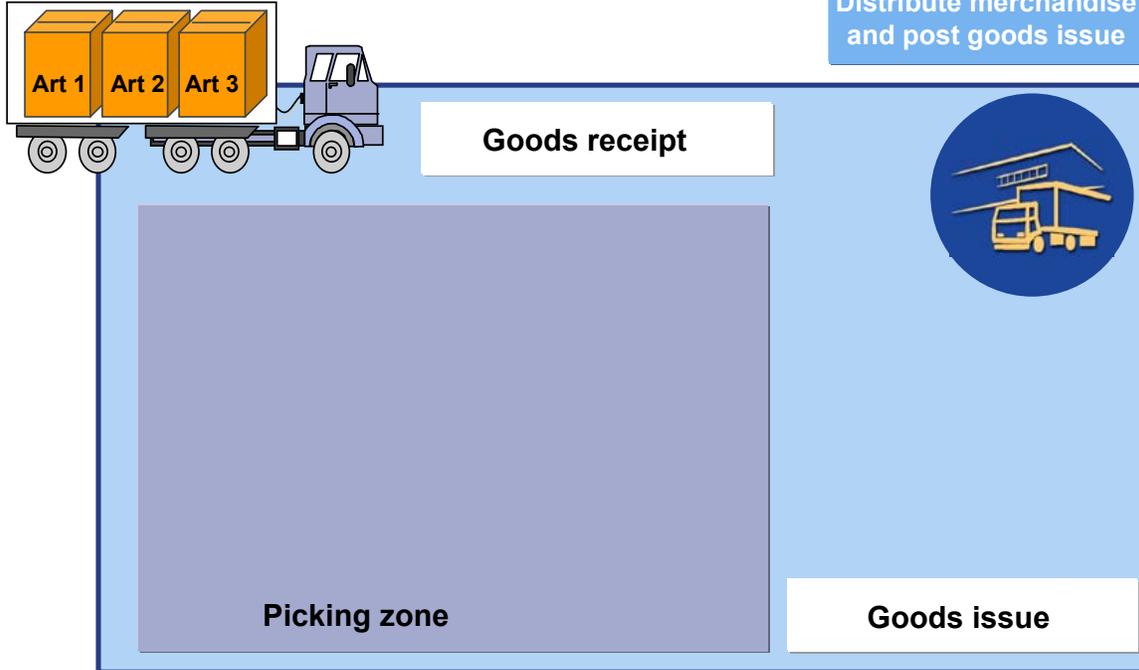
- Outbound deliveries are generated from the stock transport orders. Finally, the packaged articles are transported to the goods issue zone and goods issue is posted.

Processing Merchandise Distribution: Flow-Through (Recipient-Driven)

SAP

6

Distribute merchandise
and post goods issue



© SAP AG 2003

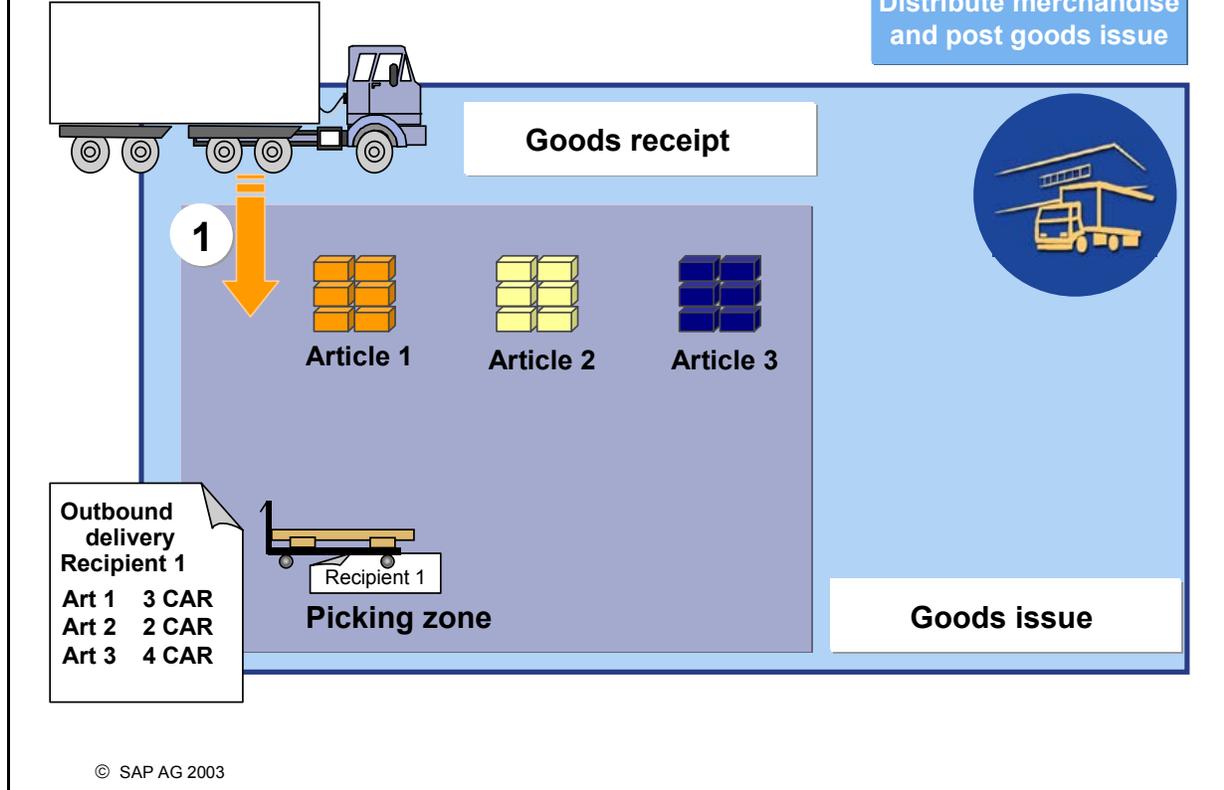
- **Recipient-driven flow-through:** Merchandise is posted to a storage location for recipient-driven flow-through as soon as it arrives at goods receipt. The merchandise distribution data is analyzed and the relevant outbound deliveries generated for the recipients.

Processing Merchandise Distribution: Flow-Through (Recipient-Driven)

SAP

6

Distribute merchandise
and post goods issue



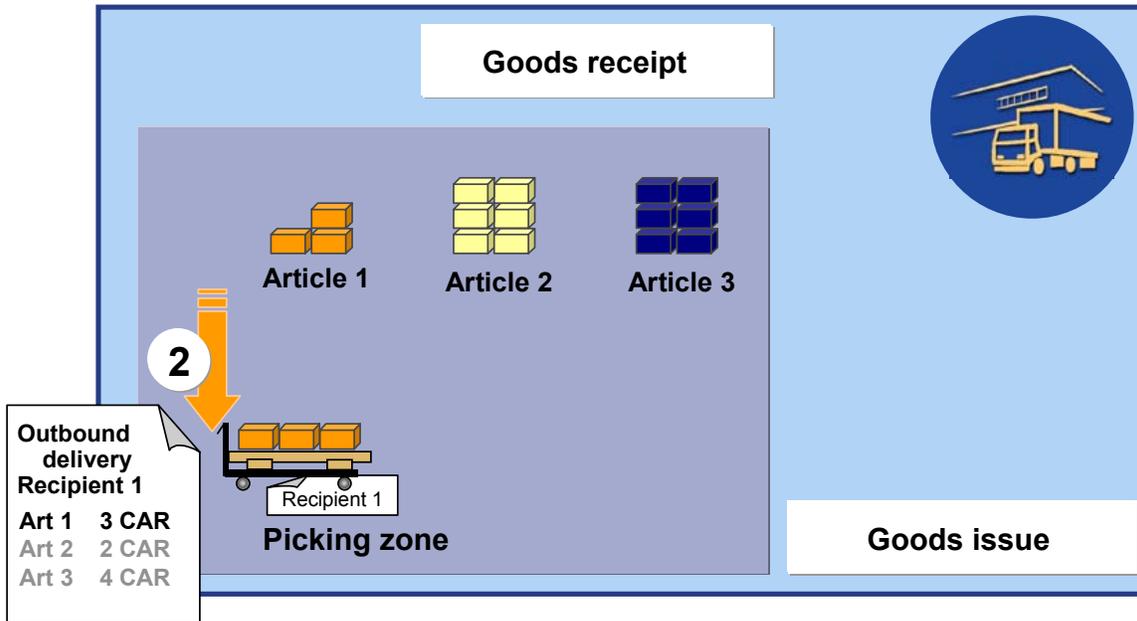
- Picking is then carried out for the outbound deliveries that have been generated. Merchandise is sent to goods issues and posted as being delivered.

Processing Merchandise Distribution: Flow-Through (Recipient-Driven)

SAP

6

Distribute merchandise
and post goods issue



© SAP AG 2003

Internal Use SAP Partner Only

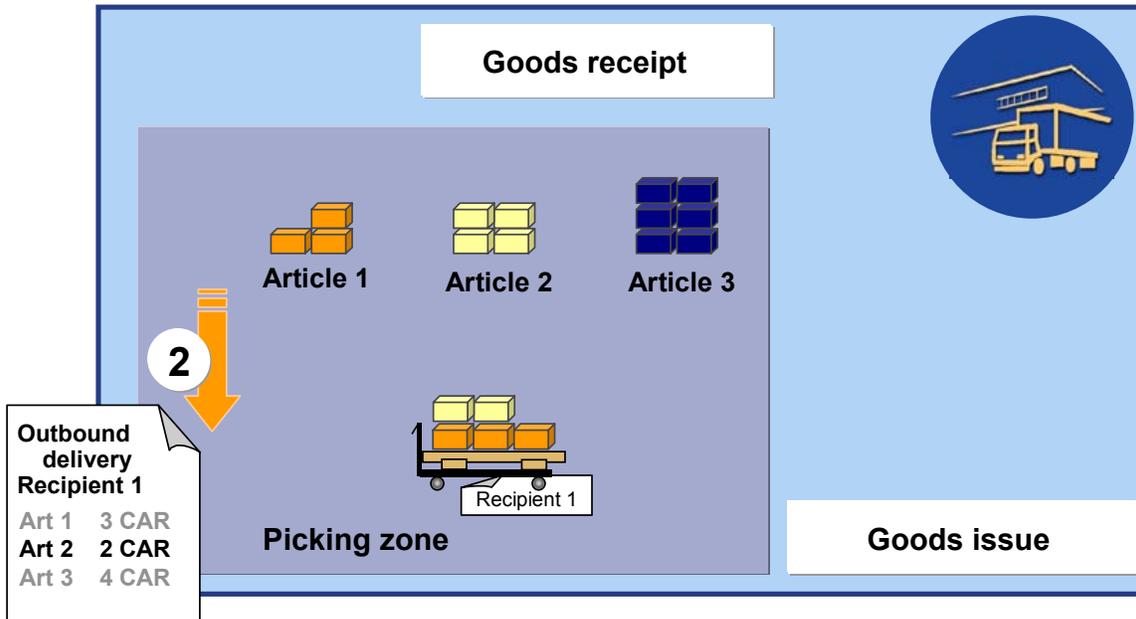
Internal Use SAP Partner Only

Processing Merchandise Distribution: Flow-Through (Recipient-Driven)

SAP

6

Distribute merchandise
and post goods issue



© SAP AG 2003

Internal Use SAP Partner Only

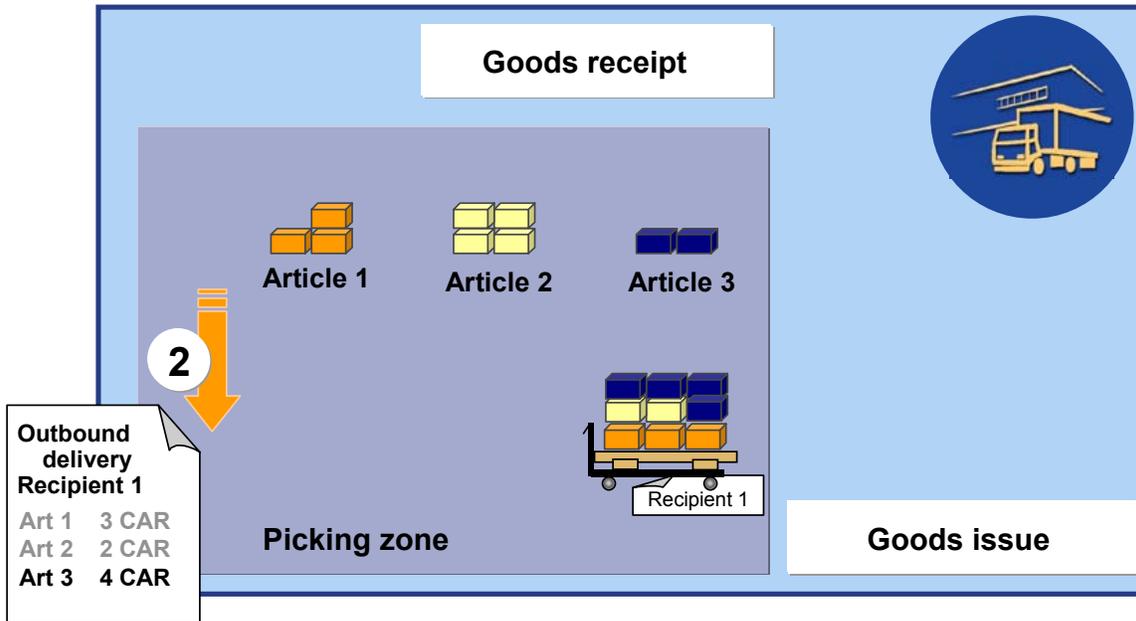
Internal Use SAP Partner Only

Processing Merchandise Distribution: Flow-Through (Recipient-Driven)

SAP

6

Distribute merchandise
and post goods issue



© SAP AG 2003

Internal Use SAP Partner Only

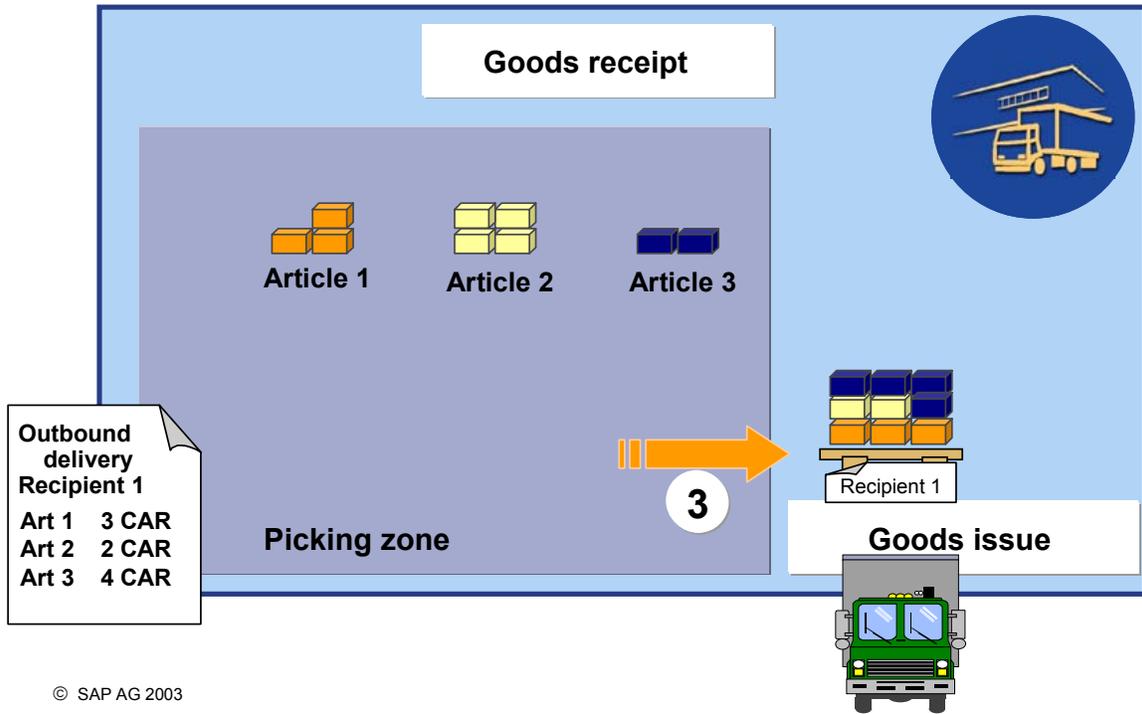
Internal Use SAP Partner Only

Processing Merchandise Distribution: Flow-Through (Recipient-Driven)

SAP

6

Distribute merchandise
and post goods issue



Internal Use SAP Partner Only

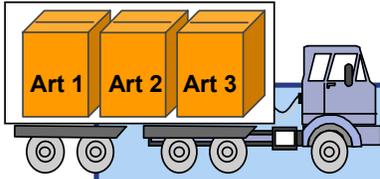
Internal Use SAP Partner Only

Processing Merchandise Distribution: Flow-Through (Merchandise-Driven)

SAP

6

Distribute merchandise
and post goods issue



Goods receipt



Distribution zone

Goods issue

© SAP AG 2003

Internal Use SAP Partner Only

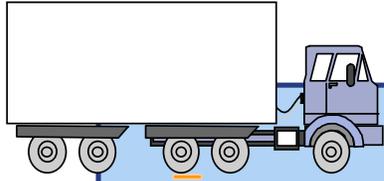
Internal Use SAP Partner Only

Processing Merchandise Distribution: Flow-Through (Merchandise-Driven)

SAP

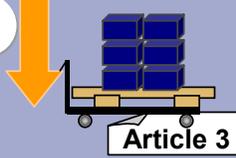
6

Distribute merchandise
and post goods issue

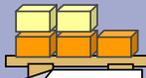


Goods receipt

1



Article 3



Recipient 1



Recipient 2



Recipient 3

Distribution zone

Goods issue

Distribution Order
Article 3

| | | |
|-------------|---|-----|
| Recipient 1 | 2 | CAR |
| Recipient 2 | 1 | CAR |
| Recipient 3 | 3 | CAR |

© SAP AG 2003



Internal Use SAP Partner Only

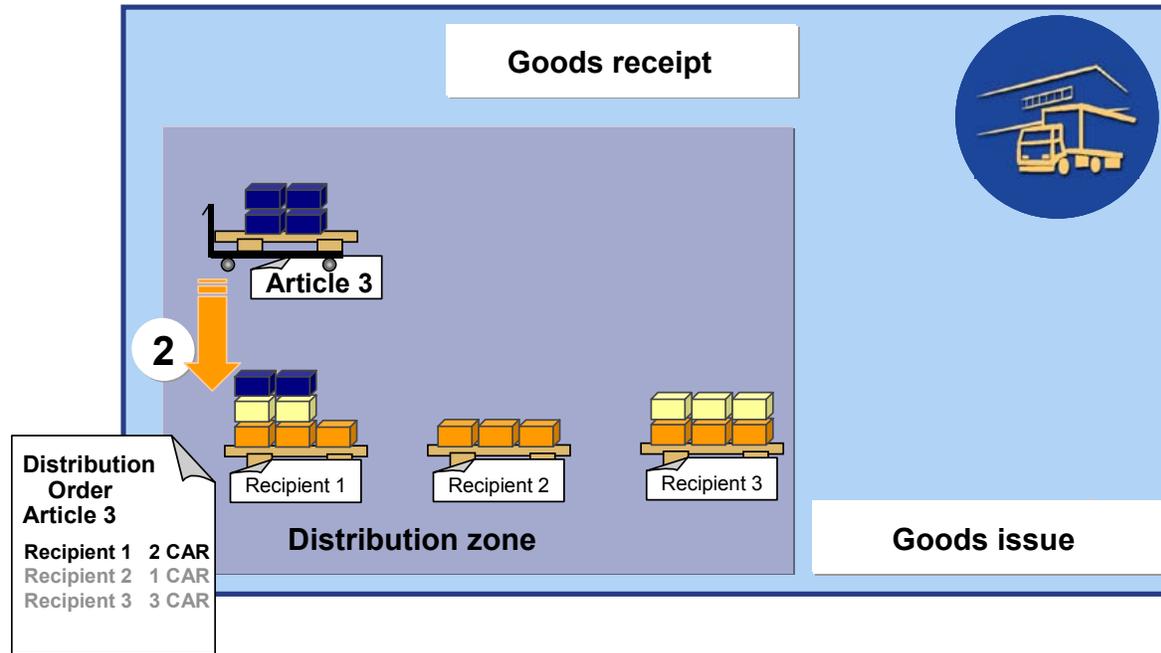
Internal Use SAP Partner Only

Processing Merchandise Distribution: Flow-Through (Merchandise-Driven)

SAP

6

Distribute merchandise
and post goods issue



© SAP AG 2003

Internal Use SAP Partner Only

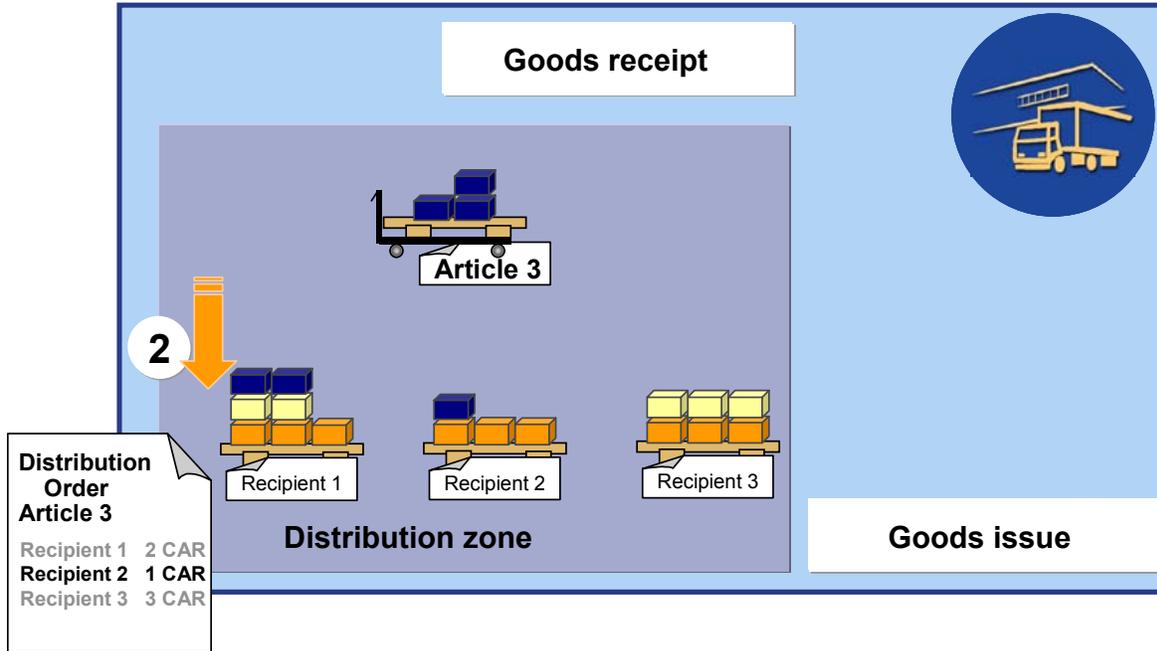
Internal Use SAP Partner Only

Processing Merchandise Distribution: Flow-Through (Merchandise-Driven)

SAP

6

Distribute merchandise
and post goods issue



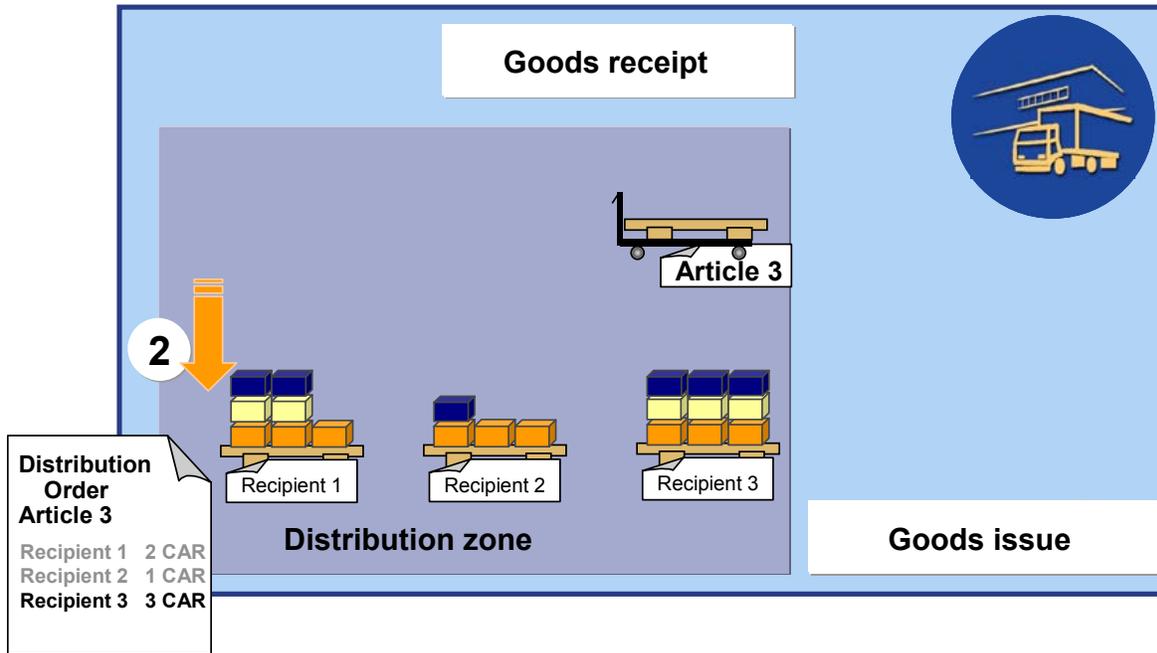
© SAP AG 2003

Processing Merchandise Distribution: Flow-Through (Merchandise-Driven)

SAP

6

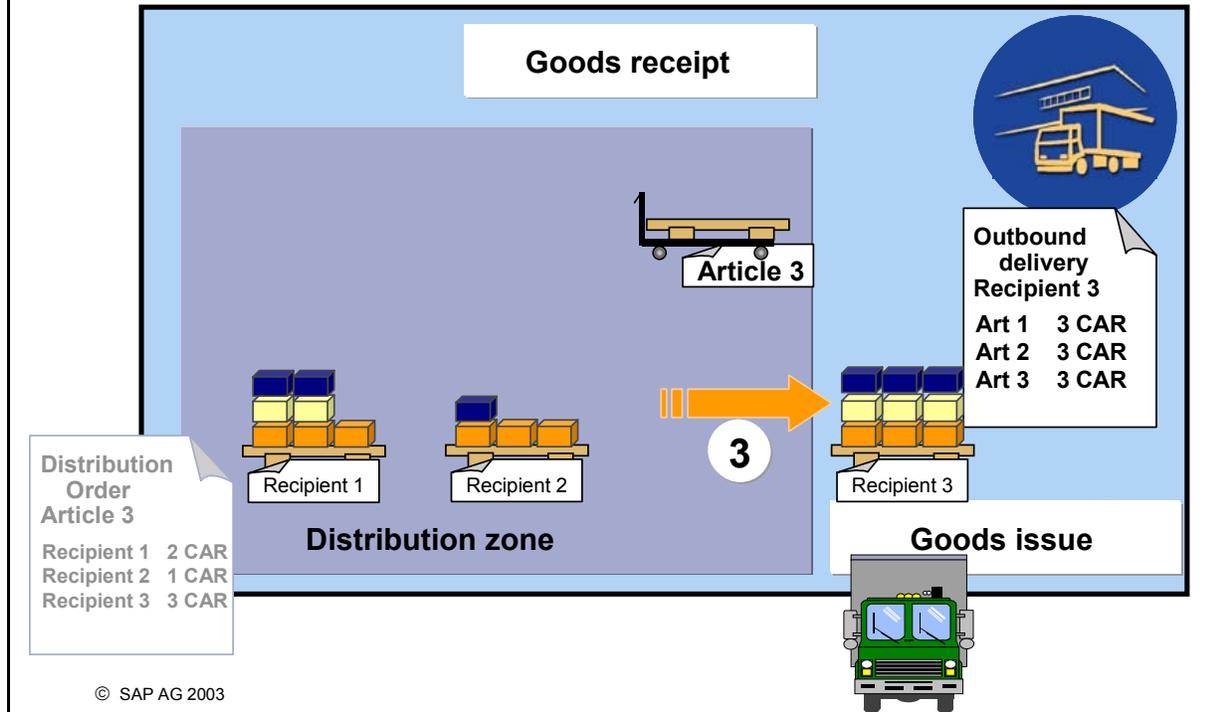
Distribute merchandise
and post goods issue



© SAP AG 2003

Internal Use SAP Partner Only

Internal Use SAP Partner Only



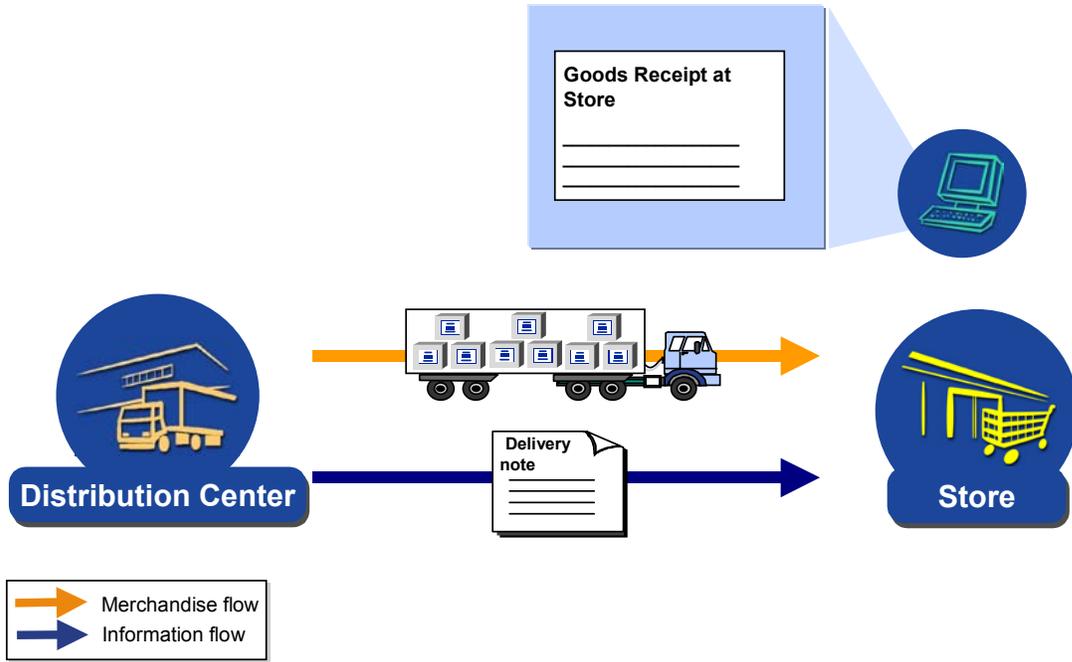
- With merchandise-driven flow through, the individual articles are distributed between the recipients once the goods issue has been posted. In the distribution center, merchandise is picked based on distribution orders.
- The distribution order is a document containing the amounts of each article that are to be picked for the individual recipients.
- Selected items for an outbound delivery can be packed in individual packaging, and are referred to as a **handling unit**.
- The handling unit is assigned a number from a defined number range or it can be identified using SSCC18 (Serialized Shipping Container Code).
- When a handling unit has been filled, an outbound delivery containing the contents of the handling unit (for example, a pallet) is generated and the goods issue is posted.
- This procedure can only be used in conjunction with Lean Warehouse Management.

Posting Goods Receipt at Store

SAP

Post goods receipt at store

5



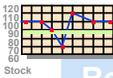
© SAP AG 2004

Internal Use SAP Partner Only

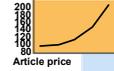
Internal Use SAP Partner Only



Perishables planning



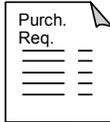
Requirements planning



Plan requirements for a distribution center

Investment buying

Purchase requisition



If necessary:

- Supply source determination
- Quantity optimizing
- Automatic load building
- Release procedure

Purchase order



Planning Workbench

If necessary:

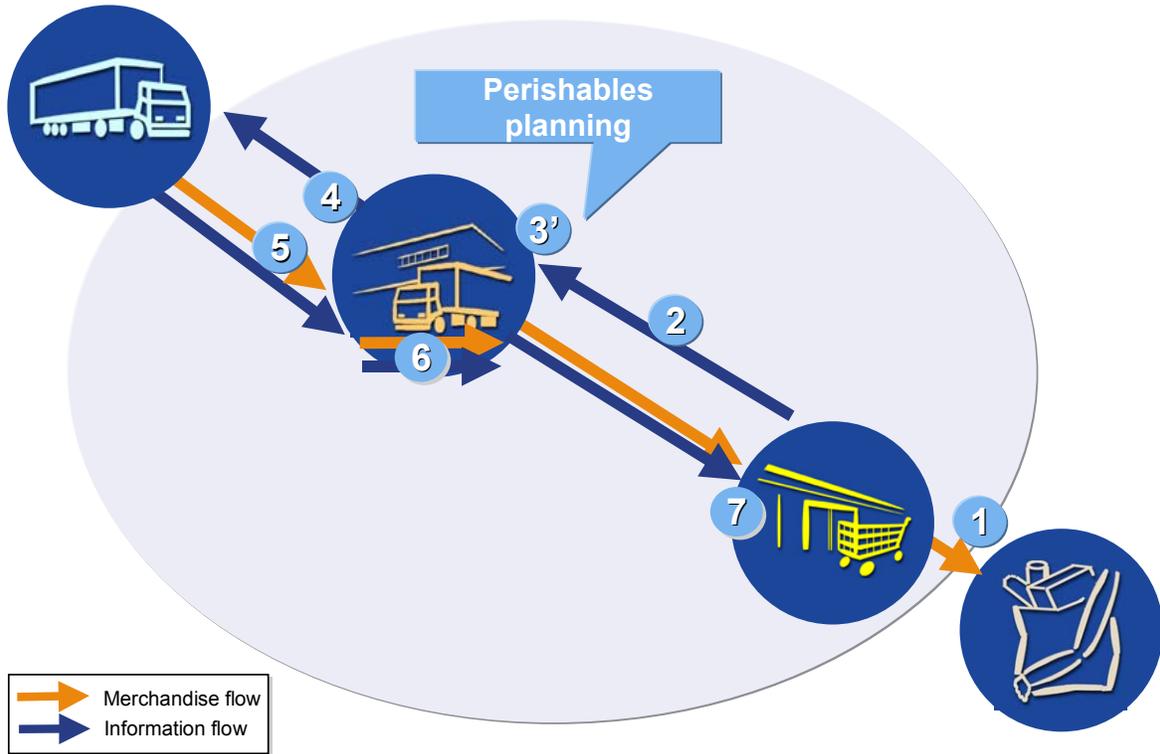
- Manual load building
- Additional requirements planning
- Release procedure

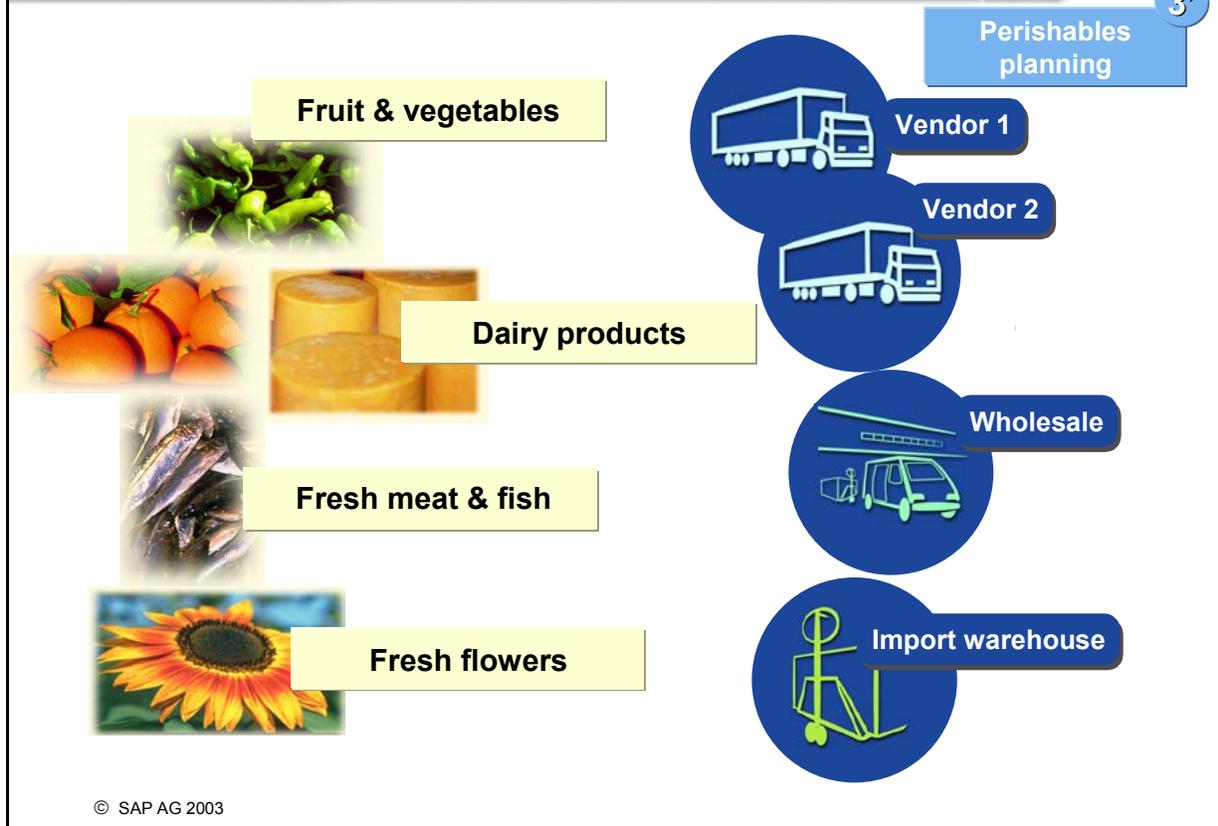
© SAP AG 2003

Internal Use SAP Partner Only

Internal Use SAP Partner Only

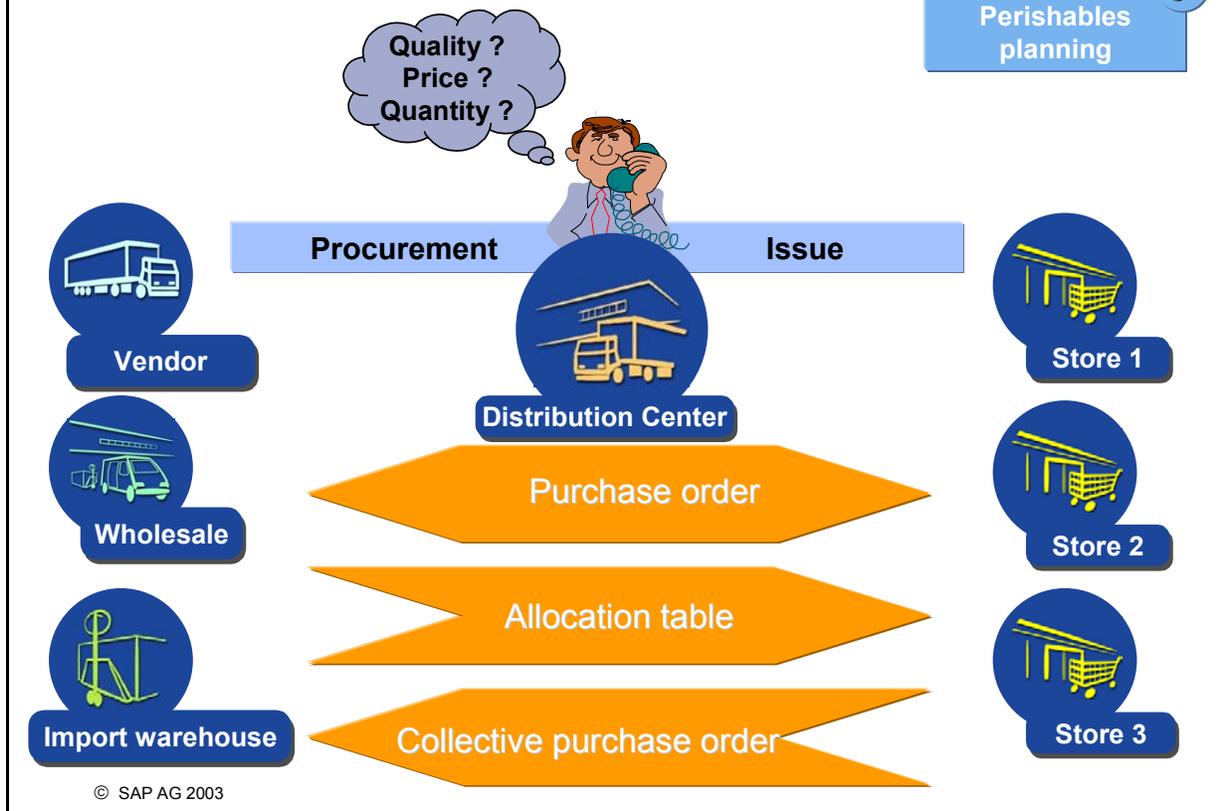
Perishables Planning: Process Overview





© SAP AG 2003

- **Perishable products** are articles that normally have **very short shelf lives** and can be procured from **different vendors** who, in turn, have limited delivery capacities. To ensure that perishables sell well, the merchandise must look fresh when it is on display for customers. It is therefore very important that the time period between the merchandise being picked and being sold is as short as possible. Ideally, this time period should not exceed 24 hours.
- As well as for normal perishable products, you can use the functionality described here for other articles that can be procured from more than one vendor.
- The special functions and procedures for requirements planning, procurement and distribution of perishables enable you to use efficient, optimized logistics processes. They enable you to analyze requirements and the current market situation quickly, help you make decisions and enable you to order articles efficiently and speedily.



- There are three different variations of perishables processing at your disposal:
 - **Purchase order:** This variant can be used centrally and decentrally in stores for procuring and distributing perishables. Thanks to manual access, this variant provides you with the maximum influence over the entire process. You can use this transaction to forecast quantities, create cost prices, calculate retail prices, and order perishables. Follow-up functions when posting data are sales orders, allocation tables and collective purchase orders.
 - **Allocation table:** This variant was conceived to fulfill the specific requirements at headquarters. This variant uses the allocation table to distribute the total quantity of an article that has been ordered to stores (push concept).
 - **Collective purchase order:** This variant is used at headquarters to handle merchandise using the pull concept. This method uses existing store orders and their follow-on documents to determine order quantities. This data is then used to generate collective purchase orders.

Assortment list

Store or DC: R300

Assortment list type R

Processing method:
 Purchase order
 Allocation table
 Collective PO

Procurement period: 03/01- 03/02

Sales period: 03/02- 03/03



Perishables Planning List

| Article | Vendor | PO quantity | Net price | ... |
|---------|----------|-------------|-----------|-----|
| Apples | Allfresh | 10 CRT | \$1.29 | |
| | Omnium | 20 CRT | \$1.43 | |
| Oranges | Allfresh | 15 CAR | \$2.13 | |
| ... | | | | |

© SAP AG 2003

- The assortment list for the site for which planning data is being created is the basis of the perishables planning list. The articles must be listed for the site. You can call further functions for procuring and distributing perishables from the perishables planning list. For example, you can change existing purchase orders.
- The functions *Allocation tables* and *Collective purchase orders* do not use the prices contained in the perishables planning list - they use independently calculated prices. It is therefore not possible to enter cost prices in the perishables planning list when using this processing procedure.

Perishables Planning List: Creation

SAP

3'

POS sales period: 02/01- 03/01

Perishables planning

Current stock
+ vendor orders
- store orders

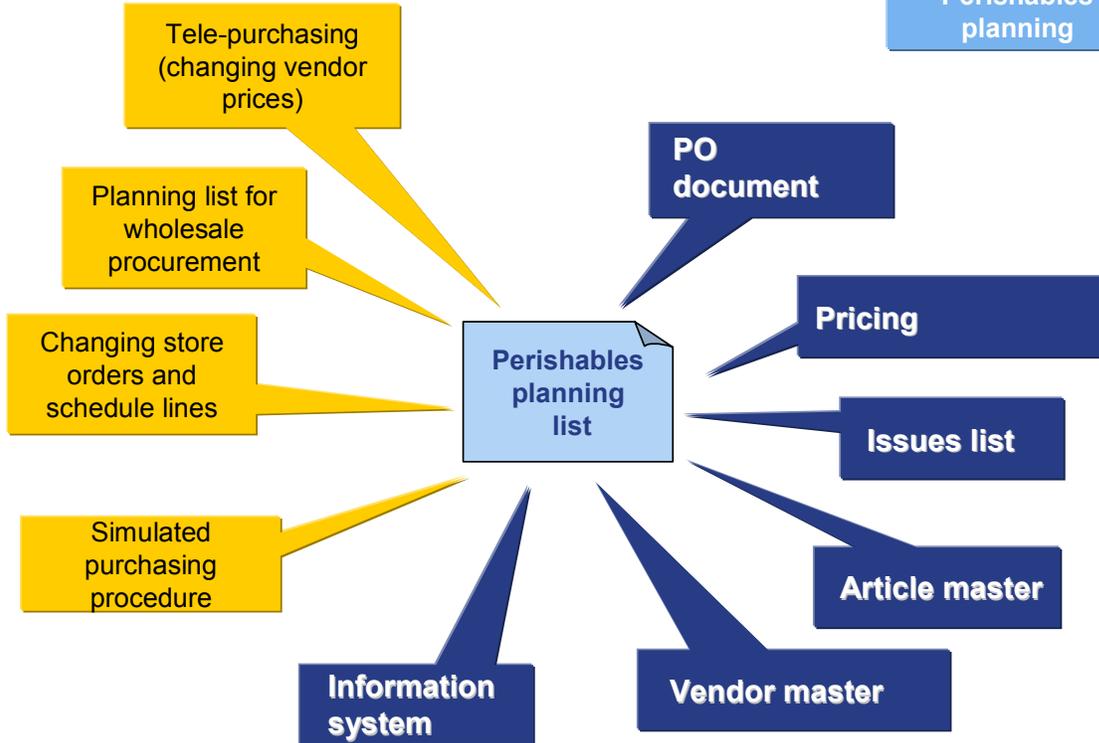
Sales

Perishables Planning List

| Article | Vendor | PO quantity | Net price | Retail price | Remaining qty | Sold qty | ... |
|----------------|----------|-------------|-------------|--------------|---------------|----------|-----|
| Apples | | | | | | | |
| | Allfresh | 10 CRT | 1.29 USD/lb | 2.29 USD/lb | 98 lb | 536 lb | |
| | Omnium | 20 CRT | 1.43 USD/lb | 2.49 USD/lb | 103 lb | 229 lb | |
| Oranges | | | | | | | |
| | Allfresh | 15 CAR | 2.13 USD/lb | 3.99 USD/lb | 59 lb | 427 lb | |
| ... | | | | | | | |

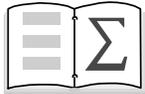
© SAP AG 2003

- The system calculates the remaining quantity of each article, thus making it easier to identify the quantities to be ordered. A simple calculation rule is used to calculate the required quantities (see the slide). You can replace this rule by implementing your own user exit.
- If you want to use the perishables information system to calculate forecast quantities, you have to activate updating for perishables info structure S160 (Customizing).
- The POS sales period is used as the comparison time period when calculating the quantity of merchandise that has been sold.



© SAP AG 2003

- You can use SAPPhone to create a direct link between the perishables buyer and the perishables vendor so that they can discuss purchasing business directly by telephone. (For more information, see the SAP Retail documentation for *Tele-Purchasing for Perishables*).
- You can generate a planning list specifically for wholesale procurement.
- You can simulate the posting procedure to test the settings that you have made. A comprehensive error log is available to help you in doing this.
- Pricing and the information system are linked.
- You can use the interactive issues list to define the quantities and delivery data for the individual recipients and to change the data created by the system.
- For more information about this, see the SAP Retail documentation for the *Perishables planning list*.



You are now able to:

- **Create a stock transport order in the SAP Retail Store using the store order**
- **List the most important steps for generating a collective purchase order**
- **Name the advantages of using cross-docking and flow-through**
- **Post goods receipt in the store using SAP Retail Store**
- **Use the functions of the perishables planning list**

© SAP AG 2003



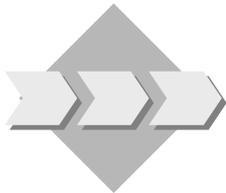
Unit: From the Vendor to the Store by Cross-Docking

Topic: SAP Retail Store



After completing this exercise you will be able to:

- Create a store order for a store using SAP Retail Store
- Generate the follow-on documents for the store order in SAP Retail Store and check the documents that are produced



You work in a store and decide that for certain articles, you require additional merchandise from the distribution center.



When navigating in SAP Retail Store, use the control elements only and not the browser elements.

1-1 Your store **T2##** uses SAP Retail Store, enabling you to create store orders.

1-1-1 Logon with the URL:

[http:// igTTR-<client>.wdf.sap.corp:1080/sap/its/homepages/sapstore.htm](http://igTTR-<client>.wdf.sap.corp:1080/sap/its/homepages/sapstore.htm)

to SAP Retail Store. Use the same logon data as in the standard SAP system (language, system, client), and start SAP Retail Store.

1-1-2 You log on to the SAP Retail Store using the same user as in R/3. You are a co-worker in store **T2##**.

1-1-3 Use the *Information* area to get an overview of all remaining open goods receipts. Select them by article **R100000/R100008** or by vendor **DC T7##**. Are there any open purchase orders for your store **T2##**?

1-2 You want to order two articles from the distribution center. To do this, go to the *Purchasing* area to create a store order for your store **T2##**.

1-2-1 Find articles **R100000** and **R100008** from the *Perishables* assortment list. The next substructure of the assortment list is the merchandise category. What are the barcodes for the two objects?

R100000: _____

R100008: _____

(The assortment list only contains a *Perishables* node if you entered assortment list profile 0010 for the site master for store **T2##**, and changed the language).

1-2-2 Before you send off a purchase order for the two articles, you make sure that DC T7## is entered as a vendor for supply source determination. Where do you have to make these settings?

1-2-3 Order the following quantities of the two articles and enter the current stock for store T2##.

| | PO quantity | Base Unit of Measure | Stock |
|----------------|--------------------|-----------------------------|--------------|
| R100000 | 100 | CAR | |
| R100008 | 150 | CRT | |

1-2-4 You conclude the ordering process by choosing the *Post Order List* pushbutton. Make a note of the purchase order number:

1-3 At a later point in time you want to take another look at the store order follow-on documents (stock transport orders). To do this, choose function **Store order follow-on documents** in the *Purchasing* area.

1-3-1 You find all the current purchase orders for your store **T2##**. Display the list. Check that the documents you created in 1-2-4 are included in the list. Bear in mind that only the purchase orders created in the **SAP Retail Store** are displayed here.

- 1-4 Now go to your R/3 Retail system and make sure that the additional SLS (**R100043** Supplementary Logistics Services) is entered in the additional data for the article master data **R100000** and **R100008** for the merchandise distribution to come. Which method do you use?

- 1-5 For the remaining exercises in this unit, create a new purchase order (stock transport order) in the SAP Retail System using the following data:

| | | |
|-------|---------------------------------|-----------------------------|
| 1-3-1 | <i>Order type:</i> | Stock transport ord. |
| | <i>Supplying site:</i> | T7## |
| | <i>Purchasing organization:</i> | R300 |
| | <i>Purchasing group:</i> | R30 |
| | <i>Company code:</i> | R300 |
| | <i>Order items:</i> | R100000 80 CAR |
| | | R100008 40 CRT |
| | <i>Delivery date:</i> | Day after tomorrow |
| | <i>Site:</i> | T1## |
| | <i>Storage location:</i> | Standard |

PO number: _____



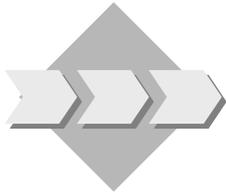
Unit: From the Vendor to the Store by Cross-Docking

Topic: Merchandise Distribution



After completing this exercise you will be able to:

- Create a collective purchase order for cross-docking deliveries
- Process the purchase orders for your stores up to goods issue in cross-docking



Before procuring merchandise, you group the stock transport orders from your stores into a collective purchase order for an external vendor. When goods are received in the distribution center, the article quantities are divided into stock transport orders and sent to goods issue immediately, together with the relevant documents.

- 2-1 The stock transport orders for your stores are now grouped into a collective purchase order in merchandise distribution, for an external vendor.
- 2-1-1 First, you want to create a new distribution profile for your distribution center. On the *Purchasing/Distribution* tab page, assign *distribution profile 004* (manual adjustment and documents) to *site T7##*.
- 2-1-2 Create a collective purchase order for *distribution center T7##* and *purchasing organization R300*. You want to run procurement for all articles that have to be delivered to your store by this Friday. The merchandise for the order is to be in your distribution center for no longer than one working day. You should therefore select the *schedule line interval 1*.
Which articles does your system propose in the worklist?

How can you find out which stock transport orders are to be used to calculate the purchase order quantity?

- 2-1-3 Let your system suggest a vendor for the article items. Your system may already have displayed a vendor for you.
Which vendor did your system suggest?
-

Generate the purchase order and note the number:

- 2-1-4 Display the purchase order in your system.
To which *site* are the articles to be delivered?
In which *storage location* do you want to process the goods receipt?
-

2-2 After goods receipt at the distribution center, the received quantities are distributed to the individual stock transport orders for the stores. They are then moved to goods issue immediately, together with the relevant delivery documents.

2-2-1 The complete merchandise is delivered to distribution center **T7##**. You post the goods receipt for your (collective) purchase order.
Note the article document number:

2-2-2 Next, go to the merchandise distribution monitor. Display merchandise distribution for *distribution center T7##* and the number of your collective purchase order. Use display variant **/IRT100**. How do you identify that no adjustments have yet been made?

2-2-3 From the distribution monitor, go to goods receipt adjustment in your distribution center **T7##**. To do this, select the items from your collective purchase order (red) from exercise 2-1-3.
What article quantities are intended for cross-docking?
Article **R100000**
Article **R100008**

2-2-4 After adjusting merchandise distribution, you return to the distribution monitor. Choose the *Refresh* pushbutton. What has changed?

2-2-5 The next step to generate follow-on documents. They represent outbound deliveries that document the distribution of merchandise from the distribution center to the stores.

From the distribution monitor, go to follow-on document generation. To do this, select the items from your stock transport order (white) from exercise 2-1-3.

You can use the purchase order history to obtain details about the document type and the number of documents for each purchase order item. Ensure that you are actually in the stock transport order that you created.

Document: _____

Number: _____

2-2-6 Display the outbound delivery in your system.
Which storage location has been found for picking the individual items?

Which picking status do the article items have?

Picking status:

How does this influence how your delivery is processed?

- 2-2-7 Use the delivery monitor for the **outbound process** to create goods issue for all outbound deliveries to be posted.
You then process all your outbound deliveries for *shipping point R300*.
- 2-2-8* You want to add a delivery note to your outbound delivery. Follow menu path *Goods Issue for Outbound Delivery – Outbound Delivery – Change – Single Document Subsequent Functions – Output From Deliveries* to create a delivery message for your outbound delivery. The message should belong to message type **LD00**. Display the delivery note.
- 2-3* You want more information about the documents that you have created.
- 2-3-1 Display the purchase order history for the items in your vendor order and your stock transport order. Which follow-on documents are displayed?
Follow-on documents for vendor order:

Follow-on documents for the stock transport order:
- 2-3-2 To complete the process, you can post the goods receipt for both articles in store **T1##** (or store **T2##**). You can either do this from the SAP Retail System or from SAP Retail Store.
When doing so, use the goods receipt for another reference and reference the outbound delivery numbers for your stock transport order(s).



Unit: From the Vendor to the Store by Cross-Docking

Topic: SAP Retail Store



All the steps detailed in these solutions start from the Retailing screen:

SAP menu → Logistics → Retailing



When navigating in SAP Retail Store, use the control elements only and not the browser elements.

1-1 Your store **T2##** uses SAP Retail Store, enabling you to create store orders.

Calling SAP Retail Store

1-1-1 Do this using your favorites, or call Internet Explorer and enter the following address:

| Field name/data type | Values |
|----------------------|--|
| <i>Address</i> | http:// igTTR- <client>.wdf.sap.corp:1080/sap/its/homepages/ sapstore.htm |

To log on to the SAP Retail Store, choose **English** as your language, TTR as the training system, and your training client number.

Choose the **[Start SAP Store]** pushbutton.

1-1-2

| Field name or data type | Values |
|-------------------------|----------------------------|
| <i>Name</i> | IRT100-## |
| <i>Password</i> | (Your R/3 password) |
| <i>Language</i> | English |
| <i>Store</i> | T2## |

Pushbutton **[LogOn]**

- 1-1-3 Use the *Information* area to get an overview of all expected goods receipts. Here, you can find out whether there are any remaining open purchase orders. Enter **T7##** in the *Vendor* field and choose the *Find* pushbutton.

- 1-2 You want to order two articles from the distribution center. To do this, go to the *Purchasing* area to create a store order for your store **T2##**.

- 1-2-1 What are the barcodes for the two objects?

R100000: 2050000000966

R100008: 25000054

- 1-2-3 Before you send off a purchase order for the two articles, you make sure that **DC T7##** is entered as a vendor for supply source determination. Where do you have to make these settings?

DC T7## must be entered in the *Vendor* field

- 1-2-3 Order the following quantities of the two articles and enter the current stock for store **T2##**.

| | PO quantity | Base Unit of Measure | Stock |
|----------------|-------------|----------------------|-------|
| R100000 | 100 | CAR | 7 |
| R100008 | 150 | CRT | 0 |

- 1-2-4 Pushbutton **Post order list**.

- 1-3 At a later point in time you want to take another look at the store order follow-on documents (stock transport orders). To do this, choose function **Store order follow-on documents** in the *Purchasing* area.

- 1-3-2 You find all the current purchase orders for your store **T2##**. Display the list. Check that the documents you created in 1-2-4 are included in the list. Bear in mind that only the purchase orders created in the *SAP Retail Store* are displayed here.

Store number: T2##

[Execute]



Unit: From the Vendor to the Store by Cross-Docking

Topic: Merchandise Distribution

2-1

2-1-1 *Master data → Site data → Site → Change*

| Field name or data type | Values |
|-------------------------|-------------|
| <i>Site</i> | <i>T7##</i> |

[Enter]

Tabstrip: *Purchasing/Distribution*

| Field name or data type | Values |
|-----------------------------|------------|
| <i>Distribution profile</i> | <i>004</i> |

Site → Save, [Back]

2-1-2 *Merchandise logistics → Merchandise distribution → Collective purchase order → Create*

| Field name or data type | Values |
|---|-------------------------------------|
| <i>Distribution Center</i> | <i>T7##</i> |
| <i>Purchasing organization</i> | <i>R300</i> |
| <i>Procurement period - date</i> | <i>From today until next Friday</i> |
| <i>Schedule-line interval</i> | <i>1</i> |
| Tabstrip <i>Articles</i> <i>Processing types</i> | <i>Select all processing types</i> |

Do not change any other settings and choose
Program → Execute or *[F8]*

Articles in worklist: **R100000** and **R100008**

How can you find out which stock transport orders are to be used to calculate the purchase order quantity?

Select the lines in the worklist

Goto → Display Details, the worklist contains the stock transport order number here

[Exit]

- 2-1-3 The source of supply is required before collective purchase orders can be created. The result of supply source determination is found in the *Vendor* column. Select the lines required, and then choose **Edit → Find source of supply**

Collective purchase order → Generate → Total worklist

The *Doc. number* column contains the purchase order number.

- 2-1-4 **Merchandise logistics → Merchandise distribution → Collective purchase order → Display**

Purchase order → Other purch. order

Enter your purchase order number from 2-1-3 and choose **[Enter]**.

In the *Item overview*, choose pushbutton **[Display/Change]** and enter the following for each item:

Site **T7##**

Storage location **CD Storage Location (0003)**

Choose **[Back]** to get to the *SAP Easy Access* menu for SAP Retail.

- 2-2 After goods receipt at the distribution center, the received quantities are distributed to the individual stock transport orders for the stores. They are then moved to goods issue immediately, together with the relevant delivery documents.

- 2-2-1 **Merchandise logistics → Goods receipt → Goods receipt for purchase order**

| Field name or data type | Values |
|-------------------------|--|
| <i>Movement Type</i> | <i>101</i> |
| <i>Purchase Order</i> | <i>Collective purchase order number from 2-1-3</i> |

[Enter]

Button **[Adopt + Details]**

Confirm any warning messages by choosing **[Enter]**.

Goods receipt → Post

[Back] to the *SAP Easy Access* menu

- 2-2-2 Next, go to the merchandise distribution monitor. Display merchandise distribution for *distribution center T7##* and the number of your collective purchase order. Use display variant */IRT100*. How do you identify that no adjustments have yet been made?

Merchandise logistics → Merchandise distribution → Distribution → Monitor

| Field name or data type | Values |
|----------------------------|-------------------|
| <i>Distribution Center</i> | T7## |
| <i>PO number</i> | <i>See 2-1-3</i> |
| <i>Document types</i> | <i>Select all</i> |
| <i>Display variant</i> | <i>/IRT100</i> |

Program → Execute
Expand the individual items

No adjustment has yet taken place as the *Act. Quantity* for the individual items has not yet been displayed (they still have the value *0*).

- 2-2-3 From the distribution monitor, go to goods receipt adjustment in your distribution center **T7##**. To do this, select the items from your collective purchase order (red) from exercise 2-1-3. **Button → Adjust**

The *CD quantity* column contains the cross-docking quantities for each of the stock transport items for the article concerned.

Display the distribution for an additional article by choosing **Goto → Next Item**.

Distribution → Save → Total
[Back] to the *SAP Easy Access* menu

- 2-2-4 After adjusting merchandise distribution, you return to the distribution monitor. Choose the *Refresh* pushbutton. What has changed?

Distribution → Refresh
[Back] to the *SAP Easy Access* menu

The *CD quantity* column contains the cross-docking quantities for each of the stock transport items for the article concerned.

- 2-2-5 From the distribution monitor, go to follow-on document generation. To do this, select the items from your stock transport order (white) from exercise 2-1-3.

You can use the purchase order history to obtain details about the document type and the number of documents for each purchase order item. Ensure that you are actually in the stock transport order that you created.

Button → Adjust

After generating follow-on documents, you return to the distribution monitor. Choose the *Refresh* pushbutton.

Double-click on the stock transport order (white), in item detail (possibly ***[Expand]***) for each item
Purchase Order History tab page, an outbound delivery was created.

- 2-2-6 Display the outbound delivery in your system.
Which storage location has been found for picking the individual items?

Double-click on the outbound delivery, *Picking* tab page
storage location **0003** (cross-docking storage location)

What is the pick status of the article items?

Pick status: (column *K*) **not pick-relevant**
(Note: It is best to view this information in item detail:
select item then choose the magnifying glass icon)

What significance does this have for subsequent processing of this outbound delivery?

The goods issue for this delivery can be posted immediately without first having to run picking in the warehouse.

[Back] to the *SAP Easy Access* menu.

2-2-7 Use the delivery monitor for the **outbound process** to create goods issue for all outbound deliveries to be posted. Display the outbound delivery in your system.

You then process all your outbound deliveries for *shipping point R300*.

Merchandise Logistics → Logistics Execution → Goods Issue Process → Goods Issue for Delivery → Goods Issue Posting → Collective Processing via Delivery Monitor

| Field name or data type | Values |
|-----------------------------|------------------------------|
| <i>Pland gds mvmnt date</i> | From today until next Friday |
| Edit → All selections | |
| <i>Created by</i> | <i>IRT100-##</i> |

Program → Execute

Select deliveries.

Subsequent Functions → Post goods issue

Confirm the dialog box concerning the actual merchandise movement date by selecting ***[Enter]***.

2-2-8* You want to add a delivery note to your outbound delivery. Follow the menu path

Goods Issue for Outbound Delivery Outbound Delivery → Change → Single Document → Subsequent Functions → Output from Deliveries to create a delivery message for message type **LD00** for your outbound delivery. Display the delivery note. Select the outbound delivery, then choose ***Goto → View***

[Back] to the *SAP Easy Access* Menu

2-3* You want more information about the documents that you have created.

Purchasing → Purchase order → Display Purchase Order

2-3-1 Display the stock transport orders and vendor orders simultaneously. Switch between the documents by choosing ***Purchase order → Other purch. order***

If required, view the item details subscreen by selecting ***[Expand]*** and then ***Purchase order history*** tabstrip.

The follow-on documents are:

For the vendor order: **Article document** (goods receipt)

For the stock transport order: **Article document** (goods issue)
Delivery

[Back] to the *SAP Easy Access* menu.

Contents:

- **Process Overview**
- **Reporting in the Business Information Warehouse (BW)**
- **Promotions**
- **Allocation table**
- **Discontinuation and Archiving**
- **Summary**

© SAP AG 2004



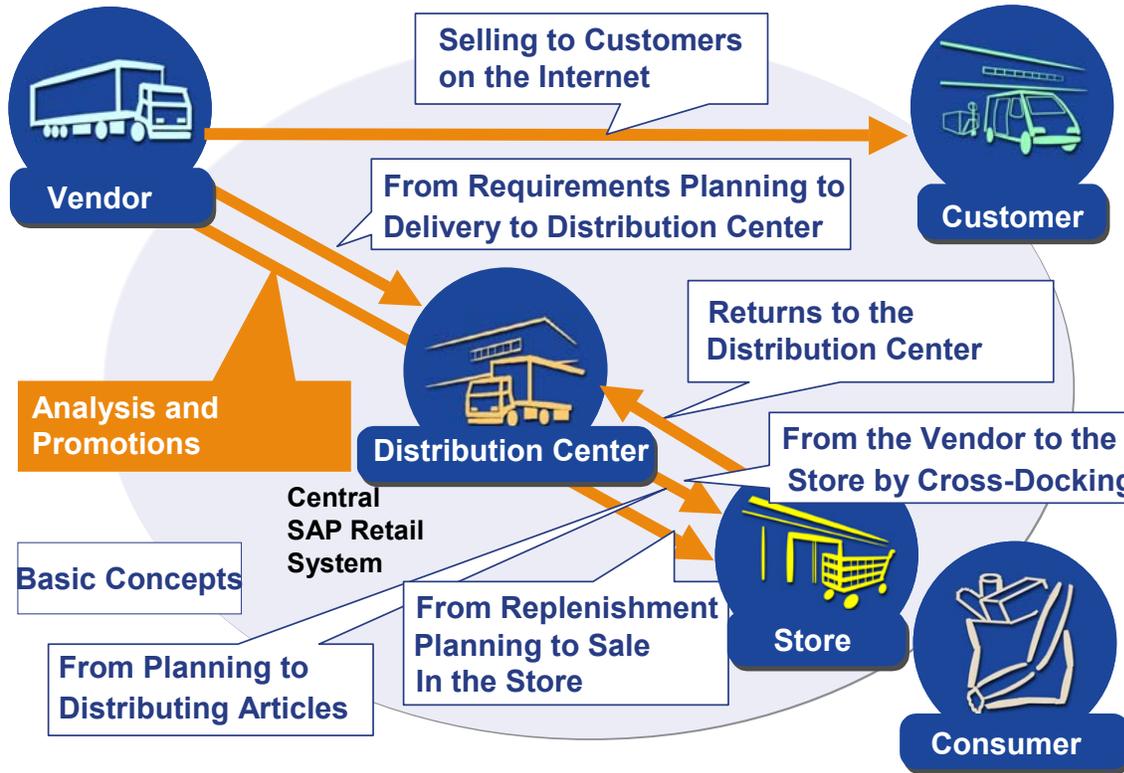
At the conclusion of this unit, you will be able to:

- **Display analyses in the Business Information Warehouse (BW)**
- **Create a promotion and trigger follow-up functions**
- **Name the most important functions for allocation tables**
- **Describe discontinuation and archiving in SAP Retail**

© SAP AG 2004

Overview Diagram

SAP



© SAP AG 2004

Internal Use SAP Partner Only

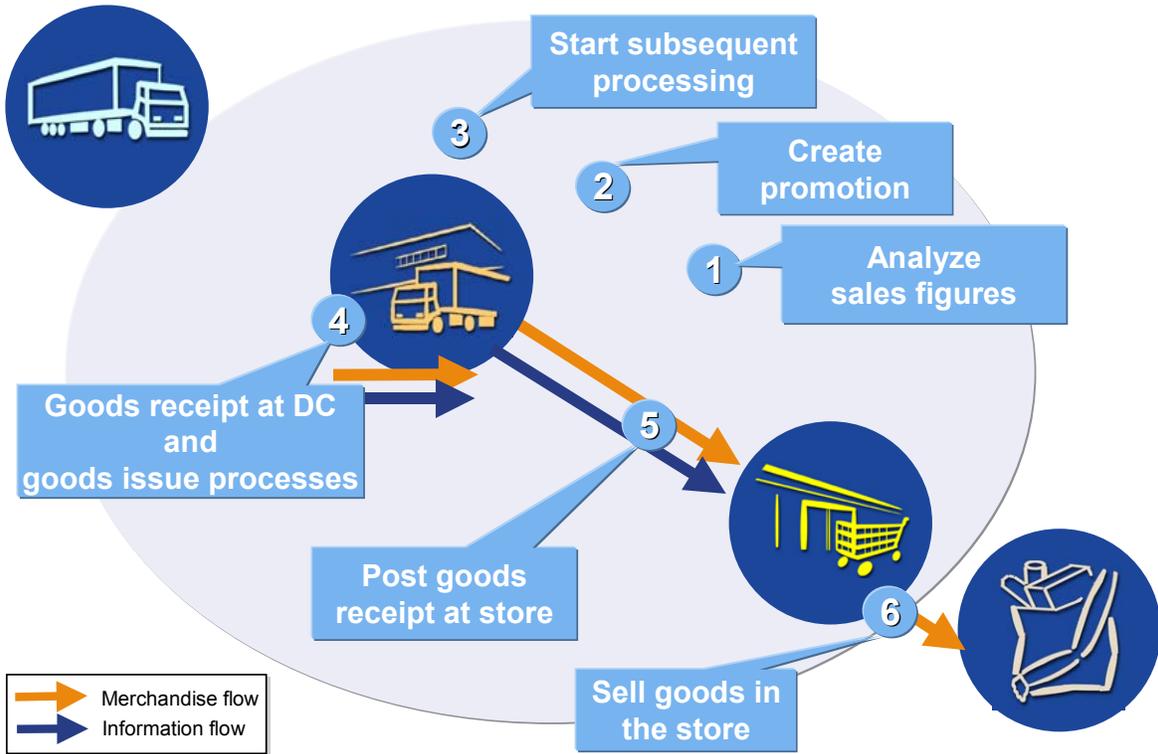
Internal Use SAP Partner Only



- You receive sales data for your articles on a day-to-day basis.
- You decide to put a bad-performing article on promotion to improve sales. The promotion should also include other articles. You can perform quantity allocation using the allocation table.
- After having analyzed the results of the promotion, you decide to discontinue the article completely.
- To guarantee good performance in the long term, you start using the archiving process at an early stage.

© SAP AG 2004

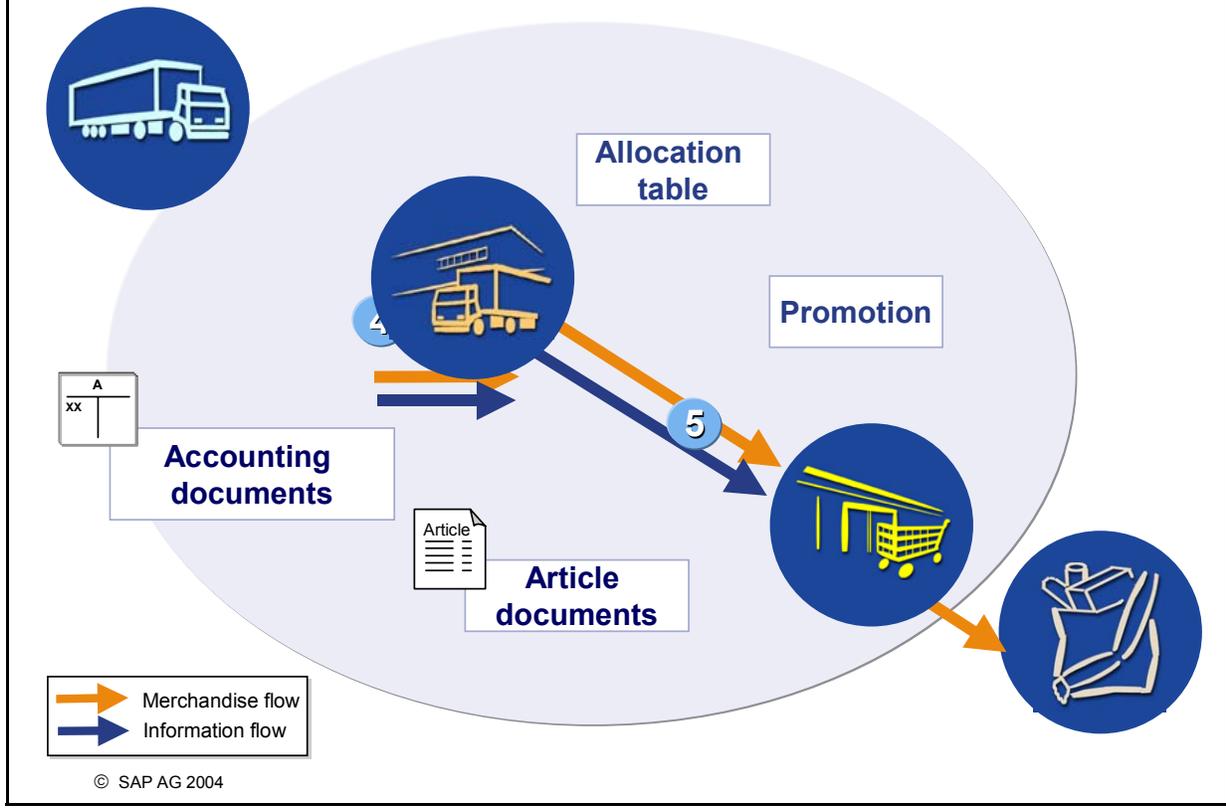
Analysis and Promotions: Process Overview



© SAP AG 2004

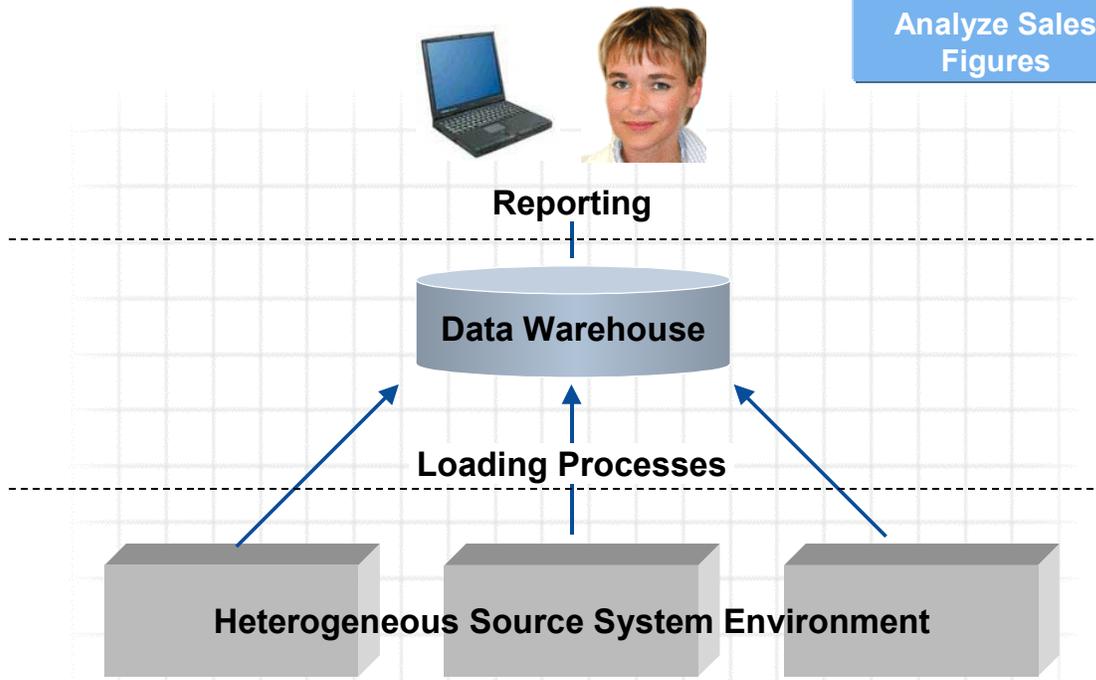
Internal Use SAP Partner Only

Internal Use SAP Partner Only



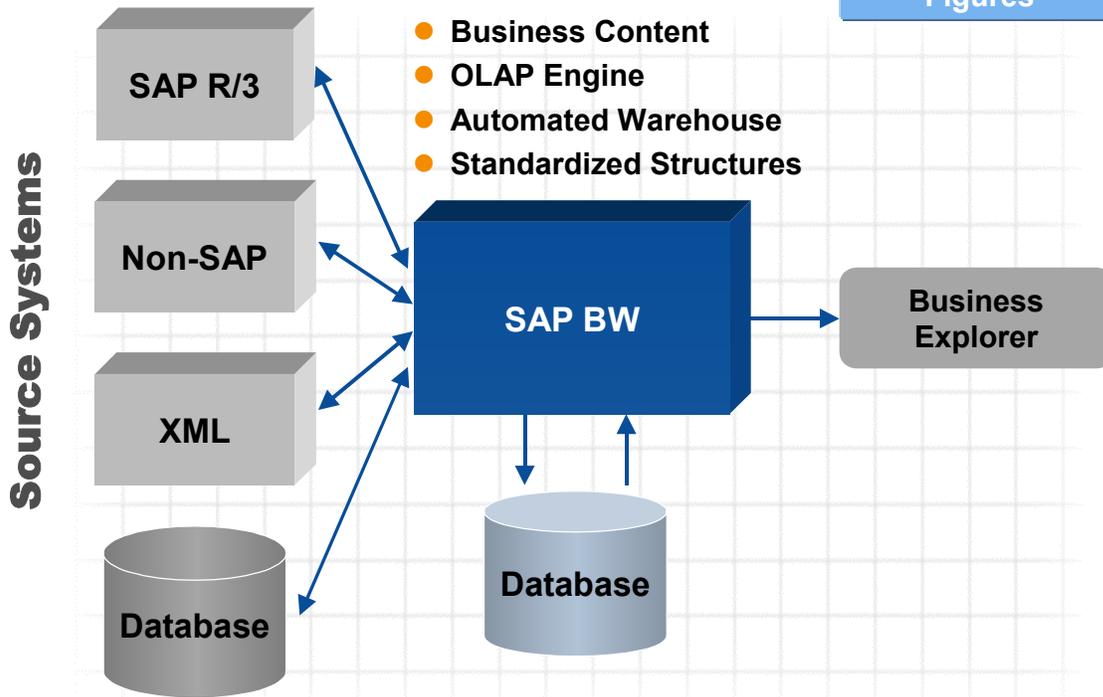
Internal Use SAP Partner Only

Internal Use SAP Partner Only



© SAP AG 2004

- A data warehouse system is primarily used to provide information from different data sources. This data, information and the resulting reports constitute the basis for successful processing of business processes in a company.
- Reports and analysis functions allow the user to check data for differences or inconsistencies. The following tasks can, for example, be performed with SAP BW in the area of Retail:
 - Monitoring the merchandise assortment to identify slow-moving and fast-selling items
 - Performing analyses to determine the profitability of different branches
 - Analyzing customer queries and complaints
 - Analyzing warehouse stock
 - Using receipts to analyze shopping baskets
- This kind of system can be implemented for employees at all levels of a firm (for example, manager, head of department).



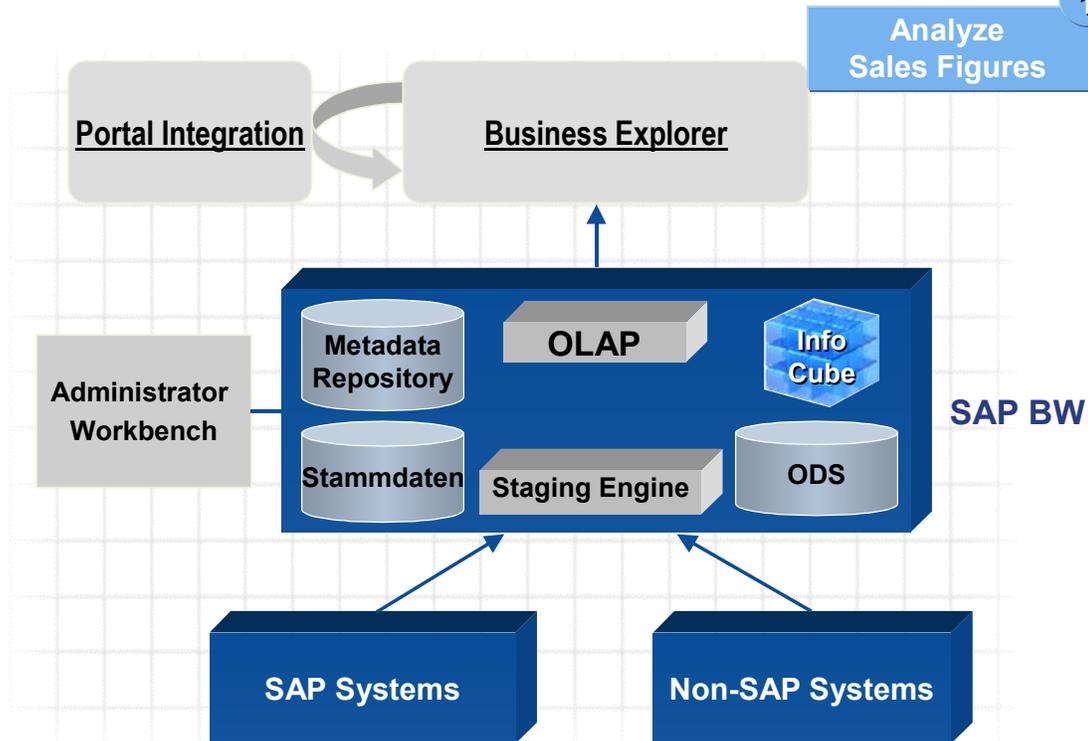
© SAP AG 2004

- For homogenous, consistent data collection, there must be one central point from which data can be called. For this reason, SAP BW uses a separate database in which a standalone application environment is able to provide the services required.
- It is absolutely imperative that efficient analysis techniques with clear, meaningful multimedia display options are available at presentation level in SAP BW.
- Simple but comprehensive preparation of the required data is all that the source system need do before transferring the data to SAP BW.
- The system (data retention, loading processes, reporting) preconfigured by the Business Content for core areas and processes allows numerous different views of company-wide business.
- Between the end user and the database lies Online Analytical Processing (OLAP), a component of the BW server: It uses different interfaces to provide the BW front end with data formatted to be multidimensional. The OLAP processor has been developed specifically to perform analyses and reports for large quantities of operational and historical data.
- The end user can employ Business Explorer to look at different views of the relevant business data.

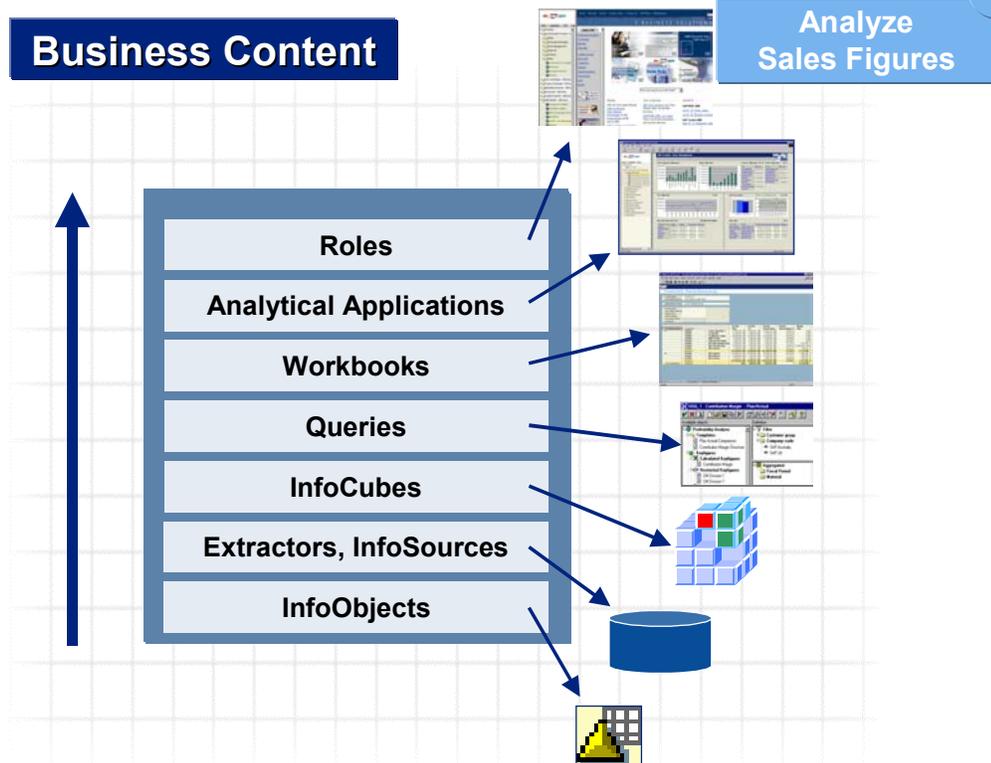
Business Information Warehouse – System Architecture

SAP

1

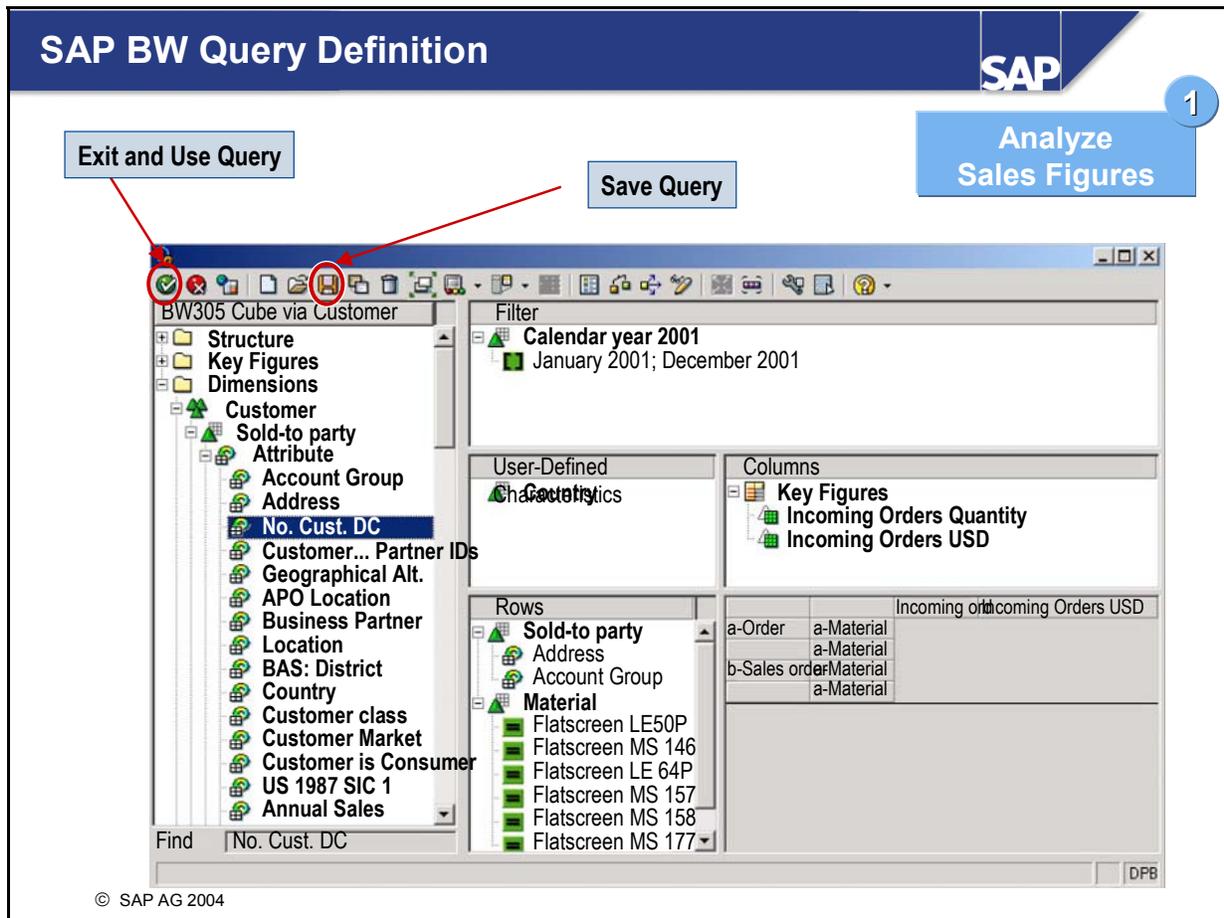


- SAP BW analyzes data from operational SAP applications and other business applications, and from external data sources, such as databases, online services and the internet.
- The Administrator Workbench (AWB) is the working environment for SAP BW administrators. SAP BW is configured, controlled and managed using the AWB functions.
- There are two types of data storage. Physical data stores include InfoCubes and ODS objects, and the second type of data stores are logical views of the physical data stores.
- The Business Explorer (BEx) is the SAP BW component that provides a flexible reporting and analysis tool for strategic analysis and support purposes. If you have the necessary authorization, you can view different levels of both historical and current data and from various perspectives, using both the Internet and Microsoft Excel.
- An Operational Data Store (ODS) is a data store in which data is stored at basic level (document level). It is generally used to clean up and consolidate datasets. Datasets are often from different data sources or source systems.



© SAP AG 2004

- The Business Content contains all the objects you need for quick reporting, from data extraction from SAP source systems to roles that provide employees in a company with all the information they need to carry out their tasks. These information models include:
 - Roles, queries and workbooks
 - InfoProviders and InfoObjects
 - Update rules and extractors for SAP R/3, mySAP.com business applications, and other selected applications.
- A role relates to a specific function in a company, for example, purchasing manager. It is linked to a particular task area, area of responsibility, and the information required for these.
- Workbooks are used to display queries. This involves creating a link between cell areas of the workbook and the data in the InfoProvider on which the query is based. This means that there is a link between the Business Explorer and the Business Information Warehouse server (BW server).
- Workbooks in which queries are inserted are the same outwardly as other Excel workbooks. They can be saved as files, copied, sent and processed (using Excel functions) and extended to include other data.



- The BEx Query Designer is divided into six subareas.
- Directory tree of the selected InfoProvider:
After the required InfoProviders have been selected, all the objects available (dimensions, key figures, structures) are displayed in the left-hand side of the Query Designer screen as a directory tree.
- Rows and columns
- User-defined characteristics:
In the user-defined characteristics area, the characteristics that are not displayed in the initial view after the query has run online or in the BEx Analyzer are transferred. It is, however, possible to integrate these characteristics using navigation steps (right mouse click). These can also be used to select filter values in the report.
- Filter:
The characteristics displayed in the filter do not appear in the breakdown, or as user-defined characteristics during the analysis of the query. They are only used as global filters to filter data from the InfoProvider.
- Preview:
This area provides a preview of the results area of the defined query.

BW Web Application - Microsoft Internet Explorer

Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites History

Address http://iwdf1621.wdf.sap-ag.de:1080/sap/bw/BEx?sap-language=DE&cmd=ldoc&TEMPLATE_ID=T_WEB_BROWSER

First Query

[Icons for various views: Table, Chart, Map, etc.]

| Sold-to party | Key Figures | | |
|---------------|---------------|--|---------------|
| | [Filter icon] | | [Filter icon] |

| Sold-to party | Sales June 2001 | Sales July 2001 |
|---------------|-----------------|-----------------|
| Beckers | 860,448.38 USD | 878,698.33 USD |
| Brite Lights | 160,268.83 USD | 98,443.41 USD |
| Cristal Clear | 680,492.53 USD | 770,000.75 USD |

© SAP AG 2004

- The BEx Web covers all BEx tools that are themselves Web-based applications, or are used to create these. The BEx Web is made up of the following components:
- The **BEx Web Application Designer**, the central desktop application for creating Web applications, allows you to create HTML pages that contain BW-specific content, such as different tables, charts or maps. You can save the Web applications as a URL, and access them via the Intranet or mobile terminals. You can also save Web applications as iViews and integrate them into an Enterprise Portal.
- The BEx Web applications created are Web-based applications from the Business Explorer used for data analysis, reporting, and analytical applications on the Internet. The **BEx Web Analyzer** is a standalone Web application that makes for easy data analysis, and allows you to define queries online.
- You can also use **BEx Mobile Intelligence** to call your Web applications on the move. You can call online (in which case, you must be connected to the BW Web Application server), or offline, in the form of static, preformatted HTML pages. Mobile Intelligence also allows you to send SMS messages to a mobile terminal, as soon as an exception arises that has been defined in the Web application.

Analyze Sales Figures

Threshold Values in Color

GR00 BW305 Exceptions

| | | Incoming Orders | | | | |
|------|--------------------------------------|-----------------------------------|-----------------------|-----------------------|-----------------------|-------------------------|
| | | 07.2001 | 08.2001 | 09.2001 | 10.2001 | Total |
| 1001 | Brite Lights | Clear 40 Watt lightbulb, 220/235V | 214,480.00 EUR | 210,267.00 EUR | 179,000.00 EUR | 648,036.00 EUR |
| | | Red 40 Watt lightbulb, 220/235V | 59,444.00 EUR | | 61,760.00 EUR | 121,204.00 EUR |
| | | Clear 60 Watt lightbulb, 220/235V | 26.38 EUR | 110,805.58 EUR | 177,587.98 EUR | 228,419.94 EUR |
| | | Red 60 Watt lightbulb, 220/235V | 54,194.00 EUR | 53,032.70 EUR | | 107,226.70 EUR |
| | | Clear 80 Watt lightbulb, 220/235V | 133,688.00 EUR | | 139,192.80 EUR | 272,880.80 EUR |
| | | Red 80 Watt lightbulb, 220/235V | | 47,176.40 EUR | | 47,176.40 EUR |
| | | Total | 461,832.38 EUR | 421,281.68 EUR | 541,829.78 EUR | 1,424,943.84 EUR |
| 1002 | Omega Soft/Hardware Market | Clear 80 Watt lightbulb, 220/235V | 31.46 EUR | 31.46 EUR | 31.46 EUR | 94.38 EUR |
| | | Total | 31.46 EUR | 31.46 EUR | 31.46 EUR | 94.38 EUR |
| 1032 | Institute for Environmental Research | Pump PRECISION 102 | | | 88,075.90 EUR | 88,075.90 EUR |
| | | Pump PRECISION 103 | | | 116,319.00 EUR | 116,319.00 EUR |
| | | Pump PRECISION 104 | | | 102,462.00 EUR | 102,462.00 EUR |
| | | Pump Standard IDESNORM 100-402 | | | 248,461.20 EUR | 248,461.20 EUR |
| | | Total | | | 555,318.10 EUR | 555,318.10 EUR |
| 1033 | Kerrs High Tech Market | Clear 60 Watt lightbulb, 220/235V | 33.91 EUR | 33.91 EUR | 33.91 EUR | 101.73 EUR |
| | | Sunny Sunny 01 | 32,502.60 EUR | 35,002.80 EUR | 40,836.60 EUR | 108,342.00 EUR |
| | | Sunny Tetra3 | 45,994.00 EUR | | | 45,994.00 EUR |
| | | Flatscreen LE 50 P | 28,994.00 EUR | 15,325.40 EUR | 18,224.80 EUR | 62,544.20 EUR |
| | | Flatscreen MS 146 | | 36,648.50 EUR | | 36,648.50 EUR |
| | | Flatscreen MS 1585 | 99,020.40 EUR | 52,964.40 EUR | | 151,984.80 EUR |
| | | Flatscreen MS 1785P | | | 82,139.40 EUR | 82,139.40 EUR |
| | | MAG DX 15F/Fe | | 32,142.50 EUR | | 32,142.50 EUR |
| | | MAG DX 17F | 68,393.60 EUR | | 43,523.20 EUR | 111,916.80 EUR |
| | | SEC Multisync XV 17 | | 56,189.00 EUR | | 56,189.00 EUR |

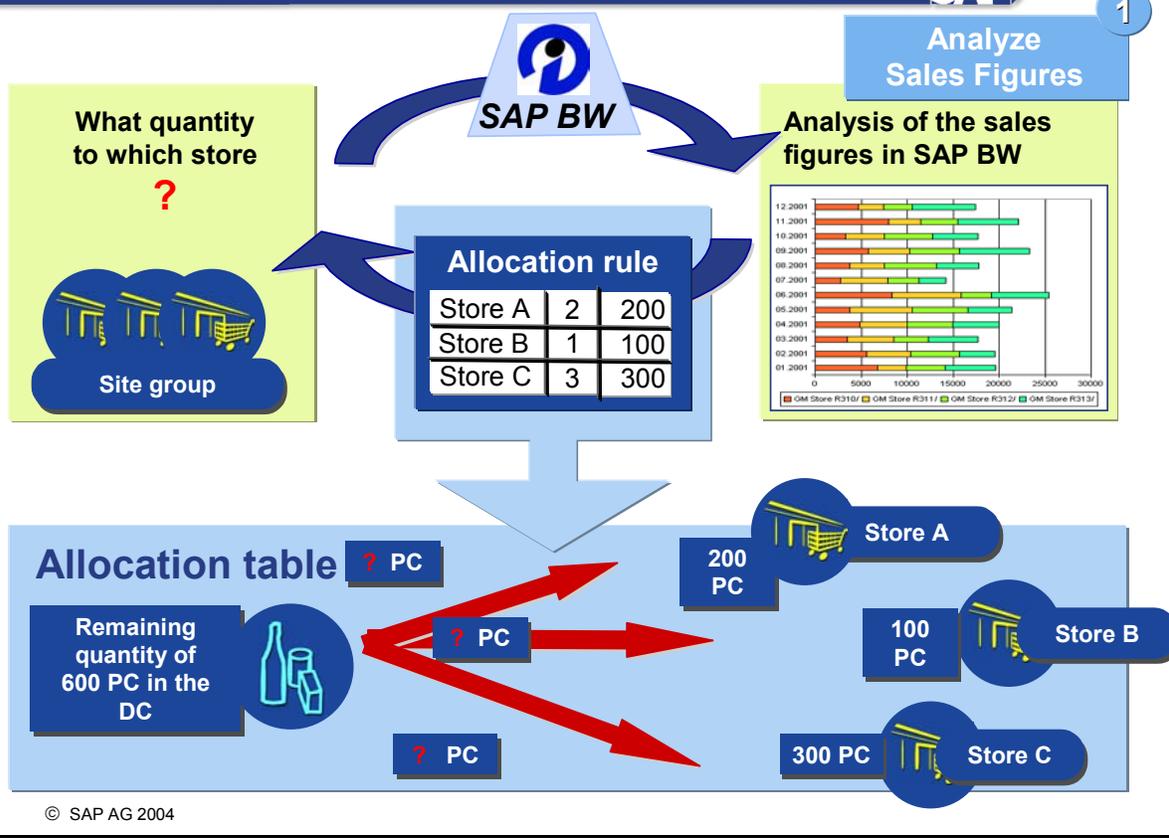
© SAP AG 2004

- The functions in exception reporting enable you to highlight unexpected key figure value differences in a query. The differences of the predefined threshold values or intervals are displayed in different colors in the query total if the exception is active. This means that differences can be identified in advance, and appropriate, timely action can be taken to deal with them.

Allocation Rule from the BW

SAP

1



- It is possible to draw upon analysis data from the Business Information Warehouse (SAP BW) or another information system to generate an allocation rule.
- In our example, you want to allocate the remaining quantities of an article to different stores. You can take the historical sales figures of these stores as the basis of this allocation.
- You send a request to SAP BW using the SAP Retail - SAP BW interface. The result is an automatically generated allocation rule for the distribution of articles to the required stores. The allocation rule can suggest either absolute quantities or ratios.

Internal Use SAP Partner Only

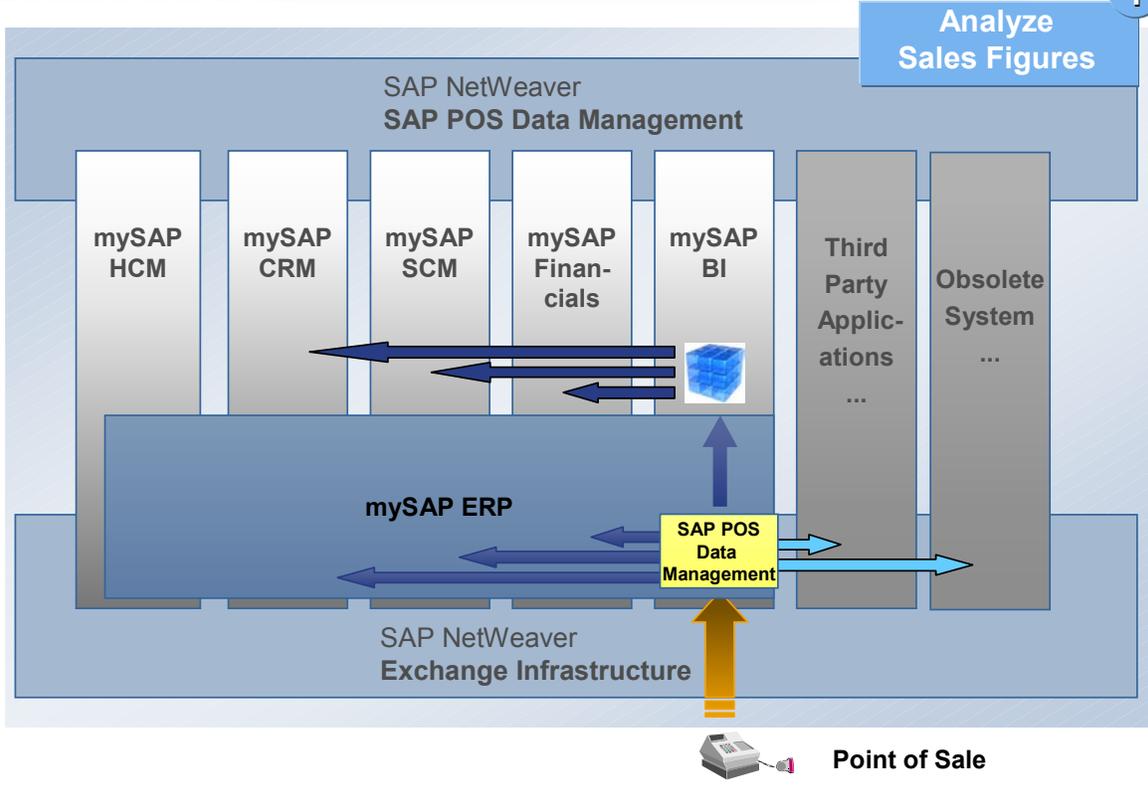
Internal Use SAP Partner Only

- **Is an integrated component of the Business Information Warehouse (SAP BW)**
- **Is part of the Business Content in BW**
- **Consists of the POS Inbound Processing Engine (PIPE) and the corresponding BW Content 'POS Analytics'**
- **Deals with the very high-performance upload and the analysis of POS data**



© SAP AG 2004

- SAP POS Data Management combines important information and applications to provide users with an overview of the data from throughout the entire company. This allows you to make the best possible use of information resources, and the best possible return on investment in the area of IT.
- SAP POS Data Management is a complete portal infrastructure with robust knowledge management and collaboration functions. The predefined Business Content in the Business Information Warehouse component ensures implementation is fast, and also reduces the cost of integrating your existing systems.
- **Fast and effective integration**
SAP POS Data Management allows you to integrate SAP solutions, external applications, obsolete systems, databases, unstructured documents, internal and external Internet content, and collaboration tools quickly and effectively. The open standards, Web services, and close integration with other SAP NetWeaver components ensure that heterogeneous systems from all the main IT providers are supported.
- SAP POS Data Management provides your employees, partners, and customers with quick, secure, role-based access to the information and applications they require. Your employees are therefore able to solve problems more quickly and effectively, and at less cost.



© SAP AG 2004

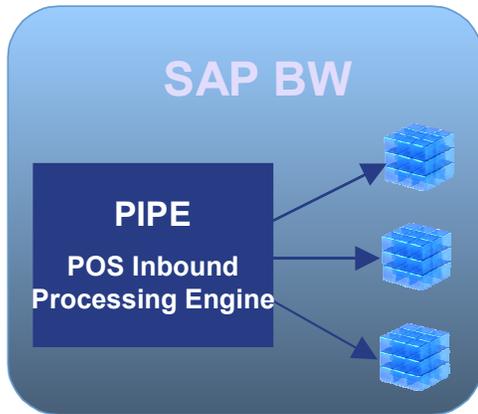
- The standalone solution, SAP POS Data Management (without an ERP system, or enterprise resource planning) enables retailers to perform the entire POS data upload, irrespective of whether an ERP Retail system, or a non-SAP Retail system is being used.
- The new architecture and technology ensure improved performance and bring clear, measurable advantages. This applies, in particular, for use with the SAP Retail system.
- Flexible POS inbound data processing and distribution optimizes the entire POS data flow, minimizing the hardware and storage capacity required.
- POS Data Management allows retailers to use and manage POS data that was not previously included in their processes. For example, a wholesaler can upload POS data from customers, a franchiser the POS data of a franchisee, or a consumer products manufacturer the POS data of customers to be included in his supply chain processes.
- The solution is intended as a Basis System that simplifies integration with future reporting and analysis scenarios. It is designed to provide a retailer's sales data for the statistics database, based on SAP BW (Business Information Warehouse). It is also possible to make enhancements to other reports in SAP BW that can be included in combined reporting view. These can contain information that is required by Sales or Procurement, for example, stock data or cost/revenue data.

Internal Use SAP Partner Only

Internal Use SAP Partner Only

Analyze Sales Figures

Sales Figure Analysis

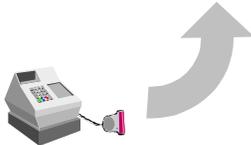


| Product Line | Calendar year | Reporting Period | Unreleased Period | Released Data |
|--------------|---------------|------------------|-------------------|---------------|
| Shop | 2002 | 7/1/02 | 7/1/02 | 7/1/02 |
| | | 7/1/02 | 7/1/02 | 7/1/02 |
| Shop | 2003 | 7/1/03 | 7/1/03 | 7/1/03 |
| | | 7/1/03 | 7/1/03 | 7/1/03 |
| Shop | 2004 | 7/1/04 | 7/1/04 | 7/1/04 |
| | | 7/1/04 | 7/1/04 | 7/1/04 |
| Shop | 2005 | 7/1/05 | 7/1/05 | 7/1/05 |
| | | 7/1/05 | 7/1/05 | 7/1/05 |
| Shop | 2006 | 7/1/06 | 7/1/06 | 7/1/06 |
| | | 7/1/06 | 7/1/06 | 7/1/06 |
| Shop | 2007 | 7/1/07 | 7/1/07 | 7/1/07 |
| | | 7/1/07 | 7/1/07 | 7/1/07 |
| Shop | 2008 | 7/1/08 | 7/1/08 | 7/1/08 |
| | | 7/1/08 | 7/1/08 | 7/1/08 |
| Shop | 2009 | 7/1/09 | 7/1/09 | 7/1/09 |
| | | 7/1/09 | 7/1/09 | 7/1/09 |
| Shop | 2010 | 7/1/10 | 7/1/10 | 7/1/10 |
| | | 7/1/10 | 7/1/10 | 7/1/10 |
| Shop | 2011 | 7/1/11 | 7/1/11 | 7/1/11 |
| | | 7/1/11 | 7/1/11 | 7/1/11 |
| Shop | 2012 | 7/1/12 | 7/1/12 | 7/1/12 |
| | | 7/1/12 | 7/1/12 | 7/1/12 |
| Shop | 2013 | 7/1/13 | 7/1/13 | 7/1/13 |
| | | 7/1/13 | 7/1/13 | 7/1/13 |
| Shop | 2014 | 7/1/14 | 7/1/14 | 7/1/14 |
| | | 7/1/14 | 7/1/14 | 7/1/14 |
| Shop | 2015 | 7/1/15 | 7/1/15 | 7/1/15 |
| | | 7/1/15 | 7/1/15 | 7/1/15 |
| Shop | 2016 | 7/1/16 | 7/1/16 | 7/1/16 |
| | | 7/1/16 | 7/1/16 | 7/1/16 |
| Shop | 2017 | 7/1/17 | 7/1/17 | 7/1/17 |
| | | 7/1/17 | 7/1/17 | 7/1/17 |
| Shop | 2018 | 7/1/18 | 7/1/18 | 7/1/18 |
| | | 7/1/18 | 7/1/18 | 7/1/18 |
| Shop | 2019 | 7/1/19 | 7/1/19 | 7/1/19 |
| | | 7/1/19 | 7/1/19 | 7/1/19 |
| Shop | 2020 | 7/1/20 | 7/1/20 | 7/1/20 |
| | | 7/1/20 | 7/1/20 | 7/1/20 |
| Shop | 2021 | 7/1/21 | 7/1/21 | 7/1/21 |
| | | 7/1/21 | 7/1/21 | 7/1/21 |
| Shop | 2022 | 7/1/22 | 7/1/22 | 7/1/22 |
| | | 7/1/22 | 7/1/22 | 7/1/22 |
| Shop | 2023 | 7/1/23 | 7/1/23 | 7/1/23 |
| | | 7/1/23 | 7/1/23 | 7/1/23 |
| Shop | 2024 | 7/1/24 | 7/1/24 | 7/1/24 |
| | | 7/1/24 | 7/1/24 | 7/1/24 |
| Shop | 2025 | 7/1/25 | 7/1/25 | 7/1/25 |
| | | 7/1/25 | 7/1/25 | 7/1/25 |
| Shop | 2026 | 7/1/26 | 7/1/26 | 7/1/26 |
| | | 7/1/26 | 7/1/26 | 7/1/26 |
| Shop | 2027 | 7/1/27 | 7/1/27 | 7/1/27 |
| | | 7/1/27 | 7/1/27 | 7/1/27 |
| Shop | 2028 | 7/1/28 | 7/1/28 | 7/1/28 |
| | | 7/1/28 | 7/1/28 | 7/1/28 |
| Shop | 2029 | 7/1/29 | 7/1/29 | 7/1/29 |
| | | 7/1/29 | 7/1/29 | 7/1/29 |
| Shop | 2030 | 7/1/30 | 7/1/30 | 7/1/30 |
| | | 7/1/30 | 7/1/30 | 7/1/30 |

Outbound Interface

mySAP System Landscape

Third-Party Landscape



POS Data Upload to SAP BW

© SAP AG 2004

- POS Data Management is a point solution, that can be used independently of an ERP system. SAP BW is the central platform for this solution and provides basic tools and functions for data retention and analysis.
- The main POS Data Management tasks are:
 - High-performance upload of POS data in BW, using an inbound interface,
 - Data analysis,
 - Provision of analysis results for other applications, using defined interfaces.
- The main task of the POS Inbound Processing Engine (PIPE) is to ensure and control the transfer of all POS inbound data from the Online Transaction Processing System (OLTP).

- Is an integrated component of the Business Information Warehouse (SAP BW)
- Contains MAP-specific Business Content and functions
- MAP-specific Business Content comprises:

Strategic planning, store and merchandise planning, assortment planning and slow seller management



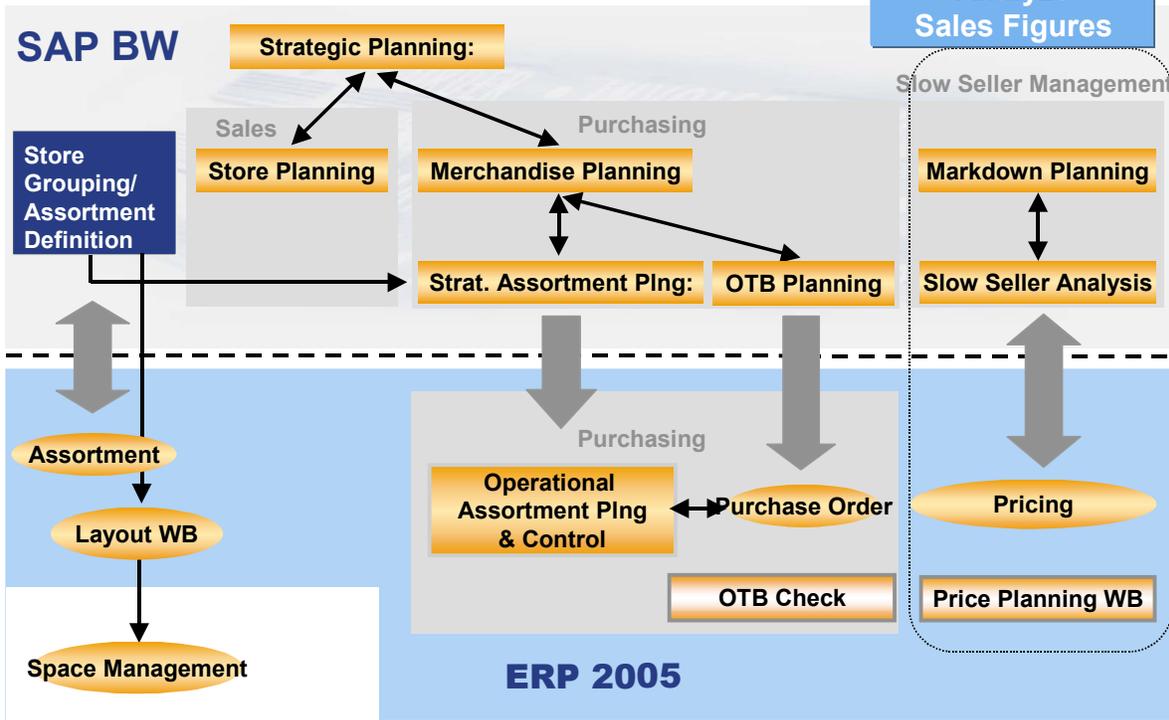
© SAP AG 2004

- Merchandise and Assortment Planning (SAP Merchandise and Assortment Planning, MAP) comprises the following components:
- **Strategic planning:** In the strategic plan, also referred to as the business plan, a retail company defines its strategic targets. The business plan is created on the highest level for the entire firm, but also for individual distribution channels or higher levels of the merchandise hierarchy.
- **Store and merchandise planning:** The store plan is the concrete form of the strategic plan, taking into account different factors from within the store hierarchy: Regional marketing, the current competition, demographic changes, preferences, and specific events.
By contrast, merchandise planning is the more detailed embodiment of the higher-level, strategic guidelines. Planning takes place along the merchandise category hierarchy, but no details are given about the actual merchandise.
- **Assortment planning:** The aim of assortment planning is to create assortments, thus deciding which products are to be listed for which stores, and which quantities are to be assigned to the individual stores. Different levels can be planned within the article hierarchy, for example, product (style), color (variant), or the price band.
- **Slow seller management:** The aim of slow seller management is to ensure that at the end of a selling period the smallest possible amount of stock (particularly for fashion or high-fashion goods) remains, thus keeping the number of markdowns to a minimum.

SAP Merchandise and Assortment Planning: Overview

SAP

1



© SAP AG 2004

Internal Use SAP Partner Only

Internal Use SAP Partner Only



SSAP Forecasting and Replenishment is a Retail-specific application, based on SCM.

It supports the forecasting and replenishment process for the following pull scenarios:

- **Store replenishment**
- **DC replenishment**
- **DC replenishment – with integrated store**

© SAP AG 2004

- SAP Forecasting and Replenishment is a component of the Supply Chain Management system (SCM, Release 4.1); an SAP Retail system (Release 4.6C), or any other ERP system can be connected as a master data system.
- For more detailed information about SAP Forecasting and Replenishment, see **SAPNet, under Quick Link “RKT-Retail” (Ramp-Up Knowledge Transfer)**, select your Learning Map, and set the focus to SAP Forecasting and Replenishment.
- For more information about the product SAP Forecasting and Replenishment, see SAPNet, under Quick Link "Retail". Choose *Retail in Detail → Forecasting and Replenishment*, or attend the SAP Forecasting and Replenishment Workshop, details of which are provided on SAPNet, under OKP (Online Knowledge Product).

Causal-Based Forecast:

- Based on influencing factors
- Causal analysis evaluates the influence
- Self-adjusting model

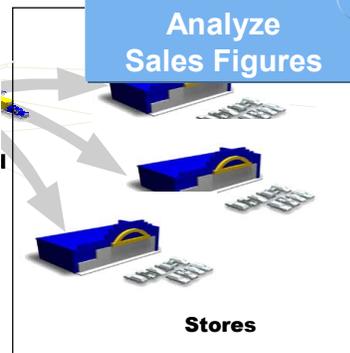


Demand influencing factor (DIF):

A demand influencing factor is an external event with a significant influence on sales, or on the demand for an article in a site. Examples:

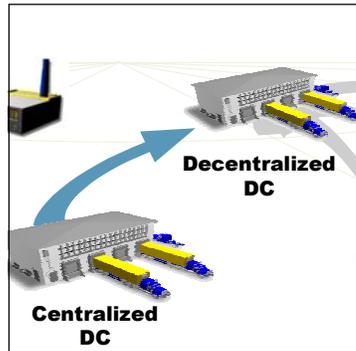
- Public holidays, such as Easter or Christmas 
- School holidays or the start of term 
- Retail promotions 
- Sales prices (and their changes)
- Local events, such as sports events 
- Unusual weather, such as hurricanes or heat waves
- The number of stores supplied by one distribution center.

© SAP AG 2004



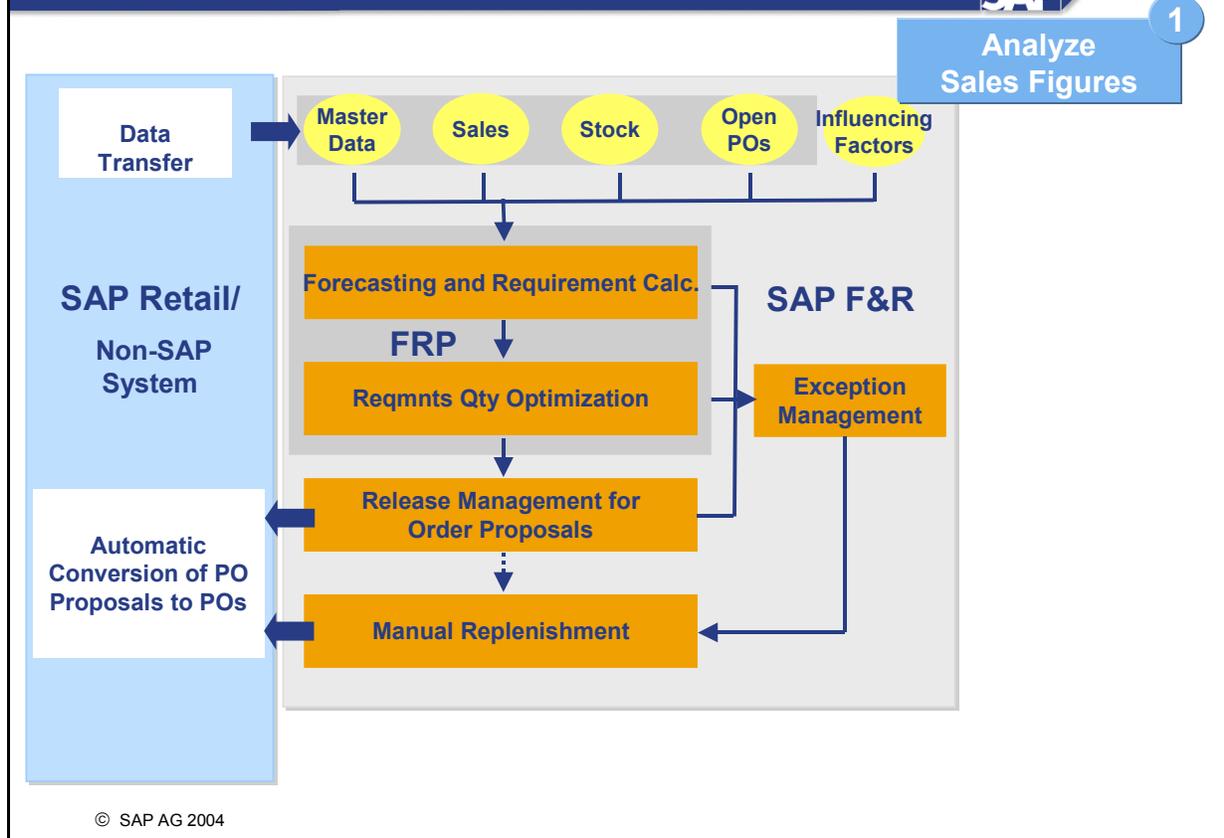
- Application for replenishable articles with sales history
- Automated process at article/store level
- Causal-based forecast from stock and sales data and demand influencing factors
- Requirements calculation and requirements quantity optimization
- Function for generating order proposals automatically

© SAP AG 2004



- Analog, automated process, but at article/distribution center (DC) level
- The following can be used for forecasting purposes:
 - Goods issues from the DC
 - Aggregated store purchase orders
 - Aggregated sales data from stores
- In addition, you can define demand influencing factors.
If the DC and the stores supplied by it use SAP F&R replenishment (integrated scenario), the aggregated store forecasts can be used as a demand influencing factor for the DC.

© SAP AG 2004

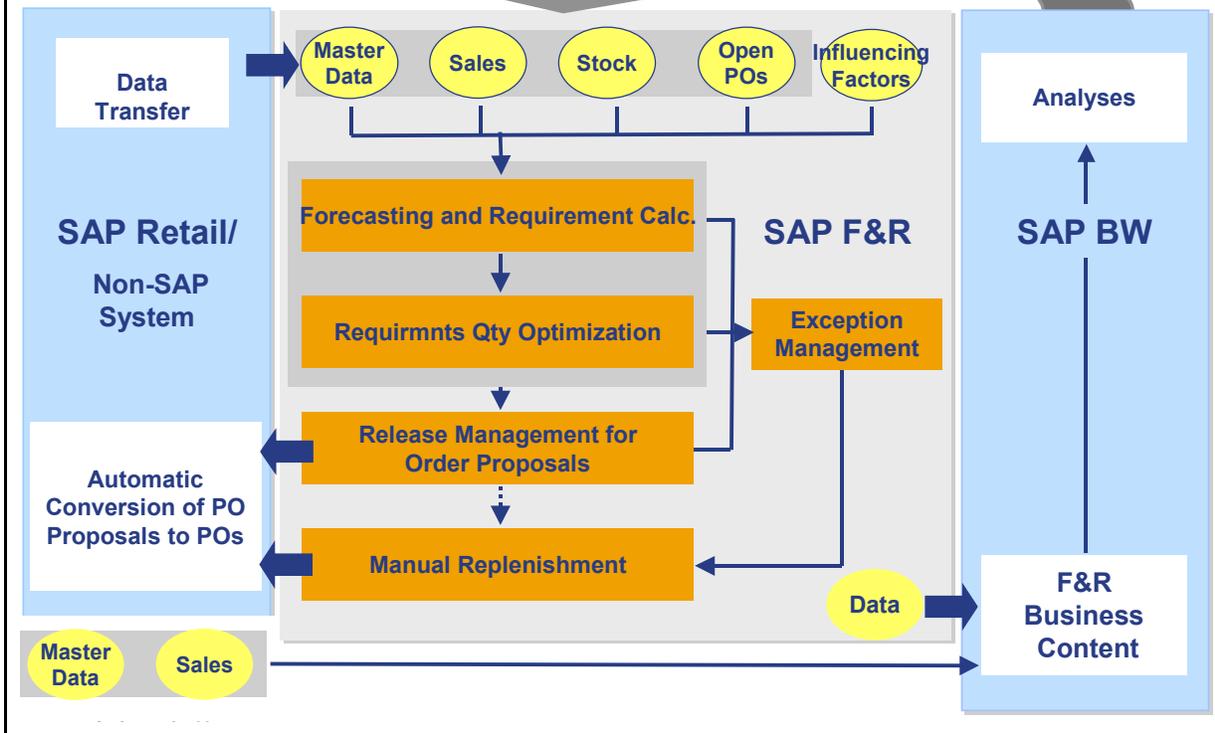


- The process starts with the data relevant for **automatic calculation of the replenishment quantity** or manual replenishment being transferred.
- **Automatic replenishment quantity calculation** determines the net requirement and identifies any exceptions. Subsequent replenishment quantity optimization uses this to calculate the purchase order proposals, and also issues exceptions.
- The exceptions are processed further in the **exception handling/manual release** process.
- Purchase order proposals are processed in **release management** for purchase order proposals. They are released here, or transferred to the exception handling process and manual release.
- Purchase order proposals result from the last two processes. The replenishment loop is closed when the released purchase order proposals are transferred to the ERP system (Enterprise Resource Planning). The ERP system automatically converts the purchase order proposals to purchase orders.
- FRP = Forecasting and Replenishment Processor

SAP F&R: Process Flow (2/2)

SAP

Analyze Sales Figures ¹



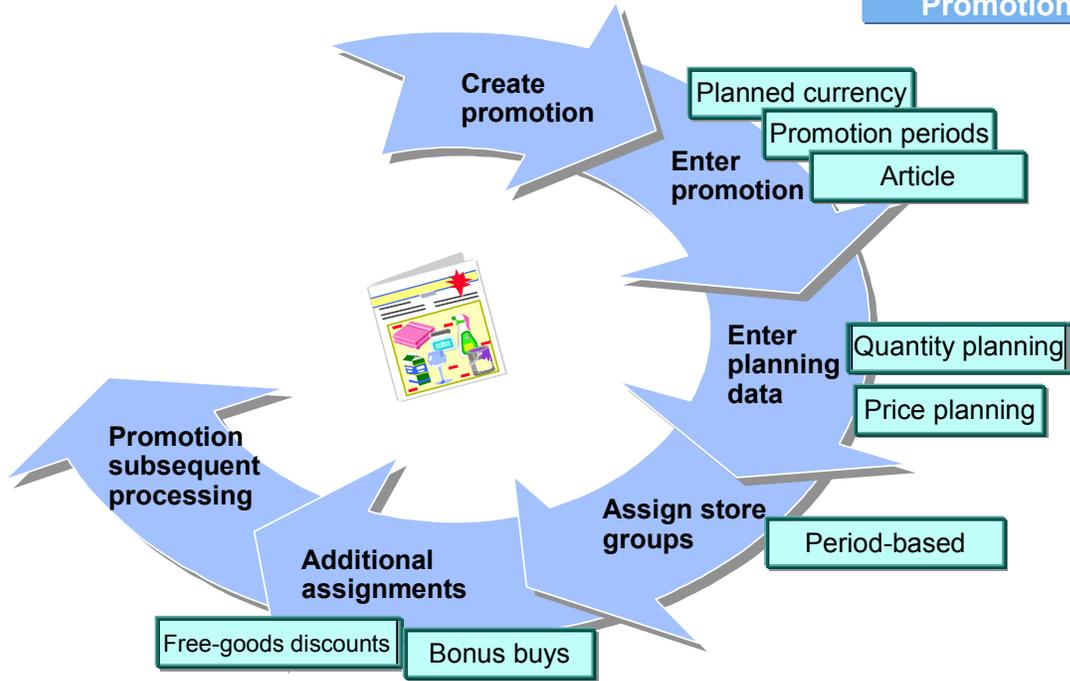
- **Analyses** in an **SAP Business Warehouse system (SAP BW)** or another legacy system can be used to support strategic SAP Forecasting and Replenishment processes, such as automatic calculation of replenishment quantities, the subsequent replenishment quantity optimization, and the resulting purchase order proposals, to enable a qualitative results valuation to be performed.
- The analyses are carried out by valuating the historical data for a specific period. The resulting key figures can be used to evaluate the quality of the results achieved with SAP Forecasting and Replenishment. Two types of reports can be created:
 - **EXCEPTION-BASED REPORTS**
Only exceptional situations are entered here: Understock and overstock, stockouts, lost sales and undelivered products
 - **NON-EXCEPTION-BASED REPORTS**
These reports chart a development over a specific period of time: Variances of minimum stock level, stock history, service grade history, range of coverage, dead stock, forecast quality and history of manually changed purchase order proposals.
- Depending on the business targets in place, the reports can be ordered according to categories, such as warehouse stock, forecast quality, stability of solution and manual access.

Promotion Creation Procedure

SAP

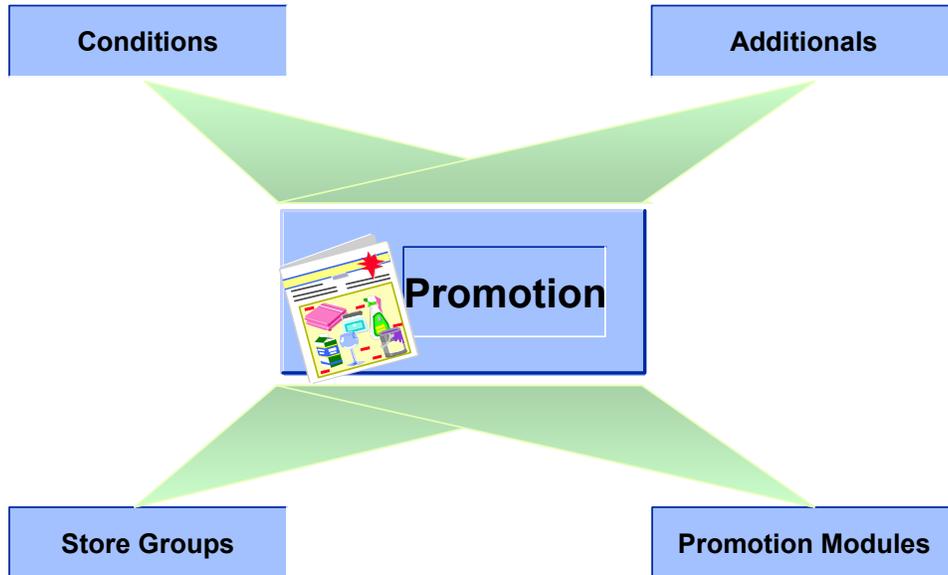
2

Create Promotion



© SAP AG 2004

Create promotion



© SAP AG 2004

- Stores participating in the promotion are assigned to the promotion as groups. Different validity periods are defined for store groups.



© SAP AG 2004

- The functions available for promotions are as follows:
 - Option of controlling the stores that participate in the promotion;
 - Assignment of particular purchase or sales agreements to promotions;
 - Complete integration of promotions in product catalogs;
 - Option of defining the periods of validity for purchasing, sales and deliveries for both retail and wholesale customers;
 - Promotion announcement to stores;
 - Automatic allocation of promotional merchandise to stores;
 - Split evaluation of promotional stock and standard stock;
 - Automatic update of sold quantities and different promotion data during the promotion;
 - Article prices are automatically reset to standard price when the validity period of the promotion has expired;
 - Automatic promotion determination when orders and purchase orders are created;
 - Availability of different reports and analyses from the Business Information Warehouse system for evaluating promotions
 - Support of coupons and bonus buys.

Create Promotion

"Back to school" promotion

Sales period: store group New York

Sales period: store group Miami



Listing period: store group New York

Listing period: store group Miami

Validity period for purchasing conditions

© SAP AG 2004

Time

- You can define different validity periods for different store groups that are participating in the promotion. A promotion for beachwear can, for example, begin earlier and last longer in warmer areas (for example, Miami) than in colder areas (for example, New York). If you define different periods of validity for different store groups, the entire promotion period is taken into consideration, meaning from the earliest start data to the latest finishing date for all stores participating in the promotion.

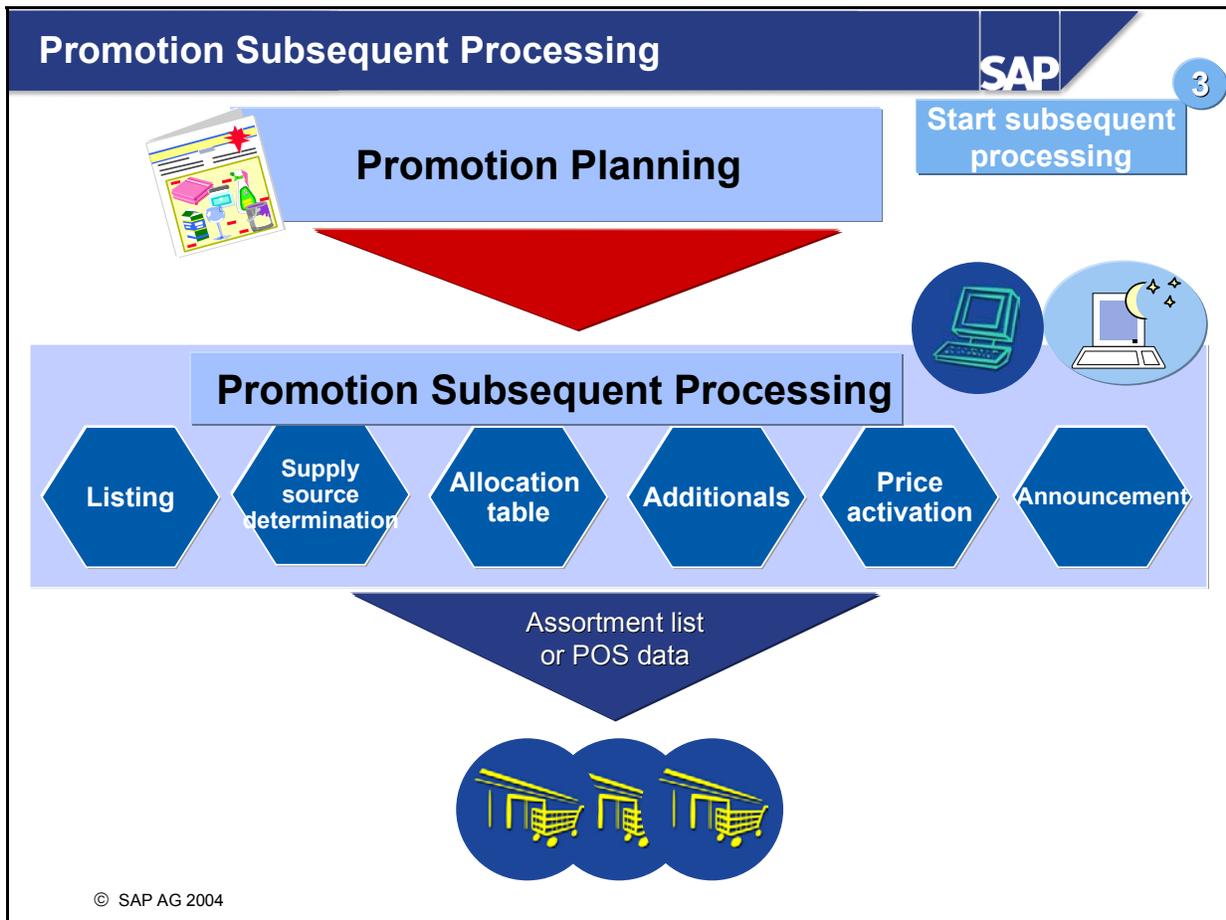


Promotion Type

- Determine lead and follow-up time for the listing period and purchasing period
- Define lead time for the announcement and goods receipt in the stores
- Specify allocation table type for subsequent processing

© SAP AG 2004

- The promotion type specifies the technical requirements for particular promotions. The promotion type describes particular qualities for promotions and controls subsequent processing for the promotion by using default values and indicators.
- The default data for the promotion header is as follows:
 - Purchasing conditions leadtime for the start of promotion sales and end of promotion sales
 - Promotion announcement lead time for the start of promotion sales
 - Article listing leadtime for the start of promotion sales and end of promotion sales
 - Leadtime for goods receipt at store before start of promotion sales
 - Allocation table type for controlling defaulted data for the allocation table item category
 - Application, schema and announcement category for controlling message determination
 - Condition type group - Purchasing
 - Condition type group - Sales



© SAP AG 2004

- The promotion subsequent processing steps, listing, supply source determination, allocation, price activation and announcement, can be executed by starting the corresponding reports in the background also. For more information, see the SAP Retail documentation on Background Processing.

Start subsequent processing

Promotion

Planned quantity: 600 PC



Site group

Allocation table

Allocation

| | |
|---------|---|
| Store A | 2 |
| Store B | 1 |
| Store C | 3 |

200 PC



100 PC



300 PC



Store A



Store B



Store C

Follow-on documents for allocation tables

Stock transfer order

Vendor order

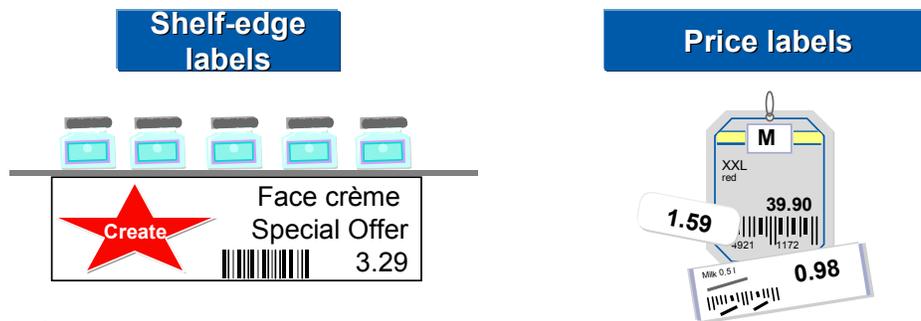
Outbound delivery

Sales order

© SAP AG 2004

- Allocation tables can be generated as subsequent processing for the promotion..
- Allocation is used at headquarters for planning, controlling and monitoring site (stores, distribution centers) and customer supplies.
Your implementation areas are for example, the initial distribution of articles, the distribution of promotional goods, stocks and centrally procured imported goods.
- You can process the distribution of articles to the site/customer groups assigned to the promotion online. You can, however, also use an allocation rule that contains either fixed quantities or relative promotions for each site/customer in the site/customer group.
(Note: the site group assigned to the allocation rule must represent a maximum quantity for the promotion site group.)
- Allocation rules can be created manually or be generated from the Information System or the Business Information Warehouse (SAP BW) using key figures. You can use planning data and statistical data for this. You also have the option of using self-defined information structures.
- According to the business transaction (controlled by the item category) you can generate logistic documents as subsequent processing for allocation tables. If you are reducing your stock, you can generate stock transfer orders or deliveries.
- As of SAP R/3 Enterprise Retail 1.10, it is possible to have a sales order created from the allocation table as a follow-on document.

- **Additional** are assigned to articles on sale to ensure effective sales presentation, for example:
 - Price labels, shelf-edge labels, security tags, clothes hangers...
 - Packaging (in particular for private labels)
 - Services, pre-packing
- **Additional** can be assigned to articles within, for example, subsequent processing for promotions.



© SAP AG 2004

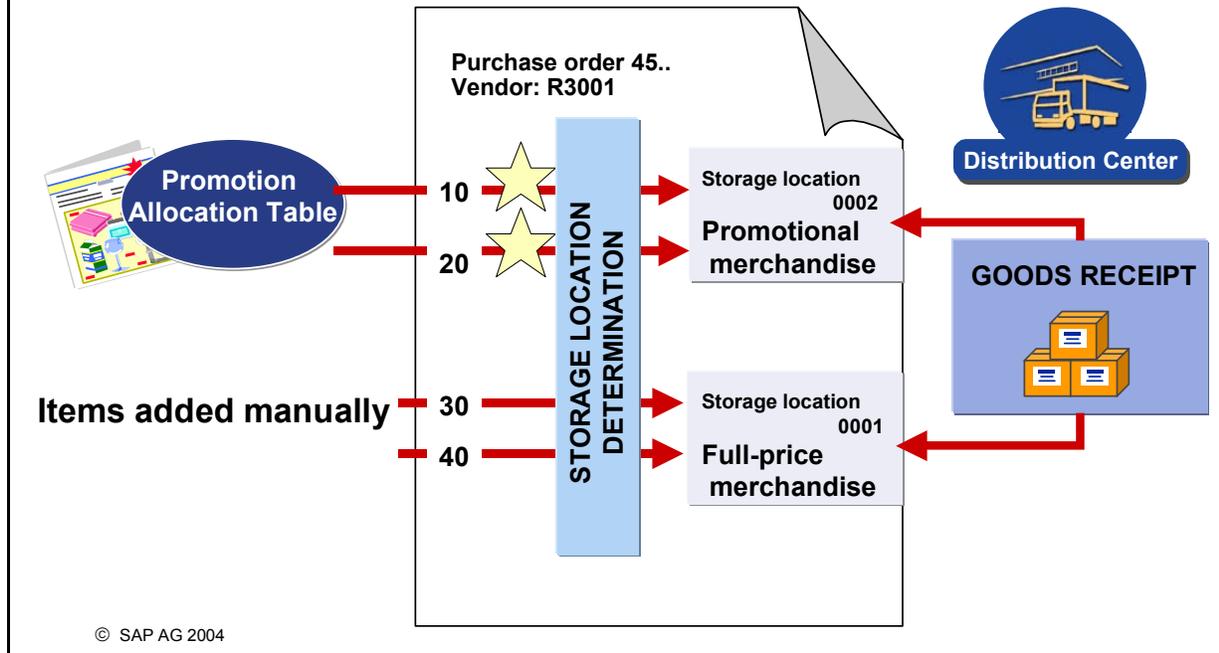
- Additional are assigned to articles. A procedure for additional is also entered for each additional.
- The Additional monitor provides an overview of the additional documents that have been generated by follow-up actions and their status'.
- You can include material costs and handling costs for article additional in pricing. You then have the option, for example, of increasing the retail price for sew-in labels or including the costs for attaching price tickets in the distribution center when analyzing the articles that have been assigned.
- Changes made to master or movement data (for example, for an article or a retail price) lead to change pointers being updated. You can use change analyses to trigger the generation of additional IDocs at headquarters.
- You have to use external systems to print labels.

Storage Location Determination for Promotional Merchandise

SAP

4

Goods Receipt at DC
and Goods Issue
Processes

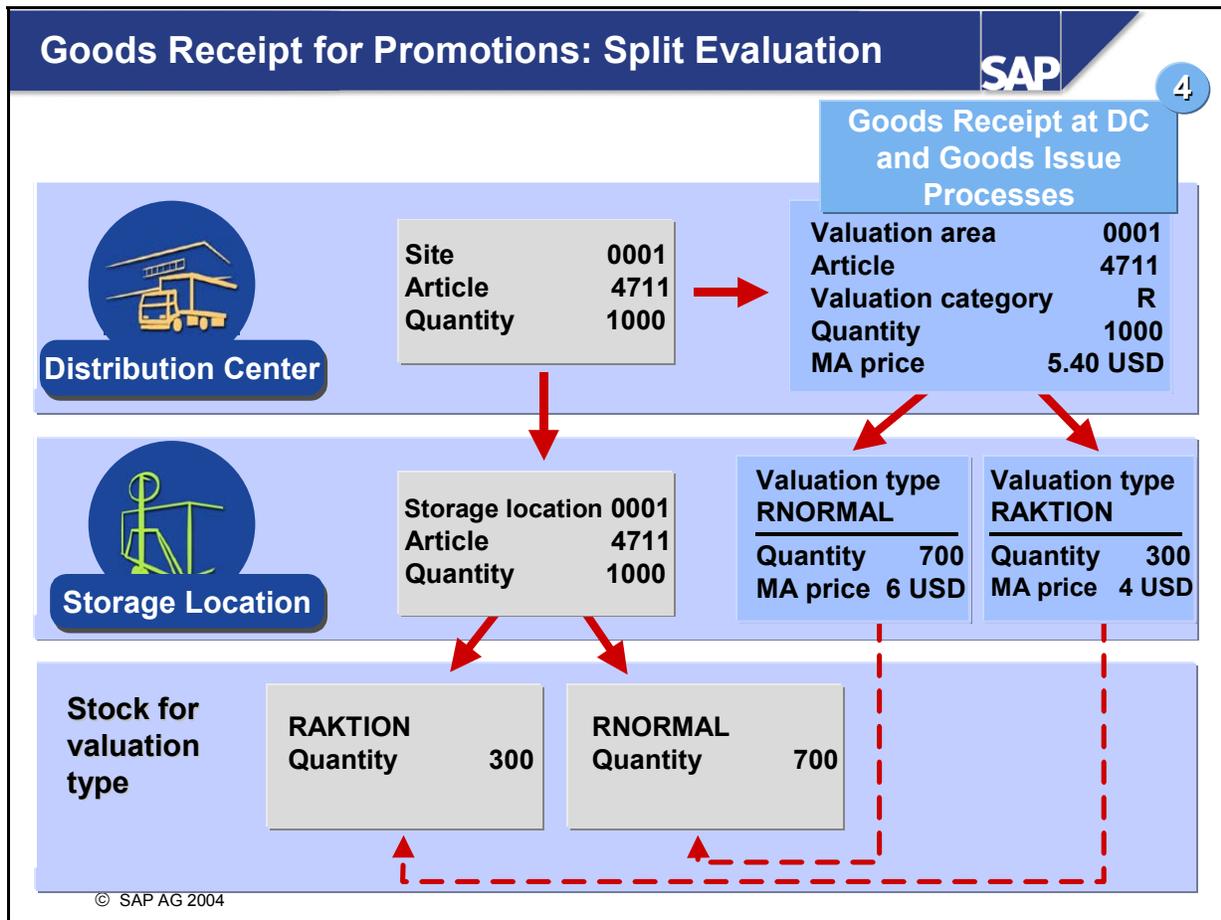


- Promotional stock can be managed in its own separate storage location.
- If you create the vendor order from the promotion allocation table, the promotion storage location will be entered automatically in the purchase order. Prerequisites are:
 - Storage location determination with situation (situation 02 = promotion) is set up (in Customizing for Shipping) **and**
 - Automatic storage location determination is activated for follow-on document generation in the item type of the allocation table.
- This storage location is copied when posting goods receipt.

Goods Receipt for Promotions: Split Evaluation

SAP

4



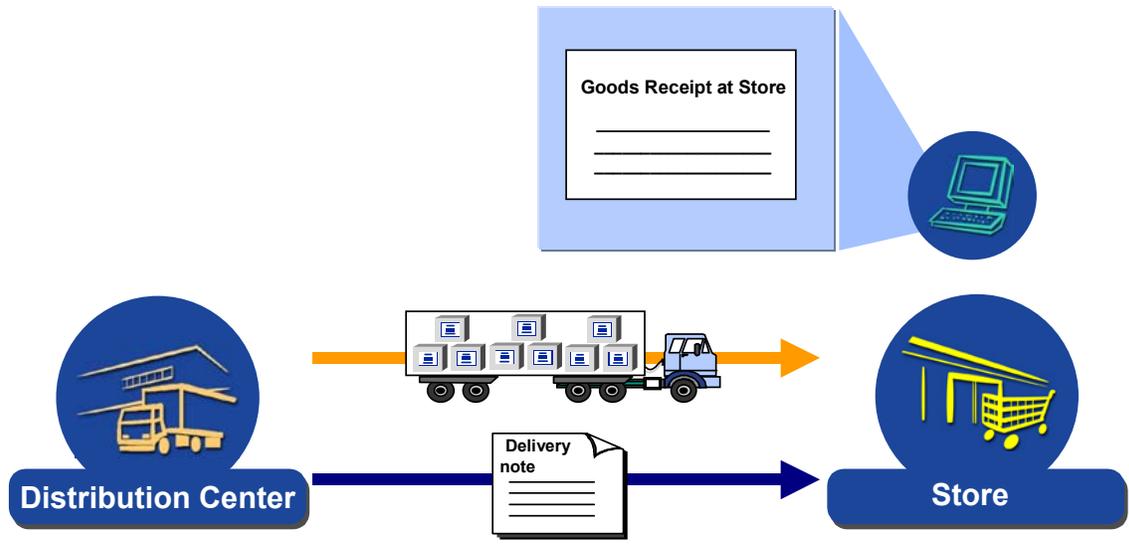
- Split evaluation allows you to manage partial stock for an article with different prices. It is used in SAP Retail to distinguish promotional merchandise from full-price merchandise. The function can be used for both distribution centers and stores.
- For each valuation type, there is a specific valuation record, containing the valuation price and other control information. Furthermore, partial stock for each valuation type is managed for each storage location.
- If split evaluation is active, you must clearly specify what partial stock is affected in each transaction.

Posting Goods Receipt at Store

SAP

6

Post Goods Receipt at Store

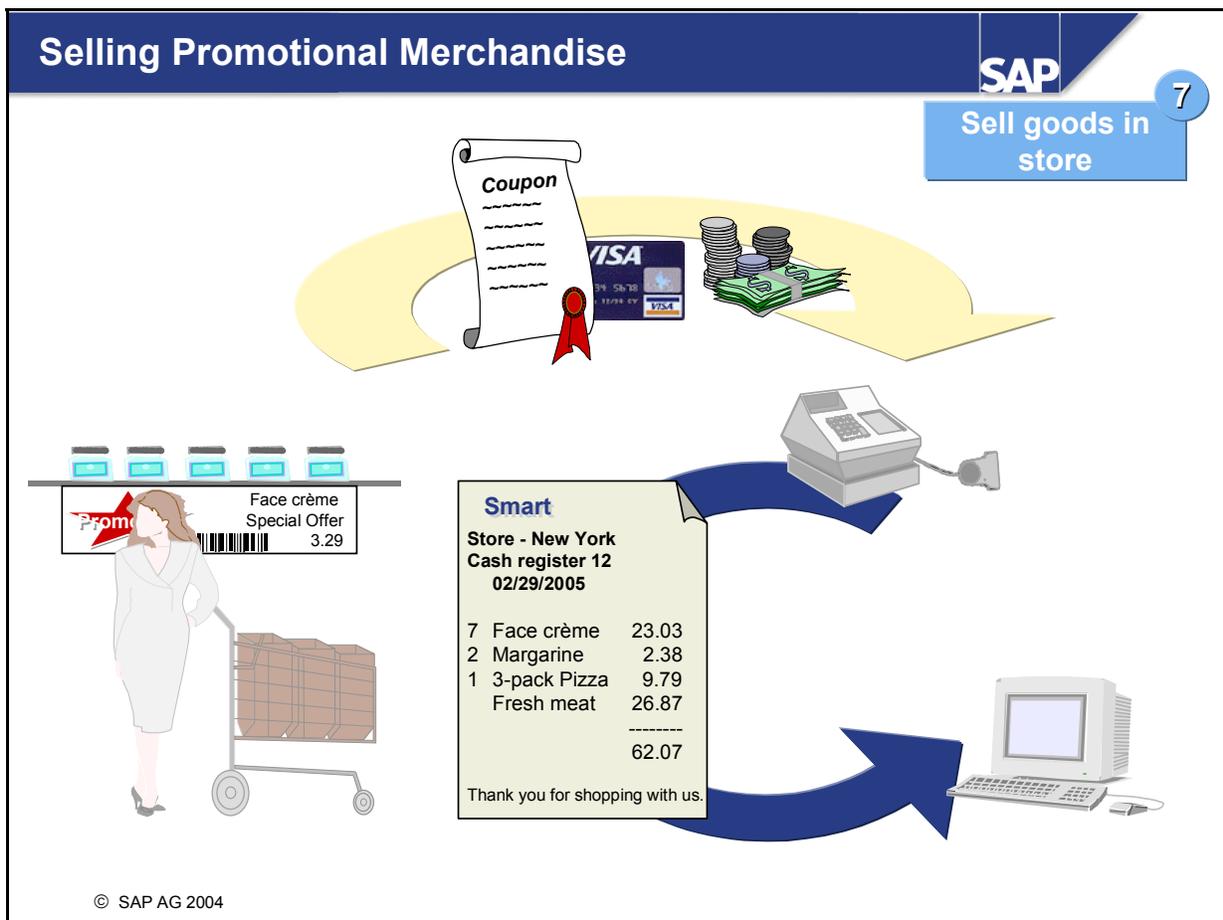


Merchandise flow
Information flow

© SAP AG 2004

Internal Use SAP Partner Only

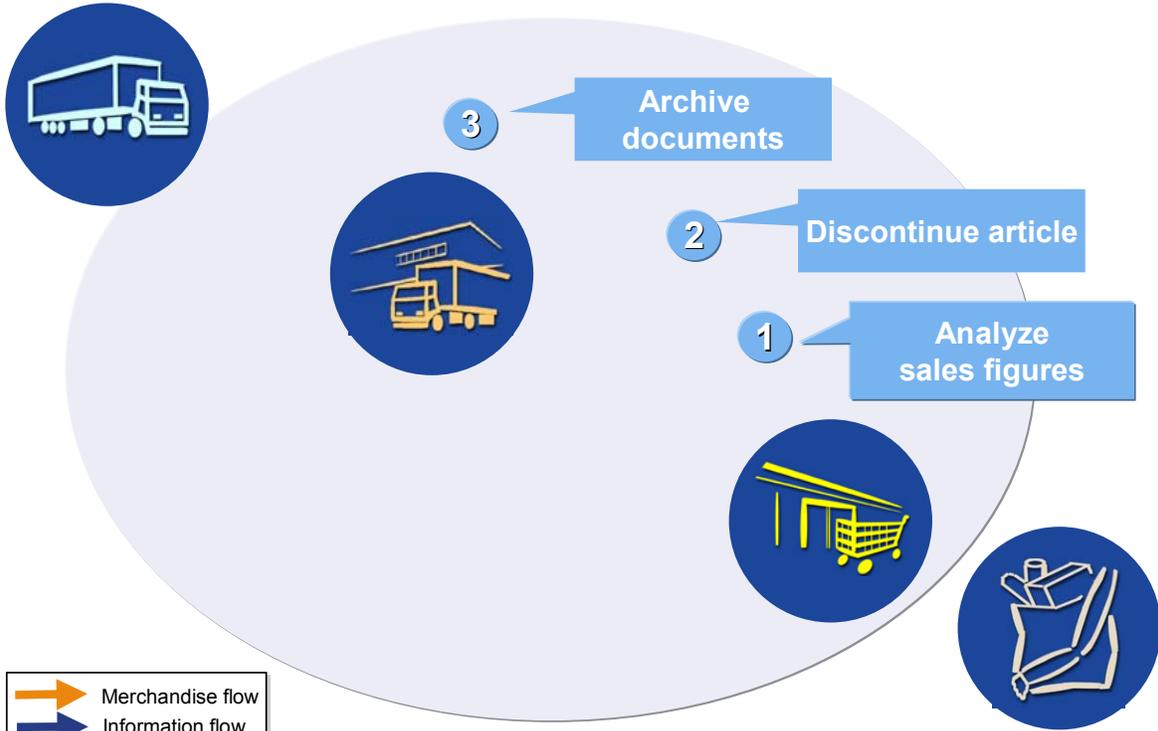
Internal Use SAP Partner Only



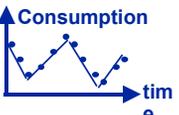
© SAP AG 2004

- **Coupons** (in connection with a bonus buy) entitle the customer to a bonus when purchasing goods. When customers buy, for example, two sweatshirts, they may receive a third sweatshirt free of charge. Alternatively, a discount of 20% may be offered on merchandise that has been reduced, or a free gift may be included when a customer buys promotional merchandise.
- Coupons are handled as articles in the SAP Retail System.
- Coupon data is downloaded to the POS system at the same time as other promotion data. The POS system must, however, be configured correctly to ensure that articles are bought in the correct quantities before customers begin redeeming their coupons. If the coupon is valid for a specified amount on a specific article (for example, 1 USD price reduction on laundry detergent) the amount appears as a negative amount on the POS cash receipt (- 1 USD) when the coupon is scanned.
- Sales transaction data is uploaded to the SAP Retail System using POS inbound processing. Discount amounts are posted to the relevant vendor and/or store in line with the distribution instructions in the coupon profile.

Discontinuation/Archiving: Process Overview



© SAP AG 2004

| | |
|---|--------------------------------|
|    | Market no longer exists |
|   | End of season |
|   | No longer manufactured |
|   | No deliveries |

© SAP AG 2004

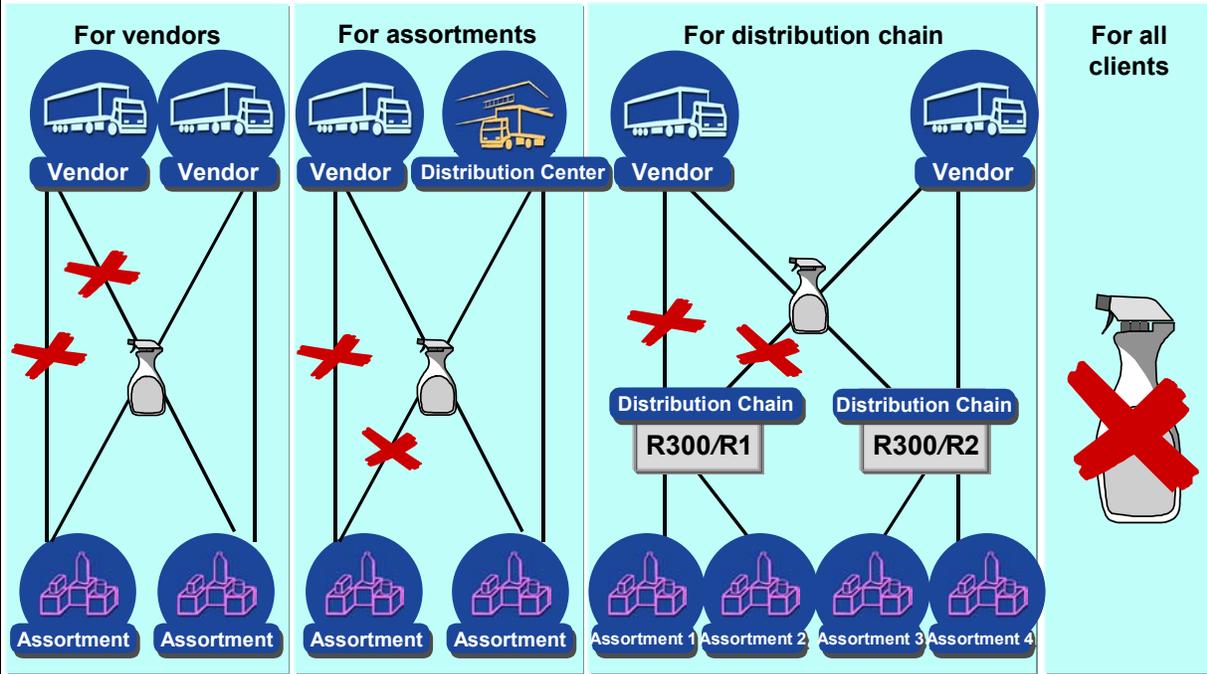
- You may decide to discontinue an article. This can arise for a variety of reasons, for example, if your vendor can no longer supply the article in question, if there are more cost-efficient alternatives or if the article is out-of-date.
- You can discontinue an article by deleting the listing conditions for the article in question or by removing the article from your article list:
 - Delete the listing conditions for the article
If you delete the assignment for an article to an assortment, the listing conditions for the article are also deleted. The article master record remains and there may still be stock available, however, no more orders can be placed for the article. (It can however still be sold.)
 - Article discontinuation
Discontinuing an article has a more wide-reaching effect than simply deleting the listing conditions. When an article is discontinued, the article master record is removed from the database as well as all the relevant article data, including purchasing information records and listing conditions.

Types of Article Discontinuation

SAP

2

Discontinue article



© SAP AG 2004

Internal Use SAP Partner Only

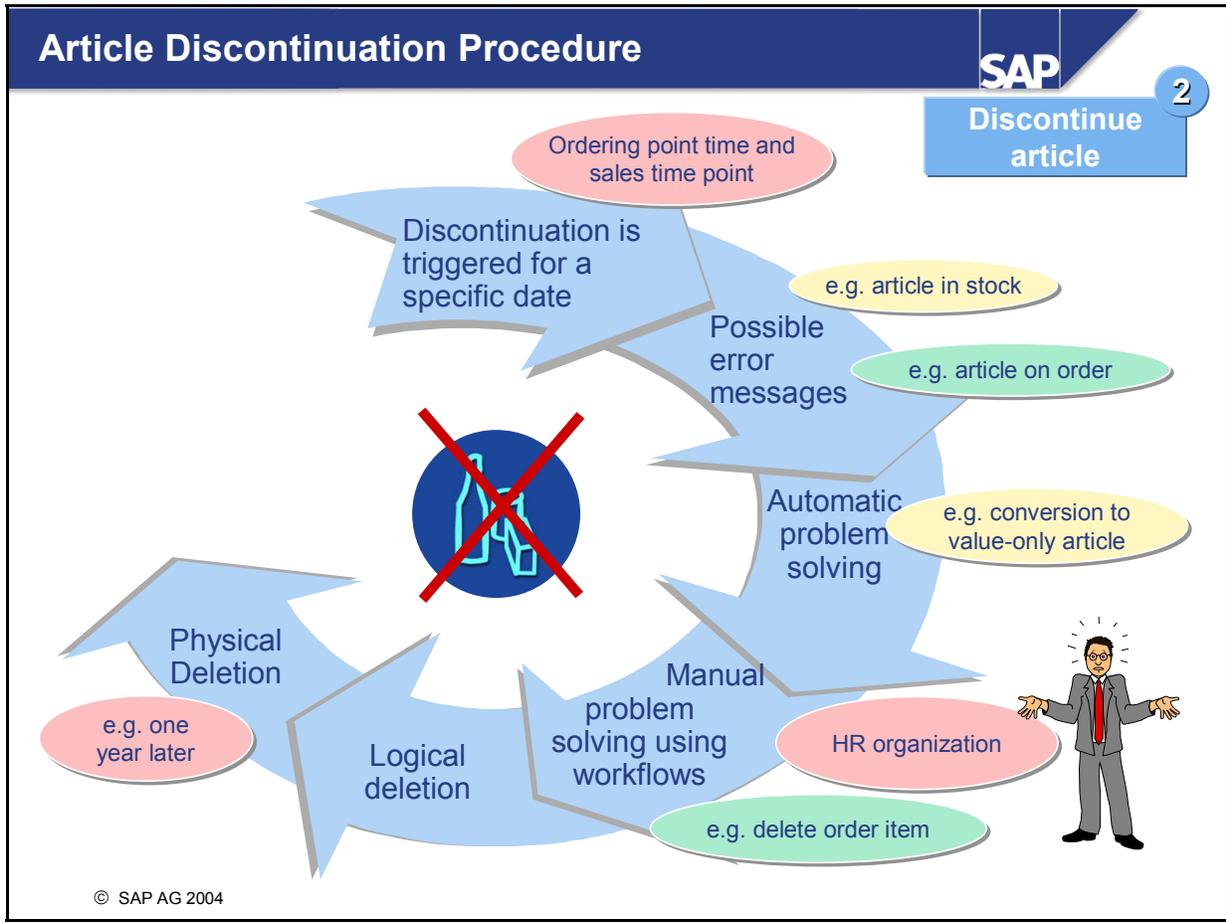
Internal Use SAP Partner Only

Article Discontinuation Procedure

SAP

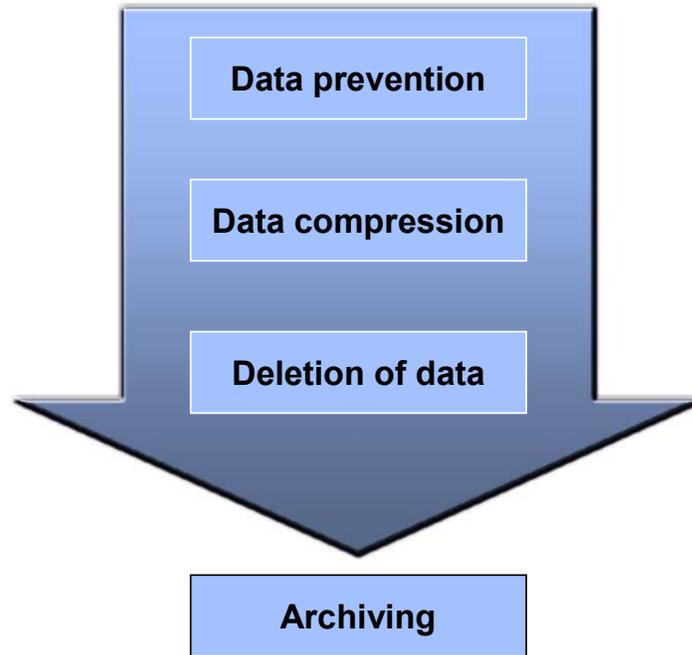
2

Discontinue article



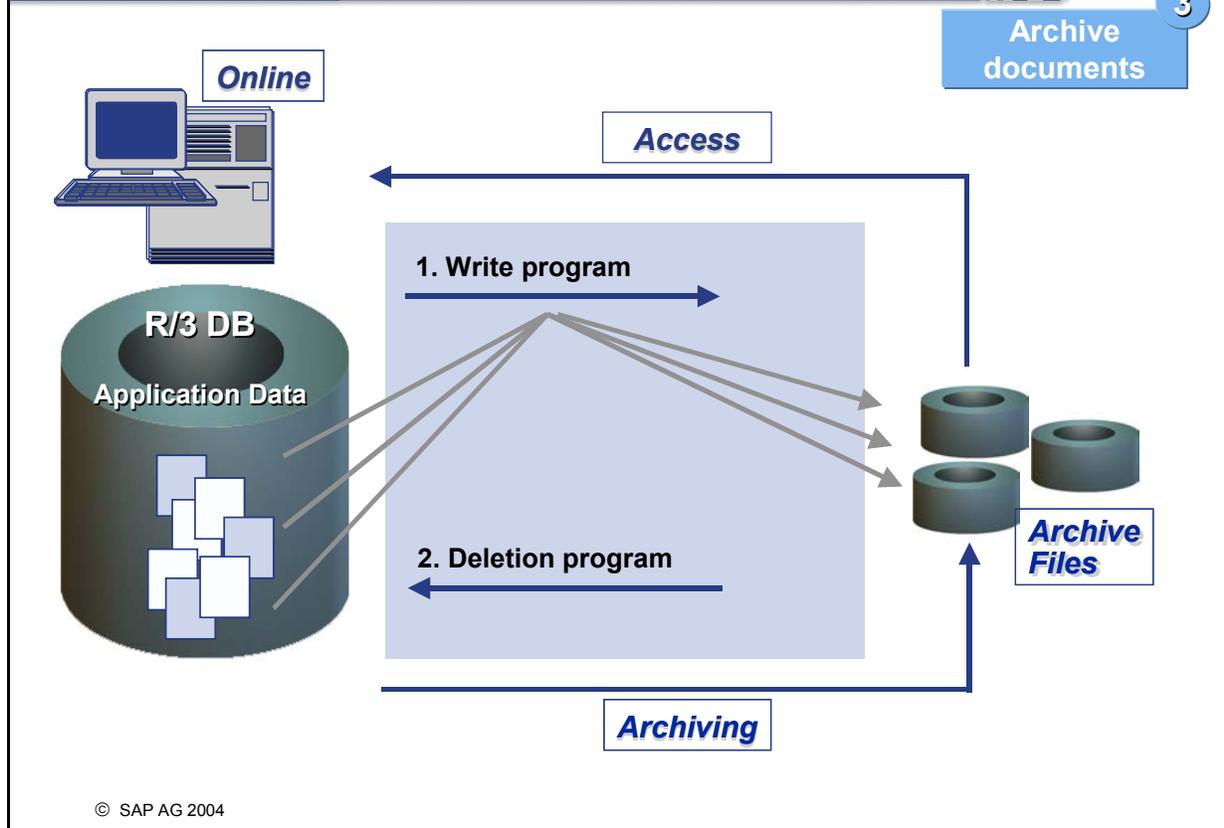
Internal Use SAP Partner Only

Internal Use SAP Partner Only



© SAP AG 2004

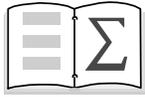
- **Data prevention:** If possible, switch off updating for all data that you do not require. (For example, you can switch off the creation of billing documents for POS inbound in Customizing).
- **Data compression:** If possible, compress data at higher levels.
- **Deletion:** Delete data that does not need to be archived.
- **Archiving:** Data archiving is used for data that cannot be prevented but also cannot simply be deleted. In an SAP Retail project, we recommend that you make data archiving productive shortly after the productive start of SAP Retail. Since an archiving project generally lasts for several months (typically around six months), it is important that you start the archiving project in plenty of time before the productive start of SAP Retail.
- For more information on data archiving, see (SAPNet, <http://service.sap.com/data-archiving>)
- For more information on performance, see (SAPNet, <http://service.sap.com/performance>)



- In the retail sector you are generally dealing with large amounts of data.
- This is due, among other things, to the large number of articles and stores. This number can have the following order of magnitude:
 - Number of articles = 10 to the power of 5
 - Number of stores = 10 to the power of 3
- Large amounts of data is updated at article/store level:
 ==> Order of data at article/store level = 10 to the power of 8

Examples:

- Article data at store level (for example, stock and valuation data)
- Listing conditions
- Processing of sales data from the stores using POS inbound (resulting in stock adjustments and revenue postings)



You are now able to:

- **Display analyses in the Business Information Warehouse (BW)**
- **Create a promotion and trigger follow-up functions**
- **Name the most important functions for allocation tables**
- **Describe discontinuation and archiving in SAP Retail**

© SAP AG 2004



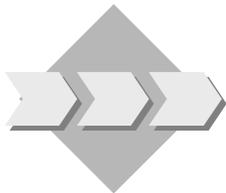
Unit: Analysis and Promotions

Topic: Promotion Planning



After completing this exercise you will be able to:

- Plan a promotion



You have decided to put articles on promotion to boost sales. The merchandise for your promotion is to be sent directly from the warehouse to the stores.

1-1 Promotion Planning

1-1-1 Create a promotion to boost sales. Which promotion type are you going to use?

1-1-2 Call your promotion "Fun and Games ##". Use USD as the currency for your promotion. Your promotion is to run in the first two weeks (1st - 15th) of the month after next.

You want to use certain articles from the merchandise category R1132 Sport.

To do this, choose the *Items* pushbutton. In article selection, enter merchandise category R1132, article TA*##, and then choose *Execute*.

This takes you back to fast entry where you enter the following data:

| | | | |
|---------------|-------------|-----------|------------------|
| TA11## | 1440 | PC | 15.99 USD |
| TA12## | 300 | PC | 79.99 USD |

1-1-3 Enter purchaser group **R30** in purchasing organization and **R300** in the header data for your promotion. Save your promotion and make a note of the promotion number: _____

1-1-4 The promotion will be run in stores **T1##** and **T2##**. These are grouped together in a site group. It has the key **BGAK##**. Go to the change view for your promotion and select the tabstrip *Site groups*. Select site group **BGAK##** with class type **030** and check the sites which are assigned to it. How do you do this?

- 1-1-5 On the tab page *Quantity planning*, you plan the distribution of your articles using an allocation table. You want to distribute your articles using an allocation rule. The allocation quantities should exceed the planned sales quantities by 10%.

The allocation rule should relate to your site group **BGAK##**. Store **T1##** is to receive twice as much merchandise as store **T2##**. How do you create a new session?

Find your allocation rule on the *Quantity Planning* tab page using F4 help. It should be valid for POrg **R300** and purchasing group **R30**. Highlight the *Allocation Quantity* column, and choose the *Mass Maintenance* button to make the following entries:

Percent 10

Credit sign+

Basis = planned sales quantity

The allocation table unit corresponds to the sales unit of measure for the promotion. Choose the *Refresh* pushbutton.

To control the business transaction, you should select the item category for stock reduction. When you use this item category, stock transport orders are generated as the follow-on documents for the allocation table.

- 1-1-6 Save the promotion.



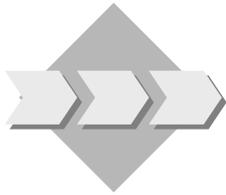
Unit: Analysis and Promotions

Topic: Promotion Subsequent Processing



After completing this exercise you will be able to:

- Inform stores about promotions, generate an allocation table and assign additional to your articles, all as part of subsequent processing for promotions.
- Generate follow-on documents for allocation tables



You have created a promotion that is intended to boost sales of particular articles. The merchandise for your promotion is to be sent directly from the warehouse to the stores. To do this, you use an allocation table and generate warehouse orders as follow-on documents for the allocation table.

2-1 Promotion Subsequent Processing

2-1-1 You want to list the article for your promotion automatically. To do this, go from the initial screen for subsequent processing for promotions to *Listing*. Run listing by choosing the *Listing* pushbutton. Confirm the message that appears, stating that listing is to be run automatically (Note: a promotion module is generated).
Save your promotion again.

2-1-2 In subsequent processing for promotions, run supply source determination for both articles. To do so, go from the initial screen for subsequent processing for promotions to *Supply source determination* by choosing the appropriate pushbutton.
Select the items and generate possible supply sources. Ensure that both articles will be delivered by distribution center **T7##**. This can be done by selecting the *Change supply source* pushbutton. Make any required changes to the data.
When complete, save your promotion again.

2-1-3 Activate the prices for your promotion. To do this, go from the initial screen for subsequent processing for promotions to *Price activation*, using the appropriate pushbutton.
Select both items and run price activation. In the dialog box that appears, ensure that the prices are activated in the background.
Save your promotion again.

- 2-1-4* You can assign additional to the articles in your promotion. To do so, go from the initial screen for subsequent processing for promotions to *Additional*s. Select both items and define *Additional*s. Assign article **R100041** (Sales Ticket) ensuring that it be affixed in-store. You should then assign the additional to the store group. After having selected the appropriate lines, select the *Assignment* button. In the tree structure for the class display, select your site group using the appropriate pushbutton. Go back two screens and save your promotion.
- 2-1-5 Generate an allocation table in the next step. To do so, go from the initial screen for subsequent processing for promotions to the *Allocation table*. Check if the default data for the allocation table has been copied correctly from the promotion (see exercise 1-1-5). Select both items and choose the pushbutton for generating allocation tables using allocation rules. In the dialog box that appears, enter 0 days as the lead time for issuing merchandise to the distribution center.



If you receive a warning that the delivery date to the stores is not a business day, confirm the message and continue nonetheless.

(Note: You can remove the warning, however, by leaving subsequent processing for promotions **without saving** your data, and by changing the goods receipt date for the site group in promotions planning. You should then return to subsequent processing for *allocation tables* and generate the allocation table again.)

Note the number of the allocation table:

Save your promotion again.

- 2-1-6* You want to inform store **T1##** about your promotion. To do so, go from the initial screen for subsequent processing for promotions to *Announcements*. Select *Announcement* → *Notification*. Using the appropriate button, select the entire subtree for store **T1##** (including all the assigned articles) and execute the *Notification*. Confirm the message that appears, go back to the announcement and save your promotion. To display the announcement, go back to the *SAP Easy Access menu* and choose *Promotion* → *Announcement* → *Output* → *Screen*. Enter the number of your promotion, **T1##** for the store and then execute output. Exit the display mode.

2-2* **Follow-on documents for the allocation table**

- 2-2-1 From the *Fast entry overview* for displaying promotions, go to the maintenance environment for allocation table you have created.
Display the individual item quantities that have been assigned to the individual stores in the site display. Select the necessary items:

| Site | Planned qty for TA11## | Planned qty for TA12## |
|------|------------------------|------------------------|
| T1## | | |
| T2## | | |

- 2-2-2 Switch from change mode to the allocation table **display**. Select both items and choose *Allocation table* → *Create follow-on documents* → *Warehouse order*. What influences the type of follow-on document that is generated?
-

- 2-2-3 Generate the follow-on documents.
How many stock transport orders are created?
-

Note the number of the stock transport order:

- 2-2-4 Leave the allocation table and display the allocation table again. Select the item(s), select *Sites* and then *Detail View*. Here, select the tab page *Admin. data*. Ensure that the follow-on document you created is entered.



Unit: Analysis and Promotions

Topic: Promotion Planning



All the steps detailed in these solutions start from the Retailing screen:

SAP menu → Logistics → Retailing

1-1 Promotion Planning

1-1-1 **Master data → Edit promotions → Promotion → Create**
Promotion type: **0002** (Promotion of sales), select **[Enter]**

1-1-2 A number is assigned to your promotion internally (leave the field empty).
Promotion name: Fun and Games
Plan currency: **USD**
Enter data in the fields *On sales from* and *to* fields as detailed in the exercise.

Tab page *Fast entry*:

You want to use certain articles from the merchandise category R1132 Sports Goods. To do this, choose the *Items* pushbutton. In article selection, enter merchandise category R1132, article TA*##, and then choose **[Execute]**.

| Article | Planned Sales Qty | Sales Price | Plnd Crncy |
|---------|-------------------|-------------|------------|
| TA11## | 1440 | 15.99 | USD |
| TA12## | 300 | 79.99 | USD |

[Enter] (missing data is retrieved)

1-1-3 **Goto → Header data**

Tab page *Planning*

Purchasing org.: **R300**

Purch. grp.: **R30**

[Back]

Promotion → Save

The promotion number appears in the status bar.

1-1-4 **Promotion** → **Change**, [Enter]

Tab page *Site Groups*

Enter site group **BGAK##** in the relevant column

Double-click on site group **BGAK##**, sites T1## and T2## are entered in the *Site/Class* column

[Save]

1-1-5 Switch to the *Quantity Planning* tab page

In field *Alloc. table*, enter allocation rule number **ARAK##** for both items

Choose **Environment** → **Allocation rule** → **Display**

Allocation rule: **ARAK##**

[Enter]

Site group **BGAK##** is entered in the *Base site group* column

Select item, **Goto** → **Sites**

Two proportions are assigned to site **T1##**

On the *Quantity Planning* tab page for the promotion:

Highlight both your items and the *Allocation Quantity* column, and use the *Mass Maintenance* pushbutton to make the following entries:

Percent 10

Credit sign+

Basis = planned sales quantity

The allocation table unit corresponds to the sales unit of measure for the promotion. Choose the *Refresh* pushbutton.

| Article | Planned Sales Qty | Allocation Qty | AUn | Alloc. Rule | Item Cat. |
|---------|-------------------|----------------|-----|-------------|-----------|
| TA11## | 1440 | 1584 | ST | ARAK## | F |
| TA12## | 300 | 330 | ST | ARAK## | F |

1-1-6 **Promotion** → **Save**

[Back]



Unit: Analysis and Promotions

Topic: Promotion Subsequent Processing

2-1 Subsequent processing for promotions

Master data → *Edit promotions* → *Promotion* → *Subseq. Processing*

If it is not displayed automatically, enter the number of your promotion.

2-1-1 Choose the *[Listing]* pushbutton.

Run listing using the *[Listing]* pushbutton.

Confirm both messages with *[Enter]*.

Promotion → *Save*

2-1-2 Choose *[Supply source determination]* pushbutton.

Select the items in column S.

Choose *[SS proposal]* button.

In the table, press the *[Change]* pushbutton for each item individually. For each store, check that distribution center **T7##** is defaulted in the *Vendor* column. If this is not defaulted, enter **T7##** manually for each store.

[Back]

Promotion → *Save*

2-1-3 Choose *[Price activation]* pushbutton.

Select the items in column S.

Choose *[Activate]* pushbutton.

In the dialog box that appears, choose *[Background price calc.]* pushbutton.

Promotion → *Save*

2-1-4* Choose *[Additional]* pushbutton.

Select both items.

Choose *[Additional]* pushbutton.

Enter **R100041** in the *Additional* column.

Enter **0004** in the *Procedure* column, using F4 if necessary.

Select the lines in the table and choose *Additional* → *Assignment*

To select the subtree for the site groups: place your cursor on the site group and then choose

Assignment → *Select/deselect*

Choose *[Back]* twice and then

Promotion → *Save*

2-1-5 Choose *[Allocation table]* pushbutton.

Select both items.

Choose *[Alloc. rule]*

Goods receipt lead time in distribution center **0** confirm the message that appears in the relevant column.

Promotion → *Save*

- 2-1-6* Choose **[Announcement]** pushbutton.
 Choose **[Notification]** pushbutton.
 Place your cursor on **T1##**, and then choose **Edit → Select subtree +/- Announcement → Notification**
 Confirm the message that appears and then choose **[Back]**
Announcement → Save

[Back] to the SAP Easy Access menu
Promotion → Announcement → Output → Screen
 Enter promotion number and site and then choose
Program → Execute
 2x **[Back]**

2-2* Follow-on documents for the allocation table

- 2-2-1 Choose **Promotion → Display, [Enter]**
Environment → Allocation table, Allocation table → Change
 for each item: Select item
Goto → Sites → Sites in Item
 Note the planned quantities and choose **[Back]**
- 2-2-2 **Allocation table → Display** and choose **[Enter]**
Edit → Select → Select all
Allocation table → Create follow-on documents → Warehouse order
 The type of follow-on document depends on the item category for the allocation table.
- 2-2-3 **Edit → Gen. wareh. order**
 A warehouse is generated for both stores. The warehouse order number appears in column *POrd*.
- 2-2-4 **Allocation table → Display** and choose **[Enter]**
 Select the items and choose **Goto → Sites → Sites in item**
 Select the items and choose **Goto → Sites → Details**
 Tab page *Administration data*. A warehouse order is generated for both stores.
 The warehouse order number appears under *Follow-on documents* in the *Warehouse order* field.

Analysis and Promotions

Contents:

- **Process Overview**
- **Creating a sales order (using SAP Retail Store)**
- **Converting a sales order into a purchase order**
- **Inbound delivery of merchandise to customers**
- **Sending a vendor invoice to vendors**
- **Billing a sales order to the customer**
- **Summary**

© SAP AG 2004



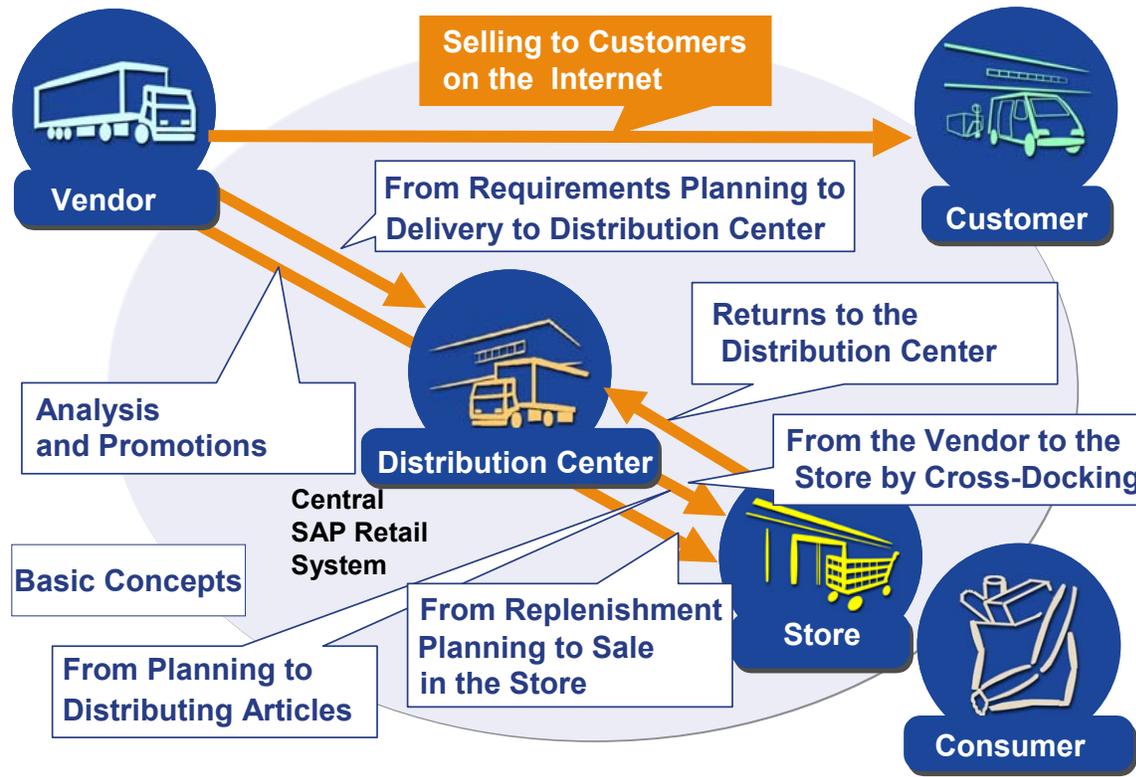
At the conclusion of this unit, you will be able to:

- **Procure merchandise from a vendor for a (wholesale) customer in SAP Retail.**
- **Run the following activities:**
 - **Create a sales order in SAP Retail and the SAP Retail Store**
 - **Generate purchase orders from a sales order**
 - **Bill sales orders**

© SAP AG 2004

Overview Diagram

SAP



Internal Use SAP Partner Only

Internal Use SAP Partner Only

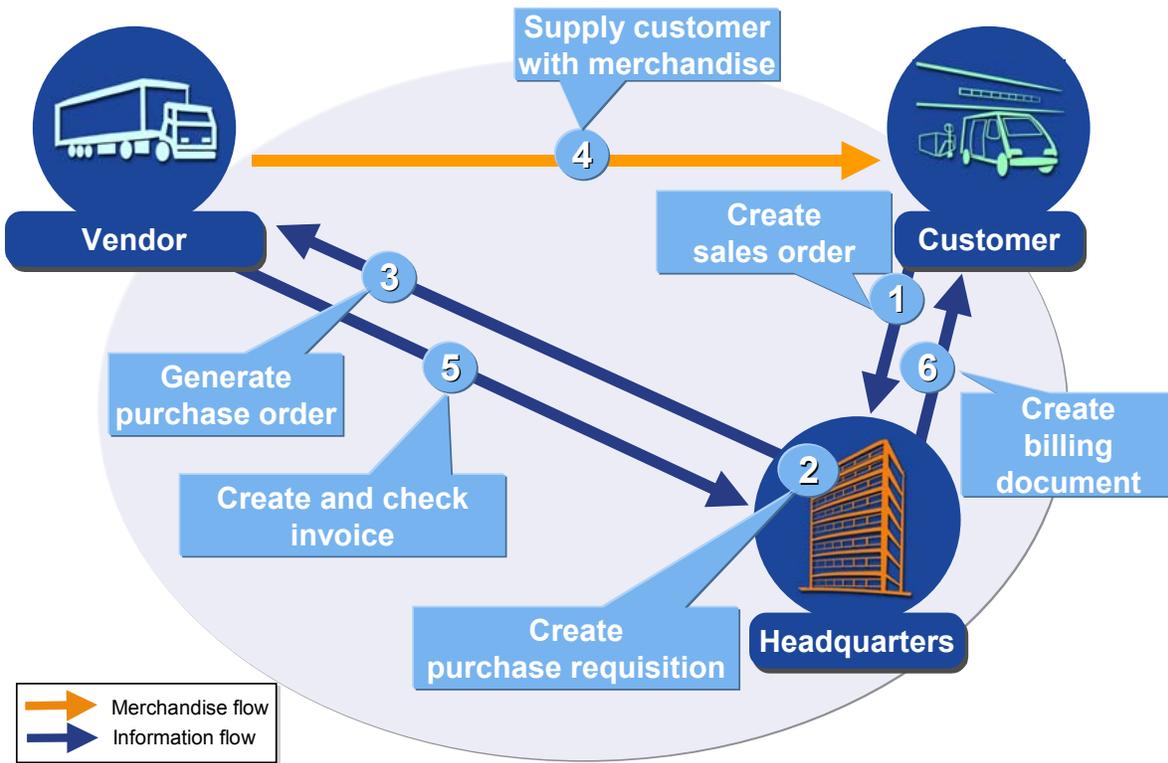


- **A customer orders merchandise from your enterprise using the SAP Retail Store.**
- **The sales order that is generated is sent to an external vendor. The vendor is then sent direct to the customer.**
- **After the vendor has billed you for the merchandise, you, in turn, bill the customer.**

© SAP AG 2004

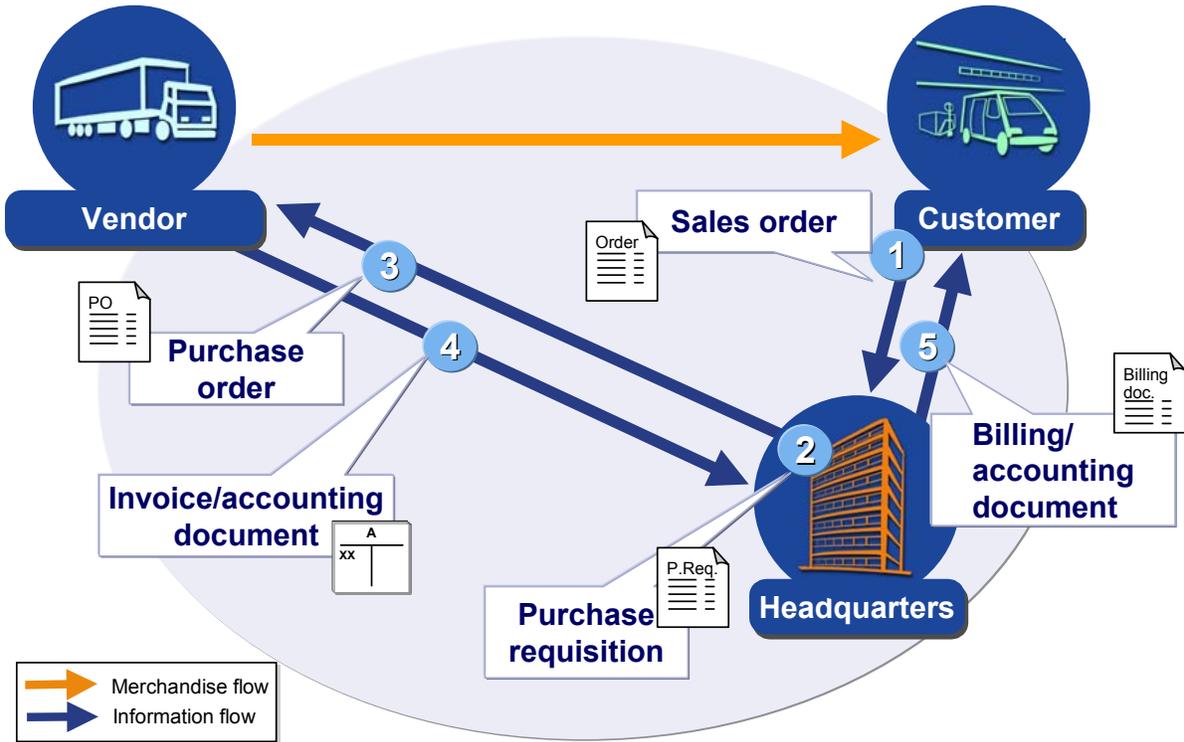
Selling To Customers On The Internet: Process Overview

SAP



© SAP AG 2004

Overview: Documents



© SAP AG 2004

Internal Use SAP Partner Only

Internal Use SAP Partner Only

Create sales order

Information



- Display/maintenance of promotion and allocation table
- Display of warehouse stocks
- SAP standard analyses

Sales



- Creation, maintenance and status display of sales orders

Master data



- Assortments
- Product catalog
- Sales prices
- ...

Inventory management



- Goods receipt posting
- Stock transfers

Purchasing



- Store order
- Follow-on documents for store order

© SAP AG 2004

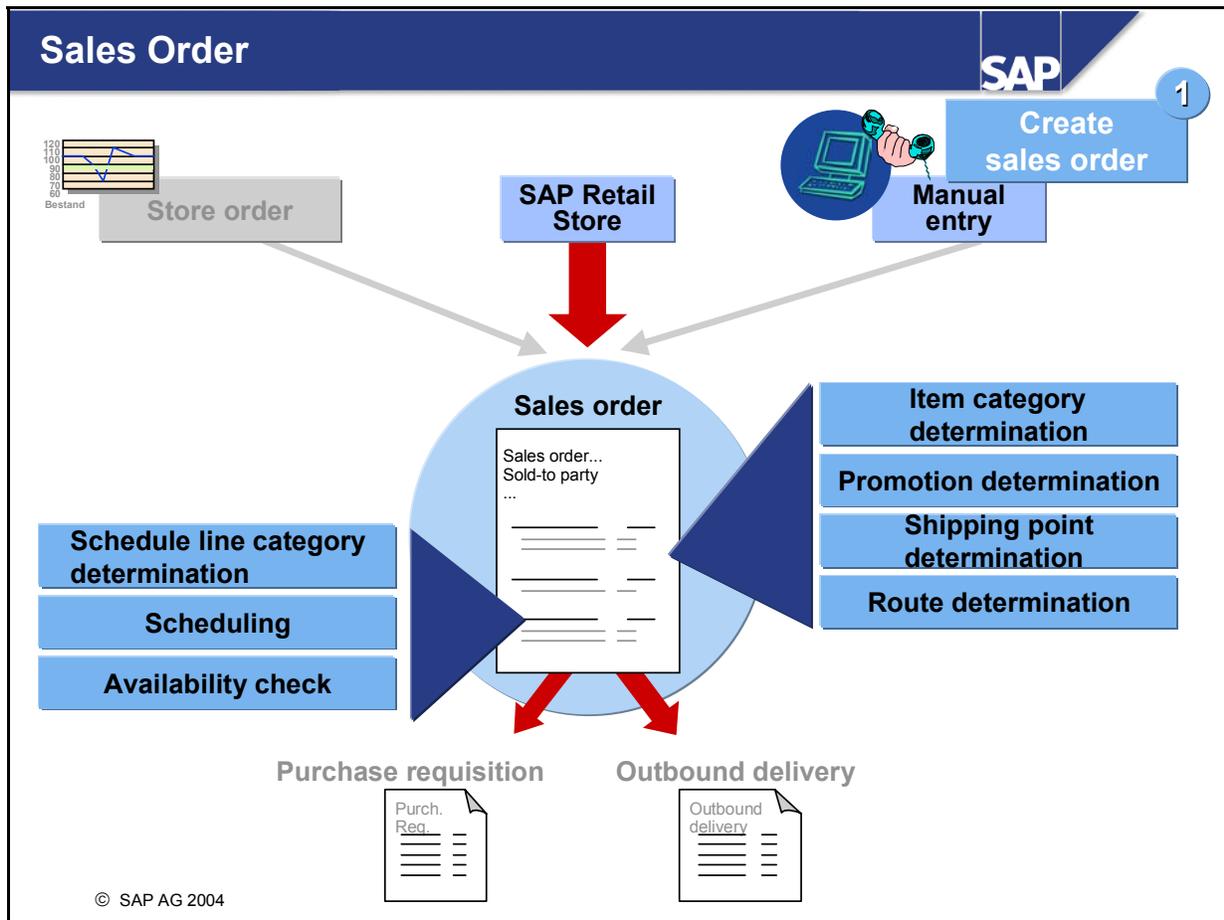
Internal Use SAP Partner Only

Internal Use SAP Partner Only

Sales Order

SAP

1



- You can enter sales orders online in the central SAP system - as done by customers who send their purchase orders by post, fax or telephone. Sales orders can also be uploaded into your system automatically using EDI. Customers can also create sales orders directly from the SAP Retail Store.
- Depending on the Customizing settings that have been made, your system uses the following functions when a sales order is created:
 - Scheduling
Different shipping activities are scheduled depending on the sales order type.
 - Availability check
Depending on the schedule line category, the system checks the availability of the staging date that is determined by scheduling. If staging cannot be guaranteed, the system automatically generates new schedule lines.
 - Item type / schedule line type determination
Your system determines an item type for each order item and a schedule line type for each schedule line for an order item.
 - Quantity optimizing (at item or schedule line level)
Depending on the item type, quantity optimizing is run at item level (or at schedule line level for schedule lines that are created manually). The original quantity is retained and included in the documents belonging to the relevant sales order.

Sales organization
Sales channel
Division

Order type

Create sales order

| | |
|--------------------------------|--------------|
| Sales order | 5400 |
| Ordering party | R3002 |
| Requested delivery date | 02/15 |
| | |
| <hr/> | |
| Art. 72364 220 PC DC R300 ... | |
| 15.2. 220 PC | |
| Art. 89236 18 CAR DC R301 ... | |
| 15.2. 12 CAR ... | |
| 18.2. 6 CAR ... | |
| Art. 35765 40 PAL DC R301 ... | |
| 15.2. 20 PAL ... | |
| 15.3. 10 PAL ... | |
| 31.3. 10 PAL ... | |
| . . . | |
| . . . | |

Header

1

n

Items

1

m

Schedule line

- Sales organization / sales channel / division
- Order type
- Order number
- Sold-to party
- Requested delivery date
- ...
- Item category
- Article with short text
- Order quantity
- Delivery DC
- Billing data
- ...
- Schedule line category
- Delivery date for schedule line
- Shipping data
- ...

© SAP AG 2004

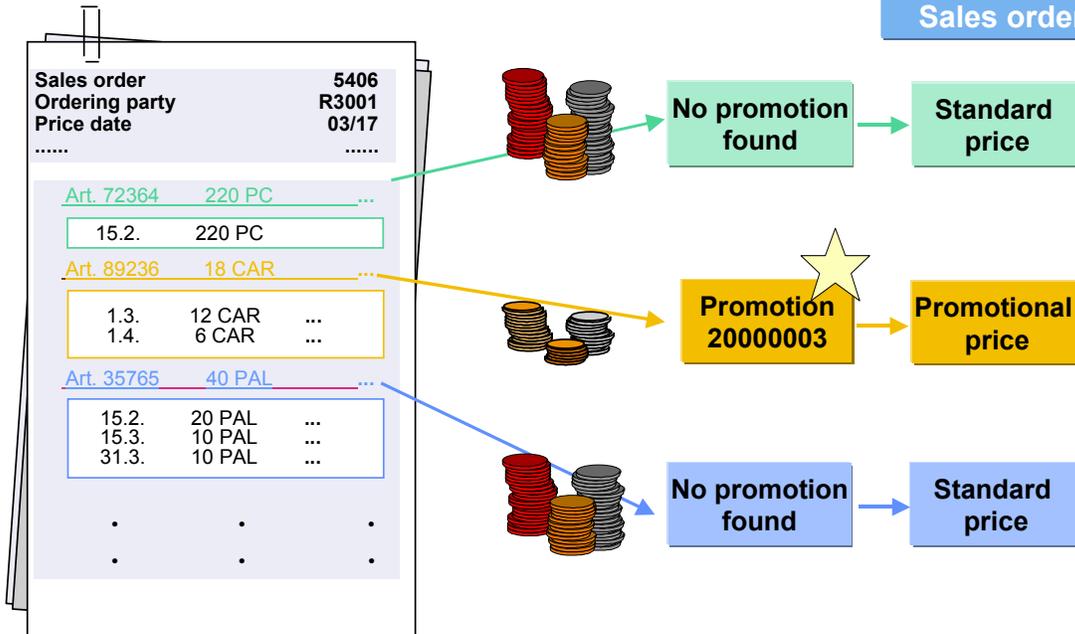
- The sales order is the central document for sales to customers.
- A sales order consists of a header and one or more items. The items can be broken down into different schedule lines, to allow vendors to use partial deliveries.
- Each sales order is assigned to one point of sales, one delivery channel and one division.
- The sales order document is controlled using the order type.

Sales Order: Promotion Determination (1/2)

SAP

1

Create Sales order



© SAP AG 2004

- In Customizing, you can configure your system so that automatic promotion determination is automatically run in the sales order (at item level) for every order type and screen sequence group.
- A suitable promotion is then identified and the relevant promotional conditions (prices) are assigned to the item in question.

Sales Order: Promotion Determination (2/2)

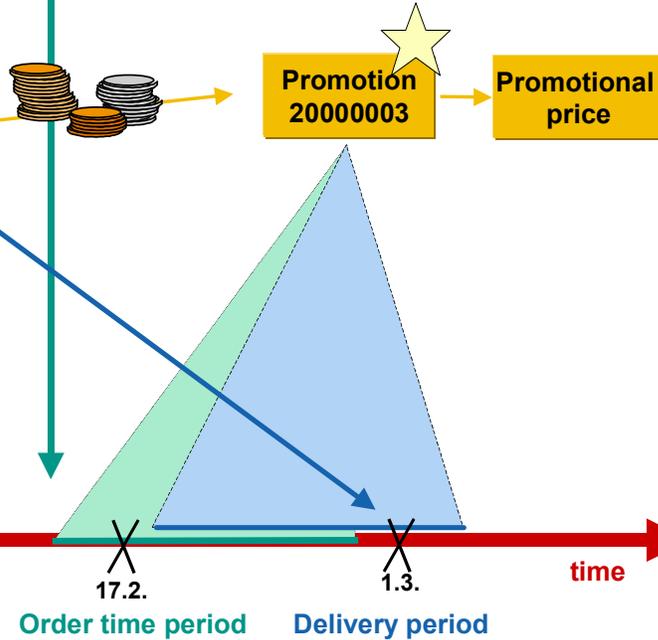
SAP

1

Create sales order

Sales order 5406
 Ordering party R3001
 Price date 02/17

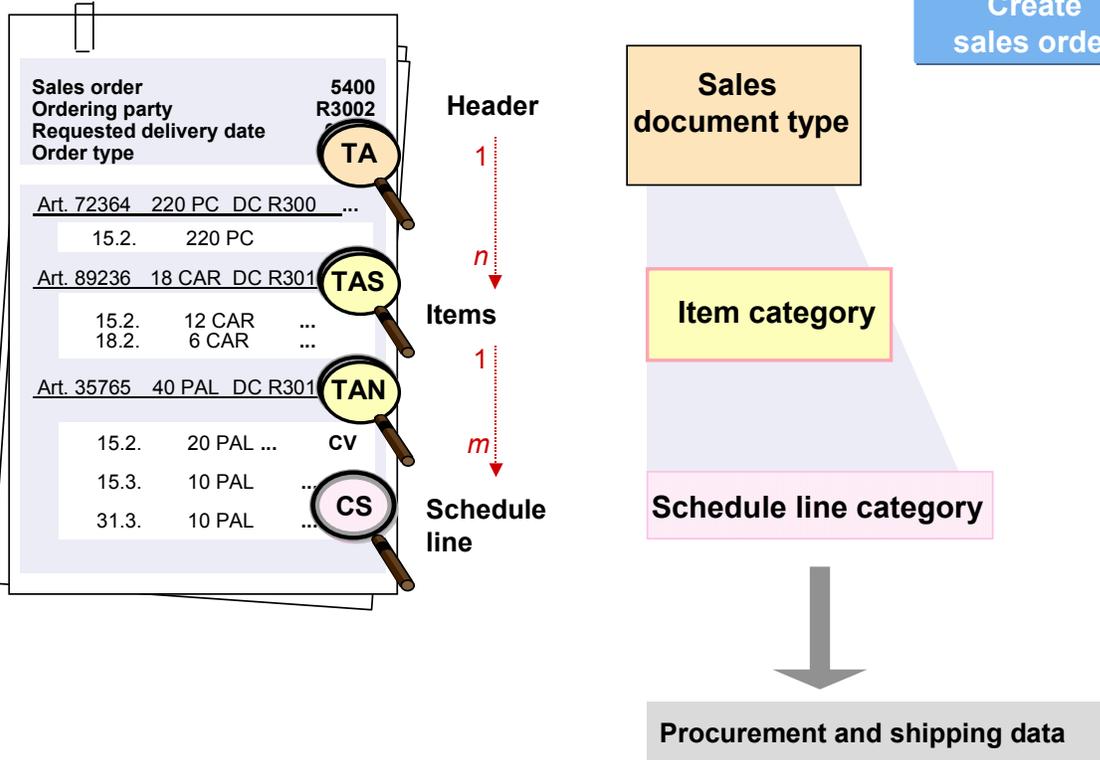
| | | |
|------------|--------|-----|
| Art. 72364 | 220 PC | ... |
| 15.2. | 220 PC | ... |
| Art. 89236 | 18 CAR | ... |
| 1.3. | 12 CAR | ... |
| 1.4. | 6 CAR | ... |
| Art. 35765 | 40 PAL | ... |
| 15.2. | 20 PAL | ... |
| 15.3. | 10 PAL | ... |
| 31.3. | 10 PAL | ... |



© SAP AG 2004

- In the basic data for Promotions, you can enter an order time period during which the sales conditions for the promotion in question are valid. The price date (the business data in the header) is then checked against the order time period during the promotion determination period for the sales order. The price date for the sales order must be within the specified order time period so that your system can locate a suitable promotion.
- You can also define delivery time periods in the basic data for Promotions. Merchandise that is ordered can only be delivered during the specified time periods. The delivery date for the first schedule line for an item in a sales order is checked against the stated delivery time. If it is not within the defined time period, the user receives a warning message – the promotion is still assigned to the correct sales order item nonetheless.

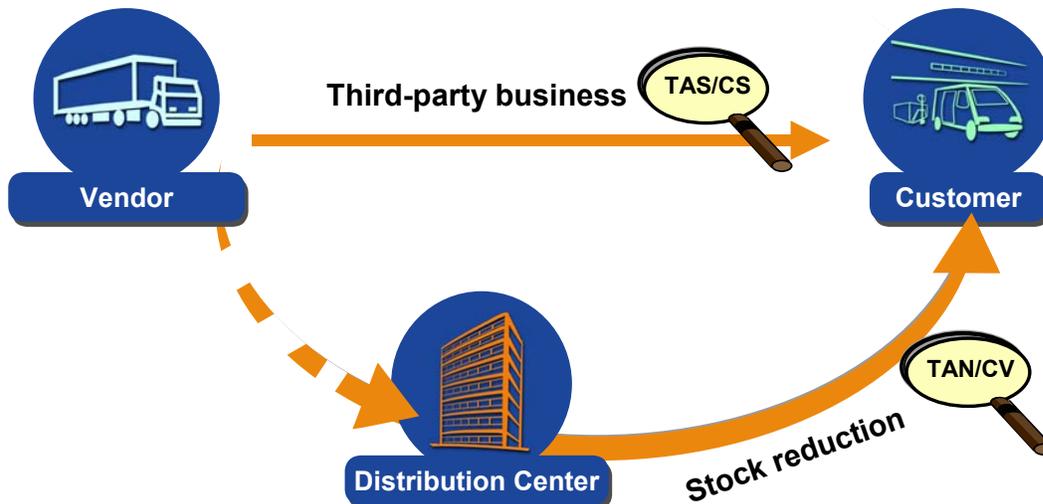
Create sales order



© SAP AG 2004

- Sales documents consist of a document header and any number of items. There is no limit to the number of schedule lines that can be assigned to each item. Procurement and shipping data is stored at schedule line level.
- Depending on the structure, sales documents can be customized at header, item or schedule line level. The relevant control instruments are the sales document type, the item category and the schedule line category.

Item category / Schedule line category



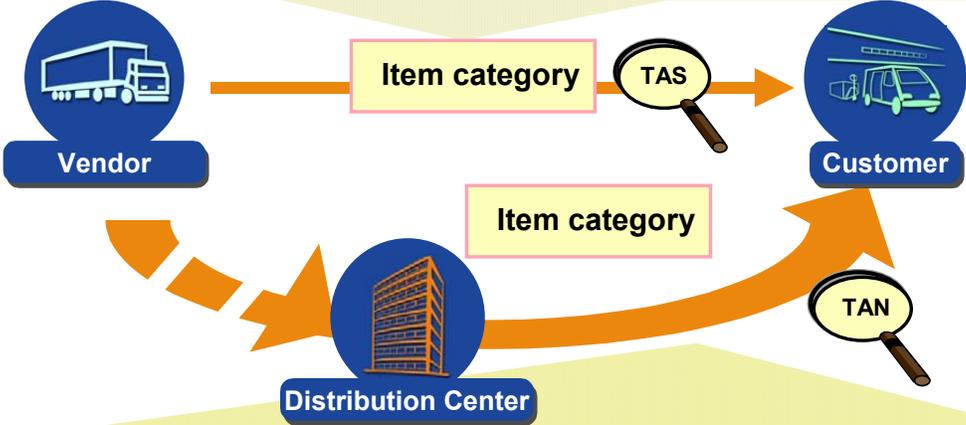
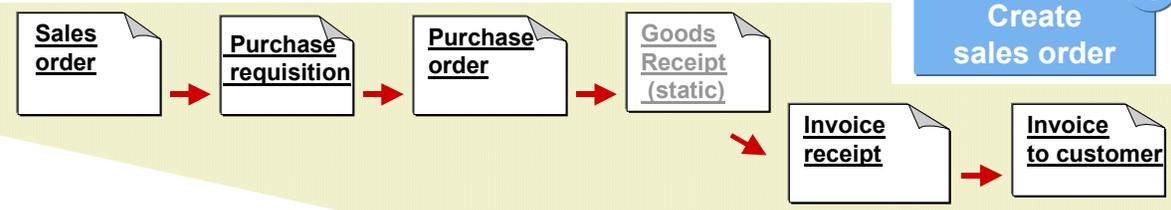
© SAP AG 2004

- Item category TAS has been defined for third-party order items. This definition results from a combination of sales document type, item category group and two other control options in Customizing. Additionally, you can create alternative item categories here, which you can select manually in the sales order item. The item category group is assigned in the article master.
- The system has also been configured in such a way that schedule line type CS ("Third-party") is used for third-party items. This results from a combination of the item category and the MRP type in Customizing. Alternative schedule line categories can also be created here. The MRP type is also assigned in the article master.
- Sales orders can contain additional third-party items or items with different item categories.

Controlling Using the Item Category

SAP

1



© SAP AG 2004

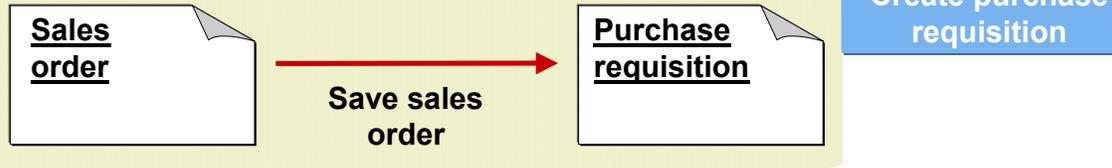
Internal Use SAP Partner Only

Internal Use SAP Partner Only

Controlling Using the Schedule Line Category CS

SAP

2



Item category / Schedule line category



- No delivery, not relevant for delivery
- No goods issue in DC
- No movement type

- Create purchase requisition
- Item category S

© SAP AG 2004

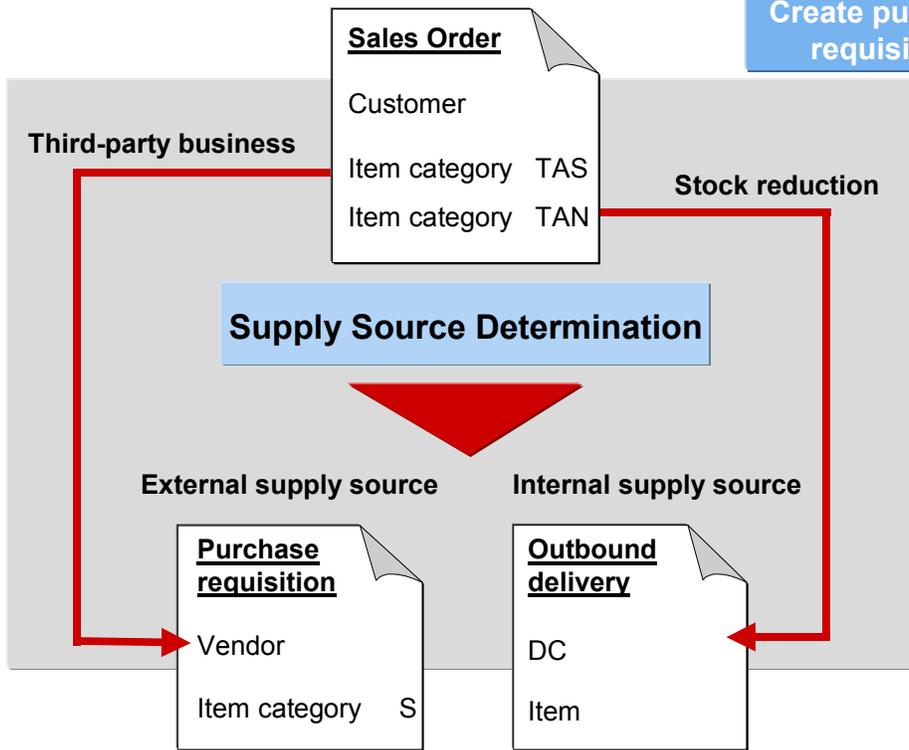
- Schedule line category CS (third-party) is used for processing third-party items in the standard system.
- No outbound deliveries are generated for the third-party items in your order. This means that the goods issue is not posted in your internal supply source (for example, the distribution center). Schedule line category CS does not therefore contain a movement type in Customizing and is not marked as delivery-relevant.
- In the standard system, purchase requisitions are normally generated automatically for third-party order items when the sales order is saved. In Customizing for schedule line category CS you must enter the document type for the purchase requisition as well as the item category (when displaying this internally) and the account assignment category.

Supply Source Determination in Sales Orders

SAP

2

Create purchase requisition



© SAP AG 2004

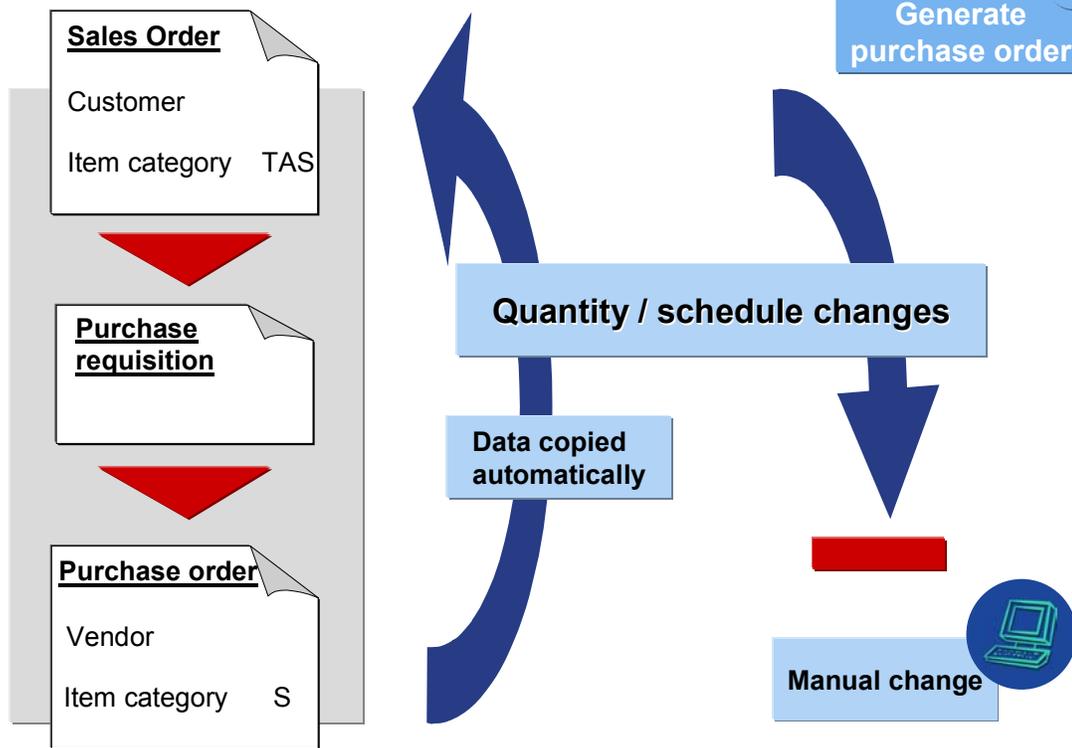
Internal Use SAP Partner Only

Internal Use SAP Partner Only

Quantity And Schedule Changes

SAP

3



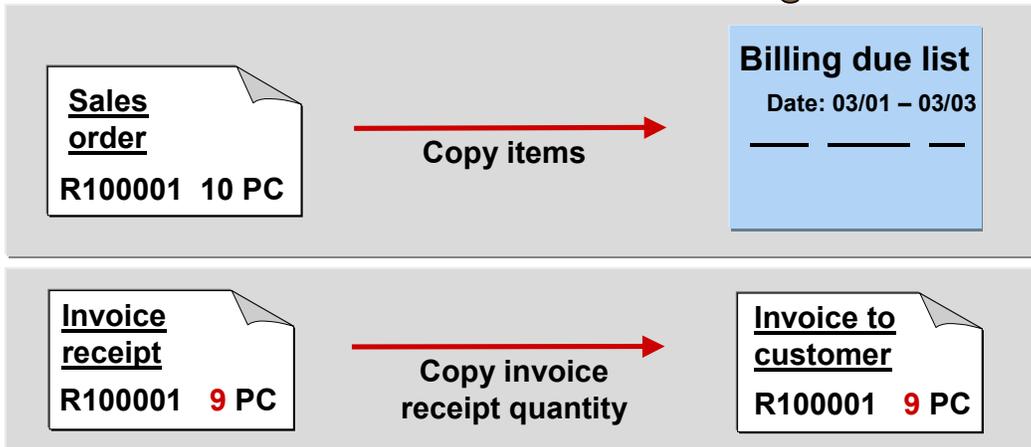
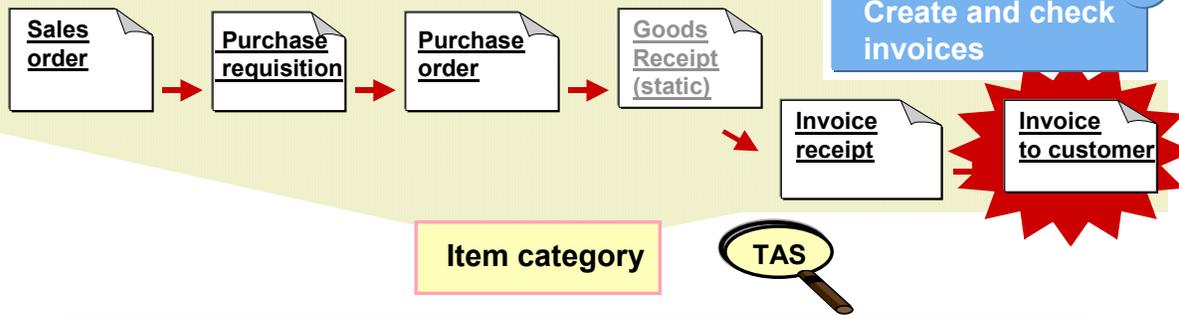
© SAP AG 2004

- Purchase orders are generated as purchase requisitions for third-party order processing.
- When a purchase order is created, the system automatically copies the recipient's address from the relevant sales order and uses it as the delivery address for the order. You can create a purchase order text for every third-party item in the sales order. The texts are automatically copied to the purchase order when it is created.
- The purchase order number that is generated appears in the sales order document flow. You can then jump to the purchase order from here.
- Changes that are made to the quantities and delivery dates in the purchase order are automatically copied into the sales order. This type of change is necessary, for example, when the vendor confirms different delivery dates and quantities for the purchase order.
- Note: If a purchase order already exists for a business transaction and you want to make changes to the sales order, they have to be done manually in the purchase order as they cannot be updated automatically. This could mean, for example, that customers receive merchandise although the sales order has already been cancelled. To monitor the situation, you can generate a list of all sales orders with third-party items in which the quantities recorded upon purchase and sales are different. You can print the list by running report SDMFSTRP.

Controlling Using the Item Category TAS

SAP

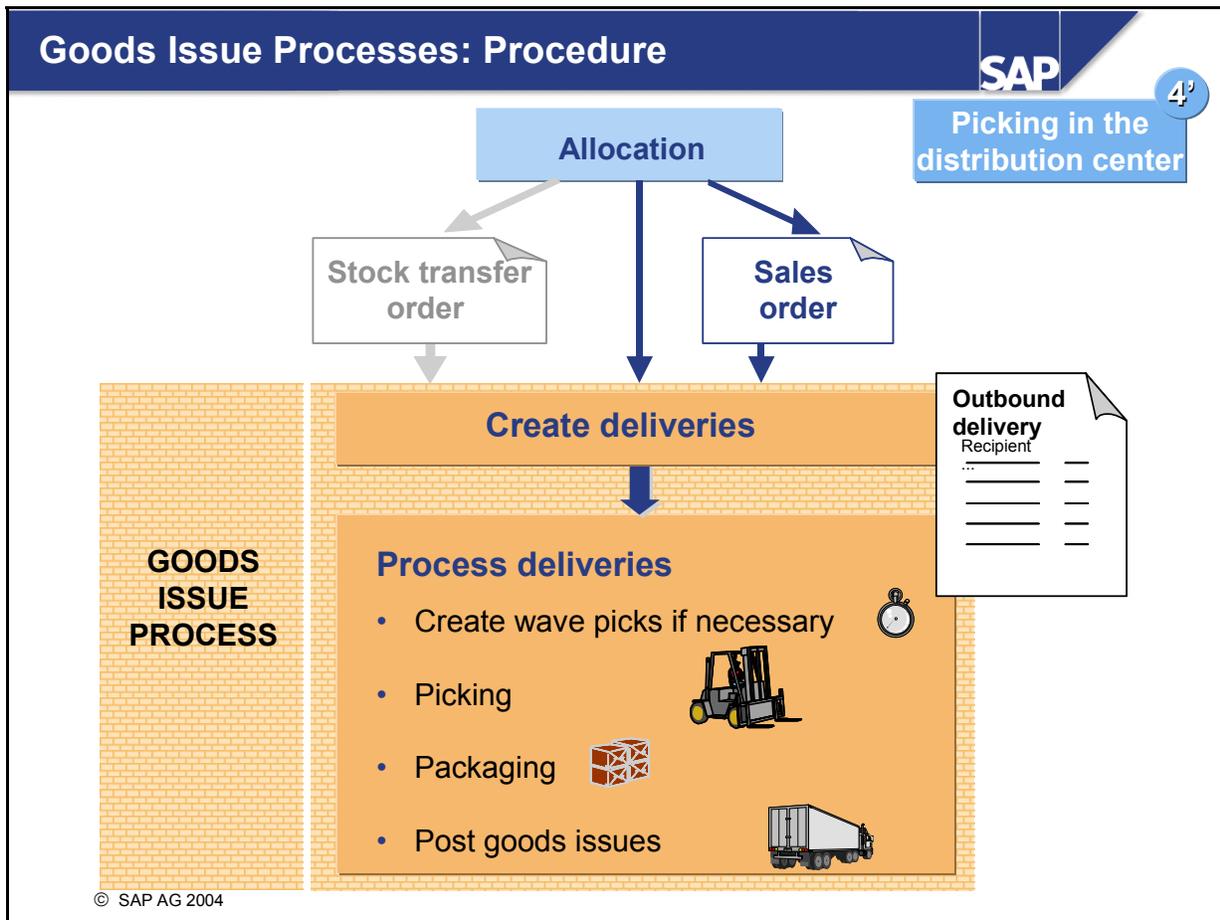
5



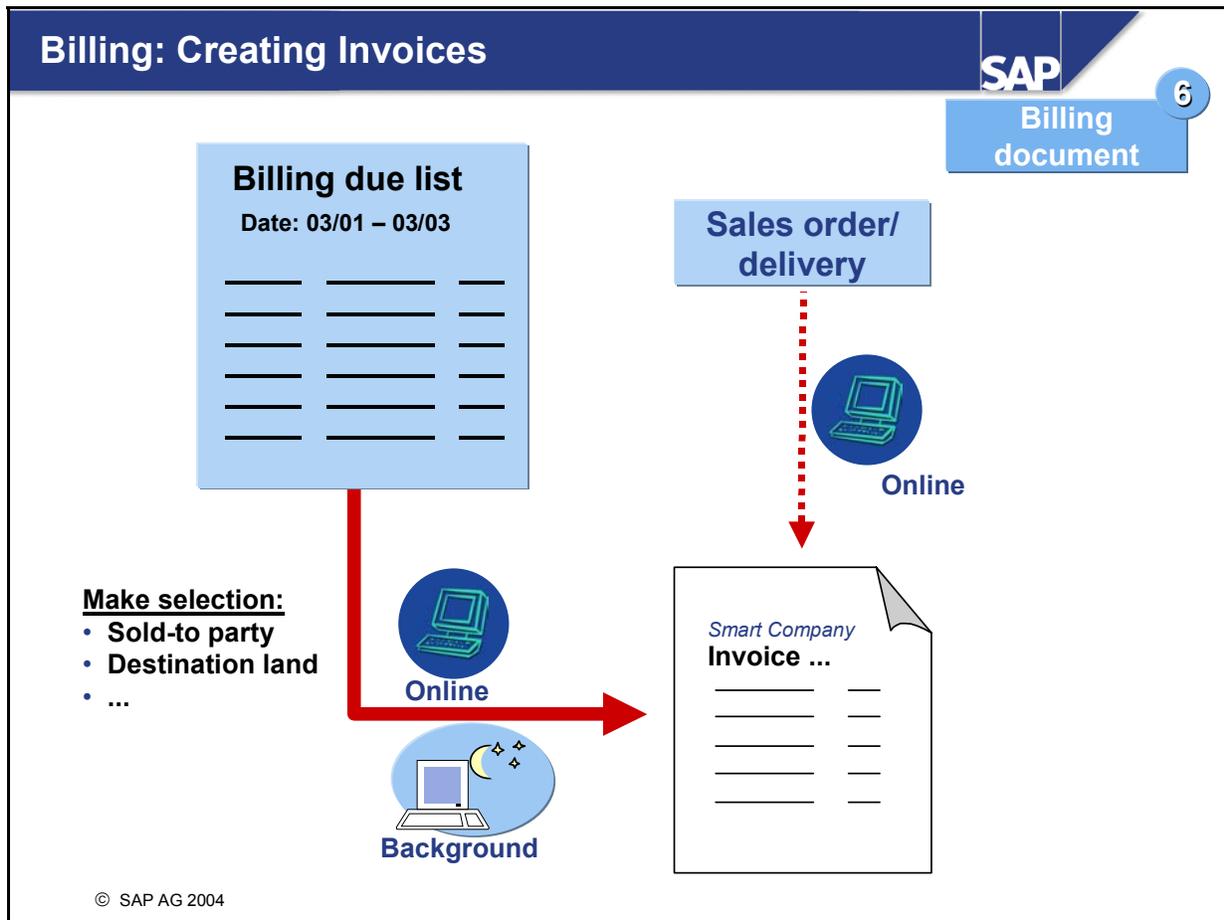
© SAP AG 2004

- If the billing document relevance indicator for the item category TAS has been set in Customizing to F ("Relevant for order-related billing document: Status as invoice receipt quantity"), the system includes the order in the billing due list if the invoice from the vendor has been received and entered in the system.
- In the copy control for "Sales document according to billing document", the standard setting for the third-party item category states that instead of using, for example, the order quantity, the quantity from the invoice receipt document should be copied into the billing document (field: Billing document quantity) instead.

Picking in the distribution center



- Delivery documents are central tools in shipping. Delivery documents are the basis for additional shipping activities such as picking, merchandise packaging (part of the process chain that is not covered in this unit) and goods issues.
- After creating delivery documents (normally for stock transport orders or sales orders, but in this case as a follow-on document for allocation tables) they can be grouped together in wave picks (= units for the goods issue processes that are to be processed in a specified time interval) if necessary. Picking is then run for the deliveries. They are then, if necessary, packaged and sent to goods issues.



- Invoices can be created in two ways:
 - By entering a specific sales order or delivery for which you want to create an invoice
 - By selecting more than one reference document from the billing-due list for which invoices are to be created. The selection criteria for this are the ordering party and the destination country.
- You can create as many billing documents as you want using these two methods. Instead of sales order and delivery, credit / debit memos or return documents are generated as reference documents.

Company code

Billing type

| | | | |
|--------------|---------|----------|-----|
| Billing doc. | 80023 | | |
| Payer | R153 | | |
| | | | |
| Art. 155 | 220 PC | 1590 USD | ... |
| Art. 815 | 18 CAR | 22 USD | ... |
| Art. 917 | 40 PAL | 164 USD | ... |
| Art. 553 | 12 CAR | 72 USD | ... |
| Art. 681 | 1000 PC | 388 USD | ... |
| Art. 334 | 500 LAY | 1890 USD | ... |
| . | . | . | . |
| . | . | . | . |

Header

1

n

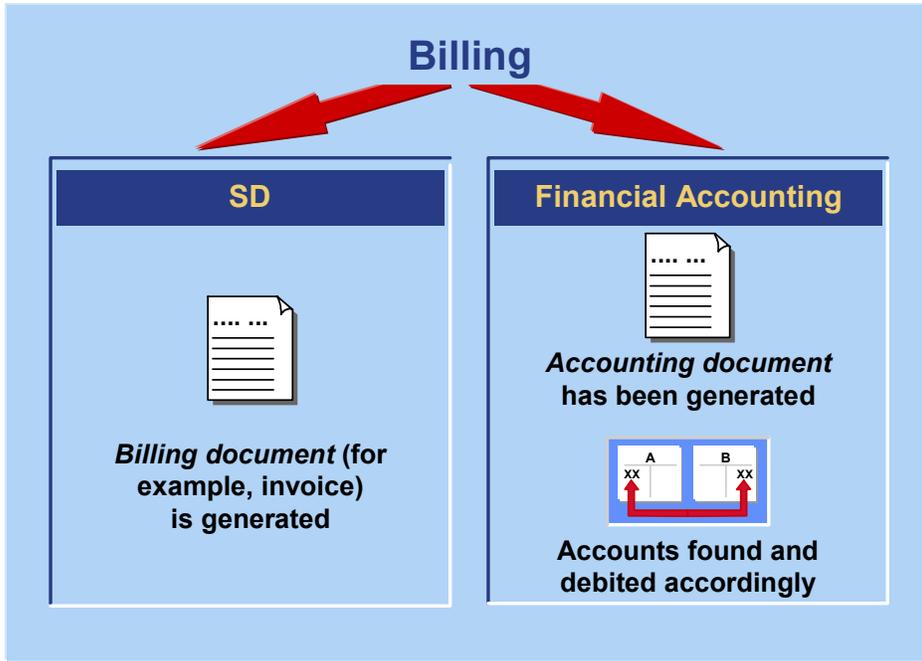
Items

- Company code
- Billing type
- Billing document number
- Payer
- Billing date
- Payment conditions
- ...

- Item category
- Article with short text
- Billed quantity
- Net value
- Document flow
- Retail price
- ...

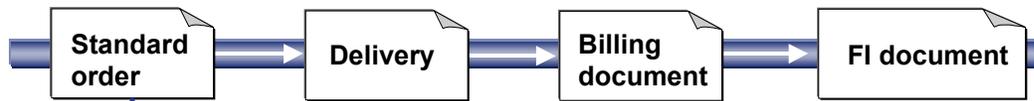
© SAP AG 2004

- A billing document (for example, an invoice, credit memo, debit memo) is assigned to one company code only and only one billing type for controlling the document (for example, F1 = invoice, G2 = credit memo, L2 = debit memo; for more information, see Customizing).
- A billing document consists of a header and one or more items.



© SAP AG 2004

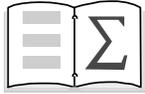
- While a billing document is generated, an accounting document is generated in financial accounting. The system finds the relevant accounts (automatic account determination) which are then debited accordingly.



| Document |
|------------------------------------|
| Standard order 6839 |
| . Outbound delivery 80002832 |
| .. WMS transfer order 482 |
| .. Merchandise delivery 4900001537 |
| .. Invoice 90005371 |
| ... Accounting 100001276 |

© SAP AG 2004

- The documents in the sales and distribution process are connected by the document flow. This allows you to display the history and the status of your order in the sales and distribution process.
- You can display the document flow as a list of inter-connected documents. Depending on the document that you want to use to call up the list, all preceding and subsequent documents are displayed.
- From this list, you can display the relevant documents or status overview for the documents in question.
- This grants you a quick overview of the SD process status, thereby helping you to answer customer questions quickly and efficiently.



You are now able to:

- **Procure merchandise from a vendor for a (wholesale) customer in SAP Retail.**
- **Carry out the following activities:**
 - **Create a sales order in SAP Retail and in the SAP Retail Store**
 - **Generate purchase orders from a sales order**
 - **Bill sales orders**

© SAP AG 2004



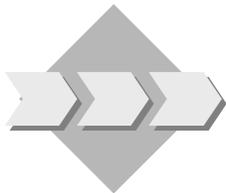
Unit: Selling To Customers On The Internet

Topic: SAP Retail Store



After completing this exercise you will be able to:

- Create a sales order in the SAP Retail Store or in SAP Retail



You are a customer who orders merchandise in a store using the SAP Retail Store. You have a recognized customer number from the retailer. You use this customer number to log on to the SAP Retail Store.

- 1-1 You want to buy articles in your store, some of which are not in stock in this store and need to be ordered. A store associate creates a sales order for you as a customer.

- 1-1-1 Logon with the URL:

[http:// igTTR-<client>.wdf.sap.corp:1080/sap/its/homepages/sapstore.htm](http://igTTR-<client>.wdf.sap.corp:1080/sap/its/homepages/sapstore.htm)

to SAP Retail Store. Use the same logon data as in the standard SAP system (language, system, client), and start SAP Retail Store.

- 1-1-2 You log on to the SAP Retail Store using the same user as in R/3. You are a co-worker in store **T2##**.

- 1-1-3 Go to the Sales Order in the Sales area. The customer number for your customer is: **TCA##**. Create an order. For the collection of the merchandise, set *Automatic Selection*, as the order contains goods that are kept in stock and goods that are not kept in stock, some of which the customer will collect in your store **T2##** on the proposed requested delivery date. Enter order number **2910##**. Enter the following articles on the *Sales* screen.

| | | |
|---|----------------|-------|
| "Ultrapol 633" | R100061 | 20 PC |
| " Replacement battery for cordless phone" | R100060 | 20 PC |
| "RX-T2-Microphone" | R100054 | 50 PC |

Note that instead of using the Enter key in the SAP Retail Store, you have to use the *Refresh* button. Check that *Promotion order* was selected as the sales document type.

1-1-4 To order the merchandise, choose *Create Document*. The system issues an order confirmation: Make a note of the following data:

Promotion order number:

Complete Delivery: _____

Requested Delivery Date: _____

Sold-To Party: _____



The SAP Retail Store can sometimes be temporarily unavailable. If this is the case, create a sales order directly in SAP Retail, as detailed in exercise 1-2*.

1-2* Create a sales order, *order type AA* and containing the following details:

Sales organization: **R300**
Distribution channel: **R1**
Division: **R1**
Sold-to party: **TCA##**
Purchase order number: **2910##**
Requested delivery date: **In one week**

Enter the following *articles*:

| | |
|----------------|--------------|
| R100054 | 50 PC |
| R100060 | 20 PC |
| R100061 | 20 PC |



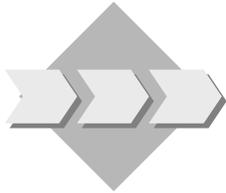
Unit: Selling To Customers On The Internet

Topic: Promotion Orders, Purchase Orders



After completing this exercise you will be able to:

- Demonstrate promotion determination for sales orders
- Use the control for procurement logistics using item categories and schedule line categories



Your customer has ordered an article that is currently on promotion. The customer also wants to purchase articles that you do not actually deliver - they are procured from and delivered by an external vendor. You create a purchase order for these articles with the vendor.

2-1 You display the sales order that the system has generated from the Internet order placed by your customer, **TCA##**. You now look more closely at the individual items in the sales order.

2-1-1 Which articles are currently included in a (wholesale) promotion?

Make a note of the promotion number and the promotional price for the article:

Promotion:

Promotional price:

2-1-2 Which item categories are defaulted for the individual article items and what do they do?

| Article number | Item category | Item category meaning (<i>F4</i>) |
|----------------|---------------|-------------------------------------|
| R100054 | | |
| R100060 | | |
| R100061 | | |

2-1-3 Go to the *Procurement* tab page and find the defaulted schedule line categories. Determine the items for which a delivery requirement (column Requirements type) has been generated.

| Article number | Schedule line category | Delivery requirement yes / no |
|----------------|------------------------|-------------------------------|
| R100054 | | |
| R100060 | | |
| R100061 | | |

2-1-4 In accordance with the controls for schedule line categories and item categories, some articles in the order are delivered from the distribution center. Other articles, however, are delivered straight to the customer by an external vendor. You can see this in the *Shipping* tab in the *(Overall) Delivery status* column.

Which articles are delivered from the distribution center?

Which articles have to be ordered from an external vendor?

2-2 Return to the initial screen for the sales order and display the status overview for your order by choosing *Environment*.

2-2-1 What are the delivery status and the purchase confirmation status for the order?

| | |
|------------------------------|--|
| Delivery status | |
| Purchase confirmation status | |

2-2-2 The system generated a purchase requisition for both articles belonging to schedule line type CS when the order was saved. The purchase requisition forms the basis for your vendor order. Use the document overview to find the purchase requisition number.

| Article number | Purchase requisition |
|----------------|----------------------|
| R100060 | |
| R100061 | |

2-2-3 Which document has to be generated from the purchase requisitions so that the external vendor knows about the customer's order and can deliver the articles to the customer in question?

2-2-4 Create the purchase order for vendor **R3002**, with a reference to your purchase requisition. If necessary, enter **0001** as the storage location. Use the document overview and the selection variant. Find site **R300**, purchasing organization **R300** and purchasing group **R30**. Make a note of their numbers.

2-3 View the purchase order in your system.

2-3-1 Is a goods receipt expected for the items in the purchase order (Item details, *Delivery* tab page)?



If the *Goods receipt* checkbox is flagged on the *Delivery* tab page, switch to change mode for the purchase order and deselect the indicator.

2-3-2* How does the system ensure that the vendor does not deliver the merchandise to the distribution center?

2-3-3* View your purchase order in the print preview.



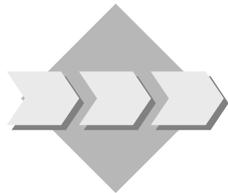
Unit: Selling To Customers On The Internet

Topic: Invoice Verification, Billing



After completing this exercise you will be able to:

- Run invoice verification for sales orders
- Run billing for the third-party items in the sales order



The invoice for your third-party order is received by invoice verification. The order is created once again in the system and checked. You then want to bill your customer for the articles that are delivered by a third-party.

- 3-1 The vendor has delivered the correct articles to the customer and sends you the invoice for the articles.

| | | | |
|--|---------|---------|---|
| | | | Fashion Inc. 2525 Greenwood Street 97701 Bend |
| IDES Retail US INC 1230 Lincoln Avenue 10019 New York | | | |
| INVOICE | | | |
| As detailed in purchase order (see exercise 2-2-4) we hereby request payment of the following articles following delivery to Simpson Apparel Inc. / 1566 Peach Tree NW / Atlanta GA 30303: | | | |
| Ultrapol 633 | 20 PC @ | 113 USD | 2260 USD |
| Replacement battery for cordless telephone | 20 PC @ | 12 USD | 240 USD |
| <u>TOTAL</u> | | | <u>2,500 USD</u> |

- 3-1-1 Create the document in logistics invoice verification for *company code* **R300** with today's date as the *document date* and with reference to your purchase order (see exercise 2-2-4). Check the document 'online' and then post it.
 - 3-1-2 You should then display your sales order and view all the follow-on documents that have been created. Do this in the status overview for *article* **R100061**. Which documents are listed?
 - 3-1-3 What is the current header status of the sales order?
- 3-2 You now want to bill your customer for the items that are listed in the sales order.
- 3-2-1 Use the billing due list to create an invoice for all the documents related to the order for *sold-to party* **TCA##**.
 - 3-2-2* Display the items in your billing document and compare them with the items contained in the sales order. Why are some items not billed for?
 - 3-2-3* What do you have to do in your system to ensure that article **R100054** is also billed?
 - 3-2-4* Execute the relevant activities. When doing so, ensure that distribution center **R300** is managed using lean warehouse management. The shipping point is **R300**. Picking is done in warehouse **030**.
 - 3-2-5* Use the billing-due list to create a billing document. To do so, select all documents that are valid for billing to customer **TCA##**.
 - 3-2-6 Go to the status overview for your sales order. What is the current header status for your sales order?
Display the complete document flow for your order.



Unit: Selling To Customers On The Internet

Topic: SAP Retail Store

1-1 Open Internet Explorer and enter the following address:

| Field Name | Values |
|-----------------|--|
| <i>Address:</i> | http://igTTR.wdf.sap.corp:1080/sap/its/homepages/sapstore.htm |

[LogOn]

- 1-1-1 Before entering the SAP Retail Store, select **English** as your language, and then the training system and client you are working in. Hit the **[Start SAP Retail Store]** button.
- 1-1-2 Select your store **T2##**.
- 1-1-3 Go to the *Sales order* in the *Sales* area. The customer number for your customer is: **TCA##**. Create an order. For the collection of the merchandise, set *Automatic Selection*, as the order contains goods that are kept in stock and goods that are not kept in stock, some of which the customer will collect in your store **T2##** on the proposed requested delivery date. Enter order number **2910##**. Enter the following articles on the *Sales* screen.

| Articles | Target Qty | Description |
|----------|------------|--|
| R100060 | 20 | Ultrapol 633 |
| R100061 | 20 | Replacement battery for cordless phone |
| R100054 | 50 | RX-T2-Microphone |

[Refresh]

The sales document type must be set to *Promotion Order*.
Collection must be set to *Automatic Selection*.

1-1-4

| Field name or data type | Values |
|--------------------------------|---------------------|
| <i>Promotion order</i> | |
| <i>Complete Delivery</i> | Not selected |
| <i>Requested delivery date</i> | |
| <i>Sold-to party</i> | TCA## |



All the steps detailed in these solutions start from the Retailing screen in the SAP Easy Access menu: **SAP menu** → **Logistics** → **Retailing**.

1-2* If you cannot create a sales order in the SAP Retail Store, proceed as follows:
Sales → **Sales order** → **Order** → **Create**

| Field name or data type | Values |
|-----------------------------|-------------|
| <i>Order type</i> | AA |
| <i>Sales organization</i> | R300 |
| <i>Distribution channel</i> | R1 |
| <i>Division</i> | R1 |

[Enter]

| Field name or data type | Values |
|-------------------------------|--------------------------|
| <i>Sold-to party</i> | TCA## |
| <i>PO number</i> | 2910## |
| <i>Required delivery date</i> | today in one week |

Enter the following *articles*:

| Articles | Quantity |
|----------------|--------------|
| R100054 | 50 PC |
| R100060 | 20 PC |
| R100061 | 20 PC |

[Enter]

Confirm any warning messages that may appear.

Confirm the schedule lines that are defaulted by selecting pushbutton **[Complete dlv.]**

Sales document → **Save**

[Back] to the *SAP Easy Access* menu.



Unit: Selling To Customers On The Internet

Topic: Promotion Orders, Purchase Orders

2-1 Sales → Sales order → Order → Create

Select button **[F4]** and search help *Sales documents for customers*.

| Field name or data type | Values |
|-------------------------|--------------|
| <i>Partner</i> | TCA## |

3x **[Enter]**

2-1-1 The *Promotion* field contains a number for article **R100054** which indicates that a (wholesale) promotion exists for article **R100054**.

Promotion number: **200000012**

Promotional price (*Net price*): **199 USD**

2-1-2 Tabstrip *Item overview*, column *Cat*

| Article number | Item category | Item category meaning [F4] |
|----------------|---------------|----------------------------|
| R100054 | TAN | Standard item |
| R100060 | TAS | Third-party item |
| R100061 | TAS | Third-party item |

2-1-3 Tabstrip *Procurement*, column *SLCat* and *Req.*:

| Article number | Schedule line category | Delivery requirement yes / no |
|----------------|------------------------|-------------------------------|
| R100054 | CV | Yes (011) |
| R100061 | CS | No |
| R100060 | CS | No |

2-1-4 Articles belonging to item category and **TAN** and schedule line category **CV** are delivered from the distribution center: in this case, the article that fits these criteria is: **R100054**

An order must be placed with an external vendor for all articles belonging to item category **TAS** and schedule line category **CS**:

R100060 and **R100061**

2-2 **Environment → Status overview**

2-2-1 **Edit → Expand all**

You can find the following data under the current header status:

| Field name or data type | Values |
|-------------------------------------|-------------------|
| <i>Delivery status</i> | Not delivered |
| <i>Purchase confirmation status</i> | Not yet confirmed |

2-2-2 The *Purchase requisition* line below the items contains the purchase requisition numbers.

2-2-3 A **purchase order** must be generated from the purchase requisition.

2-2-4 Choose **Back** twice (until you reach the SAP Easy Access menu).
Purchasing → Purchase order → Purchase Order → Create → Vendor/Supplying Site Known

If required, hit pushbutton **[Document overview on]**.

In the document overview, hit **[Selection variants]**

Choose **purchase requisitions**:

| Field name or data type | Values |
|--------------------------------|-------------|
| <i>Site</i> | R300 |
| <i>Purchasing organization</i> | R300 |
| <i>Purchasing group</i> | R30 |

Program → Execute

Select the number for the purchase requisition (from exercise 2-2-2) in the document overview and then hit **[Adopt]**.

Purchase order → Save
[Back]

2-3 **Purchase Order → Display**

If necessary, choose **Purchase order → Other purch. order**
Enter the order number from exercise 2-2-4 and hit **[Enter]**.

2-3-1 If required **[Expand]** the item details subscreen.

For each of the individual items, check the following:

The *Goods receipt* checkbox on the *Delivery* tab page must not be flagged, meaning that **no goods receipt** is expected in the distribution center, as the merchandise is to be delivered directly to the customer.



If the *Goods receipt* checkbox **is** flagged on the *Delivery* tab page, switch to change mode for the purchase order (**Purchase order → Display/Change**) and deselect the indicator for both items. Then select **Purchase order → Save**.

2-3-2* On the *Item details* subscreen, go to the *Delivery address* tab page. The delivery address in the purchase order is the customer's address.

2-3-3* **Goto → Print preview**

[Back] to return to the SAP Easy Access menu.



Unit: Selling To Customers On The Internet

Topic: Invoice Verification, Billing

3-1 Invoice verification

3-1-1 *Purchasing* → *Logistics invoice verification* → *Document Entry* → *Enter Invoice*

| Field name or data type | Values |
|-----------------------------|---|
| Company code | R300 |
| <i>Invoice date</i> | Today |
| <i>Gross invoice amount</i> | 2500 |
| <i>Purchasing document</i> | Purchase order number (see exercise 2-2-4) |

[Enter]

Invoice document → *Post*

[Back]

3-1-2 *Sales* → *Sales order* → *Order* → *Display*

If necessary, enter the number for the order you created in exercises 1-2-2 and 1-3.

[Enter]

Environment → *Status overview*

Edit → *Expand all*

The current item status lists the **purchase requisition**, the **purchase order** and the **invoice** for articles **R100061** and **R100060**.

3-1-3 The current header status is: **Not billed**

Hit *[Back]* to return to the SAP Easy Access menu.

3-2 **Sales → Billing**

3-2-1 **Billing Document → Process Billing Due List**

| Field name or data type | Values |
|-------------------------|--------------|
| <i>Billing date to</i> | Today |
| <i>Sold-to party</i> | TCA## |
| <i>Order-related</i> | ✓ |

Billing document → Display billing list

Billing document → Save

3-2-2* Place your cursor on the group number and choose

Goto → Documents

Place your cursor on the document number and hit

Environment → Display document

Create a second session:

System → Create session

Sales → Sakes Order → Order → Display

[Enter]

Environment → Status overview

Edit → Expand all

R100054 was not billed as this article has not yet been delivered to the customer.

Close the second session and in the first session, hit **[Back]** to the SAP Easy Access menu.

3-2-3* To bill for article **R100054**, you must first carry out the following shipping activities:

- Create a delivery
- Create a transfer order
- Confirm a transfer order
- Post goods issue

3-2-4* *Merchandise logistics → Logistics execution → Outbound Process → Goods Issue for Outbound Delivery → Outbound Delivery → Create → Single Document → With Reference to Sales Order*

| Field name or data type | Values |
|-------------------------|---------------------------|
| <i>Shipping Point</i> | R300 |
| <i>Selection date</i> | Today in two weeks |
| <i>Order</i> | Sales order number |

[Enter]

Outbound delivery → Save

[Back]

Merchandise logistics → Logistics execution → Outbound Process → Goods Issue for Outbound Delivery → Picking → Create Transfer Order → Single Document

| Field name or data type | Values |
|-------------------------|------------------------------|
| <i>Warehouse number</i> | 030 |
| <i>Delivery</i> | Delivery number above |

[Enter]

Transfer order → Post

Transfer order → Confirm → Transfer order

| Field name or data type | Values |
|-----------------------------|-------------------|
| <i>Warehouse number</i> | 030 |
| <i>Foreground/Backgrnd</i> | Foreground |
| <i>Adopt pick. quantity</i> | 2 |

[Enter]

Transfer order → Post

The delivery has the status *Goods issue posted* (due to *Adopt pick.quantity = 2*).

[Back] to the SAP Easy Access menu.

3-2-5* *Sales → Billing → Billing Document → Process Billing Due List*

| Field name or data type | Values |
|-------------------------|--------------|
| <i>Billing date to</i> | Today |
| <i>Sold-to party</i> | TCA## |
| <i>Delivery-related</i> | ✓ |

Billing document → Display billing list

Billing document → Save

[Back] to the SAP Easy Access menu.

3-2-6 *Sales → Sales Order → Order → Display*

Environment → Status overview

The current header status is **completed**.

Goto → Document flow

[Back] to return to the SAP Easy Access menu.

Contents:

- Process Overview
- Store Returns
- Returns using returns allocation table
- Vendor returns
- Physical inventory
- Summary

© SAP AG 2004



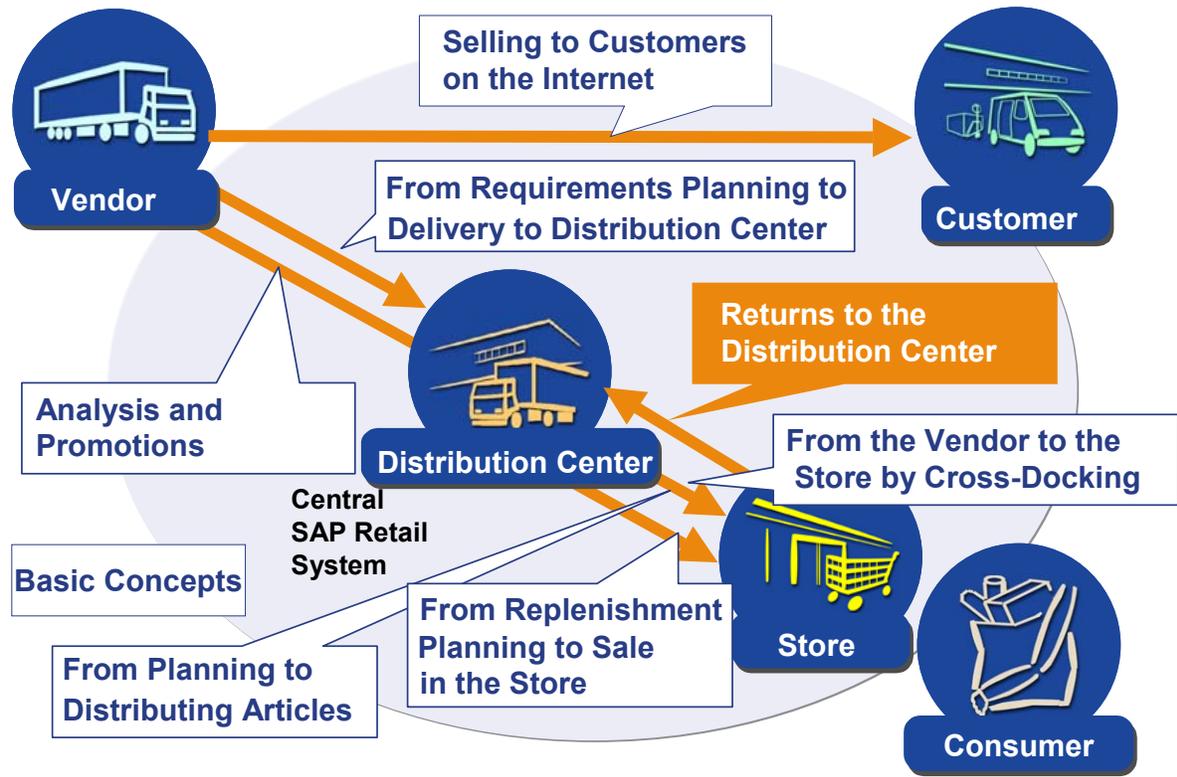
At the conclusion of this unit, you will be able to:

- **Create a returns allocation table**
- **Generate a stock transport order**
- **Generate a returns delivery**
- **Post a goods issue (as a negative goods receipt) in the store**
- **Post a goods receipt (as a negative goods issue) in the distribution center**

© SAP AG 2004

Overview Diagram

SAP



© SAP AG 2004

Internal Use SAP Partner Only

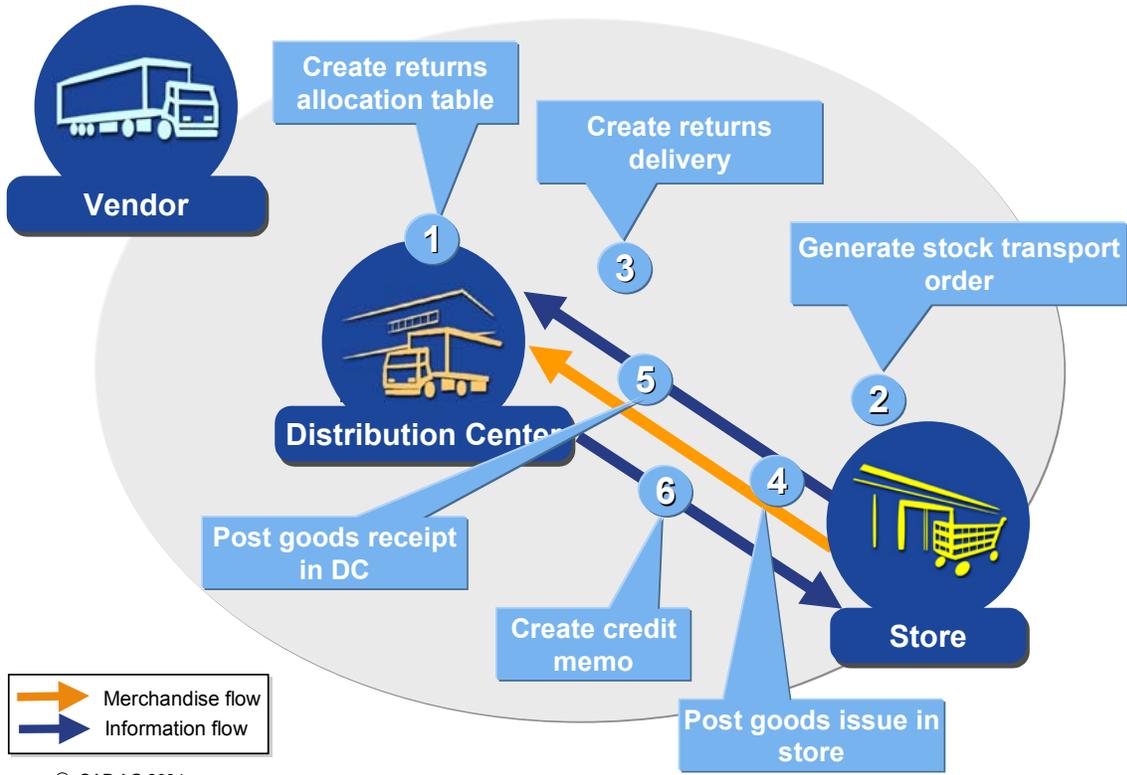
Internal Use SAP Partner Only



- **At the close of season or when a promotion ends, you want to return unsold merchandise (for example, seasonal merchandise) from your store to the distribution center.**
- **You have found that a particular article does not meet your quality standards. As a result, you want to remove the entire stock from your stores (for example, a recall for spoiled grocery products).**

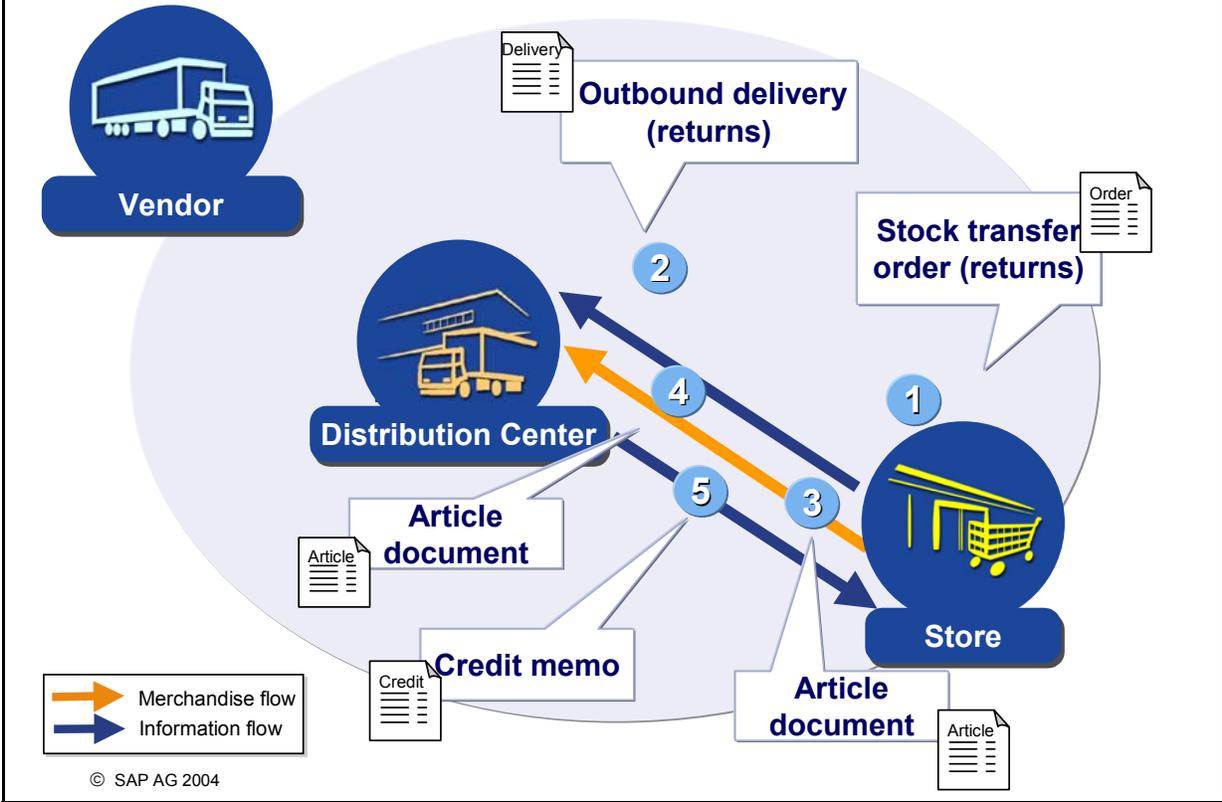
© SAP AG 2004

Store Returns Using Returns Allocation Table



Internal Use SAP Partner Only

Internal Use SAP Partner Only



Internal Use SAP Partner Only

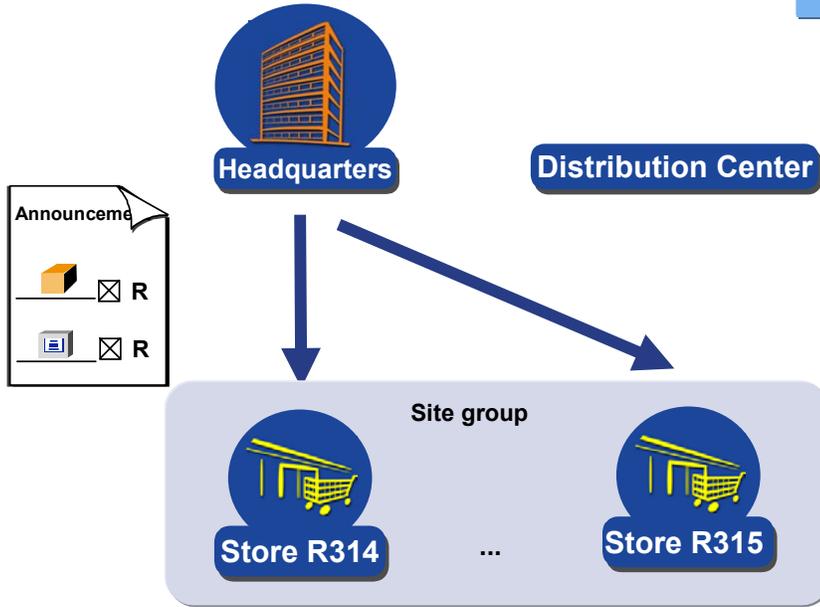
Internal Use SAP Partner Only

Returns Allocation Table: Announcement

SAP

1

Create returns allocation table



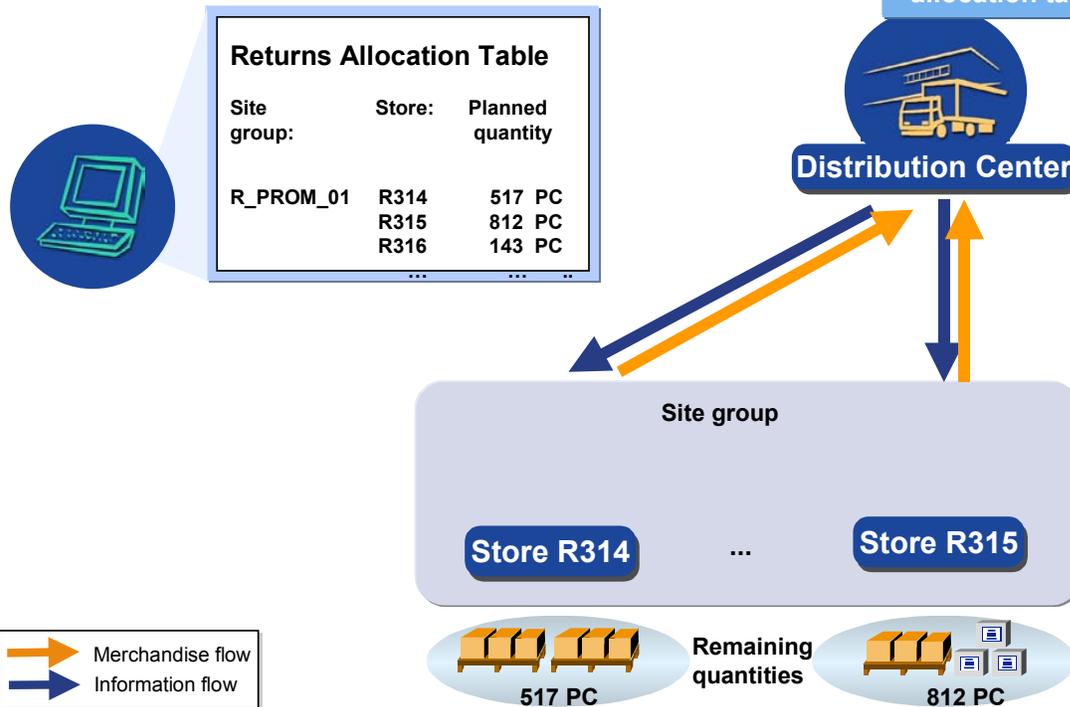
© SAP AG 2004

Create a Returns Allocation Table

SAP

1

Create returns allocation table



© SAP AG 2004

■ Use

- You can mark an allocation table item as being a returns item. Returns items enable you to process return deliveries that are coordinated centrally (for example, recalls).

■ Scope of functions

- Headquarters can use request notifications to define the quantities in return deliveries from sites. Purchase order documents are always created for return items in the allocation table. Return items in the allocation table are converted into return items in the purchase orders.
- The delivery date for return items is the date on which merchandise is issued, as planned in the system. If merchandise is to be sent back to an external vendor via the distribution center, the delivery date at the site must be before the delivery date for the distribution center.

Generate a Stock Transport Order

SAP

2

Generate stock transport order

Returns Allocation Table

| Site | Store: |
|-----------|--------|
| group: | |
| R_PROM_01 | R314 |
| | R315 |
| | R316 |

Stock transport order

| | | |
|---------|--------|---------------------------------------|
| R100000 | 507 PC | <input checked="" type="checkbox"/> R |
| R100001 | 203 PC | <input checked="" type="checkbox"/> R |
| R100002 | 102 PC | <input type="checkbox"/> R |

Distribution Center

Store

Merchandise flow
Information flow

© SAP AG 2004

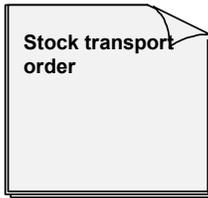
- A stock transport order is generated from the returns allocation table. The store and the distribution center must be in the same company code. If this is not possible, you should create a standard purchase order.
- At least one item must be marked as being a return in the stock transport order. This is done by setting the *R* indicator.

Generate a Return Delivery

SAP

3

Generate a return delivery



| Return delivery | | |
|-----------------|--------|---|
| R100000 | 507 PC | <input checked="" type="checkbox"/> Returns |
| R100001 | 203 PC | <input checked="" type="checkbox"/> Returns |
| R100002 | 102 PC | <input type="checkbox"/> Returns |



© SAP AG 2004

- Return deliveries are generated from the stock transport order.

Internal Use SAP Partner Only

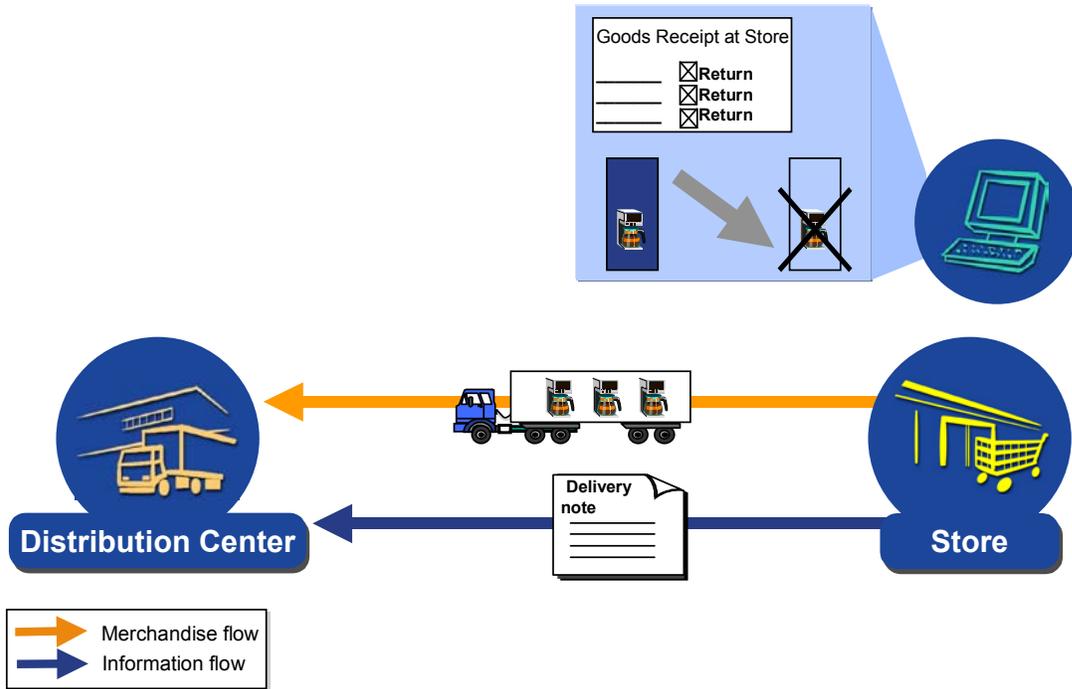
Internal Use SAP Partner Only

Post Goods Issue at Store

SAP

4

Post goods issue in store



© SAP AG 2004

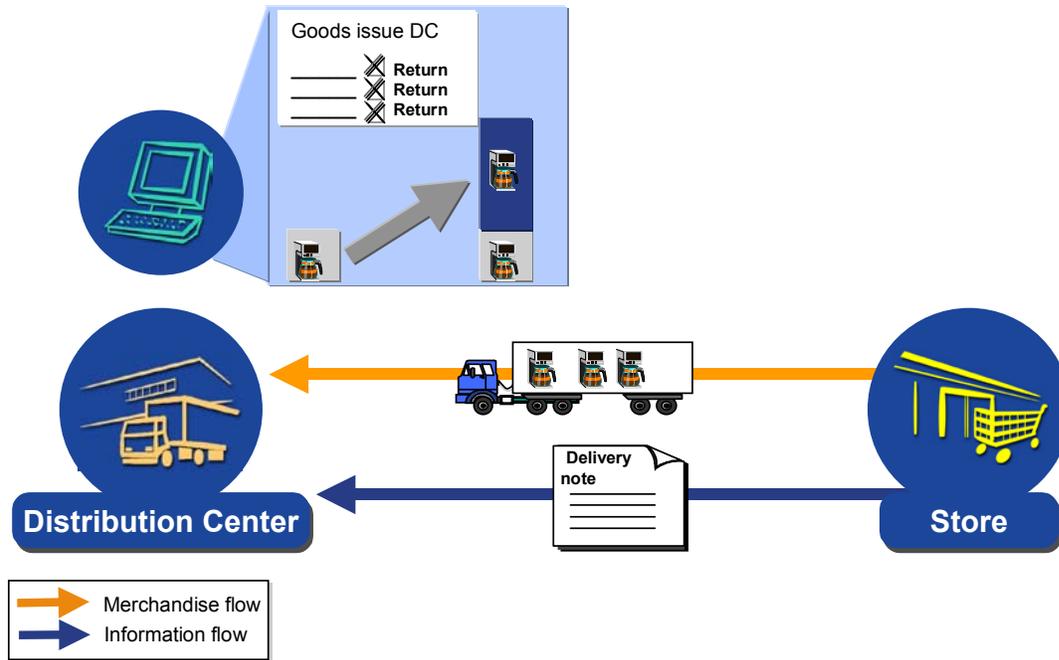
- Physical goods issue at store is posted as a negative goods receipt in the system when merchandise is returned.

Post Goods Receipt at Distribution Center

SAP

5

Post goods receipt
in DC



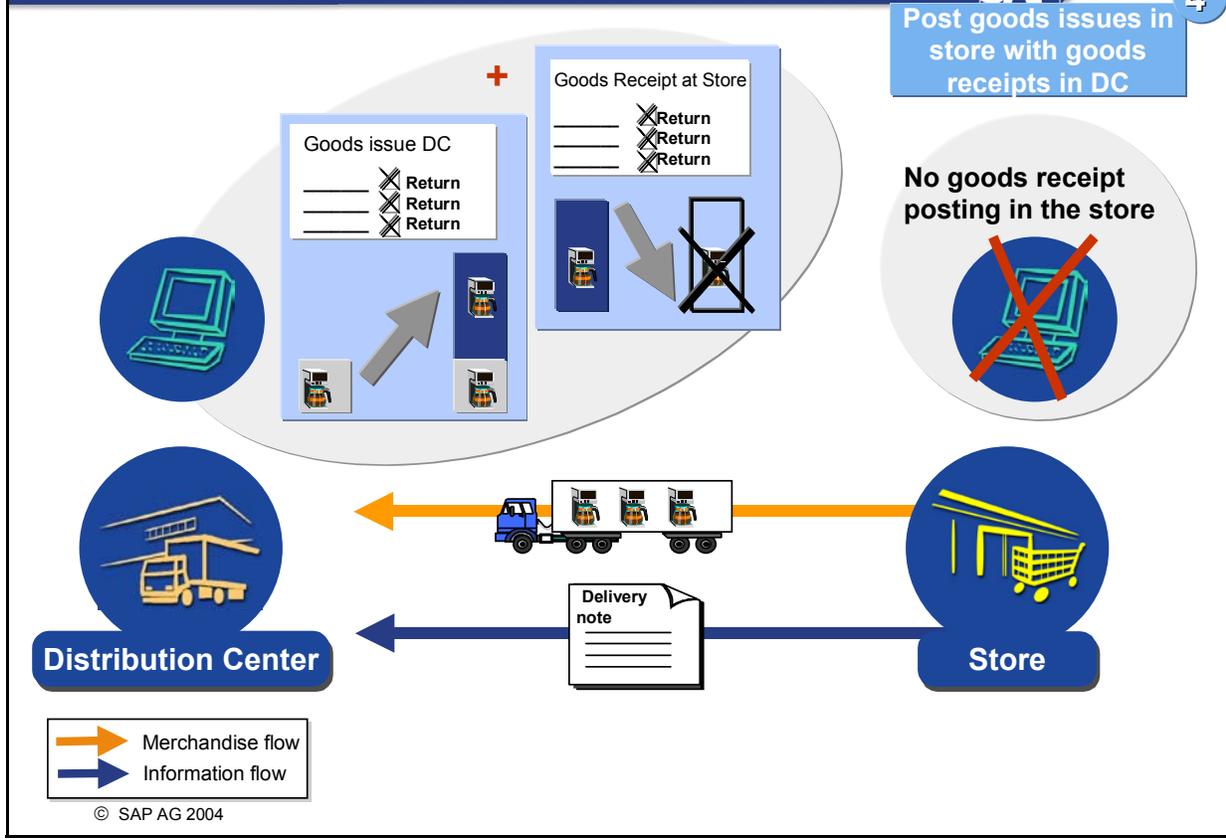
© SAP AG 2004

- The physical goods receipt in the distribution center is posted as a negative goods issue when merchandise is returned.

Post Goods Issues in Store with Goods Receipts in DC

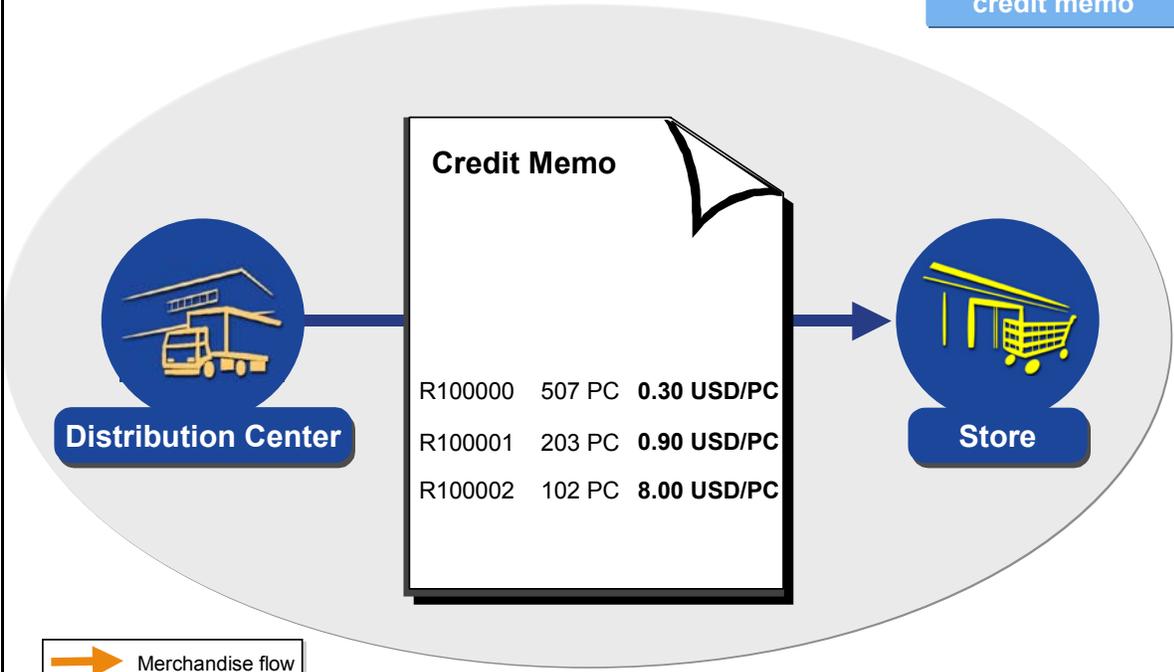
SAP

4'



- By checking the "One-step" flag in Customizing, goods receipts in the distribution center can be posted without posting the goods issue in the store beforehand. The goods issue in the store is then posted automatically.

Create credit memo

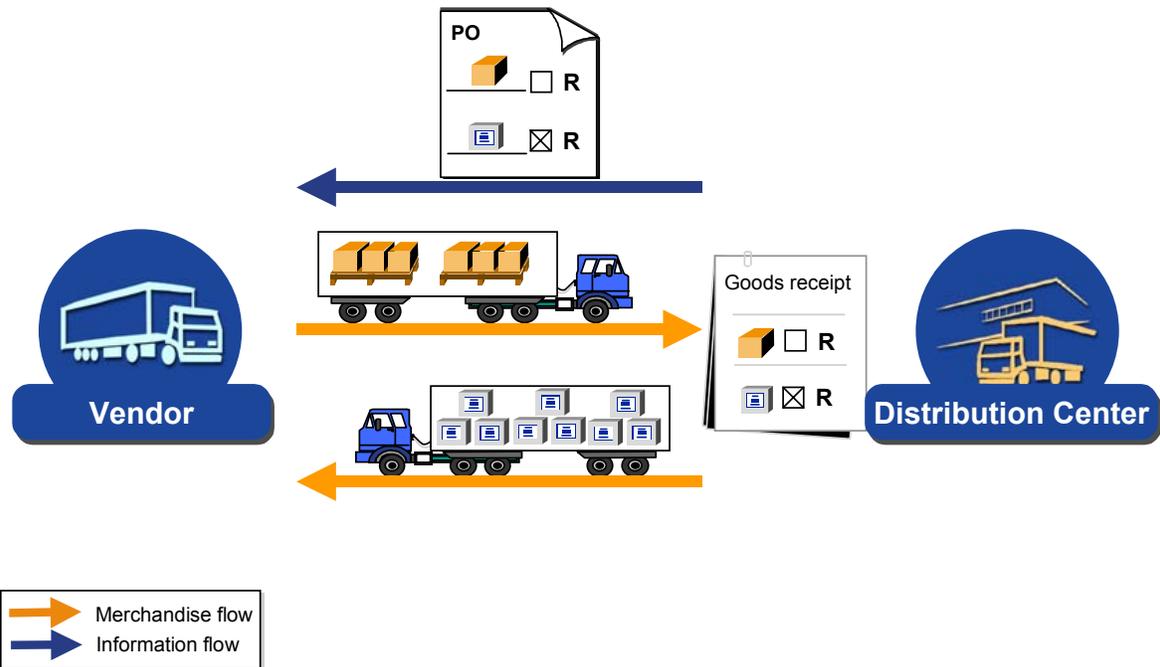


© SAP AG 2004

- A credit memo is created when a return for more than one company code is required.

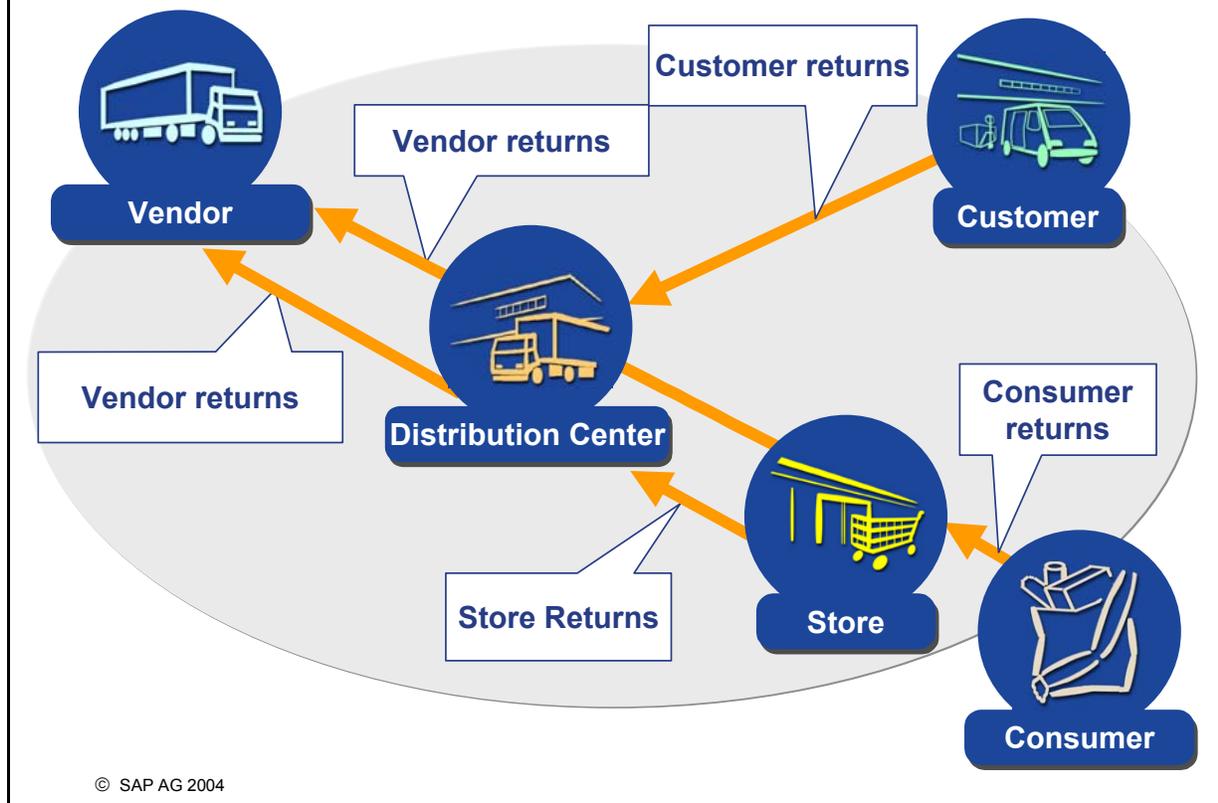
Internal Use SAP Partner Only

Internal Use SAP Partner Only

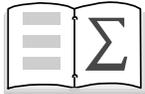


© SAP AG 2004

- A return order is created for the planned vendor return. The vendor is therefore informed about the return and can schedule capacity, as required, for the returned merchandise.
- In the case of unplanned returns to vendors, the goods issues (negative goods receipts) are posted without a reference document. A purchase order is, however, created in the background which can then, for example, be used in invoice verification. (Note: this situation is not shown in the slide).
- Your enterprise returns merchandise to an external vendor. The system posts a goods receipt correction and takes a credit memo from the vendor into consideration at invoice verification. You can post the return without first creating a reference document (for example, a purchase order).
- In contrast to a return without a reference document, a return delivery in MM is a return to an external vendor with a reference document (for example, a purchase order).



- With regard to vendors and recipients, returns differ in the following ways:
 - Customer or consumer returns
Customer returns normally occur in wholesaling. Consumer returns normally occur in retailing when merchandise is exchanged or when merchandise is returned at POS.
 - In both cases, you create the returns. The system posts a goods receipt and creates a credit memo. You can create the return with or without first creating a reference document (for example, a sales order).
 - Merchandise is returned to the vendor (vendor return).
- The following types of return also exist:
 - RTP return
 - Returns for articles that are to be discontinued
 - Merchandise recalled by the vendor
 - Return/destruction of poor-quality or ruined merchandise.



You are now able to:

- Create a returns allocation table
- Generate a stock transport order
- Generate a returns delivery
- Post a goods issue (as a negative goods receipt) in the store
- Post a goods receipt (as a negative goods issue) in the distribution center

© SAP AG 2004

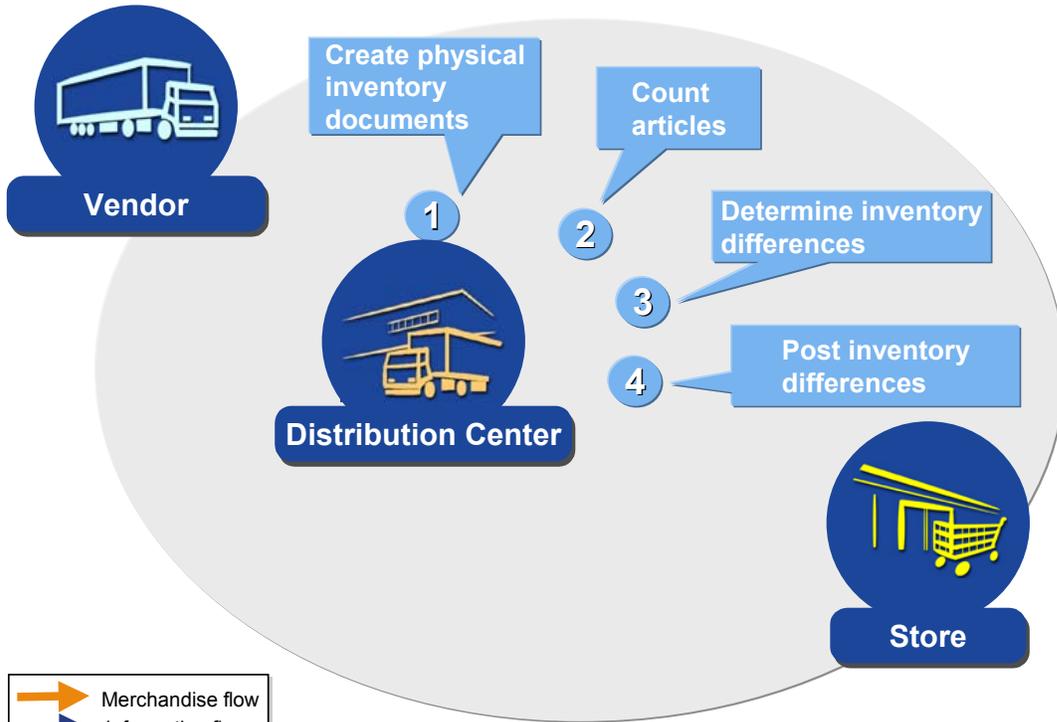


- **At the end of your business year, you want to carry out a physical inventory of your stock articles.**
- **To do so, you create physical inventory documents in SAP Retail.**
- **The articles are then counted and you record the results in the system. SAP Retail determines the inventory differences.**
- **These inventory differences are then posted. In the process, the stocks are updated and the stock accounts are updated in Accounting.**

© SAP AG 2004

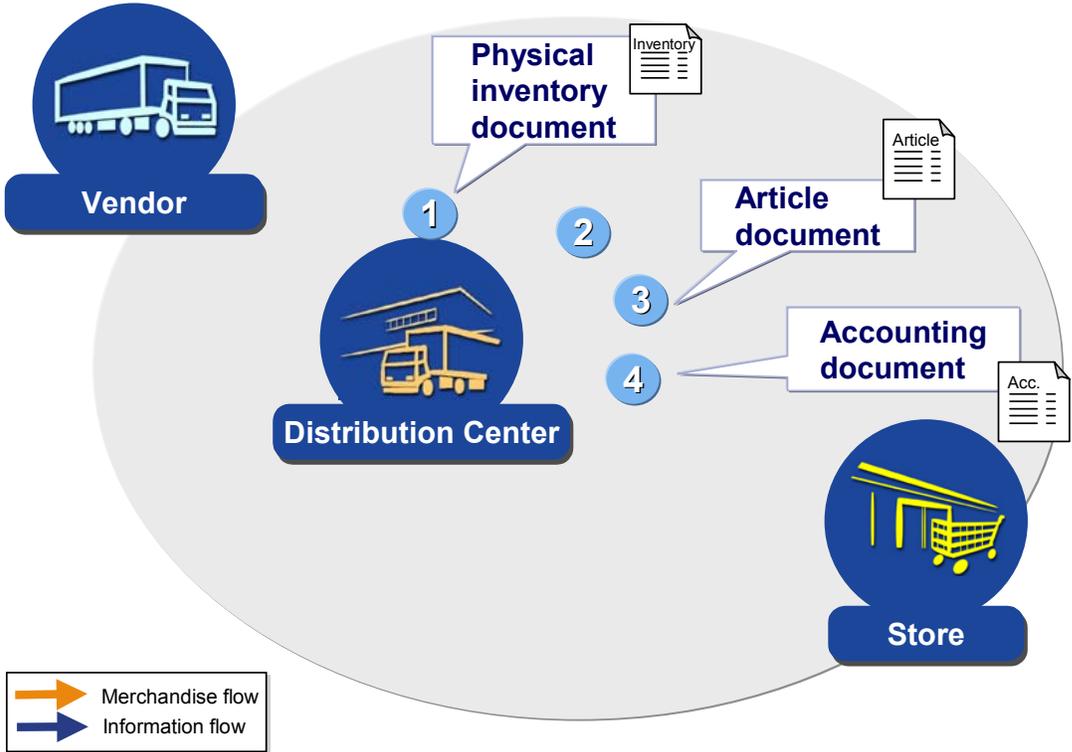
Physical Inventory: Process Overview

SAP



© SAP AG 2004

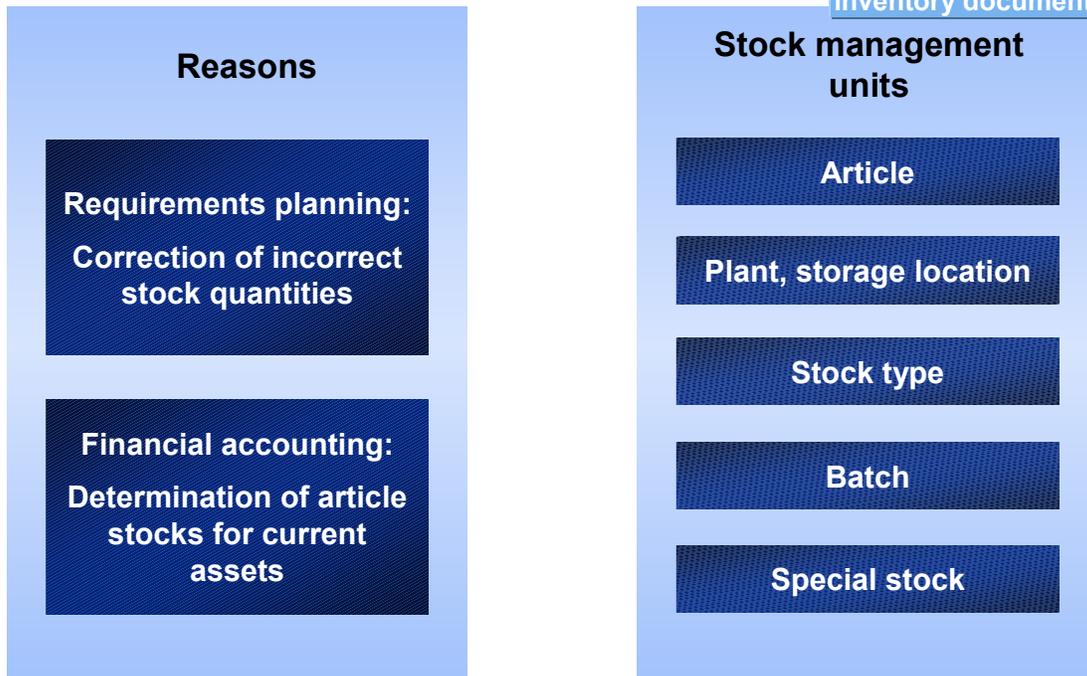
Overview: Documents



© SAP AG 2004

Internal Use SAP Partner Only

Internal Use SAP Partner Only

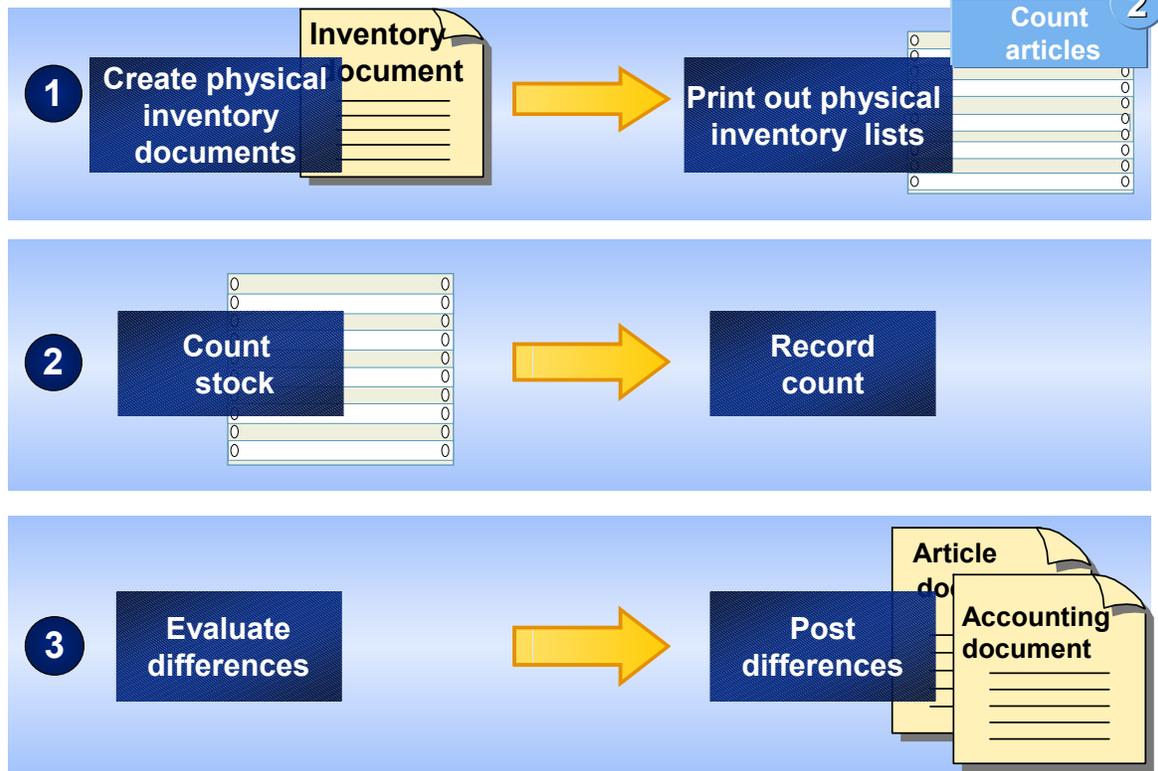


© SAP AG 2004

- The physical inventory carried out on the basis of stock management units. A stock management unit is a part of the stock for an article that cannot be broken down any further and that has its own book balance.
- A stock management unit is uniquely defined by the following information:
 - Article
 - Site
 - Stock type
 - Batch and special stock
- Each stock management unit for an article is counted separately and the inventory differences are posted for each stock management unit. This means, for example, that for an article in a storage location for a site, you have to include the unrestricted stock, the stock in quality inspection, and the blocked stock separately.

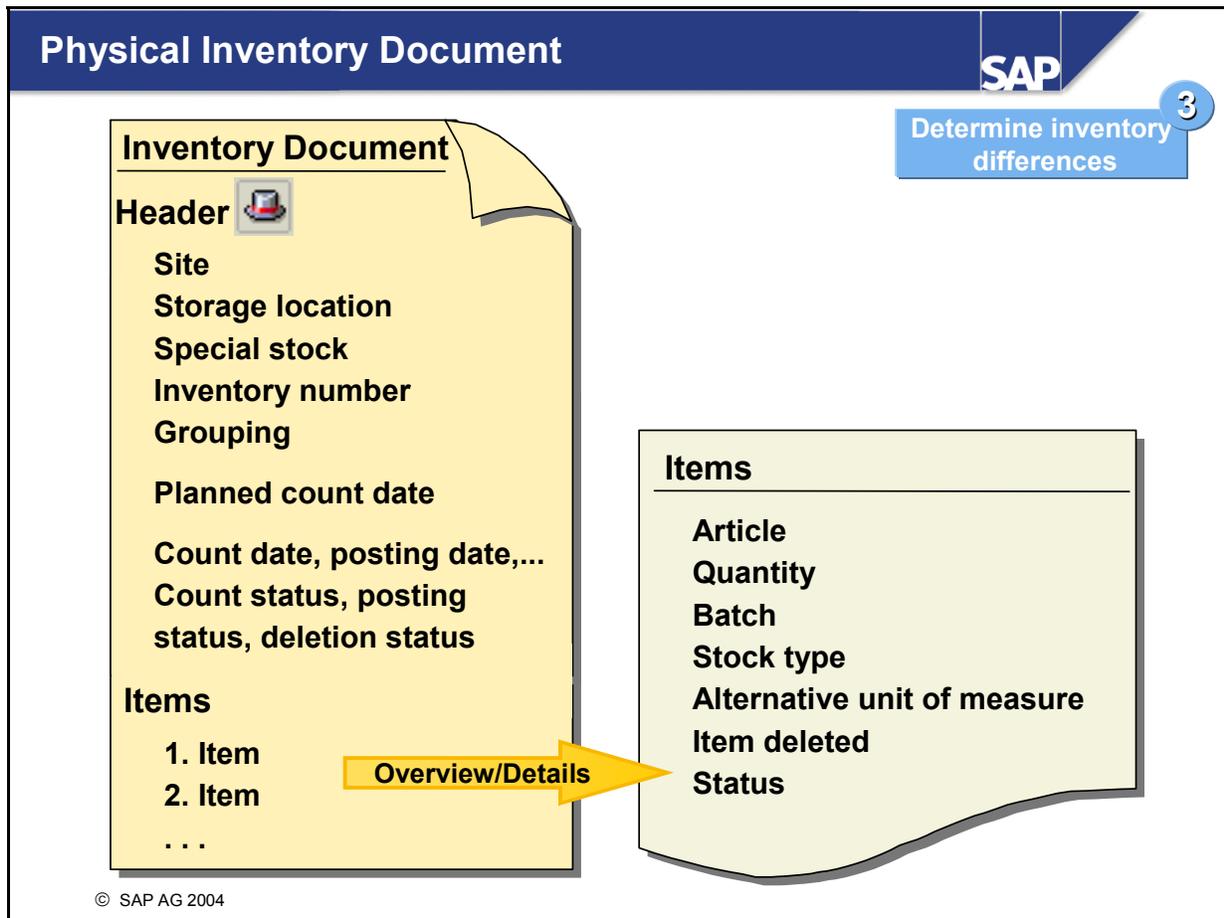
Physical Inventory: Procedure in Three Phases

SAP



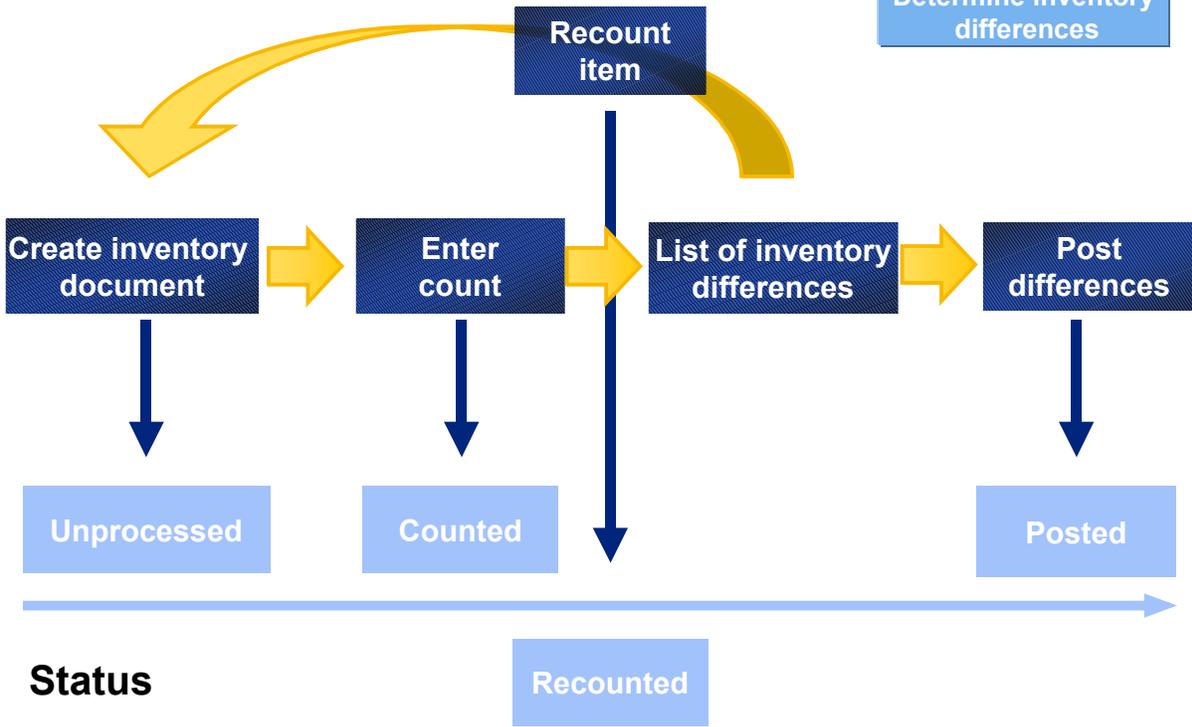
© SAP AG 2004

- The physical inventory procedure is split into three phases:
 1. Creating the physical inventory documents
 2. Recording the count
 3. Posting the inventory difference
- In the first phase, you create the physical inventory documents. SAP R/3 provides you with several methods for mass creation of physical inventory documents. After selecting the stocks to be counted and creating the physical inventory documents, the documents are printed out ready to begin the stock count.
- In the second phase, you enter the results of the count in the system and the system then calculates the inventory differences. If any of the results look dubious, you can initiate a recount of the stock management units in question. In this case, more physical inventory documents are generated.
- In the third phase, you post the inventory differences that were found. This updates the quantity- and value-based stock, and the stock accounts in Financial Accounting.



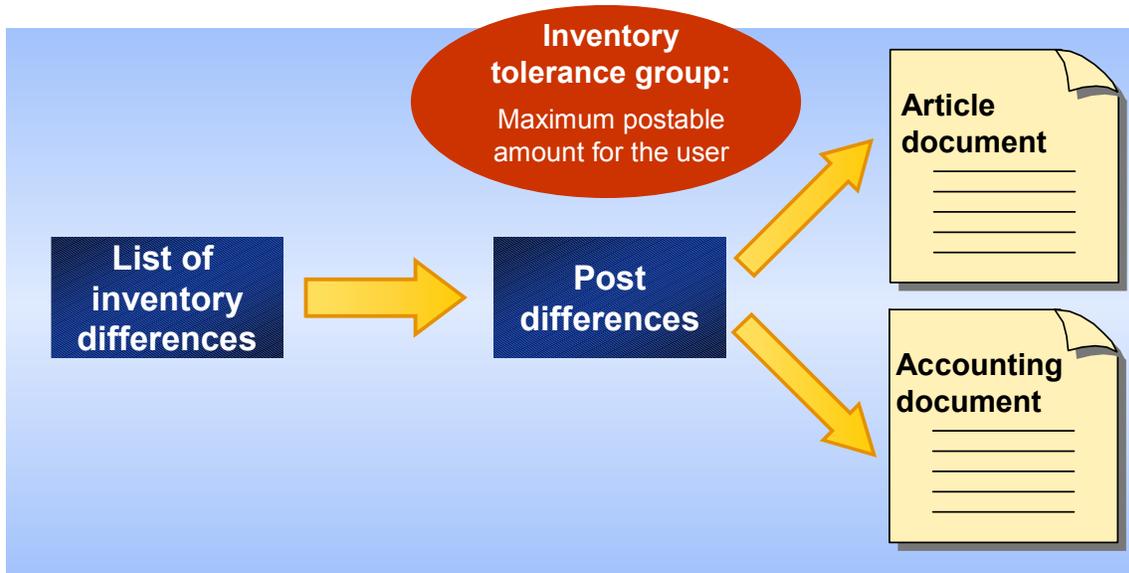
- An inventory document contains the following data:
 - The site and storage location in which the inventory is going to be counted
 - When the count will take place (planned count date)
 - Which articles are to be counted
 - Which stock types are to be counted
 - The status of the item
 - The status of the inventory document
- Inventory documents are created for each site and storage location. You can also define the storage bin or the merchandise category as additional grouping values. When you create a physical inventory document, you can also enter a physical inventory number in the document header. (This number should not be confused with the number of the physical inventory document, however.) You can enter any number you wish, for example, the number of the count group, the processor, the department, or the month and year of the physical inventory.

Determine inventory differences



© SAP AG 2004

- The status of an item tells you whether the item has not yet been processed, has been counted, posted, or recounted. You can display an overview of the status of the items in the statistics for the document. You can use the status of a physical inventory item as a selection criterion when searching for physical inventory documents.



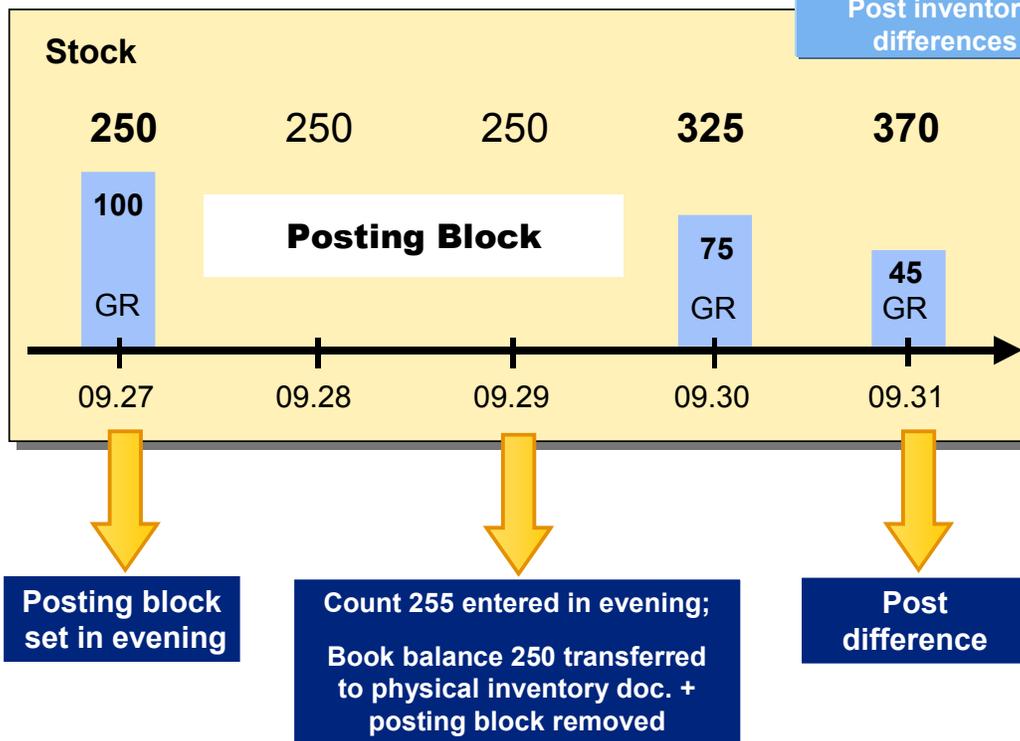
© SAP AG 2004

- When you post the physical inventory difference, the system creates an article document that corrects the stock and a posting document that records the necessary account movements. For each item, you can enter a reason for the inventory difference determined. This means that you can record, for example, the fact that an inventory difference is due to theft.
- You can post inventory differences using the difference list or using separate transactions. When you post the physical inventory difference, the system creates an article document that corrects the stock and an accounting document that records the necessary account movements.

Blocking Goods Movements

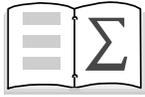
SAP

4



© SAP AG 2004

- When entering the count results, the system determines the current book balance. The book balance is compared with the count quantity entered - the result of which is the difference quantity. If goods movements are posted in between the physical stock count and entry of the physical inventory count, incorrect physical inventory differences may result. To avoid this error occurring, you can block all goods movements for a stock management unit for the physical inventory. If you set the *Posting Block* indicator in the header of the physical inventory document the system blocks all the stock management units of this physical inventory document. If it is not possible to block a goods movement for organizational reasons, you can fix the book balance in the physical inventory document at the point of counting. To do this, you set the *Fix Book Balance* indicator in the physical inventory document. This prevents goods movements changing the book balance for the physical inventory.



You are now able to:

- **Create a physical inventory document**
- **Count articles and determine inventory differences**
- **Post inventory differences in the system**
- **Use the posting block**

© SAP AG 2004



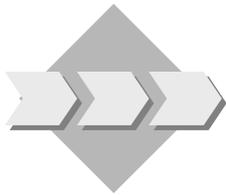
Unit: Returns to the Distribution Center

Topic: Store Returns Using Returns Allocation Table



After completing this exercise you will be able to:

- Create a returns allocation table
- Generate a stock transport order from the allocation table
- Generate a returns delivery
- Post a goods issue as a negative goods receipt in the store
- Post a goods receipt as a negative goods issue in the distribution center



As part of a recall action due to a possible problem with certain articles, you have to recall the remaining stock of article **TA01##** (tomato soup) from your stores and return it to the distribution center.

- 1-1 Generate a returns allocation table that tells you the current stock levels of article **TA01##** in your stores.
 - 1-1-1 Select *allocation table type* **2004**.
Call your allocation table **Returns for group ##**. The stores should return the merchandise in two working days time. It should be received by the distribution center on the following working day. Your *site group* is **R_PROM_01**. The cumulated remaining stock from the stores should be displayed in the *Plnd qty* field when you choose *Enter*.
 - 1-1-2 Assign distribution center **T7##** to your item in the item overview. Confirm the dialog box about manual changes that appears with *Yes*.
 - 1-1-3 Have a look at the quantities of the article in the individual stores in the item overview.
 - 1-1-4 Save the allocation table that you just created and make a note of its number.
Allocation table: _____

- 1-2 Create a stock transport order as a follow-on document for your allocation table (Change allocation table) and note its number.

Stock transport order number: _____

- 1-3 Generate outbound deliveries for the stock transport order that you just created. Create the outbound delivery in the background. You can display the documents for the delivery in the log for delivery creation. Note the number of the sales document.



Ensure that the delivery is always created from the distribution center to the store. Item type NLNR is the only way of converting the delivery into a return.

Return delivery: _____

- 1-4 Post the goods issue in the store as a negative goods receipt with a reference to a stock transport order. Use movement type **101** (*Goods receipt for purchase order into warehouse/stores*) and storage location **0001** (*Standard*). Note the number of the article document.

Article document: _____

- 1-5 Post the goods receipts in the distribution center as a negative goods issue by going to the appropriate delivery documents.
Check if storage location **0001** is defaulted by the system.

- 1-6 Then check the stock of article **TA01##** :

| Site | TA01## |
|-------------|--------|
| R310 | |
| R311 | |
| R312 | |
| R313 | |
| R314 | |
| R315 | |

What do you notice?



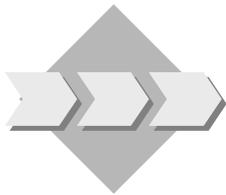
Unit: Returns to the Distribution Center

Topic: Physical Inventory



After completing this exercise you will be able to:

- Create a physical inventory document
- Set a posting block during the [physical inventory count](#)
- Enter the results of the inventory count in the system
- Display the list of inventory differences and the physical inventory statistics



As part of a stock analysis, you want to record the unrestricted warehouse stock in storage location **0001** for generic article **TA06##** (“Rapido” vacuum cleaner) in your store **T1##**.

2-1 Check the available stock of article **TA06##**:

| Site | TA06##001 <i>(De luxe ++, red)</i> | TA06##002 <i>(Basic, green)</i> |
|-------------|--|---|
| T7## | | |
| T1## | | |

2-2 Create a physical inventory document for your store **T1##**, using the following data:

| | |
|-----------------------------------|--------------------|
| <i>Document date:</i> | Today |
| <i>Planned count date:</i> | Next Monday |
| <i>Site:</i> | T1## |
| <i>Storage location:</i> | 0001 |
| <i>Physical inventory number:</i> | GR## |

[Enter]



Pay particular attention to the sequence of the steps in the following because we are dealing with a generic article with two variants.

Article **TA06##** is a generic article. Enter **TA06##** in the *Article* column. Press **[Enter]** and then **[Next Screen]** to move on to the next screen. Note: At first no article number will be displayed. Both variants will be displayed when you choose the **[Collective Processing]** pushbutton.
 Check that the stock type for both variants is set to *warehouse* and save your physical inventory document.

Physical inventory document number: _____

2-3 You want to ensure that no [goods movements](#) can be posted for the article stocks contained in the physical inventory document for the duration of the [physical inventory count](#). The *Posting Block* indicator is set for the stocks concerned (for example, storage location stock or special stock) for all relevant [stock types](#) and is not removed again until the inventory count is posted.

2-3-1 Change the physical inventory document that you have generated by going to the header data and setting the *Posting Block* indicator. Save your physical inventory document.

2-4 You want to check whether you can post a goods issue for article TA06## even though the posting block indicator is set while the [physical inventory count](#) is being carried out.
 Post a goods issue (movement type 201) in store **T1##**, storage location **0001** for cost center **R3210_1**. The entry quantity is 10, comprising 6 red and 4 green vacuum cleaners.
 What message does the system issue when you try to post the goods issue? Now terminate the posting process.

System message:

2-5 Enter the physical inventory count. Enter the number of your physical inventory document and press **[Enter]**. You now count your articles and enter the quantities in the relevant fields.

| Site | TA06##001 <i>(De luxe ++, red)</i> | TA06##002 <i>(Basic, green)</i> |
|-------------|---------------------------------------|------------------------------------|
| T1## | 5 | 4 |

Save your count.

- 2-6 Now display the differences in the list of inventory differences. Post the physical inventory difference and then check the stock of article **TA06##** again:

| Site | TA06##001 <i>(De luxe ++, red)</i> | TA06##002 <i>(Basic, green)</i> |
|-------------|--|---|
| T1## | | |

What do you notice?

- 2-7 Now display the physical inventory history in your physical inventory document. What is the physical inventory status now?

What is the difference amount for article **TA06##001**?

- 2-8 You now want to check again whether you can post a goods movement, for example, a goods issue for article **TA06##**, now that the inventory count has been completed. Post a goods issue (movement type 201) in store **T1##**, storage location **0001** for cost center **R3210_1**. This time the entry quantity is 9, made up of 5 red and 4 green vacuum cleaners.

Does the system issue a message when you try to post the goods issue?

Quit the posting transaction.



Unit: Returns to the Distribution Center
Topic: Store Returns Using Returns Allocation Table



All the steps detailed in these solutions start from the Retailing screen:

SAP menu: Logistics → Retailing

1-1 To create a returns allocation table:

1-1-1 **Purchasing → Allocation → Allocation table → Create**

| Field name or data type | Values |
|--------------------------------|-------------|
| <i>Alloc. tbl type</i> | 2004 |
| <i>Purchasing organization</i> | R300 |
| <i>Purchasing group</i> | R30 |

[Enter]

| Field name or data type | Values |
|---------------------------------|-------------------------------|
| <i>Alloc. table description</i> | Returns group ## |
| <i>Site del. date</i> | In two working days |
| <i>DC del. date</i> | Three working days from today |
| <i>Article</i> | TA01## |
| <i>Site group</i> | R PROM 01 |

[Enter]

1-1-2

| | |
|----------------------------|-------------|
| <i>Distribution Center</i> | T7## |
|----------------------------|-------------|

[Enter]

[Enter]

1-1-3 Select the item(s) and then **Goto** → **Sites** → **Sites in item**

| Sites for Item | Planned Quantity |
|----------------|------------------|
| R310 | 1,808 |
| R311 | 1,042 |
| R312 | 1,119 |
| R313 | 1,379 |
| R314 | 407 |
| R315 | 137 |

1-1-4 **Allocation table** → **Save**
Note the number of the allocation table.

1-2 **Allocation table** → **Change**
Do not press [Enter]
Allocation table → **Create follow-on docs** → **Warehouse order**

Hit pushbutton **[Gen. wareh. order]**

Note the order number (column *POrd*)
[Back] to the SAP Easy Access menu.

1-3 **Merchandise logistics** → **Logistics execution** → **Outbound Process** → **Goods Issue for Outbound Delivery** → **Outbound Delivery** → **Create** → **Collective Processing of Documents Due for Delivery** → **Purchase Orders**

| Field name or data type | Values |
|------------------------------------|--------------|
| <i>Shipping point/receiving pt</i> | R300 |
| <i>CalcRuleDefltDelvCrDt</i> | 3 |
| <i>(Ship-to party</i> | R310) |

Tab page *Purchase orders*

| Field name or data type | Values |
|----------------------------|------------------------------------|
| <i>Purchasing Document</i> | Purchase order number noted in 1-2 |

[Execute]

Select the item and then hit **[Background]** pushbutton.
 Confirm the dialog box that may appear.
 Hit **[Log for delivery creation]** button.
 Place your cursor on *Group* and then select **Goto → Documents**.
 Note the delivery number (displayed in *Document* column).

[Back] to return to the SAP Easy Access menu.

- 1-4 **Retailing → Merchandise logistics → Goods receipt → Goods receipt for purchase order**

| Field name or data type | Values |
|--------------------------|---|
| <i>Movement type</i> | 101 |
| <i>Purchase order</i> | Purchase order number noted in exercise 1-2 |
| <i>Site</i> | R310 |
| <i>(Storage location</i> | 0001) |

[Enter]
Goods receipt → Post
[Back]

- 1-5 **Merchandise logistics → Logistics execution → Outbound Process → Goods Issue for Outbound Delivery → Outbound Delivery → Change → Single Document**

Enter outbound delivery number from exercise 1-3.
 Tab page *Picking*, column *SLoc*: **0001**

Select the items, **Edit → Post goods receipt**
[Back]



Unit: Returns to the Distribution Center

Topic: Physical Inventory



All the steps detailed in these solutions start from the Retailing screen:

SAP menu: Logistics → Retailing

2-1 **Master data → Article data → Article → Display**

| Field name or data type | Values |
|-------------------------|---------------|
| <i>Article</i> | TA06## |

Select *Basic Data* view

[Enter]

Environment → Stock Overview

Position the cursor on the *unrestricted use stock* for each site

| Site | TA06## | TA06##001 | TA06##002 |
|-------------|---------------|---------------|---------------|
| T1## | <i>10</i> | <i>6</i> | <i>4</i> |
| T7## | <i>20,000</i> | <i>10,000</i> | <i>10,000</i> |

Goto → Variant split

[Back] to return to the SAP Easy Access menu.

2-2 **Merchandise logistics → Physical inventory → Physical inventory document → Create**

| Field name or data type | Values |
|----------------------------------|--------------------|
| <i>Document date</i> | Today |
| <i>Planned count date</i> | Next Monday |
| <i>Site</i> | T1## |
| <i>Storage location</i> | 0001 |
| <i>Physical inventory number</i> | GR## |

[Enter]

Article **TA06##** is a generic article. Enter **TA06##** in the *Article* column. Press **[Enter]** and then **[Next Screen]** to move on to the next screen. Note: At first no article number will be displayed. Both variants will be displayed when you choose the **[Collective Processing]** pushbutton.

| Article | Article Description | Stock type | AUn |
|-----------|---|------------|-----|
| TA06##001 | Vacuum cleaner 'Rapido' De luxe ++, red | 1 | ✓ |
| TA06##002 | Vacuum cleaner 'Rapido' Basic, green | 1 | ✓ |

Check that the stock type for both variants is set to *warehouse* and save your physical inventory document.

Physical inventory document number: _____

- 2-3 You want to ensure that no [goods movements](#) can be posted for the article stocks contained in the physical inventory document for the duration of the [physical inventory count](#). The *Posting Block* indicator is set for the stocks concerned (for example, storage location stock or special stock) for all relevant [stock types](#) and is not removed again until the inventory count is posted.

2-3-1 Header data **[Header]**, Other fields:

| Field name or data type | Values |
|-------------------------|----------|
| <i>Posting Block</i> | X |

Physical Inventory Document → **Save [Back]**

- 2-4 You want to check whether you can post a goods issue for your article TA06## even though the *Posting Block* indicator is set while the [physical inventory count](#) is being carried out.

Merchandise logistics → Inventory management → Goods movement → Goods issue

| Field name or data type | Values |
|-------------------------|-------------|
| <i>Movement type</i> | 201 |
| <i>Site</i> | T1## |
| <i>Storage location</i> | 0001 |

[Enter]

Cost center: **R3210_1**
 Article: **TA06##**
 Entry quantity: **10**
 Quantity per characteristic **6 red, 4 green**

What message does the system issue when you try to post the goods issue?
Article TA06##001 is blocked in T105, storage location 0001, due to physical inventory.

Now terminate the posting process.

Item details subscreen, tab page *Variants*:

| Field name or data type | Values |
|-------------------------|-------------------|
| <i>De luxe ++ (red)</i> | 6 |
| <i>Basic (green)</i> | 4, [Enter] |

Purchase order → Save

Make a note of the purchase order number.

[Back]

2-5 *Merchandise logistics → Physical inventory → Inventory count → Enter*

| Field name or data type | Values |
|------------------------------------|---------------------------------|
| <i>Physical Inventory Document</i> | Document number from 2-2 |
| <i>Fiscal year</i> | Current year |
| <i>Count date</i> | Next Monday |

[Enter]

| Article | Quantity |
|-----------|----------|
| TA06##001 | 5 |
| TA06##002 | 4 |

[Save].

2-6 *Retailing → Merchandise logistics → Physical inventory → Difference → Difference list*

| Field name or data type | Values |
|------------------------------------|----------------------------------|
| <i>Article</i> | TA06##001 & TA06##002 |
| <i>Site</i> | T1## |
| <i>Storage location</i> | 0001 |
| <i>Physical Inventory Document</i> | Document number from 1-2 |

Retailing → Merchandise logistics → Physical inventory → Difference → Post

| Field name or data type | Values |
|------------------------------------|---------------------------------|
| <i>Physical Inventory Document</i> | Document number from 1-2 |
| <i>Fiscal year</i> | Current year |
| <i>Posting date</i> | Today |

[Enter]

[Save].

Merchandise logistics → *Inventory management* → *Environment* → *Stock* → *Stock overview*

| Site | TA06## | TA06##001 | TA06##002 |
|------|--------|-----------|-----------|
| T1## | 9 | 5 | 4 |
| T7## | 20,000 | 10,000 | 10,000 |

Goto → *Variant split*

[Back] to return to the SAP Easy Access menu.

2-7 *Merchandise logistics* → *Physical inventory* → *Physical inventory document* → *Display*

Physical inventory document from exercise 2-2

Overview, *[Phys. Inv. History]*, *Inventory status*: **Counted, posted**

What is the difference amount for article **TA06##001**?

186.00 USD

2-8 *Merchandise logistics* → *Inventory management* → *Goods movement* → *Goods issue*

| Field name or data type | Values |
|-------------------------|-------------|
| <i>Movement type</i> | 201 |
| <i>Site</i> | T1## |
| <i>Storage location</i> | 0001 |

[Enter]

Cost center: R3210_1

Article: TA06##

Entry quantity: 10

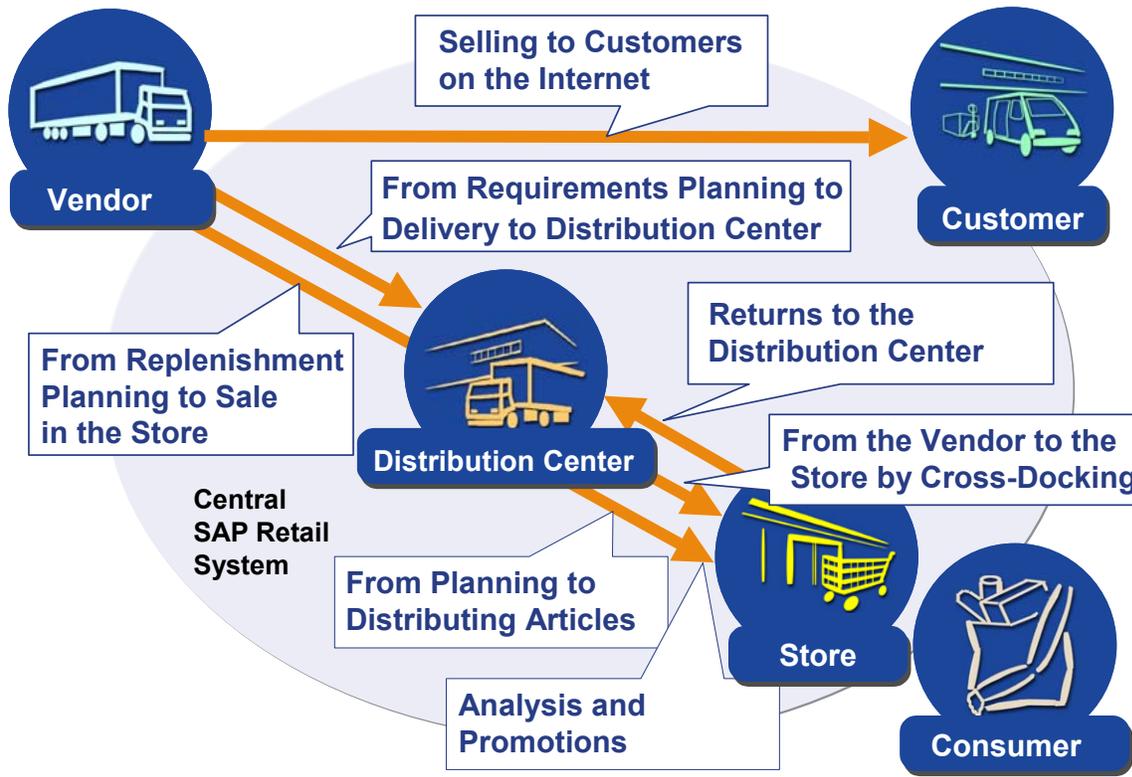
Quantity per characteristic 6 red, 4 green

What message does the system issue when you try to post the goods issue?

None

Quit the posting transaction.

Summary



© SAP AG 2003

Internal Use SAP Partner Only

Internal Use SAP Partner Only



You are now able to:

- **Model the different processes in merchandise procurement and distribution to an SAP Retail system**
- **Describe the main functions of an SAP Retail system and the necessary settings that must be made in master data**

© SAP AG 2002

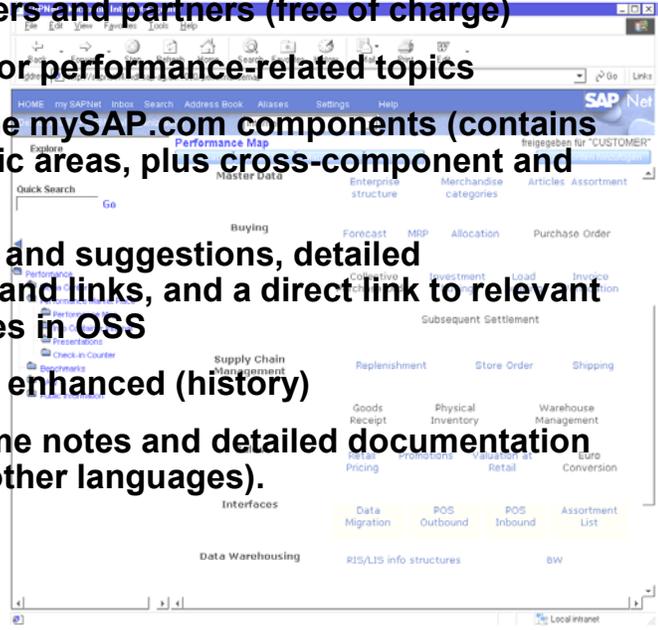
- **IRT310 Retail Master Data**
- **IRT320 Pricing and Promotions**
- **IRT330 Requirements Planning and Purchasing**
- **IRT340 Supply Chain Management**
- **IRT350 Merchandise and Assortment Planning**
- **IRT360 Store Connection**
- **IRT370 SAP Retail Store**

© SAP AG 2002

- Go through the exercises using IDES data or your own data
- Read online documentation
- Read IMG documentation
- Read SAP Release Notes

© SAP AG 2002

- **SAP Service Marketplace under SAPNet alias performancemap**
- **Released for for customers and partners (free of charge)**
- **Central point of access for performance-related topics**
- **Divided up in line with the mySAP.com components (contains core and industry-specific areas, plus cross-component and technical blocks)**
- **Gives recommendations and suggestions, detailed information, documents and links, and a direct link to relevant notes and collective notes in OSS**
- **Continually updated and enhanced (history)**
- **Available in English (some notes and detailed documentation are also translated into other languages).**



© SAP AG 2003

- You can find the SAP Service Marketplace under the alias performancemap by entering the following address: <http://service.sap.com/performancemap>

... Offer you "Best Practice" configuration of mySAP Retail in a number of versions for the following sectors:

- **Fashion** (including apparel, textiles, footwear) *
- **Food** (discounters, supermarkets, hypermarkets, convenience stores) *
- **Wholesale** (technical wholesale, mail order, Internet) **
- **Hardlines** (specialists in building materials, electrical items, toys, and so on) **

... Are an implementation tool combining AcceleratedSAP (ASAP) and Preconfigured Systems (PCS), are free of charge and can be installed in a day.

* already available

** planned

© SAP AG 2003

- For more information on SAP Best Practices for mySAP Retail, see service.sap.com → Industry Solutions → Retail on the SAP Service Marketplace.

... Provide help in every mySAP Retail implementation

- ... The preconfigured development client reduces the project runtime.
- ... Allow early prototyping in the implementation, which reduces problems later thanks to a system-based discussion in the Blueprint Workshops.
- ... Contain detailed documentation of the preconfigured processes including full integration with AcceleratedSAP.
- Enable you to set up a pared-down, functioning system in a short period of time and test live operations.

© SAP AG 2003