

# Sales (SD-SLS)



HELP.SDSLS

**Release 4.6C**



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## Icons

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	Recommendation
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## Sales (SD-SLS)

### Purpose

Sales allows you to execute different business transactions based on sales documents defined in the system.

Four groups of sales documents are differentiated:

- Customer inquiries and quotations
- Sales orders
- Outline agreements, such as contracts and scheduling agreements
- Complaints, such as free of charge deliveries, credit and debit memo requests and returns

### Features

Deliveries and billing documents can be created and processed from the sales document. Some sales documents, such as cash sales and rush orders, automatically trigger the creation of subsequent deliveries and billing documents.

## Working With Sales Documents

## About Sales Documents

Sales-related business transactions are recorded in the system as sales documents. These are grouped into four categories:

- Pre-sales documents: inquiries and quotations
- Sales orders
- Outline agreements, such as contracts and scheduling agreements
- Customer problems and complaints, leading to free-of-charge deliveries and credit memo requests

If your particular business processes require it, you can process deliveries and billing documents directly from a sales document. In addition, some sales documents, such as [cash sales \[Page 125\]](#) and [rush orders \[Page 127\]](#) automatically trigger the creation of subsequent delivery and billing documents.

## Basic Functions Within Sales Order Processing

During sales order processing, the system carries out basic functions, such as:

- Monitoring sales transactions
- Checking for availability
- Transferring requirements to materials planning (MRP)
- Delivery scheduling
- Calculating pricing and taxes
- Checking credit limits
- Creating printed or electronically transmitted documents (confirmations and so on)

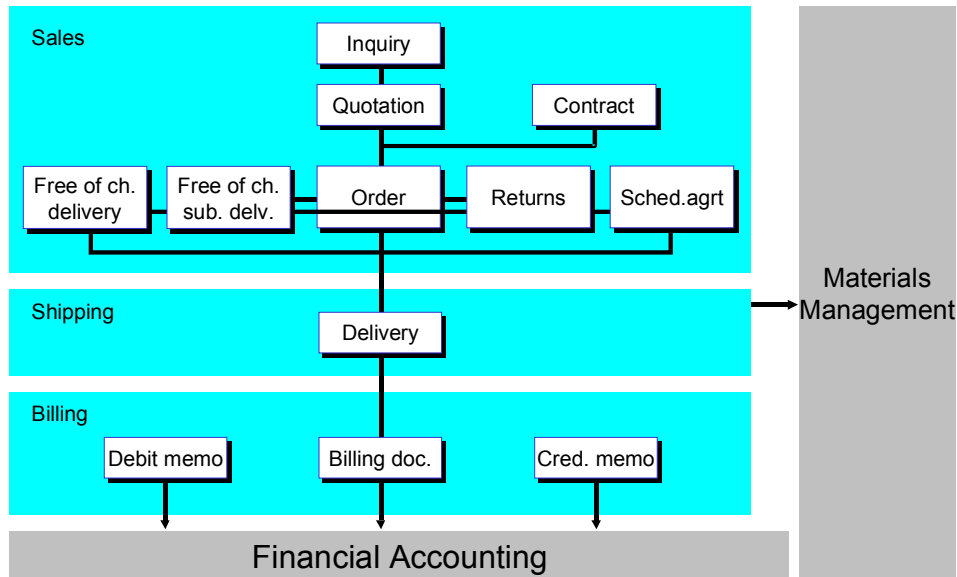
Depending on how your system is configured, these functions may be completely automated or may also require some manual processing. The data that results from these basic functions (for example, shipping dates, confirmed quantities, prices and discounts) is stored in the sales document where it can be displayed and, in some cases, changed manually during subsequent processing.

## Document Flow in Sales

The sales documents you create are individual documents but they can also form part of a chain of inter-related documents. For example, you may record a customer's telephone inquiry in the system. The customer next requests a quotation, which you then create by referring to the inquiry. The customer later places an order on the basis of the quotation and you create a sales order with reference to the quotation. You ship the goods and bill the customer. After delivery of the goods, the customer claims credit for some damaged goods and you create a free-of-charge delivery with reference to the sales order. The entire chain of documents – the inquiry, the quotation, the sales order, the delivery, the invoice, and the subsequent delivery free of charge – creates a document flow or history. The flow of data from one document into another reduces manual activity and makes problem resolution easier. Inquiry and quotation management in the Sales Information System help you to plan and control your sales. For more information about how to display the document flow for a particular sales document, see [Information on Individual Sales Documents \[Ext.\]](#).

## About Sales Documents

The following graphic shows how the various types of sales documents are inter-related and how data subsequently flows into shipping and billing documents.

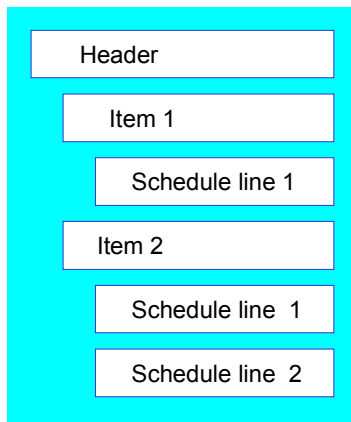


## The Role of Organizational Structures in Sales Documents

Sales transactions occur within the organizational structure of sales and distribution. This means, for example, that all sales activities are allocated to a sales organization, a distribution channel and a division. Since sales activities within your organization are processed in different geographical locations, the system allows you to specify additional organizational structures that define sales offices, sales groups, and sales people. For more information, see [Organizational Structures \[Ext.\]](#).

## How Sales Documents are Structured

All sales documents have basically the same structure. They are made up of a document header and any number of items. The items can in turn be divided into any number of schedule lines. The following graphic shows the structure of a sales document:



### Header data

The general data that is valid for the entire document is recorded in the document header. For example,

- Number of the sold-to party
- Number of the ship-to party and the payer
- Document currency and exchange rate
- Pricing elements for the entire document
- Delivery date and shipping point

### Item data

Whereas data in the document header applies to all items in the document, some data applies only to specific items. This data is stored at item level and includes the:

- Material number
- Target quantity for outline agreements
- Number of the ship-to party and the payer (an alternative ship-to party or payer can be defined for a particular item)
- Plant and storage location specifications
- Pricing elements for the individual items

---

**How Sales Documents are Structured****Schedule line data**

An item consists of one or more schedule lines. The schedule line contains all the data that is needed for a delivery. For example, a customer orders 20 units of a particular material which you enter as one item in the sales order. However, you can only deliver 10 pieces now and the remaining 10 pieces next month so you need to schedule two deliveries. The data for these deliveries (dates, confirmed quantities) are stored in two separate schedule lines. In sales documents where delivery data is not relevant, for example, contracts, credit and debit memo requests, the system does not create any schedule lines.

Data recorded in the schedule lines includes the:

- Schedule line quantity
- Delivery date
- Confirmed quantity

## Structure and Data in a Sales Document

The user interface provides you with the following advantages for processing sales documents:

- Easy navigation between different processing screens
- Less switching between screens during processing
- Transparent display of data
- Complete display of processing screens even on smaller computer screens

The new interface with its flexible tables allows you to adjust the display to meet your requirements during processing. You can alter the width of the columns and their sequence to suit your way of working by simply dragging the mouse. You can then save your different version of the display as a variant.

An essential element of the interface is the tab page which looks like a box of index cards where you can easily find what you need. Each tab page has a title which is constantly visible. By simply clicking on the tab page title, you can bring the page in the box into the background, and process it if necessary.

This tab page technique means that all the data that belongs together can be displayed together, even if the display area available is limited.

The essential data in a sales document is contained on the following screens; each screen in the standard system has several tab pages:

- **Overview screen** Tab pages: *Sales, Item overview, Ordering party, Procurement, Shipping, Reason for rejection*
- **Header screen** Tab pages: *Sales, Shipping, Billing, Payment slips, Billing plan, Accounting, Conditions, Partners, Texts, Purchase order data, Status, Additional data A and B*
- **Item screen** Tab pages: *Sales A and B, Shipping, Billing, Country, Conditions, Account assignment, Schedule lines, Partners, Texts, Purchase order data, Status, Structure, Additional data A and B*

You can also use icons to help you to switch between these tab pages quickly and easily.

### Overview Screen

The overview screen provides the user with a choice of data for the document header. Under the display area, there is a table with the items for the document.

From this overview screen, you can switch between several tab pages. The *Sales* tab page contains important fields from the document header so it is particularly useful when you create the document for the first time. In Customizing, you can define which fields should be hidden. This gives you more space for the items.

The *Item overview* screen displays a limited amount of header data - and again this provides more room for the items.

The *Ordering party, Procurement, Shipping, and Reason for rejection* tab pages display data for the relevant area. The *Procurement* tab page shows both the items and the schedule lines.

Using the *Configuration* tab page, you can gain an overview of characteristic attributes for an item quickly and easily. This display possibility is particularly useful for materials with a relatively

## Structure and Data in a Sales Document

simple configuration, and for when you work with models, in which essential characteristics occur again and again.

The *Configuration* tab page is only displayed in the sales document if you have maintained the characteristics display. If no entries are available in Customizing, the tab page is not displayed. The settings for the characteristics display in the overview screen are found in Customizing for Sales and Distribution under *Sales* → *Sales Documents* → *Define Characteristics Display for Overview Screen*. You can find further information on this in the implementation guide.

## Header Screen

The header screen contains several tab pages with data from the document header.

Before Release 4.0, you could switch from the *Business Data* screen to the three detail screens *Sales*, *Shipping* and *Billing*. The data for these detail screens is now on the *Sales*, *Shipping*, *Billing document* and *Accounting* tab pages for the header screen, making it easier to reach than previously. As of 4.0, the data from the *Business Data* screen is divided between the relevant tab pages.

Instead of the additional data screen, there are now two tab pages for *Additional Data A* and *Additional Data B* and the latter can be designed to suit your needs.

## Item Screen

The item screen displays data on an individual item for the document. Even here, there are several tab pages to choose from. Similar to the header screen, the tab pages in the item screen make data from the previous three detail screens for sales, shipping and billing directly accessible. The *Business Data* screen no longer exists here either and instead you can find the fields from this screen in the *Sales A*, *Sales B*, *Shipping* and *Billing* tab pages.

There are two pages for sales data (*Sales A* and *Sales B*), allowing full display of the tab pages even on smaller screens. The previous data in the *Additional Data* screen has now also been divided into two pages (*Additional Data A* and *Additional Data B*).

## Additional Screens

### Schedule Lines

The overview, header and item screens do not contain all the data for a sales document. Instead, you can go to the *Schedule line* tab page from the *Item* screen to see a schedule line in the *Schedule Line* screen. (This can also be done by double-clicking on the magnifying glass under the schedule line table.) This screen contains detailed information for a single schedule line.

### Scheduling Agreements

Up to three scheduling agreement releases with different delivery schedule release types (forecast, just-in-time, or planning delivery schedules) can be assigned to one scheduling agreement item. Each delivery schedule comprises general data for the scheduling agreement release (release header) and a list of schedule lines in the delivery schedule. The items in the scheduling agreement do not have schedule lines so, in contrast to the other types of sales document, there are no tab pages here for schedule lines.

There are tab pages for forecast delivery schedule, JIT delivery schedule and planning delivery schedule. These pages are displayed independantly of the scheduling agreement type. The pages provide an overview of the current delivery schedule, with data for the delivery schedule header in the upper area, and a list of schedule lines in the delivery schedule below. You can

## Structure and Data in a Sales Document

reach detail screens by clicking on an icon for both the delivery schedule header (only for forecast and just-in-time delivery schedules) and the schedule lines.

You will find a few other screens, including the output screen, by going to *Extras* in the menu.

### Navigation

You can switch between the *Overview*, *Header* and *Item* screens quickly by going to *Goto* in the menu bar. This enables you to switch to the required tab page with only a server access. For example, from the *Overview* screen you can choose *Goto* → *Item* → *Shipping* to reach the *Item* screen where the *Shipping* tab page will automatically appear in the foreground. In comparison to navigating with the icons, using the *Goto* menu allows you to specify exactly which tab page you require.

Areas from which you can switch to a detailed screen by double-clicking, are optically highlighted.

These areas are visualized via a changed cursor form on the relevant object (in the standard system, the cursor takes on the shape of a hand). By double-clicking, detailed information can be called up in sales document processing for the following objects:

- Sold-to parties, Ship-to parties  
By double-clicking on the sold-to party or ship-to party, you will reach the *Partners* tab page at header level.
- Purchase order data, Purchase order number  
By double-clicking on the purchase order date or purchase order number, you will reach the *Purchase order data* tab page at header level.

### Quick Input of Data with Subscreens

In order to enter document data quickly and effectively, it is important that you can enter all important detailed data for sales order header and item at once, and that this is available at a glance.

For this reason, the *Sales* and *Item detail* tab pages are enhanced. You can use these to reproduce detailed data for header and item. The entire amount of detailed data for header and item are available to you for the subscreens.

In the standard system, these additional subscreens are filled with a choice of fields.

Using transaction variants, you can fill these subscreens with further fields, or fade out fields you do not need. This means you can define how big the input area should be for the header data, and which fields should be displayed individually. As from a certain number of fields on the subscreen, the system automatically maps a scroll bar for this screen area.

You can assign individual order types to transaction variants (See [Transaction variants dependent on sales document types \[Page 18\]](#)).

## Transaction Variants Depending on Sales Document Types

# Transaction Variants Depending on Sales Document Types

## Use

You can assign various transaction variants to individual sales document types.

With the help of transaction variants, you create various variants for the same transaction (for example, create sales order VA01), in order to simplify your transaction flows. You can achieve this by:

- Preassigning fields with values
- Fading out and changing input availability for fields
- Fading out entire screens

In this way, you can provide your users with screens which are defined according to their specific needs per sales document type.

When a transaction variant is created, several screen variants are created for each individual screen for the transaction chosen for the variant. The system accesses this screen variant when a transaction variant is applied.

## Prerequisites

In the standard system, transaction variants for Sales (for example, quotation, sales order, credit memo request, group master contract) are defined for all business objects. Assignment of transaction variants for the sales document type is carried out in Customizing for sales document types.

## Activities

You will find the transaction for creating a transaction variant in Customizing, under *General Settings* → *Field Display Characteristics* → *Configure application transaction fields*. You can find further information on this in the implementation guide.

Assignment of transaction variants to sales document types can be found in Customizing for Sales, under *Sales* → *Sales Documents* → *Sales Document Header* → *Define Sales Document Types* in the *Variants* field.



In order that a transaction can be called up depending on a sales document type, the system of course needs the information as to which sales document type should be worked with. This choice is however made by the user on the initial screen first. This means that the initial screen can not be modified or faded out within a transaction variant. If you wish to miss out or modify the initial screen with the choice of sales document types, you need to create a *variant transaction*, this means a variant is created for a complete transaction. This transaction will then have its own name, which has been defined by you.

---

Transaction Variants Depending on Sales Document Types

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**Origin of Data in Sales Documents**

## Origin of Data in Sales Documents

When you create a sales document, the system proposes much of the data from the following sources:

[Data From Master Records \[Page 21\]](#)

[Data Determined by the System \[Page 24\]](#)

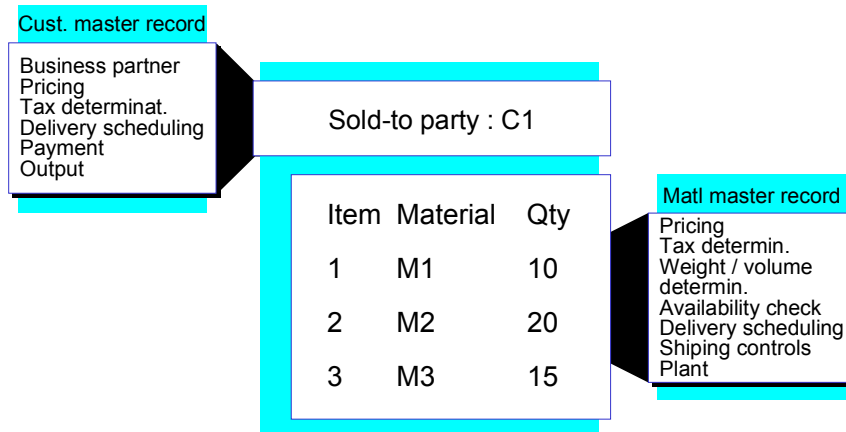
[Data from Preceding Documents \[Page 25\]](#)

## Data From Master Records

When you create a sales document without referring to a preceding document, the system copies the following data from the master records:

- Data about the sold-to party and other partners (for example, ship-to party or payer) from the customer master records
- Item data from the material master record
- Data from any relevant customer-material information records

The following graphic shows some of the data that is either transferred to the sales document or determined in the sales document.



## Data From the Customer Master Record

Among other things, the name of the sold-to party as well as agreements for [complete deliveries](#) [Page 44] and order combinations are copied from the customer master record into the document. You can change this data for each transaction.

The document contains data that can be entered in the header and in the items. The header data here normally applies to the items as well. For example, payment terms, Incoterms, partner functions, and the delivering plant are copied from the customer master records of the business partner into the document and the items. You can change the data in each item.

## Deviating Item and Header Data

A sales document may include items where some of the business data differs from the business data in the header. You can review items where the data varies with the header data by selecting *Edit* → *Display criteria* → *Own business data* from the *Overview* screen. You reach an overview screen that contains only the items for which the data is defined. If you enter general business data for an item which deviates from the data in the document, subsequent changes to the data in the document header have no effect on this item.

## Data From Master Records

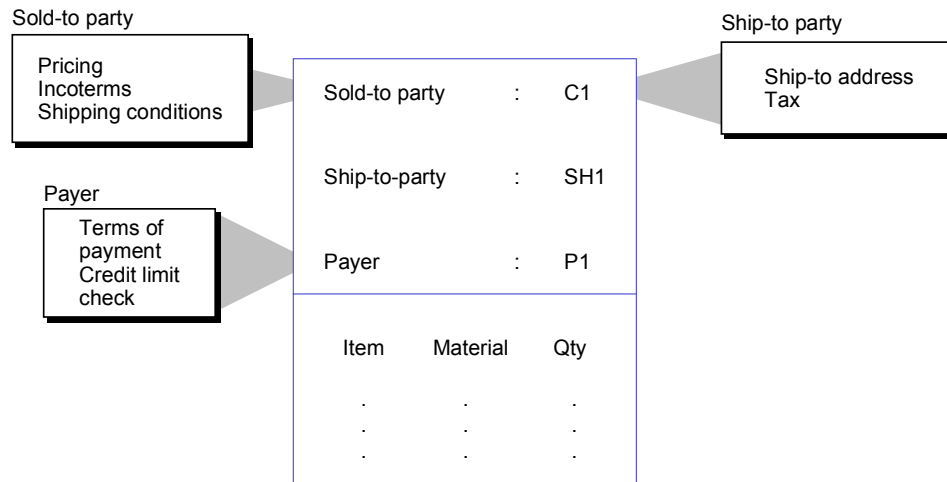


The payment terms ZB01 are copied from the document header into the items. You change the payment terms for item 20 to ZB02. If you then change the terms of payment in the header later to ZB03, it will not affect item 20. If you also decided to change the Incoterms in the document header from FOB to EXW this will not affect item 20 either.

## Data From Different Business Partners

Sometimes the customer master record specifies different partners for the various partner functions. For example, you may define several ship-to parties for a single sold-to party. In addition, you can define different partners for receiving and paying invoices. Each partner has its own customer master record and, during sales order processing, the system automatically copies data from the customer master record of the relevant partner into the sales order. For example, for each different ship-to party, the system copies the appropriate delivery and shipping data from the customer master record into the document.

The following graphic shows an example in which the sold-to party, ship-to party, and payers are all different. The payment terms are copied from the customer master record of the payer, while the destination address is copied from the customer master record of the ship-to party.



## Data From the Material Master Record

The system copies data from the material master record and copies it into the individual items. This includes data about weights, delivery priorities, as well as over- and underdelivery rules. You can change this data for each business transaction.

## How the System Determines the Delivering Plant

You can enter the delivering plant in the customer master record and in the material master record. A value is proposed for the delivering plant according to the following criteria:

Data From Master Records

If the delivering plant is defined in ...	Then the system proposes the delivering plant from ...
the material master only	the material master
customer master only	the customer master (if the material has not been maintained for the plant in question)
the material and customer master records	the customer master (if the material has not been maintained for the plant in question)
the material and customer master records	the material master (if the material has <b>not</b> been maintained for delivering plant defined in the customer master)



The delivering plant is proposed from the customer master record of the ship-to party. Keep this in mind in case the ship-to party is different from the sold-to party.

### Data From Customer-Material Information Records

You can determine customer-specific data for the materials in a customer-material information record. For example, you can define the material number and the customer's description for the material as well as specific shipping data, such as delivery priority, and partial delivery specifications.

If you have maintained the customer data in the customer-material information record, you can access material using this customer data rather than having to find the actual material number. To call up the *Ordering Party* view in the sales document, choose the *Ordering party* tab page in the overview screen. Here, you can enter the customer material number or a customer description. The system determines the number under which the material is managed.

When you create the information record, the system copies some of this data from the customer master record and the material master record. You can change this data in the information record. If a customer-material information record exists, the data defined there has priority over data in the customer and/or the material master record and is copied accordingly, into the individual items. You can change this data for each transaction.

---

**Data Determined by the System**

## Data Determined by the System

Some data in the sales document consists of a combination of different factors, such as customer and material, and cannot therefore be copied directly from the customer or material master records to the document. Instead, the system has to determine the data separately for the different factors at different times. For example, when you configure your system for Sales and Distribution, you can save the data for different routes separately from the master data, dependent on the location of the delivery plant and the ship-to party. As long as the necessary data has been saved, the system can then determine the route automatically during sales order processing. The following data can also be defined in advance to be determined during processing:

- Prices, discounts and surcharges
- Data for delivery scheduling
- Shipping point

## Data from Preceding Documents

If you create a sales document with reference to a preceding document, the system copies nearly all the data from the preceding document. The data in the preceding document originally comes from the customer and material master records. Because the data is copied from the preceding documents into the sales document, any changes that have been made to the master data records since the preceding document was created are not included in the sales document. If, when you create with reference, you add another item to the document that was not in the preceding document, the system determines the data for it from the master records, such as the material master or info record.



You have created an inquiry and a quotation with reference to this inquiry. Before you created the quotation, you changed some data in the material and customer master records.

- You have changed the material description in the material master record. This description is stored in the sales document at item level.
- You have changed the terms of payment in the customer master record from ZB01 to ZB03. These are stored in the sales document at header level.

When you created the inquiry, the system copies the original material description to the item. If you enter another item in the quotation for the same material, the system displays the new material description for the new item.

However, the system continues to propose the original term of payment, that is, ZB01, for all items including the new one. This is because it is copied from the header of the preceding document into the header of the quotation, and the change in the customer master record has no affect on the quotation.

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## How Sales Documents are Controlled

### How Sales Documents are Controlled

During Customizing for Sales and Distribution, your system administrator defines various types of data for controlling the processing of sales documents. Data is defined on three different levels:

- According to [sales document type \[Page 27\]](#)
- According to [item category \[Page 29\]](#)
- According to [schedule line category \[Page 33\]](#)

At sales document level, for example, you can specify whether a credit check takes place for a particular type of document. In addition, you can specify whether a certain document type is automatically blocked and must first be reviewed before it can be processed further (a request for a credit memo, for example). At item category level, you can specify, for example, whether an item category is relevant for delivery or billing. The item categories used in a quotation, for example, would not be relevant for delivery or billing. Finally, schedule line categories can be defined according to how you want MRP requirements and the availability check to be carried out.

## Sales Document Types

The standard SAP R/3 System includes a variety of pre-defined sales document types. During the implementation of your system, these standard definitions may be modified to suit the particular needs of your organization. In addition, you may add your own sales document types. The sales document types in the standard system include the following:

Type of processing	Sales document type	Abbreviation
Presales	Inquiry	IN
	Quotation	QT
	Free-of-charge delivery	FD
Sales orders	Standard sales order	OR
	Cash sale	BV
	Rush order	SO
Outline agreements	Quantity contract	CQ
	Maintenance contract	WV
	Rental contract	MV
	Scheduling agreement	DS
Complaints	Credit memo request	CR
	Debit memo request	DR
	Subsequent delivery, free-of-charge	SD
	Returns	RE

## Control Elements in Sales Document Types

You can use control elements, configured in Customizing for Sales and Distribution, to define each sales document type in such a way that it is provided with its own range of functions. The document types can be tailored to meet the requirements of your company. You can modify the existing document types or you can create your own if those specified in the standard version of the SAP R/3 System do not meet the needs of your sales organization. Your system administrator is responsible for maintaining control elements.

Your answers to the following questions help to decide how to define a particular sales document type:

### General data

- Can the document be entered only with reference to a preceding document?
- Should the existing customer-material info record be taken into consideration?
- Should the delivery date be proposed?

---

**Sales Document Types**

- Must a customer number be entered when creating a document? For example, assortment modules can be entered without reference to a particular customer.
- Which order probability is defined?
- Should the division be taken from the material master record for every item or should an alternative division specified in the header take precedence over the item specifications?
- How should the system respond if the division entered in the header deviates from the division in the items?
- Should a credit limit check be made?
- From which number range should the document number for internal or external number assignment come?
- Which fields are relevant for the incompleteness log? The validity period, for example, is important for contracts and must therefore be specified in the document.
- Can an incomplete document be saved or must all data be complete?
- Which partner functions are allowed and which ones are mandatory?

**Shipping data**

- Which delivery type should the delivery resulting from the order have?
- Should delivery scheduling be carried out?
- Should transportation scheduling be carried out?
- Should a delivery block be set automatically for a specific reason? For example, a delivery block may be appropriate for a free-of-charge delivery.
- You can define shipping conditions for a sales document type. These are copied into the document regardless of what is defined in the customer master record.

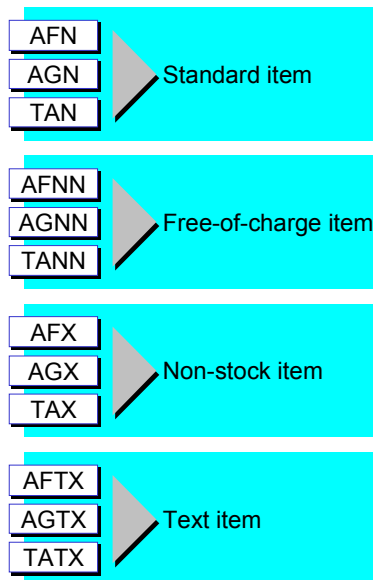
**Billing data**

- Which billing type should the invoice resulting from the order or the delivery have?
- Should a billing block be set automatically for a specific reason? For example, a billing block may be appropriate if a credit memo request should first be checked before it is used as the basis for a credit memo.

## Item Categories

Item categories are defined to provide additional control functions for the sales documents and thus meet the demands resulting from different business transactions. A separate control is defined for each of these item categories. For example, the functions of a standard item are completely different from those of a free-of-charge item or a text item.

The following graphic shows some of the item categories which are defined in the standard system. For instance, the first example displays the item categories for a standard item in the inquiry, in the quotation, and in the sales order.



## Item Category Control

The system uses an item category to process a material differently in each sales document type. For example, you can define a different control for a material in an inquiry and a material in an order.

The following graphic shows an example of how a material is controlled in an inquiry and how it is controlled in an order.

## Item Categories

### Inquiry

Sold-to party : C1			
Item	Material	Item category	
1	M1	AFN Standard item	Pricing Not rel. to delivery
2	D1	AFNN Free-of-charge item	No pricing Not rel. to delivery

### Order

Sold-to party : C1			
Item	Material	Item category	
1	M1	TAN Standard item	Pricing Relevant to delivery
2	D1	TANN Free-of-charge item	No pricing Relevant to delivery

In the inquiry, the standard item is priced but is not relevant for delivery. For the free-of-charge item, however, which is subordinate to the standard item, no pricing is carried out and it is not relevant for delivery.

In the sales order, the situation is different. Both items are relevant for delivery but pricing is carried out only for the standard item.

## Control Elements in Item Categories

Depending on the sales document type, different item categories are allowed. The item categories can also be adapted using control elements to meet the special requirements of your installation. You can modify the existing item categories or you can create your own. Your system administrator is responsible for maintaining the control elements.

The answers to the following questions form the basis for deciding how to define a particular item category:

### General data

- Should pricing be carried out for the item?
- When should an item be regarded as completed? A quotation item, for example, can only be regarded as completed if the entire quantity has been copied into a sales order.
- Does the item refer to a material or is it a text item?
- Are schedule lines allowed for the item?
- May general business data, for example, the terms of payment at item level, deviate from those at header level?

- Should a system message appear if the item cannot be fully delivered?
- Which fields are relevant for the incompleteness log?
- Which partner functions are allowed at the item level and which are mandatory?
- Which output (for example, an order confirmation) is allowed for the business transaction and which output determination procedure is used?

### Shipping data

- Is the item relevant for delivery?
- Should the weight and the volume of an item be determined?

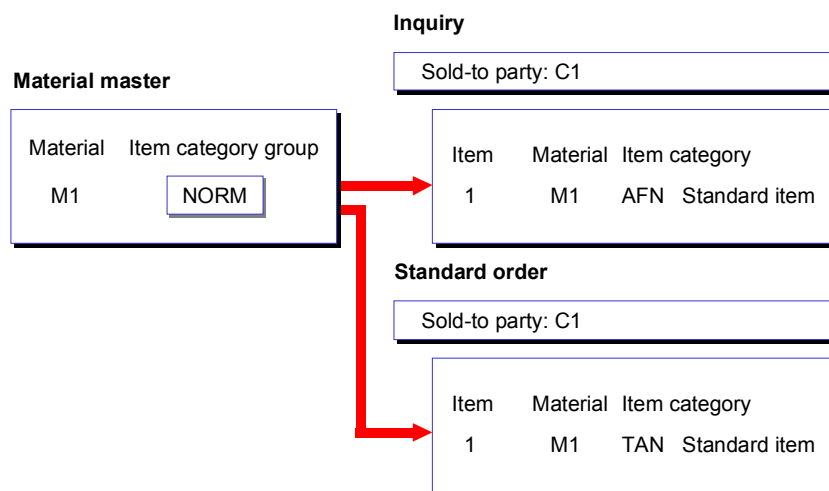
### Billing data

- Is an item relevant for billing?
- Should the cost of the item be determined?
- Is it a statistical item? The system prices statistical items, but they are not added to the value of the order. In other words, the customer is not charged for them.
- Should a billing block be set automatically for an item? For example, this may be important for items whose prices have to be clarified before billing.
- Is it a returns item?

### Determining the Item Category

The item category in the sales document depends on the sales document type and the material. An item category group is defined in the material master record. For example, in the standard SAP System, the item category group NORM is defined for materials kept in stock and the group DIEN for services and non-stock material.

The following graphic shows how the system determines the item category. For a material with item category group NORM, the system determines the item category AFN for an inquiry (sales document type IN) and the item category TAN for a standard order (sales document type OR).



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**Item Categories****Determining the Item Category for Sub-Items**

Services and free goods can be entered as separate items or can be allocated to other items. An item which is allocated to another one is called a sub-item. Determining the item category for sub-items depends on the higher-level item.

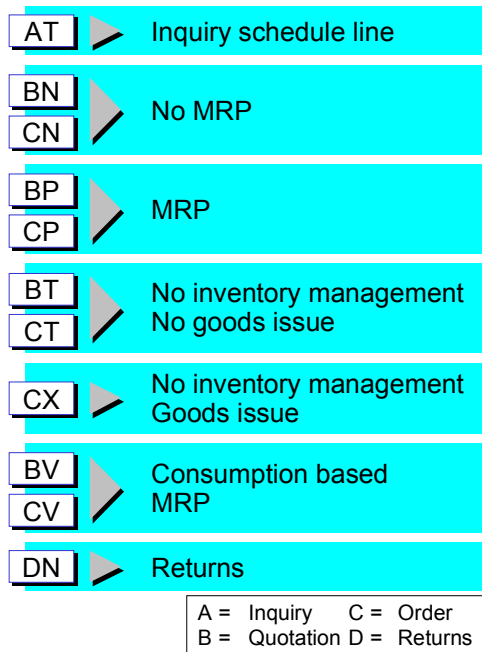
If a free goods item is allocated to a standard item in a standard order (item category TAN), the item category TANN is used for the sub-item in the standard version of the SAP System, and the sub-item is processed as a free-of-charge item.

## Schedule Line Categories

The items in a sales document are divided into one or more schedule lines. These schedule lines differ from each other with respect to date and quantity.

Different control elements are also defined for the schedule lines. For example, for some schedule lines, material requirements planning is not carried out; for other schedule lines, it is carried out. Also goods receipt, not goods issue, is posted for a schedule line defined in a returns document.

The following graphic provides an overview of some of the item categories which are defined in the standard system.



## Schedule Line Category Control

The various schedule line categories are controlled in different ways:

- The schedule line AT in inquiries is used only for information.
- No requirements are transferred and no availability check is carried out for the schedule lines BN and CN.
- Requirements are transferred and the availability of the material is checked for the schedule lines BP and CP.
- No stocks are managed for the schedule line categories BT, CT and CX. No goods issue is posted for the categories BT and CT. However, goods issue is posted for CX.

## Schedule Line Categories

- The schedule line categories BV and CV are controlled in the same manner as the categories BN and CN. However, requirements can be passed on for analysis purposes.
- Goods receipt is posted for the schedule line DN in a returns document.
- The schedule line categories CN, CP, CT, and CV are relevant for delivery; the other schedule line categories are not.

## Control Elements for Schedule Line Categories

Different schedule line categories are permitted according to the sales document type and item category you are using. You can use control elements to tailor the schedule line categories to meet the special demands of your installation. You can also define new schedule line categories. Your system administrator is responsible for maintaining the control elements.

The answers to the following questions form the basis for deciding how to define a particular schedule line category:

### General data

- Which fields are relevant for the incompleteness log?
- Should a customer requirement be reported to purchasing or production?
- Should an availability check be carried out?
- Is it a schedule line for a returns document?

### Shipping data

- Is the schedule line relevant for delivery?
- Should a delivery block be set automatically for the schedule line? A delivery block is appropriate for free of charge deliveries.

## Determining the Schedule Line Category

The schedule line category depends on the item category of the corresponding item and the material requirements planning type (MRP) of the material. The MRP type of a material is specified in the material master record.

Schedule line categories are proposed automatically based on values set in the appropriate table. You can make some manual changes to the entries in the sales document but you cannot change everything. When you enter another schedule line category, the system checks whether this category is allowed. For information on which schedule line categories are allowed in each case, see your system administrator.

## Common Features in Sales Order Processing

Some features in sales order processing are common to all sales documents. For example, you can use the *fast change* feature in any sales document, regardless of type (it can be a sales order, quotation, contract, and so on) to change certain data (for example, the plant, billing block or reason for rejection) for several items at once.

Another example of a common feature is the *incompletion log*, which reminds you automatically if important data is missing when you save a document.

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**Sales Summary**

## Sales Summary

### Definition

A condensed form of information taken from several sources, such as the customer master and statistical data.

There are two versions of the sales summary in Sales Support. The *advanced version* in HTML format is available in sales activities and address lists. The *standard version* is used to display information on groups of customers or common characteristics.

### Structure

The sales summary is made up of a header and main body.

The **header** normally contains two fields: *View* and *Info block*. With the *View* field, you can personalize the information that is shown. In the drop-down lists on this field, the system displays those views that you have set in Customizing. When you choose a view, the system refreshes the sales summary with the info blocks that have been assigned to this view.

The drop-down list on the *Info block* field contains the title of all of the info blocks for the view. Choose an info block to branch to it directly, instead of scrolling up and down to find the one that you need.

Note that when there is more than one customer listed in a sales activity, the system displays an additional *Customer* field, in the sales summary header. This field contains the name of the customer whose sales summary is currently being displayed. View the drop-down list for a complete list of customers for the sales activity.

The **main body** of the sales summary contains information blocks that display a wide variety of data for a particular customer. There are 22 information blocks:

- Address
- Customer classification
- Performance measures
- Contact persons
- Sales order information
- Pricing information
- Delivery information
- Partial delivery information
- Transport information
- Billing information
- Delivery conditions
- Partner
- Customer statistics
- Document statistics

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**Sales Summary**

- Last sales documents  
These include sales support documents.
- Service notifications
- Quality notifications
- Credit information  
The credit limit, the credit limit used, and the delta of these values as well as the open items are displayed for each credit control area in which the customer is defined. You can branch into the credit master sheet and the credit master record from this information block.
- Promotional agreements  
Here, you will find information on any rebate agreements, promotions or sales deals you have with the customer.
- Payment card information
- Quick info  
A call center employee can use this information block to obtain important data on a particular customer at a glance, for example blocked orders, customer-material information records, and open documents.
- Backorders  
All backorders are listed with their material availability and delivery status. You can branch from the list into the individual documents and process them as required

You can combine information blocks to form reporting views. For example, the information blocks that are relevant for telesales (quick info, promotional agreements, and credit-relevant information) have been grouped into one reporting view. The reporting views can be assigned to particular users. If no reporting view is assigned to a user, the system displays the standard reporting view.

In Customizing for Sales Support, you define which views and information blocks are relevant to your work. Choose *Sales Summary* → *Assign info blocks to a view*, and *Assign views to users* to make these assignments. In the related Customizing activities, you can also:

- Set a default view
- Specify whether or not documents used in the Logistics Information System are displayed
- Specify how many documents are displayed in an info block (the default number is 20)

## Use

With the sales summary, you can:

- Prepare for sales reports and sales calls  
You can access all relevant customer information directly in the sales activity or [address list \[Ext.\]](#). Because the sales summary is in HTML format, you can view it in external systems, such as mobile sales. Or you can print the sales summary out after making the appropriate settings in *Customizing for Sales Support* for the output type (*MAK3* in the standard system).
- Prepare telephone calls and answer telephone queries

---

**Sales Summary**

Click on the white, triangular icons to branch directly to the relevant documents, such as the last sales order, or other information.

- Target customers for a direct mailing campaign

You can display the sales summary directly in the address list to determine whether the customer should be included in the direct mailing.

## Making Fast Changes

With the fast change function, you can carry out certain changes for several or all items at the same time. Using this function, you can change the following data:

- Reason for rejection
- Delivery block
- Billing block
- Delivery date
- Delivery priority
- Plant

To make a fast change:

1. Select the items that you want to change on one of the overview screens for the sales document to be changed.
2. Choose *Edit* → *Fast change of...* and the relevant process (for example, *Reason for rejection*).
3. Enter the new value for the data you want to change.
4. Choose *Copy*.
5. The system copies the data which you change into all the selected items.
6. Save your document.

You can also set the delivery and billing block in the sales document header by going to the header screen and choosing the *Billing* or *Shipping* tab pages for the billing or delivery blocks respectively. When you set a block in the header, the block then applies to the entire document.

## Reference status

### Reference status

When you copy a sales document, the system updates the reference status in the copied item. An item can have the following status:

- Not referenced  
The item has not yet been copied.
- Partially referenced  
The item has already been copied but the entire item quantity was not copied.
- Fully referenced  
The item has already been copied. Depending on the completion rule for the item, there are two possibilities here:
  - The entire item quantity has been copied.
    - The entire item quantity has not been copied. However, because of the completion rule, the item cannot be referenced further.



You can define the completion rule in Customizing for Sales and Distribution when you define item categories.

### Reference Status at Header Level

The status for all the items in a document is combined in the header with the following indicators:

- If all items have been classed as not referenced, the entire document is also classed as not referenced.
- If all items are classed as fully referenced, the entire document is also classed as fully referenced.
- In all other situations, the document is assigned the status of partially referenced.

### Completing an Item

The system determines an overall reference status from the reference status of the item and the reason for rejection. An item which has been released receives the status "complete" and can no longer be copied.

### Displaying Reference Status

You can check a reference document to see whether the items and the entire document have been fully referenced by choosing *Goto* → *Header* → *Status* in the overview screen. You can see this information for items by choosing *Goto* → *Item* → *Status* on the overview screen.

## Entering Dunning Data in a Sales Document

A dunning key or block can be entered at header or item level in a sales document.

- Dunning key  
The dunning key controls dunning during sales processing. It determines the maximum number of dunning levels and can, for example, specify that a line item can only be dunned once even if the dunning procedure defined allows multi-level dunning.
- Dunning block  
The dunning block allows you to block line items for dunning if, for example, you want to suspend dunning because a customer has disputed the dunning procedure.

Dunning key and dunning blocks are copied from preceding documents into sales orders and, during billing, they are forwarded to financial accounting where dunning is controlled.

### Entering Dunning Keys and Dunning Block

You can enter dunning keys and blocks at both header and item level in the sales document.

To do this in the document header, choose *Goto → Header → Financial accounting* in the overview screen of the sales document.

If you have entered dunning keys or blocks at header level, these values are automatically copied as default values into the document items.

To enter a dunning key or a dunning block in a document item, select the appropriate item on the *Item Overview* tab page and then choose *Goto → Item → Billing*.

## Displaying Changes Made in a Sales Document

# Displaying Changes Made in a Sales Document

All the changes made to a sales document are displayed in a list, including:

- The situation before the change
- The situation after the change
- The change date
- User name of person who made the changes

In addition, you can access the statistics as well as the technical information on what fields and tables are affected by the changes.

To display the changes made to a document, proceed as follows:

1. Choose one of the following alternatives:
  - In the initial screen for either the display or change mode of the sales document, choose *Environment* → *Changes* from the overview, header or item screens.
  - On the initial screen for displaying or changing a sales document, enter the required document number and choose *Environment* → *Changes*.
2. Enter your selection criteria and then choose *Program* → *Execute*. You receive a log listing the changes that have been implemented.

You can call up several functions from the list to see more information relevant to the changes:

- Detailed information
  - Place the cursor on a line and choose *Choose item* if you require further information on this change.
- All document changes
  - Choose *List* → *All changes* if you want to see all changes made to a document.
- Extra information about the changes
  - Choose *List* → *Additional info* → *Show* if you want to access additional information on changes and *List* → *Additional info* → *Hide* if you do not want this additional information to be displayed.



You also control the display of additional information on the *Display Document Changes Selection* screen.

- Change statistics
  - Choose *Goto* → *Statistics* if you want to see statistics on the changes made to the document.
- Technical Information
  - Place the cursor on a line and choose *Goto* → *Technical info* to obtain information on fields and tables which are affected by the change selected.

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Displaying Changes Made in a Sales Document

## Combining Sales Document Items for Delivery

### Combining Sales Document Items for Delivery

The complete delivery and delivery group functions enable you to combine some or all of the items in a sales order so that they are delivered to the customer together for the same date. The system automatically determines the earliest delivery date possible for the group of items (in extreme cases, all the items in a document) and adjusts the schedule lines accordingly. Relevant requirements records are automatically changed or re-generated.

#### Complete Deliveries

To combine all items in a sales document for delivery, you can set the complete delivery indicator. The indicator can be proposed automatically from the customer master record or you can set it manually in the sales document.



If the complete delivery indicator is set for a sales order, the system automatically creates a delivery group that consists of all items in the sales order. The system takes the latest delivery date among the items and applies it to the whole delivery group.

#### Setting the Indicator Manually

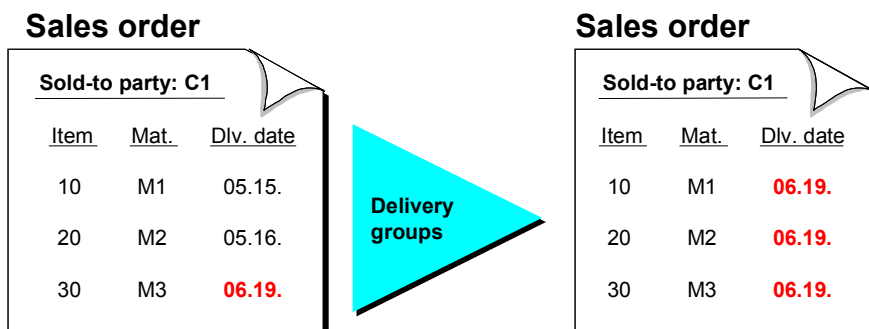
You can set the complete delivery indicator manually during sales order processing in the *Shipping* tab page in the header overview so that all the document items are completely delivered.

#### Proposal From Customer Master Record

If you set the complete delivery indicator in the shipping screen of a customer master record, the system automatically proposes the indicator in the sales documents you create for that customer. You can change the indicator manually in the document.

### Delivery Groups

If you want to combine a number of items in a sales document so that they are delivered together, you can create a delivery group, as illustrated in the following graphic:



When you create a delivery group, you should be aware that:

## Combining Sales Document Items for Delivery

- An item cannot be included in a delivery group if the item
  - has more than one order quantity
  - has no confirmed quantity
- If an item has more than one schedule line with confirmed quantities (for example, after an availability check with the delivery proposal option) the system displays the date of the latest schedule line in the delivery group overview screen.

When forming delivery groups, the system deletes the earlier schedule lines and copies their confirmed quantities into the latest schedule line.

### Creating a Delivery Group

To create a delivery group in a sales document, proceed as follows:

1. Choose the *Shipping* tab page from the overview screen.
2. For each of the items that you want to combine into a delivery group, enter the same number in the *Delivery group* field.

For example, if you want to combine three items into a delivery group, you enter 1 in the *Delivery group* field for each item. You can create additional delivery groups by using different numbers.

3. Choose *Enter* or *Save* to save your data.

The delivery groups are created. The system creates the schedule line date for each delivery group and copies it to the sales document.



A delivery group consists of at least one item in a sales document and can, in the case of complete delivery, consist of all items.

### Changing Delivery Groups

In the *Delivery Group* overview, you can expand or reduce delivery groups and also change the schedule line date of the delivery groups.

- You can extend a delivery group by entering the delivery group number in the *Delivery group* field for the document item that you want to add to a delivery group.
- You can remove an item from a delivery group by deleting the delivery group number for that item.
- You can manually change the schedule line date that the system proposes for a delivery group to a later date and if necessary, the system redetermines shipping and transportation dates. However, you can only change the date to a later date.

### Removing Delivery Groups

You can undo a delivery group by deleting the delivery group numbers for every item in the group.

If you delete a delivery group or deactivate the complete delivery indicator, the system tries to recreate the original schedule lines for the individual order items. In the case of items whose original quantity could not be confirmed, the system carries out a new availability check.

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**Combining Sales Document Items for Delivery****Displaying Delivery Groups**

For each item that belongs to a delivery group in a sales document, you can display the delivery group number.

To display this information, choose the *Shipping* tab page from the overview screen.

## Processing Billing Plans

During certain kinds of sales order processing, you may want to bill a particular item according to a schedule of billing dates. For example, you may want to bill a rental contract with monthly invoices for the duration of the contract. Or, you may have a make-to-order item which is assigned to a project and you want to bill the customer a certain percentage of the total as different stages of the work are completed. The schedule of billing dates is called a *billing plan*. Billing plans can be created automatically during processing, provided that the necessary control data has been maintained in Customizing for Sales and Distribution.

**See also:**

[Billing Plans \[Ext.\]](#)

## Additional Data

### Additional Data

The sales document now contains an *Additional data A* and an *Additional data B* screen at both header and item level.

There are five fields in the *Additional data A* tab page (*Customer group 1 - 5* field in the header and *Material group 1 - 5* field in the item). These fields do not affect the functions in the standard version of the SAP R/3 System and can be used freely for entering data or for making modifications. You can enter defaults for the additional data from the customer master record (document header data) and the material master record (document item data). The additional data is copied from inquiries and quotations into sales orders and from there, it is copied into deliveries and billing documents.

You can design the *Additional data B* tab page to suit your needs.

### Proposal from the Master Records

To maintain additional data in the customer master data, choose a sales area screen such as *Sales* or *Shipping* and there, choose *Environment* → *Additional data*. This takes you to the *Additional Customer Data (Sales and Distribution)* dialog box where you can maintain the data. You can maintain different additional data for the different sales areas assigned to the customer. The system then proposes the data for the relevant sales area.



These fields are not active in the material master record in the standard version of the SAP R/3 System. However, you can activate these fields for modification purposes. Entries made in these fields are then proposed in the sales documents.

### Entering Additional Data

To enter additional data in a sales document, proceed as follows:

- If you want to enter additional data at header level, from the sales document, choose *Goto* → *Header* → *Additional data A*, where you can enter the required data.
- If you want to enter additional data at item level, select the relevant item in the overview screen and choose *Goto* → *Item* → *Additional data A*. You reach the *Additional data A* tab page where you can enter the required data.

## Deleting Sales Documents

### Prerequisites

You can only delete a complete sales document if there are no subsequent documents. For example, you could not delete a complete sales document if items had already been delivered and therefore, delivery documents had been created.



If you want to delete a sales document, you effectively remove it from the database which means that it is no longer possible to analyze it. Therefore, we recommend that you work with reasons for rejection (see [Rejecting Items in Sales Orders \[Page 51\]](#)).

### Procedure

1. On the *Sales* screen, choose *Sales document* → *Change* and enter the sales document that you want to change. Or you can generate a [list of sales documents \[Page 55\]](#) and select the one that you want to delete.
2. Choose *Sales document* → *Delete*.  
The system prompts you to confirm the deletion.
3. Save your changes.

### Result

The system deletes the document from the database.

---

**Deleting Items in a Sales Order**

## Deleting Items in a Sales Order

### Prerequisites

You can delete individual items in a sales document if there are no subsequent documents. For example, if an item has already been processed for delivery, you can no longer delete it in the sales order.



If you want to delete an item, you won't be able to run an analysis on it later. Therefore, we recommend that you work with reasons for rejection (see [Rejecting Items in Sales Document \[Page 51\]](#)).

### Procedure

1. On the *Sales* screen, choose *Sales document* → *Change* and enter the item that you want to change. Or you can generate a [list of sales documents \[Page 55\]](#) and select the one that you want to delete.
2. Select the item in the overview screen that you want to delete and choose *Delete item* (button under the table containing the items).  
The system prompts you to confirm the deletion.
3. Save your changes.

## Rejecting Items in a Sales Order

You can enter a reason for rejection for one or more items. These items are then not copied into the subsequent documents. If you reject an item in a sales document, the system automatically cancels any materials planning requirements (MRP) previously generated for the item.

### Prerequisites

You must be in the change mode for a sales document.

### Procedure

You can either reject the whole sales document or individual items.

#### Reject all items:

1. If you want to reject all the items, choose *Reject document* in the change modus for the sales document.  
The system automatically selects all the items and you can enter a reason for rejection in the following dialog box.
2. Enter the appropriate reason for rejection and choose *Copy*.  
The system assigns the same reason for rejection to all the selected items.

#### Reject individual items:

1. If you only want to reject some of the items, select those items in the item overview screen and choose *Edit → Fast change of... → Reason for rejection*.  
A dialog box appears in which you can enter the appropriate reason for rejection.
2. Enter the appropriate reason for rejection and choose *Copy*.  
The system assigns the same reason for rejection to all the selected items.

#### Reject individual items with different reasons of rejection:

If you want to enter different reasons for rejection for the items, choose the *Reason for rejection* tab page from the overview screen when changing the sales document. You can enter a different reason for rejection for each item in the *Reason for rejection* field.

## Changing Data at Header Level

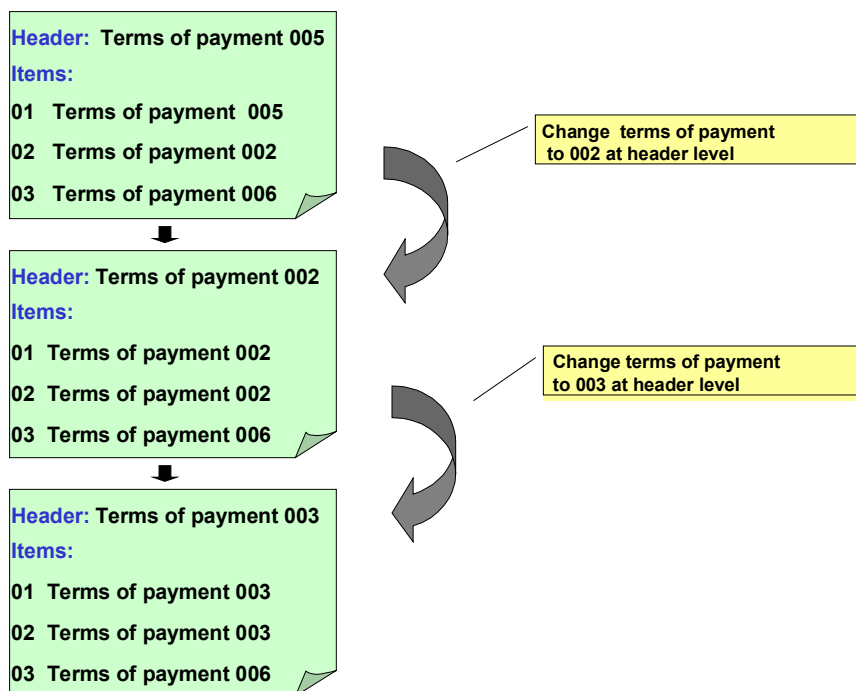
### Changing Data at Header Level

The following logic applies to the item level data if you change data at header level:

When you change a field at header level, if the contents of the fields at header and item level agreed before any changes were made, these changes are copied to the item.

This applies to business and contract data.

The following graphic provides an example:



#### Caution

Note the following rules:

- If items have already been billed, changes to the pricing date and exchange rate at header level are not copied to the items. The system displays a warning message.
- If the pricing date is changed at header level and the items have not yet been billed, the exchange rate is also copied to the item.
- If the currency is changed at header level, the exchange rate is always copied to the item. This also applies to items that have already been billed. The system displays a warning message.

## Special Features for Contract Data

If you change contract header data that affects item data (such as the contract start date), the system collects messages and activities while it copies the data. It then displays an activity log in a dialog box containing details about the item, field and message. You can use user exit EXIT\_SAPLV45W\_001 to extend the activity log, for example, by running checks that meet your individual requirements.

The following rules apply when changing contract data at header level:

- If an item has already been canceled, the changes at header level will not affect it.
- If you cancel at header level, the item is canceled for the next possible cancellation date according to its data.
- If the contract end data at header level is before the contract start date at item level (for example, header contract end date: 1 January 1998, item contract start: 1 June 1998), the system sends a note to the activity log. You can then reject or delete the item manually.
- If you extend the contract end date at header level and the contract end date for the item has already been exceeded, the item contract end date can only be extended if it originally agreed with the header date.
- If the validity of the item does not correspond to the validity at header level, the system creates a note in the activity log.
- The system never copies the rules for contract end and contract start dates. Once the data has been copied, the rules are always deleted so that nothing can be determined at item level.

---

**Assigning Contracts**

## Assigning Contracts

### Use

When you process sales documents, you are also able to assign them to contracts. (For example, you create a standard order and during processing, you assign it to a value contract that you have agreed with that customer.) You can assign the sales document at header or item level.

- Assign to contract at item level  
Select the item that you want to assign to a contract and choose *Edit → Assign contract to item*.
- Assign to contract at header level  
Go to *Edit → Assign contract to header*.

## List of Sales Documents

### Use

You use this function to list sales and distribution documents (such as sales orders or billing documents) within a certain time period. You can also specify additional criteria, such as:

- Business partner (for example, sold-to party, payer)
- And/or material
- Purchase order number

You can decide whether you want to list all sales documents or just open ones. You can also restrict your list to all those sales documents you created yourself.

There are various reasons for setting up a list of sales documents, for example:

- You want to obtain information about existing sales orders in response to a customer inquiry.
- You want to display all quotations for a certain material or a business partner for analysis.
- You want to display all sales orders where data is still incomplete.

### Prerequisites

The following indexes must be activated in Customizing for Sales and Distribution under *Sales and Distribution* → *Sales* → *Lists*.

- Partner indexes (for lists according to sold-to party, payer, and so on)
- Item indexes (for lists according to material)

You can use an existing display variant or define your own to determine which columns should be displayed in the list. Before you can save your own display variant, you must first define a parameter in your user profile by choosing *System* → *User profile* → *Own data* and entering the following in the *Parameters* tab page:

- **SD\_VARIANT\_MAINTAIN** in the *Parameters* column
- **A** in the *Value* column

For more information, see [Display variants \[Ext.\]](#) in the *CA - ABAP List Viewer* documentation.

### Features

The ABAP List Viewer functions are available for processing these lists. For more information on list processing, see [CA-ABAP List Viewer \[Ext.\]](#).

You can use lists to make mass changes, that is, changes to several sales documents at the same time, by entering a:

- New plant
- New material
- New pricing
- New currency

## List of Sales Documents

For example, if you want to reprice several sales documents, select the relevant sales documents and choose *Edit* → *Mass change* → *New pricing*.



If you want to make a change that affects the items (for example, a new plant or a new material), you must choose a display variant which lists the items in the sales document. To change the display variants, choose *Settings* → *Display variants*.

## Call

You can call up the lists as follows:

- By choosing *Info system* in each area: For example; *Logistics* → *Sales and distribution* → *Billing* → *Info system* → *Billing documents*
- Or by choosing *General report selection*, where all the reports are stored: For example; *Information systems* → *General report selection* → *Sales and Distribution* → *Billing* → *Billing documents*

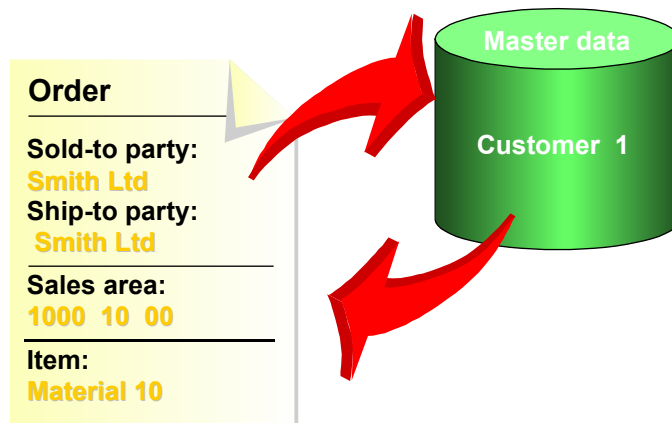
## Deriving the Sales Area

### Use

In order to represent complex sales structures in a flexible way, all the sales relevant data in the SAP System is defined according to sales area.

The sales areas (sales organization, distribution channel, division) are derived from the master data of the sold-to or ship-to parties. This means that you do not have to enter the sales area when you create a sales document.

## Deriving the Credit Control Area



If you do not specify a sales area in the initial screen when you create a sales document, the system uses the sold-to or ship-to parties that you entered in the overview screen, to derive the sales area. If there are several sales areas for that particular sold-to or ship-to party, you can choose the right sales area in the dialog box which will appear. The system then copies the selected sales area into the entry screen.

If you only enter a ship-to party, the system uses this to determine the sold-to party and if necessary, the sales area.

If there are several sold-to parties or sales areas for one ship-to party, a dialog box appears where you can choose the one you required. If the system is unable to determine a sold-to party, an error message appears in the status bar.

If you enter a sold-to party which is also the only ship-to party the system automatically copies it as such and informs you in the status bar.

## Changing the Sold-to Party

# Changing the Sold-to Party

## Use

Once you have entered a sales document, you can change which sold-to party it is assigned to. This might be necessary in the following situations:

- You entered the wrong sold-to party when you created the sales document
- During telesales, you want to enter the item first and then the sold-to party. Here, you would work with the default sold-to party first.
- In make-to-order production, you want to start with a work-to-order before the final customer is known.
- The first customer rejects a make-to-order production order but it is accepted by someone else.

## Features

When you create or change a sales document you can change the sold-to party simply by overwriting it.

When you change the sold-to party, the system runs the same checks as for the first sold-to party. It checks, for example, whether the sales area in the document is still valid for the second sold-to party. It also checks whether there is a listing or exclusion for any of the items.

You can also change the sold-to party:

- In make-to-order production
- In sales documents with special stocks, such as consignment
- If a sales document is created from another sales document with non-status relevant copying

If you change the sold-to party, you need to redetermine the related data:

- All business partners and data that arise from the sold-to party
- Texts
- Free goods
- Prices
- Output
- Profitability segment
- Customer master data (including the fields for Brazil and Argentina)
- Data from the sales information record (such as the customer material number)
- The system redetermines the plant if the system reads info records according to the sales order type, or the ship-to party changes
- The system redetermines shipping points and routes if the shipping conditions change

## Changing the Sold-to Party

The system does not redetermine the following data:

- Material number (info record, material determination, product selection)
- Sales office and sales group
- Product allocation (availability check can be triggered manually)
- Batch determination (can be triggered manually)
- Reference data for the previous sold-to party (such as the purchase order number) remain the same but can be changed manually if necessary

### Preassigning the Sold-to Party

You can use a default sold-to party if, when working with sales documents, you need to enter the items first and wait until the end before you enter the sold-to party (for example, for telephone sales). The default sold-to party allows you to create the sales order and save it before entering the real sold-to party.



When you create the default sold-to party in the customer master, note the following: There is an indicator in the customer master that allows you to replace the default sold-to party later with the real sold-to party. If the indicator is activated, and the default sold-to party has not been replaced, it appears as an incomplete field in the incompletion log. This indicator is in the customer master under *Extras* → *Account group info* → *Customer types (Default SP field)*

You can save the default sold-to party as a default value for a particular user for all the sales document types by going to *System* → *User settings* → *Own data*, choosing the *Parameters* tab page and saving parameter `VAU` for the default sold-to party.

You can use a transaction variant so that the value for the default sold-to party depends on the order type.

### Constraints

The sold-to party can only be changed on the overview screen and not on the *Partner* tab page.

When you change the sold-to party, the system does not redetermine the sales area.

The sold-to party cannot be redetermined from the ship-to party.

In the following cases, the sold-to party cannot be changed:

- If there are preceding documents relevant to the status (for example, quotations) or subsequent documents for the sales document The *Sold-to party* field is not ready for input.
- If a purchase order has been created from the sales document. The system does not distinguish between third-party and individual purchase orders.
- If the sales order arises from a notification or from a service order
- If a service order is generated from the sales document

## Changing Sales Document Type

# Changing Sales Document Type

## Use

When working with telephone sales, it is frequently the case that at the start of the telephone call, you do not know whether the customer would just like a quotation or to make a purchase order.

You can change the sales document type during document processing, which enables you, for example, to create an inquiry and change it later to a quotation, or convert an inquiry that has been saved into a standard order.

## Features

You can use the settings in Customizing for sales document types to decide which sales document types can be offered as alternatives during document processing.

In document processing, you can change the sales document type in the overview screen (*Sales* tab page) simply by selecting the required document type.

## Prerequisites

The following prerequisites must be met before you can change the document type during sales order processing:

- There must not be any subsequent documents
- The document itself must not be a status-relevant subsequent document
- The document must not have been generated from service notification or a contract

Because the item categories have to be redetermined when you change the sales document type, the following requirements also apply:

- The item category must be changeable (for example, a make-to-order item for which the costs have already been posted can no longer be changed)
- If a listing exists for the new document type and you have already entered items, these items must also be contained in the list
- If you have already entered items the new sales document type may not have an exclusion

If you choose a new order type, the system checks the following:

- Document determination procedure: if different, it re-runs pricing
- Material determination procedure: if different, it re-determines the material
- Listing/exclusion determination procedure: if different, it re-determines them
- Free goods procedure: if different, it re-determines them



When you change the sales order type for a sales document that has already been saved, both sales document types must belong to the same number range.

## Changing Sales Document Type

## Settings in Customizing

You can define two alternative document types for each sales document type in Customizing for sales document types (use the *Alt.sales doc. type1* and *Alt.sales doc. type2* fields).



Note that you can only choose alternative sales document types during document processing if you have maintained the relevant fields in Customizing for that particular sales document type.

The system runs certain checks on the sales document types that you have defined as alternatives in Customizing.

Only those document types that pass these checks can be configured as alternative documents.

The following sales document categories can be used: inquiries (category A), quotations (category B), orders (category C), contracts (category G), returns (category H), free-of-charge deliveries (category I), credit and debit memos.

Settings in Customizing for sales document types:

- The sales document type must not be blocked (*Sales document block* field)
- The sales document type must not have an indicator (*Indicator* field)
- The settings in the *Item division* fields must agree for both types (the division in the sales document header is valid for all items)

The document types must have the same:

- Payment guarantee procedure
- Partner determination procedure
- Text determination procedure
- Status procedure
- Hierarchy category for pricing
- Billing plan type/invoice plan
- Payment card planning type
- Promotion/receiving point determination (settings in Customizing for Retail)
- Commitment data
- Checking group for payment cards



Possible entries (F4) for the *Alt. sales doc. type 1* and *Alt. sales doc. type 2* fields displays all the sales document types that correspond to these requirements.

## Printing Output Manually for a Sales Document

# Printing Output Manually for a Sales Document

## Use

This procedure applies to printing output for sales documents and billing documents.

You can:

Function	When
Print output	When changing or displaying sales documents
Display output on the screen	When adding, changing, or displaying sales documents

If you display the output on the screen, the system displays the current document data. This means that you can enter a new text relevant for the output and see the result on the screen before you save it.

## Prerequisites

The general prerequisites that are described in [Printing Output \(SD\) \[Ext.\]](#) also apply here.

In the output screen in the sales document, you must also enter number 3 (*immediate*) in the *Time* column for the output you want to print.

## Procedure

The following procedure illustrates how to print output, using a sales document as an example.

1. On the [sales screen \[Ext.\]](#), choose *Sales document* → *Change* or *Display*.
2. Enter a document number and choose *Sales document* → *Issue output to*.



You can also choose *Extras* → *Output* → *Header* or *Item* → *Print Preview* on the overview screen of the sales document. You can only print a changed sales document once you have saved the data. This prevents you from sending data in a printout to the customer before it has been saved in the system.

3. In the *Issue Output* dialog box, select the output that you wish to print.
4. Choose:
  - *Printer* to print the output
  - *Screen* to display the output on the screen

## Message Log

### Use

Quitting messages while sales documents are being processed is often time consuming. Therefore, messages are collected during processing, in the form of a log. You can then deal with them at the end of your work session.

### Features

The following messages are collected in the form of a log:

Message group	(Message category) Message number
Set deletion flag check	(from PP component)
Check item data	(V1)316
Check copy item	(V1)474, (V1)475, (V1)316, (V1)473, (V2)104, (V2)105, (V2)106, (V2)107, (V2)108, (V2)109, (V2)110
Process assembly	(V1)748, (V1)798, (V1)378
Process purchase requisitions	(V1)798, (V1)619, (V1)092, (V1)796

You can display the messages using the *Log* button in the sales document, and work through them at the end of your work session. The *Log* button is only displayed if messages are in the log. The button is displayed in the Overview screen on the Overview for schedule lines. The log cannot be saved. When you save the sales document, the log is automatically deleted.



Adding further messages from the SAP standard to the log cannot be proposed by the customer himself. SAP will expand the range of messages copied to the log step for step in the following Releases.

#### See also:

Further information on working with the log can be found in the documentation for base value in the sections:

- [Application Log \[Ext.\]](#)
- [Displaying Logs \[Ext.\]](#)
- [Evaluating Logs \[Ext.\]](#)

## Copying Documents

### Copying Documents

You can use an existing sales document as the basis for a subsequent document. For example, if you want to submit a quotation on the basis of an inquiry, you can create the quotation with reference to the inquiry. In this case, all data is copied from the inquiry to the quotation.

Some of the possible combinations in the standard version of the SAP R/3 System for referring to preceding documents include:

Copying from...	To...	To...
Inquiry	Quotation	Sales orders
Sales orders	Sales orders	
Sales orders	Subsequent free-of-charge delivery	
Sales orders	Credit memo request	
Sales orders	Returns	

You can define which sales document types can be used as reference documents. You can also control which data you wish to be copied. For example:

- Header data
- Item data
- Partner data
- Pricing data
- Schedule line data

### How the System Checks Data

Before copying data from one document to another, the system can also check that certain requirements are met. The following are examples of typical copying requirements:

- The reference document and the current document must have the same customer
- Rejected items will not be copied
- If another document refers to the document or item, copying is not allowed
- The validity period must not have expired

Your system administrator determines in Customizing for Sales and Distribution whether the system displays a warning message (further processing is possible) or an error message (further processing may not be possible) when copying requirements are not met.

## Copying rules

For documents that you need to copy, you can define whether a document must be fully referenced during a business transaction and how the system should then respond.

You can specify, for example, that a quotation can only be copied in its entirety into a sales order. If the requirements and quantities in the quotation of the customer do not change, the quotation from your company is legally binding. The conditions of the quotation then apply to the resulting sales order.

### System Reaction to Full Reference

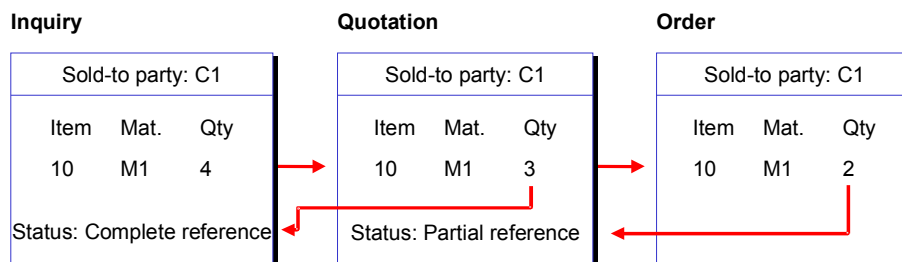
In the standard system, if full reference is specified for copying a reference document, you cannot change or delete an item when you copy from the selection list. If you subsequently try to change the document quantity or try to delete an item in the new document, you receive a system message.

### Completion rules

Your system administrator can define completion for referenced items by item category in Customizing for Sales and Distribution. An item may be considered fully referenced if one of the following criteria have been met:

- An item is complete as soon as it is used as a reference. In this case, the item is fully referenced, even if only a part of the quantity is copied.
- An item is only complete once the full quantity has been copied into a subsequent document. If the item is partially referenced, it is possible to enter several sales documents for the item until the quantity is fully accounted for.
- An item is only complete once the target quantity (in a contract, for example) has been copied into a subsequent document. If the item is partially referenced, it is possible to enter several sales documents for the item until the quantity is fully accounted for.

The standard version of the system defines an inquiry item as complete even if only one part of the inquiry quantity has been copied into a quotation. On the other hand, when you copy a quotation into a sales order, the quotation is not complete until the quotation quantity has been fully referenced. This is illustrated in the following graphic:



Contracts, like quotations, are only considered complete once the full target quantity of the contract has been released.

Copying rules

## Creating Sales Documents with Reference

There are two ways of creating a sales document with reference to another sales document:

- In the initial screen for entering sales documents  
You can copy both the item and the header data from the source document (for example, quotation) to the target document (for example, sales order).
- While processing the sales document (in change mode)  
The system copies the item data from the source document, such as the quotation. The system only copies the header data if you leave the *Sold-to party* field blank.

To create a sales document with reference, choose *Sales document* → *Create with reference*.

The system displays a dialog box in which you can choose between six tab pages (inquiry, quotation, sales order, contract, scheduling agreement or billing document). In the tab page you can specify the document number of the reference document and either copy it completely or use *Selection list* to copy some of the items.

### Copying Item Data

You can use *Selection list* in the dialog box which appears when you create with reference to copy some of the items to the new document.

To copy selected items in the new document, proceed as follows:

1. Choose *Selection list*.
2. Deselect the items you do not want to copy into the new document. If necessary, change the quantities of the items to be copied.
3. Choose *Copy* to copy the selected items into the new document.

You can copy items partially unless full reference is defined for the document type. Your system administrator is responsible for the definition of full and partial references.



Incomplete sales documents cannot be copied.

### Copying Multiple Documents into a New Document

When you create a new document, you can also copy items from several documents into the new document. To do this, use the *Create with reference* function again and enter the document from which you want to copy data.

### Copying a Document into Multiple New Documents

Your administrator may have specified full reference for the copy function. This means that the entire document must be copied into a new document. If full reference is not specified, you can copy a document into several documents. In this case, you can select items for a document using the selection list.

You can also copy an item into several documents by copying only one part of the item quantity in each case. In the next document, you can select only those items or quantities that have not yet been copied from the reference document.

**Creating Sales Documents with Reference**

## Item Proposals in the Sales Document

In order to reduce the time needed in order processing, the system can propose items from the following sources:

- An existing sales document (for example, an order or quotation).  
For more information see [Creating Sales Documents With Reference \[Page 67\]](#).
- An item proposal

If a customer frequently orders the same combination of materials, or if you recommend a particular selection of products for an opening order, you can store the frequently used data as an item proposal in the system. If you wish, the item proposal may also include proposed order quantities. During sales order processing, you can then copy all or some of the materials and quantity data from the item proposal directly into your document (sales order, quotation, and so on). In addition, you can assign a particular item proposal to one or more specific customer master records. The system can then automatically propose the number of the assigned item proposal whenever you process sales orders for the relevant customers.

For more information about creating item proposals, see [Creating Item Proposals \[Ext.\] \[Ext.\]](#) in the *SD Basic Functions and Master Data* documentation.

---

**Proposing Items**

## Proposing Items

1. On the overview screen of the sales document, choose *Edit* → *Propose items*.
2. Enter the number of a valid sales document in the *Sales document* field, such as an existing inquiry, quotation or sales order. If you have defined an item proposal in your customer master record, it is automatically proposed by the system.
3. Select one of the following:
  - *Default without quantity* to copy all materials.  
The quantity from the item proposal is not copied to the sales document.
  - *Default with quantity* to copy all materials with quantities.
  - *Selection list* to list all the items in the sales document or in the item proposal. You can then select the required materials.

Depending on the function key you choose, the system either copies the material with or without a quantity into the sales document, or it displays a list from which you can select the quantities and materials you want to be copied.

## Proposing Items From Another Document

To copy all or selected items from a sales document, proceed as follows:

1. In the overview screen of the sales document, choose *Edit* → *Propose items*.
2. Enter the number of the sales document, or search for the number by selecting the possible entries pushbutton.
3. Select one of the following:
  - *Copy materials* to copy all materials
  - *Copy quantities* to copy all materials with quantities
  - *Selection list* to list the sales document and to select the required materials.

Depending on the function key you select, the system either copies the material with or without a quantity into the sales document, or it displays a list from which you can select the quantities and materials you want to be copied.

## Incompletion Logs

### Incompletion Logs

The incompletion log reminds you when data important for further processing is missing from the sales document. When you enter a sales document, the system usually proposes much of the necessary data from customer and material master records, and you can also enter additional data or change proposed data manually. The sales document then forms the basis for various subsequent functions, such as delivery processing and billing. However, subsequent functions can often only be carried out if the data in the original sales document is complete. To guarantee completeness, the system logs all missing data in an incompletion log. The data needed to process subsequent functions is defined by your system administrator for each sales document type. For example, when entering a quotation, you must enter a validity period. If you do not enter the validity period, this field is entered into the incompletion log and further processing may be blocked.

The completeness of data in a sales document determines its status. You can display an overview of status information in a sales document for both header and items.

[Calling Up the Incompletion Log \[Page 74\]](#)

[Displaying Incompletion Status \[Page 75\]](#)

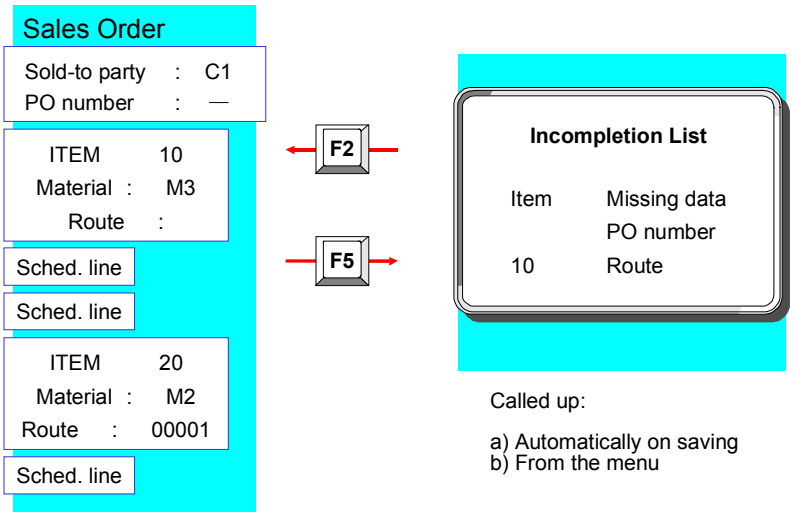
### Saving a Document with Incomplete Data

Whether you can save a document with incomplete data depends on the sales document type. For example, the system might allow you to save an incomplete quotation, whereas it might allow you to save an order only if the data is complete. Even if you can save an incomplete document, the missing data or texts may affect further processing of the sales document. The following functions may be blocked:

- Copying
- Delivery
- Billing

If, for example, the payment terms are missing, you can still deliver the sales order but you cannot invoice it. The incompletion log may also indicate that the purchase order number is missing, but this may not necessarily affect further processing of the document. The following graphic shows how you process incomplete data.

Incompletion Logs



## Calling Up the Incompletion Log

### Calling Up the Incompletion Log

If you try to save the sales document but your data is incomplete, the system automatically displays a dialog box informing you that your data is incomplete.

To complete the document, proceed as follows:

1. Choose *Edit* and *Enter*.

The screen containing the incompletion list appears. The system displays the data still required to make the document complete.

2. Select the lines that you want to edit and choose *Complete data*.
3. Enter the missing data and choose *Edit next data*.

This takes you to one of the following screens:

- If you select additional data from the incompletion log, you reach the next screen that has missing data.
- If you do not select additional data in the incompletion log, you reach the item entry screen. You have finished processing incomplete data.

4. As soon as you have entered all missing data, choose *Save*.

You can now be sure that you have edited all the data that is required to continue processing the business transactions.



If the incompletion log contains missing data, you can also call it up manually by selecting *Edit* → *Incompletion log* from any of the overview screens in the sales document.

## Displaying Incompletion Status

You can check whether all the necessary data has been entered for both the entire document or for individual items.

- If you want to check the completeness of the entire document, choose *Goto → Header → Status* on one of the overview screens. On the screen which follows, you can see whether the header and item data is complete.
- If you want to check the completeness of the items, choose *Goto → Item → Status* on one of the overview screens.

On the status screens, you see which subsequent functions (for example, delivery) cannot be carried out because the document is incomplete. However, the system does not display which specific data is missing.

---

**Material Determination**

## Material Determination

Material determination enables you to carry out the following tasks during sales order processing:

- Automatically substitute materials
- Automatically determine and offer the user a selection of products based on pre-defined conditions

You can also create an analysis log for material determination in the order

For more information about using material determination and creating the prerequisite master data, see the following topics:

[Material Determination \[Ext.\]](#)

[Product Selection \[Ext.\]](#)

[Selecting Products During Sales Order Processing \[Page 77\]](#)

[Creating an Analysis Log for Material Determination \[Page 79\]](#)

## Selecting Products During Document Processing

Product selection offers the following functions during sales document processing:

- Manual product selection
- Automatic product selection

### Selecting Products Manually

To select products manually, proceed as follows:

1. In the entry screen of the sales document, enter the material or key term for which you have created condition records for product selection.
2. Choose *Enter*.

The material that you enter triggers product selection. The system displays a dialog box with a list of options for you to select from.

3. Choose the product the customer wants.

The system replaces the material or key term you entered with the product you selected.

### Selecting Products Automatically

In automatic product selection, you enter a material that triggers product selection. The system automatically selects products according to availability and the sequence of the alternative products in the master data condition record. For each material the system selects, it enters a sub-item in the order. The material that you use to trigger product selection can be a “dummy” material, such as a non-stock material (material type: NLAG), used only for triggering purposes.



Product selection can also be a two-level procedure. During the first step the system can use material determination to find a material or it can propose materials for manual selection. During the second step, the system then carries out automatic product selection as described in the preceding section.



The following example shows a list of alternative products that have been entered in a condition record for automatic product selection, along the stock available for each product.

Materials listed in condition record	Stock available
Product X	Non-stock Material
Product X - pack 1	100 pcs
Product X - pack 2	200 pcs
Product X - pack 3	200 pcs
Product X - pack 4	300 pcs

During order entry, enter the material-product X to trigger product selection and the order quantity of 350 pcs. The system automatically selects the products, which you

### Selecting Products During Document Processing

entered in the condition record, if they are available and creates the following new lower level items in the order:

Item	Higher-level item	Material	Quantity
10		Product X	----
20	10	Product X - pack 1	100 pcs
30	10	Product X - pack 2	200 pcs
40	10	Product X - pack 3	50 pcs

The order quantity of 350 takes up the available stock of product X - pack 1 (100 pcs) and product X - pack 2 (200 pcs). The remaining amount of 50 pcs is covered by the quantity of product X - pack 3 (200 pcs) that is still available.

### Automatic Product Selection in the Delivery

The system can also carry out automatic product selection in the delivery. If the availability situation of products selected in the order changes, then the system automatically determines new order quantities or even different products, if necessary.

## Creating an Analysis Log for Material Determination

Display the log in the same way as you would display the condition analysis for pricing. Unlike in pricing, however, the analysis for material determination can only be carried out during the transaction, not retrospectively.

The log contains information relevant to the condition analysis and specifies, for example:

- whether a condition record was found
- whether accesses were carried out and, if so, which ones
- why a material was substituted

To activate/deactivate this function, select *Environment* → *Analysis* → *Material determination* → *On/Off* in the *Header* and *Overview* screens before entering the items.

If this function is activated, the analysis log for material determination is displayed during item entry in the order.

---

**Material Listing and Exclusion**

## Material Listing and Exclusion

Material listing and exclusion lets you control which materials specific customers may or may not buy. For example, if you create a listing of products for an individual customer, the customer may only order products on the list. If you create an order for this customer, a check is carried out during item entry to make sure that the material entered is on the list. You can also specify material exclusion for a particular customer. The customer may not order excluded materials from you.

It is possible to create an analysis log in material listing and in material exclusion.

**See also:**

[Material Listing and Exclusion \[Ext.\]](#)

[Creating an Analysis Log in Material Listing and in Material Exclusion \[Page 81\]](#)

## Creating an Analysis Log in Material Listing and in Material Exclusion

Display the log in the same way as you would display the condition analysis for pricing. Unlike in pricing, however, the analyses for material listing and material exclusion can only be carried out during the transaction, not retrospectively.

The log contains information relevant to the condition analysis and specifies, for example:

- whether a condition record was found
- whether accesses were carried out and, if so, which ones

To activate/deactivate this function, select *Environment* → *Analysis* → *Listing/exclusion* → *On/Off* in the *Header* and *Overview* screens before entering the items.

If this function is activated, the analysis log for material listing/material exclusion is displayed during item entry in the order.

## Dynamic Product Proposal

# Dynamic Product Proposal

## Use

A product proposal is a list of products for a specific customer that is automatically proposed during sales document processing. You can determine yourself which materials should be displayed as product proposals in the sales document. You can also specify the sequence in which the materials are to be displayed in the product proposal.

During sales document processing, the system displays a product proposal in the item overview, according to the customer and business transaction. It displays the material number, material description and the historical order quantities in the sales unit last used. To use them again, you can just copy them.

The system does not run the standard checks (pricing, availability, incompleteness, material determination, free goods determination, and so on) until you enter the order quantities.

The product proposal acts both as an entry aid and also an aid to sales support and promotions. It is particularly useful tool in the telephone sales area. During sales document processing the materials, that are particularly relevant for a particular customer, are displayed to the processor. This enables them to provide appropriate advice to the customer quickly and easily. You can use the sales document history to analyze the customer's purchasing habits and recognize straightaway if their behavior changes, for when instance when they suddenly stop ordering a product.

The product proposal differs from cross selling in that it is dependent on the customer and sales area, and is therefore displayed in the sales document as soon as you have entered a customer. Cross selling, on the other hand, is triggered by the material. In other words, the system proposes cross-selling materials according to the material or a characteristic of the material you have entered.

## Prerequisites

You must make the following settings in Customizing:

- Define the customer pricing procedure for the product proposal
- Define the document pricing procedure for the product proposal
- Assign the document pricing procedure for the product proposal to sales document types
- Maintain the table of origin for the product proposal
- Define the procedure for the product proposal and specify the access sequences
- Maintain procedure determination (in background) for the product proposal
- Maintain procedure determination (online) for the product proposal

You can find these settings in Customizing for Sales and Distribution under *Basic Functions*. For more detailed information about these settings, see the Implementation Guide for the Product Proposal.

## Features

You can determine the product proposal from different data sources:

- Order history

**Dynamic Product Proposal**

- Listed materials
- Excluded materials
- Item proposal
- Customer/material info records
- Customer-specific data sources

For the product proposal you can combine materials from other data sources: For example, you could combine the total of all materials in the last n-sales orders with all materials listed for the customer, plus all materials in certain item proposals, but not including those specified in the exclusion. You can then determine the sequence in which they appear yourself.

You can access the data sources either online, in background processing, or using a combination of both. It is also possible to have a combination of both access techniques. If you want to access various different data sources, we recommend that you use background processing, in order to keep the system load as low as possible while working online.

**Working with the Product Proposal in the Sales Document**

As soon as you have entered a sold-to party in the sales document, the system calls up the function module for determining the product proposal and runs the accesses according to the online product proposal procedure.

All materials that it finds for the product proposal are automatically displayed as proposal items in the sales document.



None of the normal checks at item level, such as the availability check and pricing, are carried out for the materials included as product proposals. These checks are only carried out when you have given the material an order quantity and an item number is assigned.

If you have entered the order history as a data source in Customizing, the system also displays the historic quantities for each material.



In standard system the fields with historic quantities are displayed at the end of the table. When working with the product proposal, SAP recommends placing the field with historic quantities, for example behind the field *Order quantity*.

The checks are only carried out (for example, pricing, availability check) when you enter the order quantities for a material from the product proposal. The item then receives an item number.

The *Source* field shows which data source was used to determine the product proposal for each item (for example, O = order history). If a material is determined from several sources (such as the listing and order history), the system displays the first data source used to determine the material, according to the access sequence defined in Customizing.

You can use *Product proposal active <-> inactive* pushbutton to hide or display materials from the product proposal. This only applies to items where no quantities have been entered.

When the order history is the source of the product proposal, you can use the *Copy IP quantity* pushbutton to copy the quantities from the first column with the most up-to-date information (usually the last order) as an order quantity.

---

**Dynamic Product Proposal****Constraints**

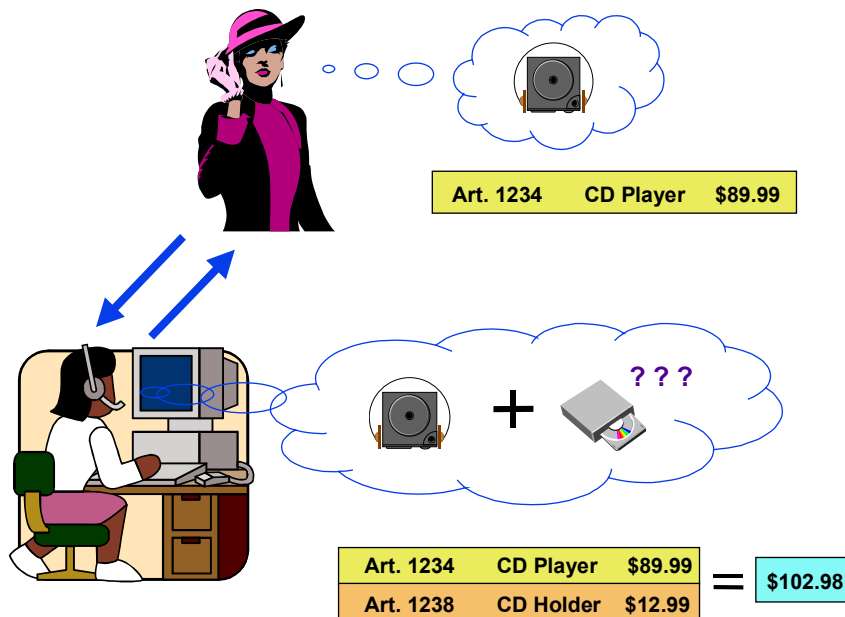
The system does not generate a product proposal when you use:

- Batch input
- Incoming IDocs
- BAPIs
- Change/display sales document
- Create sales document with reference

## Cross Selling

### Use

Mail order catalog retailers frequently use cross selling to increase sales. When a customer orders an article over the phone, the order taker can suggest additional articles that the customer might buy. For example, if the customer orders a VCR, you might suggest purchasing some blank tapes; for a cellular phone, a leather carrying case.



The sales transaction takes place as normal: The customer chooses an article and the order taker enters it on the sales order screen. The order taker can press `Enter` after each article, or wait until the customer has finished selecting the article he or she wants.

- If the order taker presses `Enter` after entering the data for one article, then a dialog box appears automatically, displaying a list of articles to be suggested to the customer. These cross selling articles are ones that pertain specifically to the purchased article.
- If the order taker waits to press `Enter` until the customer has finished ordering, then the dialog box appears automatically, this time showing all of the articles in the sales order, along with their corresponding cross selling articles.



The articles that appear in the cross selling dialog box always depend on which articles are in the sales order. If you want to have the system suggest articles based on the customer's past purchasing history or other factors, see [Dynamic Product Proposal \[Page 82\]](#) in the standard SD documentation.

The cross selling dialog box displays the following information:

## Cross Selling

- Article number
- Description
- Sales unit of measure (each, 3-pack, etc.)
- Price per unit of measure (calculated either by the standard R/3 pricing scheme or by a custom pricing scheme you have defined)
- Availability check
- Delivery flag (that is, whether the cross selling articles can be delivered independently of their corresponding main articles in the sales order, or whether the cross selling articles can only be shipped either together with or after the main articles have been shipped)



You can turn off the availability check in Customizing, thereby increasing system performance.

## Integration

You can set up the system so that if a customer orders a specific article, a list of other suggested articles appears as well. If the customer chooses to accept one of the suggested articles, the article is flagged in the sales transaction data indicating that this article was a result of cross selling. You can then analyze the results in the Business Workbench or Retail Information System to see how successful your cross selling strategy is (that is, how frequently a suggested article is actually purchased by the customer).

For each article, you can assign one or more cross selling articles.

## Prerequisites

To set up cross selling, you must make the following settings in Customizing:

- Create the conditions tables, access sequence, and calculation schemes for determining cross selling articles, since the cross selling function relies on the conditions technique. (Alternatively, you can use the analysis discussed in “Activities” below to create the data automatically.)
- Create a cross selling profile with the following attributes:
  - Determination of cross selling articles via function module
  - Price calculation scheme
  - Scheme using conditions technique
  - Flag indicating how the cross selling dialog is to appear
  - Flag indicating whether an availability check is to be performed
- Assign the cross selling profile to a sales area, document scheme, and customer scheme.

## Activities

In order to determine which products are most frequently purchased together, you can use report SDCRSL01 (transaction SE38) to analyze sales orders for a specified period time (for example, for the previous 30 days). The system will search through all the orders, list all the articles purchased, and how often certain pairs of articles (or even three or more) appeared in the same

**Cross Selling**

sales order: for example, 10% of the time, customers purchased a specific shirt-and-tie combination. In this way, you can mine the R/3 database to find article combinations that might not have occurred to you (for example, a movie and a CD with the sound track for the movie).

Alternatively, you can manually assign combinations of articles for cross selling purposes, based on other information you may have.

## Status Management

# Status Management

You can use SAP status management in sales order processing. Status management allows you to document the current processing status of an object, such as a sales order or sales order item. The current processing status can consist of a combination of individual statuses. Each individual status fulfills two functions:

- It **informs** you that a particular status has been reached (for example: “Sales order has been released”)
- It **determines** which business transactions may or may not be carried out next (for example: Delivery is allowed, billing is not)

There are two kinds of status:

- System status
- User status

System statuses are determined automatically by the transactions you carry out. You cannot change a system status manually.

User statuses, on the other hand, can be activated and deactivated by the user. Individual user statuses can be grouped together into status profiles. The status profiles can then be assigned in Customizing for Sales to:

- Sales document types (for header status)
- Item categories (for item status)

One status profile can be assigned to multiple sales document types and item categories.



To maintain a status profile in Customizing for Sales, go to the IMG and choose *Sales and Distribution* → *Sales* → *Sales Documents* → *Define and assign status profile*.

### See also:

For a complete description of status management functions, see the documentation in *Controlling*.

For information about setting statuses for make-to-order items, see [Setting the Object Status \[Page 243\]](#).

You can carry out the following status management-related functions in Sales & Distribution:

[Activating/Deactivating a User Status in a Sales Document \[Page 89\]](#)

[Selecting Sales Documents by Object Status \[Page 90\]](#)

## Activating User Status in Sales Documents

To activate a user status in a sales document, proceed as follows:

1. From one of the overview screens for the sales document, choose *Goto* → *Header* → *Status* or *Goto* → *Item* → *Status*.

The system displays the corresponding status screen. The current system status and user status are displayed in the *Processing status* field group.

2. Choose *Object status*.

Select *Change profile*. System statuses and user statuses are listed separately.

3. To activate a user status, select *Activate status*.

The system displays a list of all the permitted user statuses, which have all been defined in the status profile, in a dialog box.

4. Select the user status you want to activate.

The selected user status appears in the list.

5. To display the business transactions that the current processing status allows and prohibits, select *Business transactions*.

The system displays a list of allowed and prohibited transactions in a dialog box.

### Deactivating a User Status

To deactivate a user status, place your cursor on the user status in the *Change Status* dialog box and select *Deactivate status*.

The system removes the user status from the list and automatically updates the list of business transactions that may or may not be carried out next.

### Changing the Status Profile

You can change the status profile during sales order processing. The status profile is proposed from the sales document type definition for the header and from the item category for the item.

To change the proposed status profile, proceed as follows:

1. From one of the overview screens for the sales document, choose *Goto* → *Header* → *Status* or *Item* → *Status*.

The system displays the corresponding status screen. The current system status and user status are displayed in the *Processing status* field group.

2. Choose *Object status*.

Select *Change profile*. System statuses and user statuses are listed separately.

3. Choose *Choose procedure* (F16).

The system displays a dialog box where you can choose from the status profiles that are defined for sales documents in Customizing for Sales.

## Selecting Sales Documents by Object Status

### Selecting Sales Documents by Object Status

You can search for sales documents according to their current system status or user status. A list of sales documents with the status you have entered appears independently of the selection criteria you enter. You can display a list of sales documents or sales document items at header or item level.

- If you display sales documents at header level, the document number, current processing status and customer number are displayed.
- If you display sales documents at item level, the material is displayed per item, as well as current processing status and customer number.

In order to search for sales documents according to status, proceed as follows:

1. In the initial screen, choose *Logistics* → *Sales and distribution* → *Sales*.
2. Choose *Information System* → *Orders or Quotations or Inquiries* → *Sales Document By Object Status*

This brings you to the selection screen for displaying by status.

3. Enter the following data in the selection screen:
  - status by which you wish to search
  - whether you wish to search by system status or user status
  - other relevant selection criteria



You can display a list of available user statuses, by choosing *Help* → *Application help*. You will then receive the corresponding program documentation. In the *Prerequisites* section, you can go directly to Customizing, where the status profiles are maintained.

4. Choose *Execute*.

You will receive a list of sales documents or sales document items corresponding to your selection criteria. Only the documents or items, for which the corresponding status is set, are chosen. You can select individual documents or document items for further processing.

## Maintain and Display Status for Sales Docs in Initial Screen

### Use

In the initial screen for the sales document, you can display, and, if necessary, change the system status and/or user status for all items available via the object status. Therefore, you do not need go to the detail screen for the status, but instead you can check all important statuses in the item overview directly, and set or reset a status. The following rule applies: A user status can, in principal, be changed, but a system status can only be changed if this is scheduled by the system.

At the moment, the following system statuses can be changed: blocked, closed, fully invoiced, technically closed.

In Customizing for Sales, you can define, per sales document, which statuses should be displayed from which item status profile, and whether the statuses can only be displayed, or can be changed also. If an item has no user status, for example, because no status profile has been defined for the item category, then the fields in the initial screen for displaying the user status not filled in.

### Prerequisites

You can set which statuses should be displayed in the initial screen, in Customizing for Sales, under *Sales* → *Sales Documents* → *Define Display Status in the Overview Screen*. Here, you can define, per sales document type, which system and user statuses should be displayed from which item status profile. You can also combine user statuses from several status profiles for the display.



You can check the changeability of a system status with the help of the report `sd_status_info`. This report display all system statuses available in the SAP System. All system statuses which are important in the area of Sales are coloured light green in the standard system. All system statuses which are relevant to Sales and can be changed are coloured dark green in the standard system (column: "changeable").

## Status Overview

# Status Overview

## Use

The *Status overview* function enables you to view important status information about sales documents at header and item level at one glance.

## Features

Status overview is available for all sales documents in the *Environment* menu. To provide a clear overview of all the status information regarding the header and items, the status overview has been designed as a multi-level hierarchy tree.

The first information you see is the most important up-to-date status at header and item level. From here you can branch into more detailed status information for the header and item as well as additional information about the document. You can obtain more detailed information by expanding the nodes in the hierarchy.

The system takes all the relevant statuses for a business process and determines the most important status information at the time for the initial screen dynamically. Examples of an important status could be the last status change to a document or the most important status according to document type or an item category that has not yet been changed. The type of status information that is important depends on the document type, item category and schedule line category.

The following table illustrates examples of which document statuses are important depending on document type and item category:

Document Type/Item Category	Examples of Relevant Status
Quotation, contract	Reference status
Returns	Delivered, billed
Credit/Debit memo	Blocked for billing, rejected, billed
Sales order (standard item)	Confirmed, delivered, billed
Sales order (individual purchase order)	Ordered, order confirmed, goods receipt posted, delivered
Sales order (third-party item)	Ordered, order confirmed, invoice receipt
Free-of-charge item	Delivery status
Make-to-order production	Confirmed, billed

The system uses the document types together with item and/or schedule line categories to determine a chronological sequence (order, delivery, billing) of the statuses that are relevant for display.

When you call up the status information, the system then displays the most important status. Parameters such as those for delivery relevance, billing relevance, requirements type, purchase order type, and completion rule control whether status information is relevant for display.



## Customer Inquiry/Quotation

# Customer Inquiry/Quotation

## Purpose

You can represent pre-sales business processes in the system using the functions for inquiries and quotations. Customer inquiries and quotations to the customer can be entered and monitored.

For example, a customer inquires whether you have a certain product in your warehouse, how much it will cost, or whether the product will be available for a certain date. The inquiry is therefore a request from the customer for you to provide him with a sales quotation.

A quotation presents the customer with a legally binding offer for delivering a product or providing a service within certain fixed conditions.

The data you store in sales queries forms the basis of subsequent documents and, if you wish, sales analysis.

Creating and maintaining this kind of data may be useful under, for example, the following circumstances:

- You want to evaluate your pre-sales processing with reports and analysis. For example, you want to compare the value of a quotation against the value of subsequent sales orders and invoices and then evaluate the effectiveness of your planning process. Or you want to evaluate the success rate of quotation-to-order conversion by salesman or sales group.
- Your sales organization deals with government agencies or large organizations and institutions who routinely send out for bids and requests for proposal. You want to record the entire sales cycle.
- Your sales organization sells a wide range or low value products (for example, consumer products with a high turnover) but you wish to fix certain data for the presales phase if you are negotiating for larger contracts.



A company sends out quotations for equipping intensive care rooms in hospitals. The equipment can vary, depending on the hospital and other factors, but 40% of the components are standard. The company's sales staff copy the standard components into quotations from master data, along with standard texts (standard clauses, for example). Whenever possible, the staff copies the remaining components from existing quotations that resulted from similar queries. Alternatively, the staff can copy data from product proposals.

## Implementation Considerations

Before you can use sales queries, you must maintain the following:

- Master data for order probability by customer and document type
- Relevant sales query document types

---

**Customer Inquiry/Quotation**

- Copying requirements for document flow
- Master data for alternative items (material determination)

You maintain document types and copying requirements in Customizing for Sales and Distribution. For more information about these functions, see the online *Implementation Guide*.

## Features

Sales queries let you enter and store all the important, sales-related information you use during sales order processing. Queries that are not complex can be entered quickly in the initial entry screen. The query can be entered from scratch or can be copied. For example, when the customer decides he wants a firm quote, you can copy a previously entered inquiry directly into a quotation.

The inquiries and quotations entered in the system can be displayed and evaluated in a **list**. You can use selection criteria to limit the list which will give you a more selective display and processing. For analysis purposes, you can list all the quotations you processed during the last six months and examine those that were rejected and for what reasons.

You can maintain a validity date in sales queries by which time the query should have been answered. The documents can then be monitored and evaluated according to this validity date, which then allows you to evaluate the queries on time. In this way you are able to plan and implement the necessary subsequent activities according to the deadline.

Instead of a material number you can also enter a **text description of the material** if, for example you can't assign the materials to a customer call straight away.

In one quotation for a material, you can offer the customer several options with differing pricing conditions and shipping times. If the quotation leads to a sales order, you can select an **alternative item according to the customer's requirements**.

---

**Customer Inquiries**

## Customer Inquiries

### Definition

A customer's request to a company that they provide a quotation or sales information without obligation.

An inquiry can relate to materials or services, conditions and if necessary delivery dates.

The sales area that accepts the inquiry becomes responsible for further processing.

### Structure

A customer inquiry comprises one or more items that contain the quantity of a material or service that the customer asked for.

The total quantity of an inquiry item can be subdivided between the schedule lines in different amounts and relevant delivery dates.

Items can be structured in a hierarchy so that you can differentiate between batches or explode any combinations of materials (bills of material).

The valid conditions for an item are listed in the item conditions and can be derived individually from the conditions for the whole document.

### Integration

Not only the customer but also other business partners can be specified as sold-to parties in different partner functions (for example, ship-to party).

## Customer Quotation

### Definition

A quotation presents the customer with a legally binding offer for delivering a product or providing a service within certain fixed conditions. This offer is legally binding for the company within a specified time period.

A sales area can reply to a customer inquiry with a customer quotation or use it to refer to a business partner contact.

### Structure

A customer quotation comprises one or more items that contain the quantity of a material or service that the customer asked for.

The total quantity can be subdivided between the schedule lines in different amounts and relevant delivery dates.

Items can be structured in a hierarchy so you can differentiate between batches, or explode combined materials (bills of material).

The valid conditions for an item are listed in the item conditions and can be derived individually from the conditions for the whole document.

### Integration

Not only the customer but also other business partners can be specified as sold-to parties in different partner functions (for example, ship-to party).

## Alternative Items

### Use

You can specify alternative items in the inquiry or quotation, allowing you to list one or several alternatives for the product that the customer has requested. If the customer decides to accept one of the alternatives, you can copy it from the quotation when you create the sales order.

## Creating Alternative Items

When entering alternatives for an item, you must enter them directly below the item. To enter alternative items in a quotation or an inquiry, proceed as follows:

1. If you know which material the customer is most likely to choose, enter it as a main item in the quotation or inquiry.
2. Enter the following information for the alternative item directly under the main item it is meant to replace.
  - In the *Material* field, enter the material number
  - In the *Alternative item* field (*Altitm*), enter the item number of the material for which the item serves as an alternative (the material you entered in step 1)
  - If there is more than one alternative for an item, repeat the process and enter the same item number
3. Save the quotation.



If you are copying an inquiry with alternative items into a quotation or copying a quotation into a sales order, the system automatically copies only the main items. If you want to copy an alternative item instead, you can use the *Selection list* function that appears automatically in a dialog box when you create a new document with reference to an existing one. Here, you simply select the relevant alternative items to be copied.




A customer requests a quotation for 100 pieces of material A. You enter a line in the quotation and the system issues item number 10. The customer has also said that you can send them material B if material A is not available. You therefore enter a second line in the quotation for 100 pieces of material B and enter the item number for material A (in this case, 10) in the second line.

## Order Probability


## Order Probability

### Use

When you create a sales query, you may want to know: What is the probability that the customer will buy from me? The system calculates the probability from master data that can be defined for the sales document type and for specific customers. The estimate is expressed as a percentage. Based on the resulting probability, the system calculates an expected order value and displays it in the top section of the double-line entry overview screen. You can then generate a list of quotations or inquiries in such a way that sales queries with the highest probability of being confirmed are listed first. The following figure shows how the system calculates order probability from master data.

Customer	Sales doc. type	Probability
C1		
	AF	
80 %	x	50 % = 40 %

Customer	Sales doc. type	Probability
C1		
	AG	
80 %	x	90 % = 72 %

## Delivery Times/Commitment Dates in Sales Orders

### Use

You can enter a delivery time in contracts and quotations.

In the **contract**, the delivery time fixes the time period that the customer has given the vendor between contract release and delivery receipt.

In **quotations**, the delivery times enables you to agree on a guaranteed maximum delivery time once the order has been entered.

In the **sales order**, a committed quantity and date are issued alongside the confirmed quantity calculated by the availability check, which enables you to see whether committed quantities and delivery dates have been complied with.

These new functions are particularly useful if you are working with contracts and are expecting bottlenecks and where obligatory agreements on dates have to be met. Above all, they are suitable for the high tech and chemical industries as well as those branches of industry with customer make-to-order production.

### Features

You can specify the delivery time at header level and this influences the delivery times for all items in a quotation or contract but you can also enter different delivery times for single items at item level.

Enter the delivery time at header level in the *Delivery time* field on the *Sales* tab page for the overview screen. Enter the delivery time at item level in the item table in the *DlyTime* field. You can configure possible delivery times in Customizing by going to *Sales and Distribution* → *Sales* → *Sales Documents* → *Define agreed delivery times*.

When you create a sales order with reference to a contract or quotation the system copies the delivery time into the sales order item. If you do not enter a delivery, nothing changes in sales processing.

### Commitment Dates in the Sales Order

In the schedule line screen for the sales order items there are fields for the committed quantities and dates.

In a normal sales order, the commitment date results from the first availability check. If a second availability check results in different data, you can compare the two to see if the availability situation for a sales order item has improved or deteriorated.

The commitment date is calculated using the delivery time in contract releases with a delivery time, or in sales orders that refer to a quotation with a delivery time. The committed quantity is calculated from the agreed delivery time or from the confirmed quantity, according to the settings you made in Customizing. If you change the material, quantity, delivery date or delivery time in the sales order, the system recalculates the committed quantity.

You can configure how the commitment dates are calculated in Customizing for the sales document type in the *Commitment date* field. You can choose one of the following rules:

- A: Consider agreed delivery time only  
Here, all the required schedule lines are committed for the date that follows the delivery

## Delivery Times/Commitment Dates in Sales Orders

time at the distance agreed on when you entered the sales order. If the customer requires a later date, this date is confirmed. The commitment situation does not influence the calculations and if you don't specify a delivery time, the system does not calculate any committed quantities.

- **B: Calculation after the first confirmation date**  
The committed quantity is calculated from the first commitment situation. If a delivery time is available for the item, the system takes it into account in calculation rule A and the system commits the quantity for the earlier date. If you change the material, quantity, delivery date or delivery time in the sales order, the system recalculates the committed quantity. In each case the current commitment situation is valid when you save the document.
- **C: Calculation after the first confirmation date**  
If you enter new items, rule C corresponds to rule B. If you save the document again and the customer's commitment situation has improved, the system saves the better situation as the committed one. As in calculation rule B, the system recalculates the commitment dates if you change the material, quantity, requested delivery date or delivery time.
- **No entry:** The system does not calculate or display commitment dates.

The committed delivery date is issued in the order confirmation and the agreed delivery time is included in the printout of the contracts and quotations.

### Delayed Sales Order Indicator

There is a status field for the sales order header and items that specifies whether the availability check has covered the commitment for undelivered order quantities. If you choose matchcode M, you can display all sales documents that have the "delayed" status. A delayed sales order is one where the committed quantities could not be either completely or partially committed, or where the quantity will be not be confirmed as committed until a later date.

## Creating Quotations

You can create a quotation from scratch or you can copy information from an existing inquiry, from another quotation, or from within a sales activity (for example, while making a telemarketing call to a customer).

To create a quotation from scratch, proceed as follows:

1. Choose *Logistics* → *Sales/distribution* → *Sales* on the main menu screen.
2. Choose *Quotation* → *Create*.
3. Enter the quotation type and, if necessary, the organizational data.
4. Choose *Enter*.
5. Enter the following data:
  - Customer number of the sold-to party
  - Validity dates (start and end)
  - Material numbers (instead of the material number, you can enter text in the *Description* field)
  - Quantities
6. For information on how to enter alternative materials, see [Offering the Customer Alternative Items \[Page 99\]](#).
7. Choose *Enter*.

If you want to change data at the item level, mark the items, then select the appropriate menu entry.

If you want to enter additional information in the header, select the appropriate menu entry.
8. Save your document.

---

**Displaying Quotations**

## Displaying Quotations

You can display a single quotation, perhaps in response to a customer's request for a status. In addition, you can display a list of quotations using various selection criteria. You can find more information about displaying quotation lists in the [Reports in SD \[Ext.\]](#) documentation.

To display a quotation, proceed as follows:

1. Choose *Logistics* → *Sales and distribution* → *Sales* on the main menu screen.
2. Choose *Quotation* → *Display*.
3. If you already know it, enter the number of the quotation or choose *Possible entries* to find the quotation you want.
4. Choose *Enter* to display the quotation.

## Changing Quotations

***You may need to make changes to quotations already entered in the system.*** For example, a customer may want to accept some items in a quotation but not others. You then need to update the quotation, mark the rejected items and assign reasons for the rejection. You can select a single quotation to change or, if you do not know the number, you can find it by choosing *Possible entries*. Alternatively, you can generate a list of quotations using your own selection criteria, such as customer, material, or probability, and select the quotations you want to change.

**See also:**

[Rejecting Items in a Sales Order \[Page 51\]](#)

[List of Sales Documents \[Page 55\]](#)

## Sales Order

## Sales Order

### Implementation Considerations

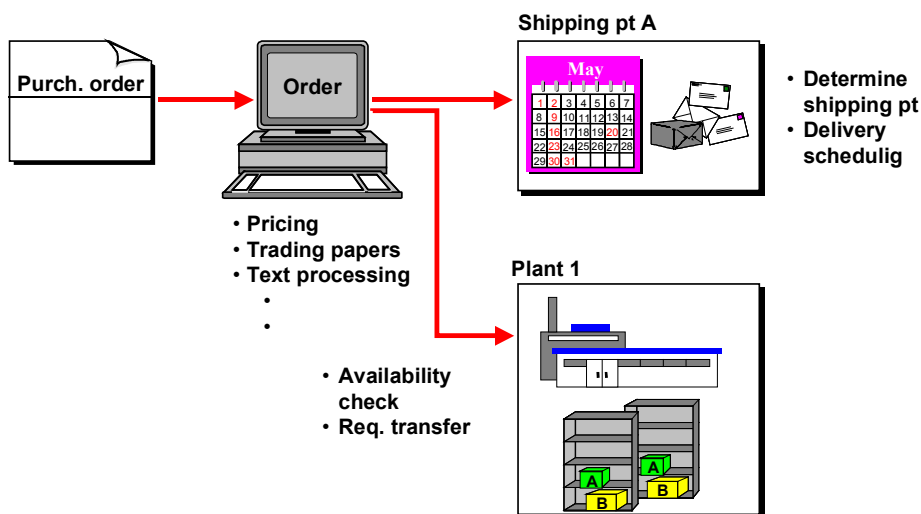
The sales order is a contractual agreement between a sales organization and a sold-to party about delivering products or providing a service for defined prices, quantities and times.

In sales order processing, the system implements various functions:

In the sales order, functions such as pricing and printouts are available. The system checks whether the material is available for the requested delivery date and if necessary, transfers the requirements to materials planning. Shipping deadlines and shipping points are determined in delivery scheduling.

Another part of this component are the special sales order types - rush orders and cash sales. (For more information, see [Special Sales Orders \[Page 122\]](#).)

- In cash sales the goods are paid for in cash.
- In a rush order transaction, the customer picks up the goods or you deliver the goods on the same day as the order is placed. However, the invoice is created later.



### Features

You can process sales orders in the SAP R/3 System differently, depending on your specific needs. In the most simple case, you can enter a sales order with several items in a single screen. The system automatically proposes data from the relevant master records:

- From the customer master record of the sold-to party, the system proposes sales, shipping, pricing, and billing data. In addition, the system copies customer-specific master data about texts, partners, and contact people at the customer site.

- For each material in the sales order, the system automatically proposes data from the relevant material master records, such as data for pricing, delivery scheduling, availability check, tax determination, and weight and volume determination.

The data proposed by the system can be used as a basis for your order. If your sales order processing requires it, you can modify this data manually or add new data. For example, your pricing policy may allow you to manually change the value of certain discounts within a permitted range. In addition, you can branch in the sales order to a number of different screens where you can display and modify data, such as terms of payment and delivery data.

### Using Existing Documents as a Reference

It is also easy to create a new sales order with reference to an existing document. For example, if a customer accepts a quotation you sent, the system can copy all the relevant master data from the quotation when you create the sales order (see [Creating a Sales Order With Reference \[Page 67\]](#)).

### Standard Functions During Order Processing

When you process a sales order using the standard version of the SAP R/3 System, the system can automatically carry out basic functions, such as the following:

- Pricing
- Availability check (if this function is defined in the material master record)
- Transferring requirements to materials planning (MRP)
- Delivery scheduling
- Shipping point and route determination
- Checking credit limits

---

**Sales orders**

## Sales orders

### Definition

Request from a customer to a company to deliver a defined quantity of products or provide a service at a certain time.

The sales area that accepts the inquiry is responsible for completing the agreement.

### Structure

A customer inquiry comprises one or more items that contain the quantity of a material or service entered in the order.

The total quantity of a sales order item can be subdivided into schedule lines that contain the various subsets with the corresponding delivering dates.

Items can be structured in a hierarchy. This enables you to differentiate between batches or explode any combinations of materials (bills of material).

The conditions which are valid for the items are listed in the item conditions. The conditions for an item can be derived from an entire condition, which is valid for the entire sales order.

An item can be subdivided into several billing plan deadlines that each determine a date on which a fixed amount of the item is to be billed.

### Integration

Not only the customer but also other business partners can be specified as sold-to parties in different partner functions (for example, ship-to party).

The items in a sales order can be taken from the times in a customer quotation.

## Delivery Times/Commitment Dates in Sales Orders

### Use

You can enter a delivery time in contracts and quotations.

In the **contract**, the delivery time fixes the time period that the customer has given the vendor between contract release and delivery receipt.

In **quotations**, the delivery times enables you to agree on a guaranteed maximum delivery time once the order has been entered.

In the **sales order**, a committed quantity and date are issued alongside the confirmed quantity calculated by the availability check, which enables you to see whether committed quantities and delivery dates have been complied with.

These new functions are particularly useful if you are working with contracts and are expecting bottlenecks and where obligatory agreements on dates have to be met. Above all, they are suitable for the high tech and chemical industries as well as those branches of industry with customer make-to-order production.

### Features

You can specify the delivery time at header level and this influences the delivery times for all items in a quotation or contract but you can also enter different delivery times for single items at item level.

Enter the delivery time at header level in the *Delivery time* field on the *Sales* tab page for the overview screen. Enter the delivery time at item level in the item table in the *DlyTime* field. You can configure possible delivery times in Customizing by going to *Sales and Distribution* → *Sales* → *Sales Documents* → *Define agreed delivery times*.

When you create a sales order with reference to a contract or quotation the system copies the delivery time into the sales order item. If you do not enter a delivery, nothing changes in sales processing.

### Commitment Dates in the Sales Order

In the schedule line screen for the sales order items there are fields for the committed quantities and dates.

In a normal sales order, the commitment date results from the first availability check. If a second availability check results in different data, you can compare the two to see if the availability situation for a sales order item has improved or deteriorated.

The commitment date is calculated using the delivery time in contract releases with a delivery time, or in sales orders that refer to a quotation with a delivery time. The committed quantity is calculated from the agreed delivery time or from the confirmed quantity, according to the settings you made in Customizing. If you change the material, quantity, delivery date or delivery time in the sales order, the system recalculates the committed quantity.

You can configure how the commitment dates are calculated in Customizing for the sales document type in the *Commitment date* field. You can choose one of the following rules:

- A: Consider agreed delivery time only  
Here, all the required schedule lines are committed for the date that follows the delivery

## Delivery Times/Commitment Dates in Sales Orders

time at the distance agreed on when you entered the sales order. If the customer requires a later date, this date is confirmed. The commitment situation does not influence the calculations and if you don't specify a delivery time, the system does not calculate any committed quantities.

- **B: Calculation after the first confirmation date**  
The committed quantity is calculated from the first commitment situation. If a delivery time is available for the item, the system takes it into account in calculation rule A and the system commits the quantity for the earlier date. If you change the material, quantity, delivery date or delivery time in the sales order, the system recalculates the committed quantity. In each case the current commitment situation is valid when you save the document.
- **C: Calculation after the first confirmation date**  
If you enter new items, rule C corresponds to rule B. If you save the document again and the customer's commitment situation has improved, the system saves the better situation as the committed one. As in calculation rule B, the system recalculates the commitment dates if you change the material, quantity, requested delivery date or delivery time.
- **No entry:** The system does not calculate or display commitment dates.

The committed delivery date is issued in the order confirmation and the agreed delivery time is included in the printout of the contracts and quotations.

### Delayed Sales Order Indicator

There is a status field for the sales order header and items that specifies whether the availability check has covered the commitment for undelivered order quantities. If you choose matchcode M, you can display all sales documents that have the "delayed" status. A delayed sales order is one where the committed quantities could not be either completely or partially committed, or where the quantity will be not be confirmed as committed until a later date.

## Creating Sales Orders

To create a standard sales order, proceed as follows:

1. In the initial screen, choose *Logistics* → *Sales and distribution* → *Sales*.
2. Choose *Order* → *Create*.
3. Enter the order type and, if necessary, the organizational data.

The values for sales organization, for distribution channel and the division are usually proposed from user-defined parameters. Entries for the sales office and the sales group are optional.

The **sales areas** (sales organization, distribution channel, division) are derived from the sold-to or ship-to parties. This means that you do not have to enter the sales area when you create a sales document.

If you do not specify a sales area in the initial screen, the system uses the sold-to or ship-to parties, which you entered in the overview screen, to derive the sales area. If there are several sales areas for that particular sold-to or ship-to party, you can choose the right sales area in the following dialog box. The system then copies the selected sales area into the entry screen.

4. Choose *Enter*.
5. Enter the following data:

Sold-to party or ship-to party



If you only enter a ship-to party, the system uses this to determine the sold-to party and if necessary, the sales area.

If there are several sold-to parties or sales areas for one ship-to party, a dialog box appears where you can choose the one you require. An error message appears in the status bar to inform you if the system is not able to determine a sold-to party.

If you enter a sold-to party that is also a unique ship-to party, the system automatically copies it as such and informs you in the status bar.

- Customer purchase order number
- Material numbers
- Order quantities for the materials

6. Choose *Enter*.

If, for example, you defined several unloading points or several ship-to parties in the customer master record of the sold-to party, the system displays the alternatives in a dialog box. The system can display alternatives for any or all of the following data:

- Unloading point
- Ship-to party
- Payer
- Bill-to party

### Creating Sales Orders

7. Select the valid data from these proposals by positioning the cursor on the line and choosing *Choose*.

As soon as you have selected this data, the material data that you have entered is displayed. If the system carries out an availability check and finds that there is insufficient stock for an order item to be delivered on the requested date, it displays a screen on which you can choose between several delivery proposals. You can find more information about this in [Reactions to the Availability Check in Sales Documents \[Ext.\]](#).

8. If you want to enter further data for the header or items, choose the corresponding menu entry. If you want to change data for the items, select the items before you choose a menu entry.
9. Enter all necessary data.
10. Save your document.

### Packing Information in the Sales Order

You can specify a proposal for packing in a sales order. You can decide how you want the individual items to be packed at delivery time. This information is then copied into the delivery during delivery processing and can, if necessary, be changed there.

To enter packing information in the sales order, Choose *Extras* → *Packing proposal*.

**See also:**

[Packing and Loading in Shipping \[Ext.\]](#)

## Creating Sales Orders With Free Goods Items

### Use

Free goods are discounts in the form of goods delivered free of charge. A free good can be subordinated to another item or it can be a main item in its own right. If you enter a sub-item in a standard sales order, the system treats it automatically as a free good, providing that the corresponding material has the item category group NORM.

### Procedure

To enter a free good as a sub-item, proceed as follows:

1. Enter the material number of the free goods directly under the higher-level item.
2. In the second entry line, in the *HgLvlt* field (higher-level item), enter the item number of the higher-level item
3. Choose *Enter*.

Various dialog boxes requesting header data can appear at this point. This occurs if, for example, you have defined several ship-to parties or unloading points in the customer master record of the sold-to party. If an availability check determines that stocks are insufficient, the system displays a screen containing delivery proposals.

After you have provided all the necessary information, the overview screen reappears. In the standard version of the SAP R/3 System, the system automatically assigns the item category TANN to the free goods item.

### Entering Free Goods Subsequently

You must enter a free goods item directly below the higher-level item. If this is not possible, perhaps because you decided on the free goods after you created the sales order, you can use the change function (*Sales document* → *Change*) to insert the free goods item at a later point. The change function enables you to enter an item number that the system will automatically insert directly below the higher-level item.

### Changing the Quantity of a Higher-Level Item

If you subsequently change the quantity of a main item, the system automatically adjusts the quantity of the subordinate free goods item in proportion. However, if you want to prevent this, proceed as follows:

1. Select the free goods item in the overview screen and choose *Goto* → *Item* → *More functions* → *Structure*.
2. Select the *Fix* indicator next to the *UoM* field.

If you change the quantity of the main item, the quantity of the free goods now remains fixed.

### Entering a Free Goods as a Main Item

If you want to enter a free goods item as a main item, change the proposed main item type TAN to TANN.

---

**Creating Sales Orders With Free Goods Items**

If you work with free goods frequently, we recommend that you use automatic free goods determination. You can find more information in the *Basic Functions and Master Data in Sales and Distribution* document under [Free Goods \[Ext.\]](#).

## Creating a Sales Order With Service Items

You enter services in the same way as you enter a [free goods item \[Page 113\]](#). You can also enter main or sub-items here. Using the item category group DIEN which is proposed for every service in the material master record, the system determines the item category TAX for the item. It proposes this item category for both for a main item and for a sub-item. You enter a service sub-item as a free goods item by allocating it to a higher-level item on the item overview screen. The service sub-items are also adjusted proportionally when you change the quantity in the main item. If you want to prevent this, proceed exactly as for a free goods.

## Changing Sales Orders

# Changing Sales Orders

When you change a sales order, you can either change the data for individual items in the sales order, or you can make changes simultaneously to more than one item, by using the fast change function. For more information, see [Making Fast Changes \[Page 39\]](#).

To change a sales order, proceed as follows:

1. In the initial screen, choose *Logistics* → *Sales and distribution* → *Sales*.
2. Choose *Order* → *Change*.
3. The system automatically proposes the number of the last order you created during the current work session.  
Alternatively, enter the number of the sales order you want to change, or, if you do not know the order number, the number of the relevant purchase order number, delivery, billing document or the WBS element.
4. Choose *Enter*.
5. Make your changes and save the document.



If you wish to change many sales orders, mass maintenance is recommended. This is always sensible if you have to change the data in sales orders due to a situation change, for example, a change to a sales organization. You can find more information in the documentation for [Cross-application mass maintenance \[Ext.\]](#).

## Displaying Sales Orders

To display a sales order, proceed as follows:

1. In the initial screen, choose *Logistics* → *Sales and distribution* → *Sales*.
2. Choose *Order* → *Display*.
3. The system automatically proposes the number of the last order you created during the current work session.

Alternatively, enter the number of the sales order you want to display, or, if you do not know the order number, the number of the relevant purchase order number, delivery, billing document or the WBS element.

4. Choose *Enter*.

## Blocking Sales Orders

### Blocking Sales Orders

You can block sales orders for the following subsequent functions:

- For shipping

The system does not let you create a delivery for a sales order that is blocked for shipping. You receive an error message telling you that the order is blocked for delivery.

- For billing

The system does not allow you to create a billing document for a delivery that is blocked for billing in the underlying sales order. When you try to create individual billing documents, the system enters a message in the relevant log. In the case of collective processing of billing documents, the delivery is not included in the billing due list.

In addition, it is possible to block sales document types for certain customers, so that you can prevent certain types of sales documents being created for a particular customer.

### Setting a Delivery Block

You can set a delivery block at header level as well as in the individual items and schedule lines:

- To display this information at header level, choose the *Shipping* tab page from the overview screen. You can set the delivery block in the *Delivery block* field.
- You can set the delivery block at item level on the overview screen in the *Shipping* tab page, by selecting the item and entering the block in the *Delivery block* field in the table.
- To enter a delivery block in a schedule line, select the appropriate item on the *Item Overview* tab page and then choose *Goto* → *Item* → *Schedule lines*. You can set a delivery block for the schedule line in the *Delivery block* field in the table.



A delivery block at header level is only effective if it has been assigned to the corresponding delivery type in Customizing (table TVLSP). Regardless of this assignment, the delivery block is still effective at schedule line level.

### Setting a Billing Block

You can set a billing block at header level and for the individual items:

- To set the billing block at header level, choose the *Sales* tab page from the overview screen and activate it in the *Billing block* field.
- To enter a delivery block for an item, select the appropriate item on the *Item Overview* tab page and then choose *Goto* → *Item* → *Billing*. You can then activate it in the *Billing block* field.



You can also use the fast change function to set delivery and billing blocks at header and item level. For more information, see [Making Fast Changes \[Page 39\]](#).

## Blocking Sales Document Types

It is also possible to customize your system so that specific types of sales documents are blocked for specific customers. For more information, see [Blocking a Customer Master Record \[Ext.\]](#).

---

**Eliminating Duplicate Sales Documents**

## Eliminating Duplicate Sales Documents

### Use

Duplicate sales orders are a problem, particularly in business-to-business mail orders. You may, for example, receive an order over the phone followed by a confirmation fax. These may be inadvertently treated as two separate orders. If this is not corrected, it can lead to unnecessary handling, shipping costs, and returns. But you can have the system track down and correct these errors before they go out the door.

SAP Retail can search for all sales documents that have the same customer, currency, and total value of the order. From this list you can select pairs of documents and have R/3 drill down into the individual line items. If at least one of the line items differs between the two orders, the system will automatically let both orders proceed. If, on the other hand, the line items are all identical, you can then examine the individual sales and choose which one you want to remove (for example, if one order has been partially delivered and the other has not, you would want to remove the one that has not yet been processed). This way you can catch unintentional duplication at an early stage and thereby reduce the frequency of merchandise returns.

### Activities

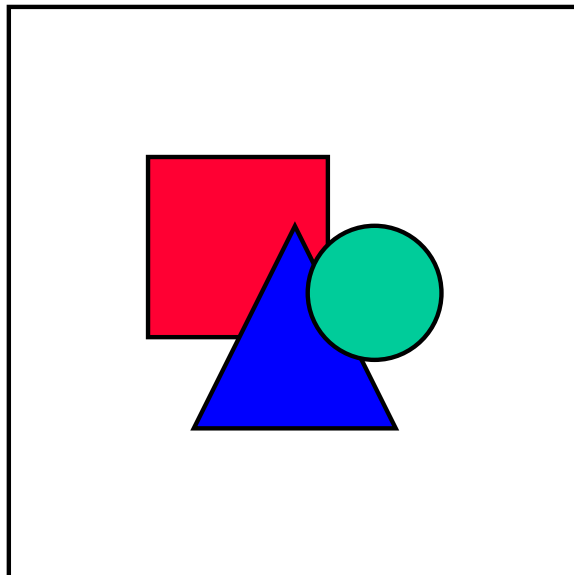
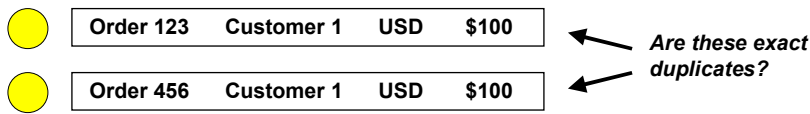
When you run the duplicate order report, the system will list all the sales documents matching the criteria you have selected. Next to each customer, there will be either a green or yellow button:

- A green button indicates that there are no duplicate sales documents.
- A yellow button indicates that one or more sales documents for this customer have the same currency and total order value.

For each customer with a yellow button, you can further expand the list to show all sales documents. Individual sales orders will now have either a green or yellow button. Again, the yellow button indicates a possible duplication.

You can select any two – and only two – sales documents at a time, then press a button to have the system do a further analysis of the two. If the items within the sales documents are different, the yellow button will become green, indicating that there are no problems. But if all items match completely, a red button appears. You can then click on each of the sales documents to examine them, then decide which of the two to remove.

Eliminating Duplicate Sales Documents



You cannot cancel a sales document directly from the report. Instead, you drill down into a particular sales document and choose *Reject*.

You cannot reject a sales document for which a full or partial delivery has already been made.

---

**Special Sales Orders**

## Special Sales Orders

In addition to the standard sales order, there are also special order types, such as the rush order and the cash sales.

- In cash sales the goods are paid for in cash.
- In a rush order transaction, the customer picks up the goods or you deliver the goods on the same day as the order is placed. However, the invoice is created later.

## Cash Sales

### Implementation Considerations

Cash sales is an order type for when the customer orders, picks up and pays for the goods immediately. The delivery is processed as soon as the order has been entered. A cash invoice can be printed immediately from the order and billing is related to the order. Receivables do not occur for the customer as they do for rush or standard orders, because the invoice amount is posted directly to a cash account.

### Process Flow

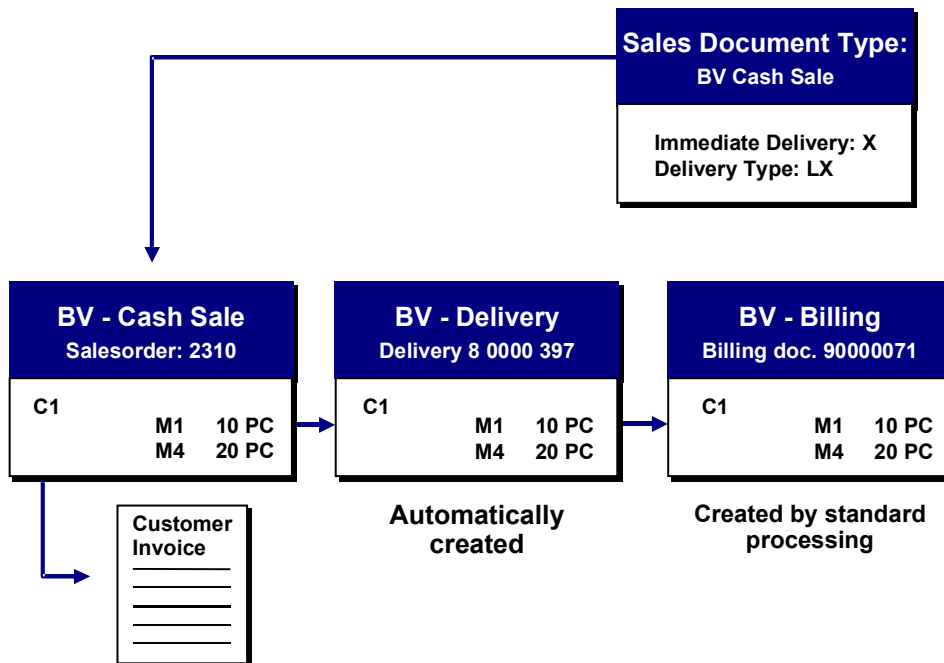
In the standard system, sales document type BV is saved for cash sales with immediate delivery type BV.

When the sales employee creates a cash sale, the system automatically proposes the current date as the date for delivery and billing. Once the order has been posted, a delivery with type BV is created immediately in the background and the system prints a document that is used as an invoice for the customer.

The invoice papers are controlled with output type RD03, contained in the output determination procedure for order type BV.

If the customer has already received the goods, this delivery should not be relevant for picking. If the customer is to pick the goods up from a warehouse, the delivery should be relevant for picking. If the goods are to be sent, this can be processed by maintaining the delivery in the usual way.

The system automatically creates a resource-related billing index which updates the billing due list. Billing document BV is created as the system processes the billing due list, but an invoice is not printed.



## Cash Sales

Once the customer has received the goods and is satisfied with them, the transaction is considered to be complete. We recommend that you post goods issue in the background using a program designed specifically for this purpose. You can then bill the transaction.



The cash sale can only be billed if the order quantity is the same as the goods issue quantity. If this is not the case, you need to adjust the cash sale document so that the delivered quantity and the quantity to be billed match.

You use an order-related collective billing process to bill the cash sale, but an invoice is not printed. The sales order number is used as the reference for the accounting document, created in Financial Accounting.

## Dealing with Problems and Complaints

If the transaction does not run smoothly, manual intervention is necessary. For example, if the required quantity of goods is not found in the warehouse, you need to adjust the delivery quantity. Equally, if the customer is not prepared to pay the agreed price, because, for example, the goods are scratched, you can change the price in the cash sale document.



In extreme cases, you can delete the entire transaction, starting with the delivery.

If the delivery is damaged before it is picked up but after it is paid for and there is no replacement stock, you can initiate a subsequent delivery.

If you make changes to the cash sale, you can issue a new cash sale invoice using the repeat printout function.

## Creating a Cash Sale

1. In the initial screen, choose *Logistics* → *Sales and distribution* → *Sales*.
2. Choose *Order* → *Create*.
3. Enter the order type for cash sales (BV in the standard system) and, if necessary, the organizational data.

The values for sales organization, distribution channel and the division are usually proposed from user-defined parameters. Entries for the sales office and the sales group are optional.

4. Choose *Enter*.
5. Enter the following data:
  - Customer number of the sold-to party
  - Material numbers
  - Order quantities for the materials

6. Choose *Enter*.

If the system carries out an availability check and finds that there is insufficient stock for an order item to be delivered on the requested date, it displays a screen on which you can choose between several delivery proposals. Normally, in a cash sale, you only sell the quantity you can deliver on the spot.

7. Save your document.

The system automatically processes the delivery in the background and prints out a cash sale invoice. The amount of the sale is processed later in an order-related billing transaction. The amount is posted to financial accounting, using the order number as reference. Because this is a cash sale, no invoice is produced during the billing run.

## Rush Order

## Rush Order

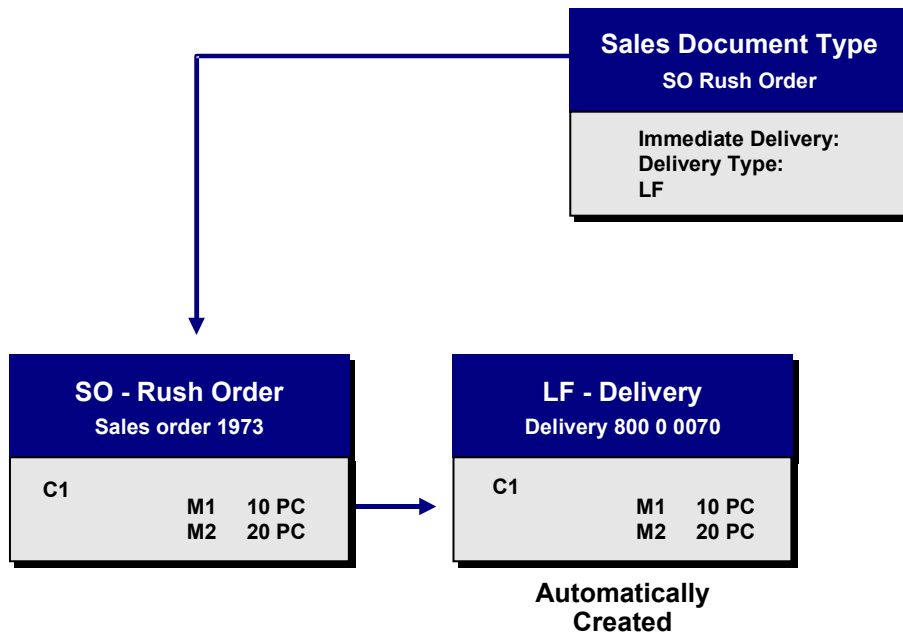
### Implementation Considerations

In a rush order transaction, the customer picks up the goods or you deliver the goods on the same day as the order is placed. In the standard system, when you save this sales document type, a delivery is automatically created and billing is related to the delivery.

### Process Flow

In the standard system, sales document type SO is saved for rush orders with immediate delivery type LF. Once the goods have been removed from storage, the goods are picked, and goods issue is posted.

Once the billing documents are created (for example, in collective processing), invoice papers are printed and sent to the customer.



## Creating Rush Orders

1. In the initial screen, choose *Logistics* → *Sales and distribution* → *Sales*.
2. Choose *Order* → *Create*.
3. Enter the order type for rush orders (SO in the standard system) and, if necessary, the organizational data.

The values for sales organization, for distribution channel and the division are usually proposed from user-defined parameters. Entries for the sales office and the sales group are optional.

4. Choose *Enter*.
5. Enter the following data:
  - Customer number of the sold-to party
  - Material numbers
  - Order quantities for the materials

6. Choose *Enter*.

If, during the availability check, the system confirms only a part of the requested order quantity, the remaining quantity can be processed at a later point in time as a backorder.

7. Save your document.

The rush order can be processed later as a delivery-related billing transaction. Billing is performed in the usual way.

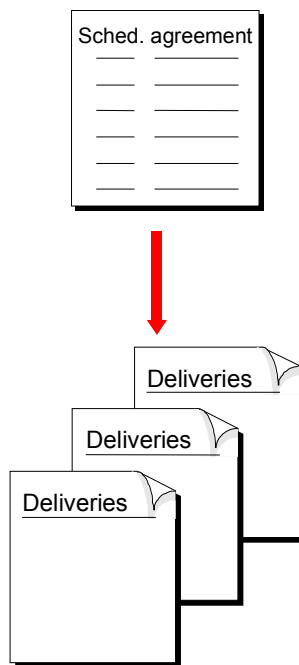
## Scheduling Agreements

# Scheduling Agreements

## Purpose

A customer scheduling agreement is an outline agreement with the customer containing delivery quantities and dates. These are then entered as schedule lines in a delivery schedule. You can either create schedule lines when you create the scheduling agreement or you can create them later.

You fulfill a scheduling agreement by creating the deliveries in the schedule as they become due. You process deliveries for a scheduling agreement in exactly the same way as you process a normal delivery. After you have carried out the delivery, the system updates the *Delivered quantity* field in the scheduling agreement item with the delivery quantity. The following graphic shows the document flow for scheduling agreements.



## Integration

You would use this component if you had outline agreements with the customer that contained future delivery quantities of materials that would be sent at certain times within a fixed time period.

If you work with scheduling agreements for the component supplier industry you also need to choose the "Electronic Data Interchange" (EDI) component.

## Features

The same functions are at your disposal for processing scheduling agreements as there are for the sales order, including pricing and availability checks.

In addition to the standard scheduling agreements you can also manage scheduling agreements for the component supplier industry, with their special features that include:

- Working with scheduling agreements with EDI output
- Entering scheduling agreements in a forecast or just-in-time (JIT) delivery schedule
- Using different types of cumulative quantities
- Taking into account the automatic fiscal year change used by the component supplier
- Managing engineering change statuses
- Storing packing proposals
- Creating correction deliveries for the scheduling agreement
- Working with external service agents

## Creating Scheduling Agreements

# Creating Scheduling Agreements


To create a scheduling agreement, proceed as follows:

1. On the initial screen, choose *Logistics* → *Sales and distribution* → *Sales*.
2. Choose *Outline agreement* → *Scheduling agreement* → *Create*.
3. Enter the scheduling agreement type and, if necessary, the organizational data.  
The values for sales organization, for distribution channel and the division are usually proposed from user-defined parameters. Entries for the sales office and the sales group are optional.
4. Choose *Enter*.
5. Enter the following data:
  - Customer number of the sold-to party
  - Customer purchase order number
  - Material numbers
  - Order quantities for the materials
6. To enter the delivery dates for an item, select the relevant item in the item overview and choose *Goto* → *Item* → *Schedule lines*.
7. Enter the necessary schedule lines.

The following list shows you see three possible formats for entering the delivery date:

Date type	Description	Example
d	Day	June 19,1995
w	Week	44,1995
m	Month	11, 1995

The last entry you made is always used as a default value here.

1. Choose *Enter*.  
The system determines the confirmed quantity.  


Delivery scheduling may mean that the system cannot confirm the quantity until a later date. In this case, the system creates a second schedule line with a confirmed quantity and date.
2. To return to the overview screen, choose *Back*.
3. If you want to enter further data for the header or items, select the corresponding menu entry. If you wish to change data for an item, select the item before you choose the menu entry.
4. Enter all necessary data.
5. Save your document.

## Packing Information in the Scheduling Agreement

You can specify packing suggestions in a scheduling agreement. You can decide how you want the individual items to be packed at delivery time. This information is then copied into the delivery during delivery processing and can, if necessary, be changed there.

To enter packing information in the scheduling agreement, choose *Extras* → *Packing proposal*.

**See also:**

[Packing \[Ext.\]](#)

---

**Changing Scheduling Agreements**

## Changing Scheduling Agreements

To change a scheduling agreement, proceed as follows:

1. Choose *Logistics* → *Sales and distribution* → *Sales* on the main menu screen.
2. Choose *Outline agreement* → *Scheduling agreement* → *Change*.
3. Enter the document number in the *Scheduling agreement* field or search for the number with the help of a matchcode.
4. Choose *Enter*.

If deliveries were already created for the scheduling agreement, the system informs you that subsequent documents exist and must be taken into account. To display these documents, choose *Environment* → *Display document flow*. All deliveries created for the scheduling agreement are displayed here. From here, you can use *Goto* functions to display further information about the items in the following screens:

- The delivery overview in which the ordered, confirmed, delivered and invoiced quantities are displayed
  - The status overview that shows the different status features of the items
5. Choose *Goto* → *Back* to reach the overview screen.
  6. Make your changes and save the document.

## Displaying Scheduling Agreements

To display a scheduling agreement, proceed as follows:

1. In the initial screen, choose *Logistics* → *Sales and distribution* → *Sales*.
2. Choose *Outline agreement* → *Scheduling agreement* → *Display*.
3. The system automatically proposes the number of the last scheduling agreement you created during the current work session.

Alternatively, enter the number of the required scheduling agreement or, if you do not know the number, enter one or more additional search criteria. For example, you can enter the number of the relevant purchase order, the unloading point, or the name of the sold-to party.

4. Choose *Enter* to display the scheduling agreement.

If more than one scheduling agreement meets your selection criteria, the system displays a list from which you can choose the correct one.

## Displaying a List of Scheduling Agreements

There are various reasons why you might want to display a list of scheduling agreements:

- You want to obtain information about existing scheduling agreements, for example, in response to a customer inquiry.
- You want to display all scheduling agreements for a certain material or a business partner for analysis.
- You want to display all scheduling agreements where data is still incomplete.

The procedure for displaying lists is identical for all sales documents. You can find more information under [SD Analyses and Reports \[Ext.\]](#).

---

**Completing Scheduling Agreements**

## Completing Scheduling Agreements

A scheduling agreement is complete when there are no more items to be delivered.

If there are still outstanding items in the agreement but you nevertheless want to close it, you can assign a reason for rejection to these items. The system then sets the status of the agreement as complete and the outstanding items no longer appear in the delivery due list. The procedure for rejecting items in a contract is identical to the procedure for rejecting items in a sales order. For more information about rejecting items, see [Rejecting Items in a Sales Order \[Page 51\]](#).

## Customer Contracts

### Implementation Considerations

Customer contracts are outline customer agreements that display when sales materials or services are sold within a certain time period.

The standard version of the SAP R/3 System contains the following categories of contracts:

- [Master Contracts \[Page 136\]](#)

The master contract is a document in which you can group contracts together as lower level contracts. Thus, all the data that refers to other documents remains consistent. The master contract contains the general terms which apply for all lower level contracts.
- [Quantity Contracts \[Page 143\]](#)

A quantity contract is an agreement that your customer will order a certain quantity of a product from you during a specified period. The contract contains basic quantity and price information, but does not specify delivery dates or quantities.
- [Value Contracts \[Page 145\]](#)

A value contract is a contractual agreement with a customer that contains the materials and/or services that they may receive within a time period and up to a target value. A value contract can contain certain materials or a group of materials (product hierarchy, assortment module).
- [Service Contracts \[Page 151\]](#)

A service contract is an agreement that contains the conditions for offering a certain service to the customer. You can manage rental and maintenance contracts in the standard version of the SAP R/3 System. A service contract contains validity dates, cancellation conditions, price agreements, and information on possible follow-up actions.

See also:

[Changing Data at Header Level \[Page 52\]](#).

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**Master Contracts**

## Master Contracts

### Definition

The master contract is a document under which you can group contracts as lower level contracts. It contains the general terms which apply for all the lower level contracts over a specified period.

### Use

You group contracts as lower level contracts under a master contract to ensure that

- The terms in the master contract are granted in all the lower level contracts
- The data in all lower level contracts remains consistent

You can group the following documents under a master contract:

- Quantity contracts
- Value contracts
- Service contracts

The link between the master and lower level contracts is controlled by the referencing procedure which is assigned to the master contract type in Customizing. The referencing procedure determines which data is copied from the master contract into the lower level contracts

### Structure

A master contract contains header data only. In the master contract, you can record:

- Business data
- Partner data
- Contract data
- Billing plan data

On the overview screen of the master contract, there is a list of all the lower level contracts which refer to it. You can branch from this list into the individual contracts.

#### See also:

[Contract Grouping \[Page 137\]](#)

## Contract Grouping

### Implementation Considerations

Contract grouping enables you to link several contracts as lower level contracts to one master contract so that consistency of data is guaranteed. When you link a contract to a master contract, data is copied from the master contract into the lower level contract. Changes to the master contract can be copied directly into the lower level contract.



Note:

- The lower level contracts must be assigned to the same sales area as the master contract.
- You can only group contracts under master contracts on one level. Further hierarchical relationships are not possible.

### Prerequisites

Before you can use the contract grouping function, you must define the referencing requirements in Customizing for Sales and Distribution. Choose *Sales* → *Sales Documents* → *Contracts* → *Master Contract* → *Define Referencing Requirements* and then perform the following activities:

- Specify the reference sales document types  
Here you define which sales document types can refer to which master contract types.
- Define referencing procedure  
In the referencing procedure you specify:
  - Identical fields  
These fields must have exactly the same values in the master contract and the lower level document for the reference to be valid.
  - Copy fields  
The values in these fields are always copied from the master contract into the lower level document.
  - Proposal fields  
The values in these fields are copied from the master contract into the lower level document, if the fields had the same values in both documents before the change was made.

You then assign a referencing procedure to each sales document type which is to use the contract grouping function.

### Process Flow

First of all, you create a master contract in which you enter the data which is to apply for all lower level contracts.

## Contract Grouping



You can use the master contract type GK which is delivered with the standard R/3 System. If you require additional master contract types, define them in the Customizing activity *Define Sales Document Types*.

You then create the contracts and link them to the master contract. You create the link by entering the number of the master contract in the header of each contract. You can search for suitable master contracts using a matchcode. Matchcode *E* enables you to search by partner.



In Customizing, you can control that the system informs you during contract creation whether master contracts already exist for the customer. You can branch from the message dialog box directly into the list of existing master contracts and select a suitable master contract.

When you link a contract to the master contract, the system ensures the reference is valid by checking the following:

- The lower level contract document type is allowed to refer to the master contract document type
- The identical fields in the master contract and the lower level contract match

If the system determines that the reference is valid, it then copies the data in the copy and proposal fields in the master contract into the lower level contract header on the basis of the referencing procedure.



The system determines whether data which is copied into the lower level contract header should also be copied into the lower level contract items using the standard application logic. For example, changes to business header data are only copied into the items if the header and item fields had the same value before the changes were made.

If the system determines that the reference is not valid because the document types cannot be linked, it issues an error message. If the identical fields do not match, the system deletes the reference.

All contracts which refer to a master contract are listed on the overview screen of the master contract.

## Changes to the Lower Level Contract

If you change an identical field in the lower level contract, the system deletes the reference to the master contract.

If you change a copy field in the lower level contract, the system overwrites the new value with the value in the master contract.

You can change proposal fields as required.

## Changes to the Master Contract

In Customizing for *Sales and Distribution*, under the *Define Sales Document Types* activity, you control whether the system copies changes in the master contract into all the dependent lower level contracts automatically.

- If the update function is activated, a workflow scenario is initiated when the master contract is changed. The system accesses each dependent lower level contract and determines on the basis of the referencing procedure whether changes should be copied.
- If the update function is not activated, the workflow scenario is initiated when you call a lower level contract for processing. In this case, the system only updates the contract which you call for processing.

In both cases, the system proceeds as follows:

- If you change an identical or copy field, the system copies the change automatically into the lower level contract.
- If you change a proposal field, the system only copies the change into the lower level contract if the fields in both contracts had the same value before the master contract was changed.



You can configure the referencing procedure so that the system issues a message in the lower level contract informing you of the changes which it will copy into the lower level contract from the master contract.

When errors occur, the user who changes the master contract receives a work item. When he or she carries out the work item, two sessions are opened. One session contains a list of all the changed data and a description of the errors. The lower level contract to be changed is displayed in change mode in the second session. When the lower level contract is blocked by another user, the system makes several attempts to access the contract. The work item is not initiated until the document is accessed.

**See also:**

[Creating Master Contracts \[Page 142\]](#)

[Linking a Contract to a Master Contract \[Page 140\]](#)

## Linking a Contract to a Master Contract

# Linking a Contract to a Master Contract

### Procedure

1. On the initial screen, choose *Logistics* → *Sales and distribution* → *Sales*.
2. Choose *Outline agreement* → *Contract* → *Create*.



You can also link existing contracts to master contracts. In this case, choose *Outline agreement* → *Contract* → *Change*. Then enter the contract number and go to step 6.

3. Enter the contract type and, if necessary, the organizational data.

The values for sales organization, distribution channel, and division may be proposed from the user parameters. Entries for the sales office and the sales group are optional.

4. Choose *Enter*.

If you have activated the check for existing master contracts in Customizing and master contracts already exist for the customer, a dialog box appears. You can branch from the dialog box into the list of master contracts and select a suitable master contract from the list by placing the cursor on the master contract and choosing *Copy*.

If no dialog box appears, you reach the contract overview screen. Either enter a master contract number or search for a suitable master contract using a matchcode.

5. Choose *Enter*.

The system determines whether the reference is valid by checking that

- The contract type can refer to the master contract type
- The identical fields match

If the reference is valid, the system copies the data from the master contract into the contract according to the referencing procedure assigned to the master contract.

If the reference is not valid, the system issues an error message. If the identical fields do not match, it deletes the number in the *Master contract* field. In this case, either enter a suitable master contract number or check the settings in the Customizing activity *Define Referencing Requirements*.

6. Enter any other data you require.



The referencing procedure in the master contract controls whether you can change the data which was copied from the master contract.

7. Save the document.

### Result

The system issues a message informing you of the number under which it has saved the contract. The contract is linked to the master contract. The referencing procedure in the master contract controls how the system reacts when changes are made to either the master or lower level contract.

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**Linking a Contract to a Master Contract**

Once a contract has been linked to a master contract, you can no longer change the referencing procedure in the master contract.

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**Creating Master Contracts**

## Creating Master Contracts

### Procedure

1. In the initial screen, choose *Logistics* → *Sales and distribution* → *Sales*.
2. Choose *Contract* → *Create*.
3. In the *Contract* field, choose the contract type Master contract (GK is the master contract type in the standard system) and, if necessary, the organizational data.  

The values for sales organization, distribution channel, and division may be proposed from the user parameters. Entries for the sales office and sales group are optional.
4. Choose *Enter*.
5. Enter the number of the sold-to party in the *Sold-to party* field.
6. Choose *Enter*.
7. Check the data on the following screens and, if necessary, enter additional data:
  - Business data
  - Partner
  - Contract data
  - Billing plan
8. Save the document.

### Result

The system issues a message informing you of the number under which it has saved your master contract. You can now link contracts to the master contract.

**See also:**

[Linking a Contract to a Master Contract \[Page 140\]](#)

## Quantity contract

### Definition

A quantity contract is an agreement that your customer will order a certain quantity of a product from you during a specified period. The contract contains basic quantity and price information but no schedule of specific delivery dates and quantities. (If the customer provides delivery information, you can create a [scheduling agreement \[Page 128\]](#) instead).

The customer fulfills a contract by placing sales orders against it. These sales orders are known as release orders (or call-offs).

You can specify in the contract which other partners in addition to the sold-to party are authorized to release against the contract. For further information, see [Authorized Partners for Release Orders \[Page 160\]](#).

When you create a release order, you refer to the relevant contract, and the system automatically updates the released quantities in the contract. Otherwise, processing a release order is just like processing a standard sales order.

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**Creating Quantity Contracts**

## Creating Quantity Contracts

To create a quantity agreement, proceed as follows:

1. In the initial screen, choose *Logistics* → *Sales and distribution* → *Sales*.
2. Choose *Contract* → *Create*.
3. In the *Contract type* field, choose Quantity contract, and enter the required organizational data.

The values for sales organization, for distribution channel and the division are usually proposed from user-defined parameters. Entries for the sales office and the sales group are optional.

4. Choose *Enter*.
5. Enter the following data:
  - Customer number of the sold-to party in the *Sold-to party* field.
  - Customer purchase order number for this document
  - Validity period in the *Valid from* and *Valid to* fields
  - Material numbers
  - Target quantities for the materials

The target quantity is the projected total quantity for the material in the contract.

6. Choose *Enter*.

If you want to enter further data for the header or items, select the corresponding menu entry. If you wish to change data for an item, select the item before you choose the menu entry.
7. Enter all the necessary data.
8. Save your document.

**See also:**

[Creating Release Orders for Quantity Contracts \[Page 162\]](#)

## Value Contracts

### Definition

A value contract is a legal agreement with a customer that contains the materials and services that the customer receives within a specified time period, and for a value up to a specified target value. A value contract can contain certain materials or a group of materials (product hierarchy, assortment module).

### Use

The value contract contains rules that specify the kind of release orders that are allowed. You can define restrictions on customers and materials. In addition to the sold-to party, you can specify the other partners who are authorized to release against the contract by assigning the partner function *AA* to them. You can also define additional ship-to parties for release orders using the partner function *AW*. For further information, see [Authorized Partners for Release Orders \[Page 160\]](#).

In the value contract you can refer to lists of materials that have already been defined. This list could be a product hierarchy or a assortment module (for more information, see [Assortment Module for Value Contracts \[Page 149\]](#)). However you also create a value contract for only one material (for example, a configurable material).

To fulfill both these requirements, two types of value contracts are offered in the standard system:

- Value contract type WK 1  
You can specify a product hierarchy or a assortment module for value contracts with contract type WK 1. The system will always propose this type of contract, if you want to create a contract for several materials or a certain group of materials. All the materials in the relevant assortment, or belonging to the specified product hierarchy are then relevant for release.
- Value contract type WK 2 (material-related)  
You can create contracts for one material (usually configurable) with this type of value contract. A software company is an example of where this kind of contract is often used. There, a contract for the value of \$500,000 is made with the customer for *one* specific software product.  
You can also agree on the length of the contract for this type. The contract duration can be agreed at item level and can be different from the contract duration specified at header level.

You can store special price agreements for the value contract. These price agreements can then be used at any level. For example, a value contract can contain prices for individual materials, or discounts that are valid for every released material.

### Release Orders

The customer fulfills a contract by issuing orders against the contract. The contract does not contain any exact dates for deliveries, so you need to create a sales order to release against a value contract.

## Value Contracts

When a release order is created for the contract, the system automatically updates the released values in the contract. The release order value is calculated from the total of the open order and delivery values, plus the value that has already been billed to the value contract.

The system also updates the released value for subsequent changes (for example, overdelivery of contract release, price changes in the billing document, partial deliveries, returns, rejection of order items, cancellation or reversal of orders, deliveries or billing documents).

You can create a release order in any currency. The system automatically converts this currency into the one agreed upon in the value contract on the pricing date for the contract release order.

## Billing

You can bill the value contract either directly, or per release order. If you want to bill the value contract directly, you have to create a billing plan for the value contract. This enables you to bill the value contract for several dates, and for partial values. If you change the value of an item in the value contract, the system automatically adjusts the open billing dates so that the complete value is billed.

## Document Flow

You can use the document flow to display all the subsequent documents that arise from a value contract (for example, sales orders, deliveries, billing documents).

## Completing value contracts

A value contract is complete when you enter a reason for rejection. You can define how the system reacts when you have reached the target value in Customizing for value contracts (item category). (You define the following reactions: a warning, an error message or no reaction.)

## Constraints

A value contract that has not been completely released is not automatically billed. When you work with the billing plan which has dates that have already been billed and you then reduce the target value in the value contract, the system does not check whether too much has been billed. In this case, you have to create a credit memo for the difference.

Quantity and value contract items cannot be processed together in one document.

## Creating Value Contracts

### Prerequisites

In order to achieve technical control of value contract items for value contracts referring to an assortment module or a product hierarchy, you need a material in the item. This is, for example, important for controlling control derivation and statistics update. You can set this material as default. This predefined material is then automatically copied into the item. The item category group for value contracts must be assigned to the material in the material master. If a material is entered, then the item category is created for the value contract. This item category is taken from the item category group in combination with the sales document type.

### Procedure

To create a value contract, proceed as follows:

1. In the initial screen, choose *Logistics* → *Sales and distribution* → *Sales*.
2. Choose *Contract* → *Create*.
3. In the *Contract type* field, choose Value contract, and enter the required organizational data.

The values for sales organization, for distribution channel and the division are usually proposed from user-defined parameters. Entries for the sales office and the sales group are optional.

In the standard system, the following two sales document types are defined:

- Value contract general (VC1)
  - Value contract general (VC2)
4. Choose *Enter*.
  5. Enter the following data:
    - Customer number of the sold-to party in the *Sold-to party* field.
    - Customer purchase order number for this document
    - Validity period in the *Valid from* and *Valid to* fields
    - Description of value contract
    - The master contract number (see also [Master Contracts \[Page 136\]](#))
    - Material number(s)
    - Target values for the materials
      - The target value is the planned entire value for the material in the contract.
    - only for value contracts not referring to material: Product hierarchy and/or assortment modules



Additionally, you can define contract duration for the value contracts VC2 in the *Contract start date* and *Contract end date* fields. You can define both contract

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**Creating Value Contracts**

duration and header level per item. The contract duration at item level can be different to the contract data at header level.

6. Choose *Enter*.

If you want to enter further data for the header or items, select the corresponding menu entry. If you wish to change data for an item, select the item before you choose the menu entry.

7. Enter all the necessary data.
8. Save the document.

**See also:**

[Creating Release Orders for Value Contracts \[Page 164\]](#)

## Assortment Module for Value Contracts

### Use

This function enables you to define a list of materials that can be released from a value contract. Materials can be assigned to more than one assortment module.

An assortment module is an entry tool and can be called up from the value contract. It is valid for a certain time period.

If you delete a material from the assortment module, to which a value contract refers, you will be unable to release that material.



In the value contract, only materials with the same sales organization and distribution channel as the value contract can be taken from the assortment module. All the other materials in the assortment module are not displayed in the value contract.

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**Creating Assortment Modules for Value Contracts**

## Creating Assortment Modules for Value Contracts

### Procedure

To create an assortment module, proceed as follows:

1. From the R/3 initial screen choose *Logistics* → *Sales and Distribution* → *Master data*.
2. Choose *Products* → *Value contract - Assortment module* → *Create*.  
You will then be in the *Create assortment module: Initial Screen*.  
Module type 6 is defined for the value contract.
3. For external number assignment, enter a module number.  
You can then use existing modules as a reference by entering the name of the module under reference.
4. Choose *Enter*.
5. Enter a short description for the module.
6. Enter a validity period for the product proposal.  
During a release, the system checks if the release date lies within the validity period.
7. Create the materials that you wish to assign as items to a module.



You can display a list of materials as a product proposal, which you can then copy into the assortment module. To do this, choose *Suggest material*, enter the selection criteria in the subsequent screen and copy the selected materials to the items. Use *Edit* → *Delete item* to delete the materials that you do not want to copy to the assortment module.

8. Save your entries.

## Service Contracts

### Purpose

You use service contracts to record the details of the service package that you have agreed to provide a service recipient with over a specified period of time. For example, you specify:

- The routine service tasks which are to be performed on a piece of machinery you have sold or rented to a customer
- The prices which are to apply for these routine tasks  
For more information, see [Standard Pricing in Service Contracts \[Ext.\]](#).
- The prices which are to apply for additional service tasks and for any spare parts required  
For more information, see [Price Agreements in Service Contracts \[Ext.\]](#).
- The terms under which the contract can be cancelled  
For more information, see [Cancellation Data in Service Contracts \[Ext.\]](#).

During the validity period of the service contract, you use the service contract as follows:

- To initiate automatic billing of the routine service tasks at regular intervals
- To determine whether a service request from the customer is covered by the service contract
- To determine which price agreements apply for service tasks not covered by the service contract
- To determine whether a cancellation request from the customer is valid
- To initiate follow-up actions before the service contract becomes invalid

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**Service Contract**

## Service Contract

### Definition

Sales document which is the central document in Customer Service (CS) to which other Customer Service documents can refer.

### Structure

The service contract is made up of a header and one or more items.

At header level you specify:

- Partner data such as the partner who is to be provided with the services and the partner who is to be billed for the services
- Contract-specific data:
  - Start and end dates
  - Cancellation terms
  - Follow-up actions
- Texts
- Status information
- Price agreements

At item level you specify:

- The services to be provided
- Partner data
- Contract-specific data
  - Start and end dates
  - Cancellation terms
- Technical objects
- Texts
- Status information
- Price agreements
- Billing plan data



The data at header level of the service contract applies to the service contract item until you define alternative data at item level.

### Integration

After you have created a service contract, Customer Service (CS) arranges for technicians to make the routine service calls which have been agreed on in the service contract. The routine

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**Service Contract**

tasks that the technician carries out are billed according to the terms of the billing plan for the corresponding service contract item. The technician may need to perform tasks not covered by the terms of the service contract. If this is the case, CS refers to the underlying service contract to determine whether the customer is charged for these services and parts, and if so, how much. Billing for any additional services or products is initiated by a billing request.

---

**Service Contract Items**

## Service Contract Items

### Definition

Element of the service contract in which you define the services or products you are providing the customer with under the terms of the service contract. A service contract item can be any of the following:

- Service (for example, a particular task)
- Material (for example, a spare part)
- Time (for example, an hourly rate for a technician's time on the job)
- Response time (how soon you are obligated to respond to a problem call)
- Warranty (the agreed duration and coverage)

The items in a service contract are controlled by item category. It is possible for a service contract to include items with different item categories. For example, some items may be rented, others sold.

### Structure

A service contract item can consist of multiple objects (for example, a number of different pieces of equipment with different serial numbers). However, a prerequisite for multiple objects is that they share the same contract data. If any data varies - for example, if the installation date is different - then separate items must be created.

## Creating a Service Contract

### Procedure

1. In the [Sales menu \[Ext.\]](#) choose *Contract* → *Create*.



Alternatively, you can choose *Logistics* → *Customer Service* → *Service Agreements* → *Contracts* → *Contract* → *Create*.

2. Enter the contract type (*WV* for a maintenance contract, *MV* for a rental contract) and, if necessary, the organizational data.

The values for sales organization, distribution channel, and division (sales area) may be proposed from the user parameters. Entries for the sales office and the sales group are optional.



You can choose to wait until you have entered the sold-to party on the subsequent screen to enter the organizational data. In this case, the system offers you all the sales areas defined for the sold-to party for selection.

3. Choose *Enter*.
4. Enter the following data as required:
  - Customer number of the sold-to party in the *Sold-to party* field
  - Purchase order number of the customer for this document
  - Start and end dates (this data may also be determined indirectly; for more information, see [Indirect Date Determination for Service Contracts \[Ext.\]](#)).
  - Master contract number (for more information, see [Master Contracts \[Page 136\]](#)).
  - Material number (for example: a standard product or configured product)
  - Target quantity for the material

5. Choose *Enter*.

If you entered a standard product, the system automatically branches to the configuration editor. Enter the values for the characteristics defined in the standard product.

If you entered a configured product with pre-defined values, the system automatically copies the values into the contract.

6. To enter data in the contract header, choose *Goto* → *Header* → *Contract data*.  
Enter the relevant run-time and cancellation data and return to the overview screen.
7. If you wish to enter price agreement data in the contract, see [Pricing in Service Contracts \[Ext.\]](#).
8. The system checks the item category of the items to determine for which items it needs to create a billing plan. To display the billing plan for an item, select the item and choose *Goto* → *Item* → *Billing plan*.

**Creating a Service Contract**

9. Return to the overview screen and save your document.

## Maintenance of Contract Data

### Prerequisites

In Customizing for Sales, you control whether contract data can be maintained for a particular sales document type by entering either **x** or **⌘** in the *Contract data allwd* field in the activity 'Define sales document types'.

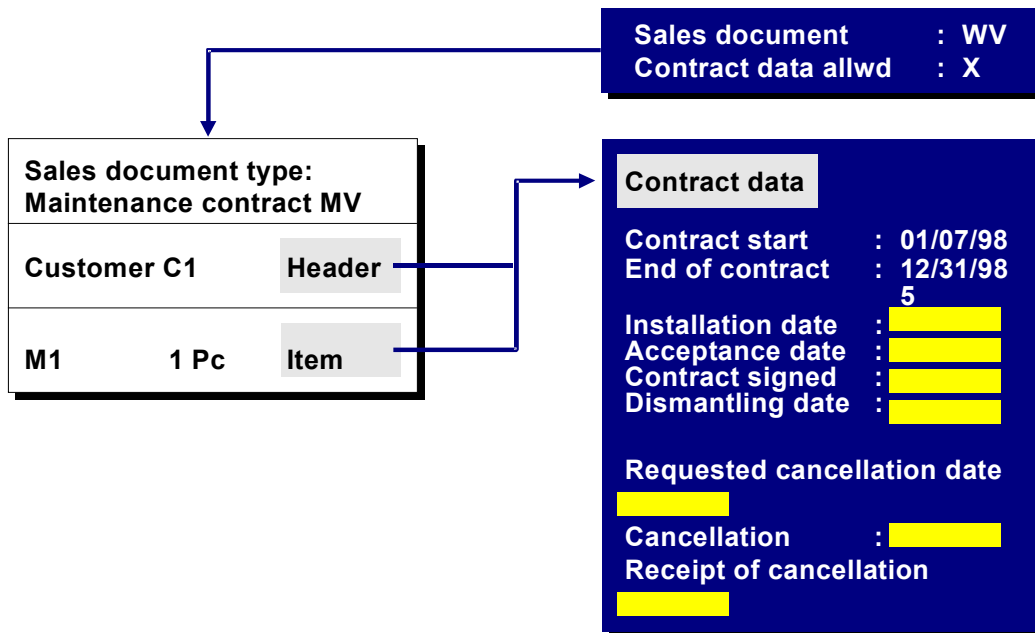
### Use

You can maintain the following contract data:

- Validity period data
- Cancellation data

Similar to business data, contract data is stored in both the header and in the contract items. Header data applies to all items in a contract until you change data in the individual items.

The following graphic illustrates the data in a service contract:



### Features

If contract item data differs from contract header data, you can control how changes to the contract header data should affect the contract item data. You do this by entering an indicator in the *Contract data allwd.* field in Customizing for Sales and Distribution under Sales → Sales Documents → Sales Document Header → Define Sales Document Types in the Contract section.

The following indicators are possible:

**Indicators in *Contract data allwd.* field:**

**Maintenance of Contract Data**

Indicator	Any changes you make to the contract header...
x	... will not be copied into the items. This applies even if the contract item data was identical to the contract header data before you made the changes to the header data.
y	... are automatically copied into the items if the contract item data was identical to the contract header data before you made the changes.

For more information, see the online help for the *Contract data allwd.* field.

## Contract Release Orders

### Use

A customer fulfills a contract by issuing releases to the contract.

Because the contract does not contain any schedule lines with delivery dates, the released goods are issued using an order. When you create a contract release order, you refer to the relevant contract and the system automatically updates the released value in that contract.

When you create a release order, the system checks whether:

- the released materials conform to the rules of the value contract
- the release order is within the contract's validity period
- the released value (in the value contract) or the released quantity (in the quantity contract) exceeds the remaining open value or the remaining open quantities in the contract

If you have a contract with your customer and you create a sales order without referring to the contract, you can set the system so that it proposes the contract automatically. To do this, use the settings in Customizing for document type (*Contract messages* field)



In Customizing for value contracts, you can set a release order type for the release contract. In the R/3 standard system, WA is the release order type.

## Authorized Partners for Release Orders

# Authorized Partners for Release Orders

## Use

When you create a release order for a contract, you enter the number of the contract and the name of the partner who is requesting the goods. The system then checks if the business partner is authorized to release against the contract.

Depending on the settings in Customizing, the system determines whether a partner is authorized to release against the contract by checking against one of the following:

- Partners in the contract (Rule *A*)  
If the partner has the partner function *AG* (sold-to party) or *AA* (sold-to party for release order) in the contract, the system accepts the partner as the sold-to party for the release order.
- Partners in the hierarchy (Rule *B*)  
If the partner who wants to release against the contract is the sold-to party of the contract or at a lower level in customer hierarchy to the sold-to party in the contract, the system accepts the partner as the sold-to party for the release order.

After the authorization check, the system also checks if more than one ship-to party is defined in the contract. If the contract contains a *WE* (ship-to party) and several *AWs* (ship-to party for release order), the system lists the possible ship-to parties in a dialog box. You select the appropriate ship-to party for the release order.



You can define authorized sold-to parties (*AA*) and additional ship-to parties (*AW*) in the customer master record. When you create a contract for the customer, these partners are proposed for selection.

## Prerequisites

You activate the partner authorization check in the Customizing activity 'Define Sales Document Types'.

Partner determination procedure *KAB* (partners in contract) contains the partner functions *AA* and *AW*. You must assign this procedure to the sales document types for which the partner authorization check is relevant. You make this assignment in the Customizing activity 'Define and assign partner determination procedures'.

In the standard R/3 System, the partner releasing against the contract and the ship-to party which you select are copied into the release order. If you want to control which partners are copied into the release order, you can define a copying routine for the relevant document types in the Customizing activity 'Maintain Copying Control for Sales Documents'. For example, you can specify that only the sold-to party releasing against the contract is copied into the release order and the other partners are determined from the customer master record of the sold-to party.

## Features

If rule *B* is defined for the contract type, you can search for authorized partners for a release order using the contract number. Equally, you can search for the relevant contract for a release order using the partner number. In this case, the partner authorization rule is irrelevant.



---

**Creating Release Orders for Quantity Contracts**

## Creating Release Orders for Quantity Contracts

### Procedure

In order to create a release order for a quantity contract, proceed as follows:

1. In the initial screen, choose *Logistics* → *Sales and Distribution* → *Sales*.
2. Choose *Order* → *Create*.
3. Enter the order type and, if necessary, the organizational data.

The values for sales organization, for distribution channel and the division are usually proposed from user-defined parameters. Entries for the sales office and the sales group are optional.

4. Choose *Sales document* → *Create with reference*.  
A dialog box appears.

5. Choose the *Contract* tab page.

6. Enter the contract number and the number of the partner requesting the goods (the releasing partner).

If the partner authorization check is activated in Customizing, the system checks whether the partner is authorized to release against the contract. If the partner is not authorized to release against the contract, you cannot continue processing the release order until you enter a partner who is authorized. If several ship-to parties are defined in the contract to which the release order refers, a dialog box containing the possible ship-to parties appears. You must select the ship-to party who is to receive the goods.

7. Choose *Selection list*.

The quantities (quantity contract) or values (value contract) that have not yet been released for the contract items are displayed here.

8. Change the quantities/values for this release. If certain contract items should not be copied in this release, deselect these items.

9. Choose *Copy*.

10. Enter the purchase order number for the customer.

11. If you want to enter further data for the header or items, select the corresponding menu entry. If you wish to change data for an item, select the item before you choose the menu entry.

12. Enter all the necessary data.

13. Save your document.

### Packing Information in the Release Order

You can specify packing proposals in a release order. You can decide how you want the individual items to be packed at delivery time. This information is then copied into the delivery during delivery processing and can, if necessary, be changed there.

To enter packing information in the release order, choose *Extras* → *Packing proposal*.

**See also:**

---

Creating Release Orders for Quantity Contracts

[Packing in Shipping \[Ext.\]](#)

## Creating Release Orders for Value Contracts

## Creating Release Orders for Value Contracts

### Procedure

In order to create a release order for a quantity contract, proceed as follows:

1. In the initial screen, choose *Logistics* → *Sales and distribution* → *Sales*.
2. Choose *Order* → *Create*.
3. Enter the order type and, if necessary, the organizational data.

The values for sales organization, for distribution channel and the division are usually proposed from user-defined parameters. Entries for the sales office and the sales group are optional.

4. Choose *Sales document* → *Create with reference*.  
A dialog box appears.
5. Choose the *Contract* tab page.
6. Enter the contract number and the partner releasing against the contract and the requested delivery date.
  - If the partner authorization check is activated in Customizing, the system checks whether the partner is authorized to release against the contract. If the partner is not authorized to release against the contract, you cannot continue processing the release order until you enter a partner who is authorized. If several ship-to parties are defined in the contract to which the release order refers, a dialog box containing the possible ship-to parties appears. You must select the ship-to party who is to receive the goods.
  - If the value contract refers to several materials, a product hierarchy, or an assortment module, then follow the steps below:

Choose *Selection list*.

A selection list will appear with the items that belong to the underlying value contract.

To enter materials for the release, proceed as follows:

The *Enter material* function brings you to a screen where you can enter the materials and order quantities that you would like released. Deselect any items that have already been entered and that should not be copied into this release.

Use the *Selection list* function to return to the selection list. The items for which you have already created a release are displayed with an icon in the selection list.

The *Explode assort.* function enables you to display a list of materials in the assortment module from the selection list. You can only release those materials that belong to the sales area of the value contract. Enter the required release quantity.

Use the *Selection list* function to return to the selection list. The items for which you have already created a release are displayed with an icon in the selection list.



When the system executes the *Explode assort.* function, it checks whether the current date is within the validity period of the assortment module. Only materials that are valid during the release can be copied.

### Creating Release Orders for Value Contracts

- If the value contract is based on one particular material (e.g. WK2 value contract type in the standard system), then proceed as follows:

Choose *Copy*. The order screen with the items from the value contract appears. Enter the required release quantities.

7. Save your document.



If the value of the release exceeds the agreed value in the value contract, the system reacts according to the settings you made in Customizing (error message, warning, no response). If an error message appears you cannot create a release. If a warning appears, or if the system does not react, then you can create a release. You can find these settings for the system in Customizing for Sales and Distribution (go to *Sales* → *Sales Documents* → *Contracts*) under *Value contract* → *Define item categories for value contract and contract rel.*

### Packing Information in the Release Order

You can specify packing proposals in a release order. You can decide how you want the individual items to be packed at delivery time. This information is then copied into the delivery during delivery processing and can, if necessary, be changed there.

To enter packing information in the sales order, Choose *Extras* → *Packing proposal*.

**See also:**

[Packing in Shipping \[Ext.\]](#)

## Delivery Times/Commitment Dates in Sales Orders

# Delivery Times/Commitment Dates in Sales Orders

## Use

You can enter a delivery time in contracts and quotations.

In the **contract**, the delivery time fixes the time period that the customer has given the vendor between contract release and delivery receipt.

In **quotations**, the delivery times enables you to agree on a guaranteed maximum delivery time once the order has been entered.

In the **sales order**, a committed quantity and date are issued alongside the confirmed quantity calculated by the availability check, which enables you to see whether committed quantities and delivery dates have been complied with.

These new functions are particularly useful if you are working with contracts and are expecting bottlenecks and where obligatory agreements on dates have to be met. Above all, they are suitable for the high tech and chemical industries as well as those branches of industry with customer make-to-order production.

## Features

You can specify the delivery time at header level and this influences the delivery times for all items in a quotation or contract but you can also enter different delivery times for single items at item level.

Enter the delivery time at header level in the *Delivery time* field on the *Sales* tab page for the overview screen. Enter the delivery time at item level in the item table in the *DlyTime* field. You can configure possible delivery times in Customizing by going to *Sales and Distribution* → *Sales* → *Sales Documents* → *Define agreed delivery times*.

When you create a sales order with reference to a contract or quotation the system copies the delivery time into the sales order item. If you do not enter a delivery, nothing changes in sales processing.

### Commitment Dates in the Sales Order

In the schedule line screen for the sales order items there are fields for the committed quantities and dates.

In a normal sales order, the commitment date results from the first availability check. If a second availability check results in different data, you can compare the two to see if the availability situation for a sales order item has improved or deteriorated.

The commitment date is calculated using the delivery time in contract releases with a delivery time, or in sales orders that refer to a quotation with a delivery time. The committed quantity is calculated from the agreed delivery time or from the confirmed quantity, according to the settings you made in Customizing. If you change the material, quantity, delivery date or delivery time in the sales order, the system recalculates the committed quantity.

You can configure how the commitment dates are calculated in Customizing for the sales document type in the *Commitment date* field. You can choose one of the following rules:

- A: Consider agreed delivery time only  
Here, all the required schedule lines are committed for the date that follows the delivery

### Delivery Times/Commitment Dates in Sales Orders

time at the distance agreed on when you entered the sales order. If the customer requires a later date, this date is confirmed. The commitment situation does not influence the calculations and if you don't specify a delivery time, the system does not calculate any committed quantities.

- **B: Calculation after the first confirmation date**  
The committed quantity is calculated from the first commitment situation. If a delivery time is available for the item, the system takes it into account in calculation rule A and the system commits the quantity for the earlier date. If you change the material, quantity, delivery date or delivery time in the sales order, the system recalculates the committed quantity. In each case the current commitment situation is valid when you save the document.
- **C: Calculation after the first confirmation date**  
If you enter new items, rule C corresponds to rule B. If you save the document again and the customer's commitment situation has improved, the system saves the better situation as the committed one. As in calculation rule B, the system recalculates the commitment dates if you change the material, quantity, requested delivery date or delivery time.
- **No entry:** The system does not calculate or display commitment dates.

The committed delivery date is issued in the order confirmation and the agreed delivery time is included in the printout of the contracts and quotations.

#### Delayed Sales Order Indicator

There is a status field for the sales order header and items that specifies whether the availability check has covered the commitment for undelivered order quantities. If you choose matchcode M, you can display all sales documents that have the "delayed" status. A delayed sales order is one where the committed quantities could not be either completely or partially committed, or where the quantity will be not be confirmed as committed until a later date.

---

**Changing Contracts**

## Changing Contracts

To change a quantity contract, proceed as follows:

1. In the main menu screen choose *Logistics → Sales and distribution → Sales*.
2. Choose *Outline agreement → Contract → Change*.
3. Enter the document number in the *Contract* field or search for the number using a matchcode.
4. Choose *Enter*.

If release orders have already been created for the contract, the system informs you that subsequent documents exist. To display these documents, choose *Environment → Display document flow*. All the release orders created from the contract are displayed here. From here, you can use *Goto* functions to display further information about the items in the following screens:

- the delivery overview that displays the ordered, confirmed, delivered and invoiced quantities
  - The status overview that shows the different status features of the items
  - the release order overview that displays the release orders are displayed with the individual released quantities as well as the total released quantity.
5. Choose *Goto → Back* to reach the overview screen.
  6. Make your changes and save the document.

## Completing Contracts

A **quantity** contract is complete when there are no more items to be delivered.

A **value** contract is complete when you enter a reason for rejection. You can define how the system reacts when you have reached the target value in Customizing for value contracts (item category). (You define the following reactions: a warning, an error message or no reaction.)

If there are still outstanding items in the contract but you nevertheless want to complete it, you can assign a reason for rejection to these items. The system then sets the status of the contract to complete. The procedure for rejecting items in a contract is identical to the procedure for rejecting items in a sales order. For more information about rejecting items, see [Rejecting Items in a Sales Order \[Page 51\]](#).

## Displaying Contracts

### Displaying Contracts

To display a quantity contract, proceed as follows:

1. In the initial screen, choose *Logistics → Sales and distribution → Sales*.
2. Choose *Outline agreement → Contract → Display*.
3. The system automatically proposes the number of the last contract you created during the current work session.

Alternatively, enter the number of the contract you want to display, or, if you do not know the number, enter the number of the relevant purchase order or delivery.

4. Choose *Enter* to display the contract.

If more than one contract meets your selection criteria, the system displays a list from which you can choose.

### Displaying a List of Contracts

There are various reasons why you might wish to display one or more contracts:

- You want to obtain information on an existing contract, perhaps in response to a customer inquiry.
- You want to display all contracts for a certain material or a business partner for analysis.
- You want to display all contracts where data is still incomplete.

The procedure for displaying lists is identical for all sales documents. You can find more information in the [Reports in SD \[Ext.\]](#) documentation.

## Complaints

### Implementation Considerations

The following processes are available in complaints processing:

- [Free-of-Charge Deliveries \[Page 175\]](#)

Although these are not complaints, they are offered as part of this component. A free-of-charge delivery is used to send a customer a free sample of your products.
- [Free-of-Charge Subsequent Deliveries \[Page 178\]](#)

If the customer complains (for example, that they received the wrong quantity) you can send them the extra material later free of charge. This free-of-charge subsequent delivery always refers to a sales order.
- [Returns \[Page 182\]](#)

If the customer complains, for instance, that the goods were faulty, you take the goods back to check them. Once you have checked the goods, you can implement one of the following activities:

  - Send the customer a credit memo
  - Make a subsequent delivery of the goods, free of charge
- [Credit Memo Requests \[Page 187\]](#)

If the customer complains that the price was miscalculated (for example, too high) you request a credit memo for the appropriate sum, and you do not take the goods back.
- [Debit Memo Requests \[Page 188\]](#)

If prices were calculated as too low, you request a debit memo.
- [Invoice Correction Requests \[Page 193\]](#)

The invoice correction request works in the same way as credit and debit memo requests, but here you enter the price or quantity that should have been calculated. The system then calculates the difference and creates either a debit or a credit memo, depending on whether the difference is negative or positive.

### Implementation Considerations

You need this component for processing complaints, or for sending free samples or products to your customers.

### Features

All complaints can be approved or rejected. Once a complaint has been approved, you create either a credit or debit memo, depending on the type of complaint.

If you reject a complaint, you can specify a reason for the rejection and this can be used as selection criteria for listing complaints.

Complaints

## Complaints Processing

### Implementation Considerations

You can process complaints in the following ways:

- **Example 1:** The customer returns the goods. You create a return to process the transaction.
  - If the customer wants a refund for the amount, enter a credit memo with reference to the return.
  - If the customer wants a replacement product, enter a free-of-charge subsequent delivery with reference to the return.
- **Example 2:** The customer does not send the goods back.
  - If the customer wants a refund, you enter a credit memo request with reference to the sales order or the invoice.
  - If the customer wants a replacement product, you create a free of charge subsequent delivery with reference to the sales order.

- **Example 3:** The price is wrong.

For example, the discount was forgotten or the scaled prices were miscalculated. You then enter an invoice correction request with reference to the invoice.



#### Example 1

You sent the customer 100 pieces. The customer sends 30 back because they were damaged during transport. You create a return for 30 pieces and then either a credit memo or a free-of-charge delivery with reference to the return.

#### Example 2

The customer reports that a further 10 units were so damaged that they threw them away. You enter either a credit memo request or a free of charge subsequent delivery with reference to the sales order or invoice.

#### Example 3

100 units were calculated at 10 USD per unit for the customer. However, due to a promotion they should have been calculated at 9 USD per unit. You enter an invoice correction request with reference to the invoice and enter the price as 9 USD per unit.

### Prerequisites

### Process Flow

1. You decide which one of the above scenarios is most similar to the type of complaint you are processing.

Enter the appropriate sales document, with or without reference to an order or invoice.

### Complaints Processing

2. You can change the settings in Customizing so that the sales document is automatically blocked for a delivery or billing. This means that the system does not create a free-of-charge delivery or a credit memo until you have had the opportunity to check the goods or clarify the complaint.
3. Once you have checked the goods or clarified the situation, you can:
  - Approve the complaint by releasing the sales document.
  - Reject the complaint by entering a reason for rejection in the sales document.



If you do not need any release procedures for credit memo requests, you can also create a credit memo with reference to an invoice. In this case, you do not need either the credit memo request or its release.

### Result

Once you have released the sales document, you can create a delivery or a credit memo.

## Free-of-Charge Delivery

### Definition

A sales document for delivering goods to a customer free of charge.

### Use

*You can create free of charge deliveries for sending samples of your products to the customer.* The system will then generate a delivery based on the free-of-charge delivery.

### Structure

A free-of-charge delivery is a type of sales document just like the standard order. For more information on sales documents, see [Working With Sales Documents \[Page 10\]](#)

### Integration

A free of charge delivery triggers a delivery.

## Creating Free of Charge Deliveries

# Creating Free of Charge Deliveries

## Purpose

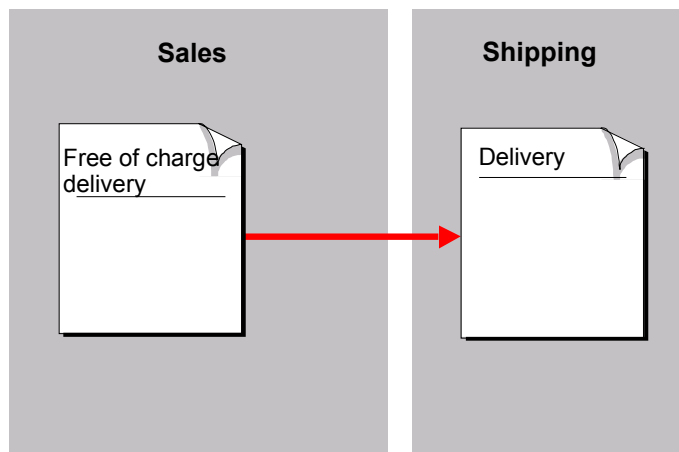
You can use a free of charge delivery to send materials free of charge to your customer.

## Process Flow

The system cannot create a delivery without a sales document, so you have to create a free of charge delivery as a type of sales document.

1. You create a sales document with the order type for free of charge deliveries.  
In Customizing you can block the free of charge delivery from being delivered. Go to *Sales* → *Sales Documents* → *Sales document header* → *Define sales document types*, and select the *Delivery block* field in the *Shipping* section.
2. For free of charge deliveries, you can do one of the following:
  - Approve it by deleting the delivery block.
  - reject it by entering a reason for rejection.

The following graphic displays the document flow for creating a free of charge delivery:



## Result

Once you have approved the free of charge delivery, you can create a delivery.

## Creating Free-of-Charge Deliveries

### Procedure

Use the same procedure that you use for [creating sales orders \[Page 111\]](#). Use order type FD in the standard system.



When you create a free-of-charge delivery, you must enter a value in the *Order reason* field or the system informs you that the document is incomplete.

### Result

After you have [released \[Page 201\]](#) the free-of-charge delivery, you can create the delivery.

---

**Free-of-Charge Subsequent Delivery**

## Free-of-Charge Subsequent Delivery

### Definition

A sales document used in complaints processing for making a subsequent delivery of goods to the customer, free of charge.

### Use

You can create a free-of-charge subsequent delivery if, for example, a customer receives too few goods, or if the goods have been damaged in the shipment. The system uses the free-of-charge subsequent delivery to create a delivery.

### Structure

A free-of-charge subsequent delivery is a sales document, like a standard order. For more information on sales documents, see [Working With Sales Documents \[Page 10\]](#)

### Integration

A free-of-charge subsequent delivery triggers the system to create a delivery.

## Creating Free of Charge Subsequent Deliveries

### Purpose

If a customer makes a complaint, you create free of charge subsequent deliveries to send products later to the customer free of charge.

### Prerequisites

The complaint must be based on an existing order.

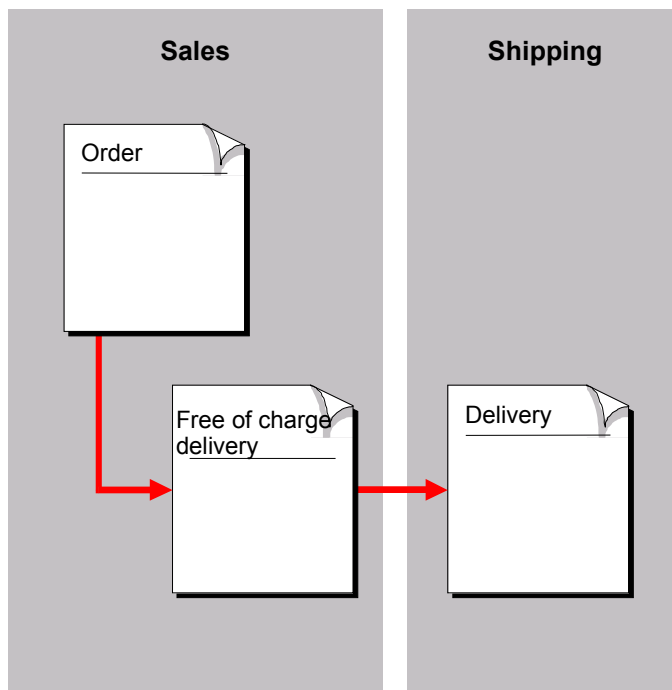
### Process Flow

1. You create a sales document with the document type for free of charge subsequent deliveries and refer it to an existing order. To do so, you have to enter which sales order the complaint is based on.

In Customizing, you can block the free of charge subsequent delivery from being delivered immediately. Go to *Sales* → *Sales Documents* → *Sales document header* → *Define sales document types*, and select the *Delivery block* field in the *Shipping* section.

2. After you have checked the goods, you can implement one of the following activities for the complaint:
  - Approve it by deleting the delivery block.
  - reject it by entering a reason for rejection.

The following graphic displays the document flow for creating a free of charge subsequent delivery:



## Creating Free of Charge Subsequent Deliveries

### Result

Once you have approved the complaint, you can create a delivery based on the free of charge subsequent delivery.

## Creating Free-of-Charge Subsequent Deliveries

### Prerequisites

To create a free-of-charge subsequent delivery, you have to refer to an existing sales document, such as the:

- Sales orders
- Contracts
- Contract release orders

### Procedure

Use the same procedure that you use for [creating sales orders \[Page 111\]](#). Use order type FD in the standard system



You do not have to use *Create with reference* for free-of-charge subsequent deliveries if you enter the order type and then choose *Enter*. A dialog box appears where you can enter the number of the order.

### Result

After you have [released \[Page 201\]](#) the free of charge subsequent delivery, you can create the delivery.

---

## Returns

# Returns

## Definition

A return is a sales document used in complaints processing for when a customer sends goods back.

## Use

You enter a return in the system if the customer returns damaged goods, or goods that had been delivered for sale on approval.

The return causes the system to:

- Register the receipt of goods using a returns delivery, and post the goods to stock (for example, blocked stock).
- Create a credit memo, once you have checked the goods and approved the complaint.

## Structure

A return is another type of sales document like a standard order. For more information on sales documents, see [Working With Sales Documents \[Page 10\]](#)

## Integration

The return triggers the following functions:

- Delivery (returns delivery)
- Billing (for creating a credit memo)

## Creating Returns

### Purpose

When you create a return based on a complaint, you:

- Post the goods to your warehouse for checking
- And then, implement one of the following activities:
  - Approve the complaint and create a credit memo
  - Approve the complaint, and implement a free of charge subsequent delivery based on the return
  - Reject the complaint

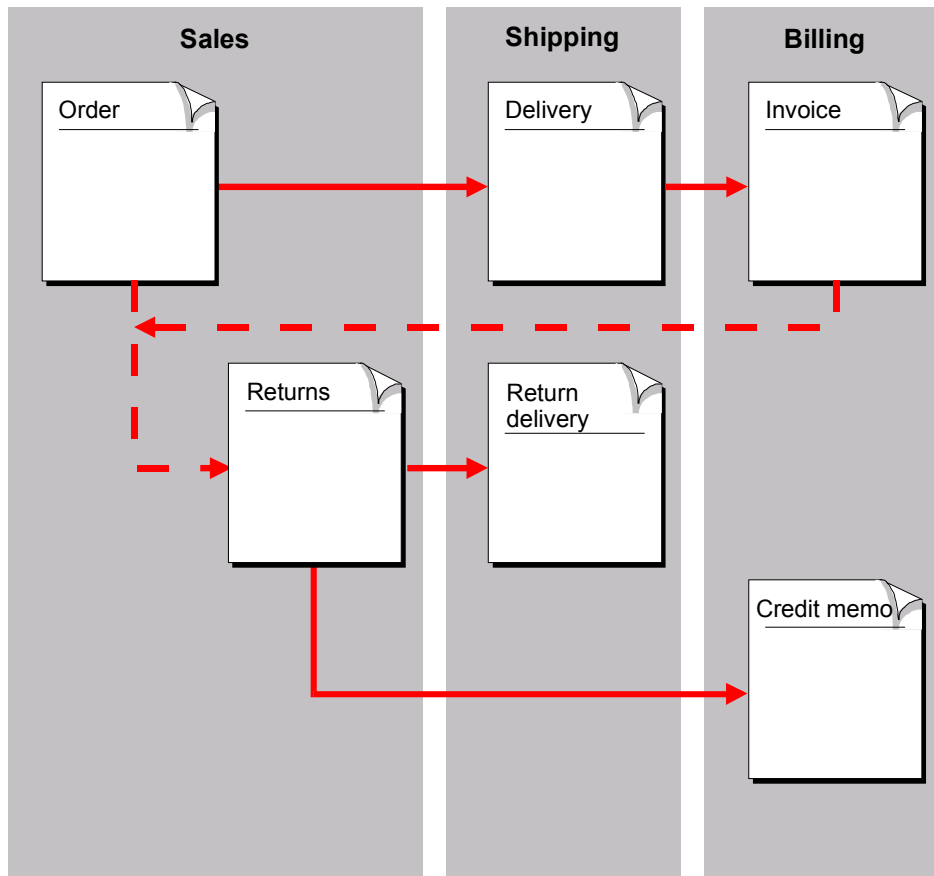
### Process Flow

1. You create a sales document with the order type for returns. You can create the return in one of the following ways:
  - Without reference to an order
  - With reference to an existing order  
Here you enter which order the complaint refers to.
  - With reference to an invoice  
Here you enter which invoice the complaint refers to.  
  
You can block the return in Customizing, so it is not invoiced. Go to *Sales* → *Sales Documents* → *Sales document header* → *Define sales document type* in the *billing block* field in the *billing* section.
2. If the returned goods are sent to your warehouse, create a delivery (returns delivery) with reference to the return. The goods issue posted for the returns delivery matches the goods receipt to your own stock.
3. After you have checked the goods, you can implement one of the following activities for the complaint:
  - Approve it by deleting the block
  - reject it by entering a reason for rejection.  
You should bear in mind the following:
    - The quantity for which the customer should receive credit.  
The order quantity rather than the delivered quantity is used as the basis for the credit memo. If the customer returns only some of the goods and disposes of the remaining goods himself, you can still create a credit memo for the full amount. On the other hand, you can create a partial credit memo for certain items even if the customer returns the entire quantity. To do this, the quantity to be ordered in the return has to be reduced to the quantity to be credited.
  - Whether the customer should receive a replacement.

## Creating Returns

If the customer is to receive replacement goods, do not create a credit memo. You can enter a reason for rejection for the appropriate items in the return. You then create a free of charge subsequent delivery with reference to the return in order to send the replacement goods to the customer. For more detailed information on the free of charge subsequent delivery, see [Free of Charge Subsequent Deliveries \[Page 178\]](#).

The following graphic displays the document flow for creating a return. The broken lines show that the return does not have to refer to a preceding document:



## Result

After you have approved the complaint, you can create a credit memo with reference to the return.

If the customer asks for replacement materials, you can create a free of charge subsequent delivery based on the return.



## Creating Returns

# Creating Returns

## Prerequisites

You can enter a return in the following ways:

- Without reference to a preceding document
- With reference to a preceding document, such as:
  - Sales orders
  - Contracts
  - Contract release orders
  - Billing documents

## Procedure

Use the same procedure that you use for [creating sales orders \[Page 111\]](#). Use order type RE in the standard system.

For more information on creating returns with reference to preceding documents, see [Creating a Sales Order With Reference \[Page 67\]](#).

When you create returns, the most important entries are:

- Customer number of the business partner who would like to return the goods to you
- Order reason (why the goods have been returned)
- Material and the quantity for the returns



If the return refers only to part of the billed or ordered quantity, you can adjust the target quantity in the return accordingly. If you enter a return with reference to the billing document or the underlying sales order, the system informs you of the quantity which has already been credited.

## Result

After you have [released \[Page 201\]](#) the returns, you can create the delivery.

## Credit Memo Request

### Definition

A credit memo request is a sales document used in complaints processing to request credit for a customer.

### Use

If the price calculated for the customer was too high (for example, with the wrong scaled prices or because a discount was forgotten), you can create a credit memo request. The credit memo request can be automatically blocked for checking. Once it has been approved, you can remove the block.

The system uses the credit memo request to create a credit memo.

### Structure

A credit memo request is another type of sales document like a standard order. For more information on sales documents, see *Working with Sales Documents*.

A credit memo request starts the billing process.

---

**Debit Memo Request**

## Debit Memo Request

### Definition

A debit memo request is a sales document used in complaints processing to request debit for a customer.

### Use

You can create a debit memo request if the prices calculated for the customer were too low (for example, if the wrong scale prices were calculated). The debit memo request can be automatically blocked for checking. Once it has been approved, you can remove the block.

The system uses the debit memo request to create a debit memo.

### Structure

A debit memo request is another type of sales document like a standard order. For more information on sales documents, see [Working With Documents](#).

### Integration

A debit memo request starts the billing process.

## Creating Credit or Debit Memo Requests

### Purpose

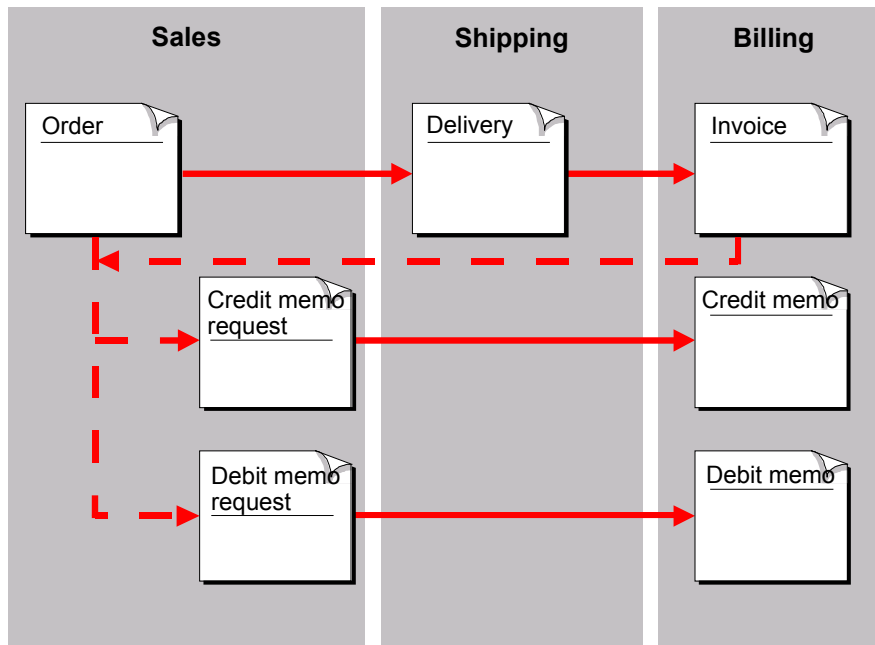
Creating a credit or debit memo request enables you to create credit or debit memos based on a complaint.

### Process Flow

1. Create a sales document with the order type for a credit or debit memo request. You can create the debit or credit memo requests in the following ways:
  - Without reference to an order
  - With reference to an existing order  
Here you enter which order the complaint refers to.
  - With reference to an invoice  
Here you enter which invoice the complaint refers to.  
In all cases, you specify the value or quantity that should be in the credit or debit memo.  
You can block the credit or debit memo request from being billed in Customizing. Go to *Sales* → *Sales Documents* → *Sales document header* → *Define sales document type* and select the *billing block* field in the *billing* section.
2. This request can later be reviewed along with similar ones, - if necessary, by another department. The request for a credit or debit memo can then be approved or rejected.

The following graphic shows the document flow for creating a credit memo or debit memo request. The broken line means that the request does not necessarily have to refer to a preceding document.

## Creating Credit or Debit Memo Requests

**Result**

Once the credit or debit memo request has been approved, you can create a credit or debit memo.

## Creating Credit and Debit Memo Requests

### Prerequisites

You can enter a credit or debit memo request in one of the following ways:

- Without reference to a preceding document
- With reference to a preceding document, such as:
  - Sales orders
  - Contracts
  - Contract release orders
  - Billing documents

### Procedure

Use the same procedure that you use for [creating sales orders \[Page 111\]](#). You can use the following order types in the standard system:

- CR for credit memo requests
- DR for debit memo request

For more information on creating credit or debit memo requests with reference to preceding documents, see [Creating a Sales Order With Reference \[Page 67\]](#).

The following entries are important for creating a request:

- Customer number of the business partner who requests a credit memo or to whom a debit memo is to be forwarded
- Order reason (why the request is necessary)
- Material and the quantity in the request



If the credit memo request refers only to part of the billed or ordered quantity, you can adjust the target quantity in the credit memo request accordingly. If you enter another credit memo request with reference to the billing document or the underlying sales order, the system informs you of the quantity which has already been credited.

### Result

After you have [released \[Page 201\]](#) a credit or memo debit request, you can create a credit or debit memo.

To create the credit memo with reference to a credit memo request, use the procedure for creating a credit memo. For more information on sales documents, see [Creating Credit or Debit Memos \[Ext.\]](#).

**Creating Credit and Debit Memo Requests**

## Invoice Correction Requests

### Definition

A sales document used in complaints processing to correct the quantity or price of one or more items in an invoice.



The invoice correction request is the same as the differential credit memo in the SAP R/2 System.

### Use

You can create an invoice correction request if the wrong prices have been calculated for the customer. The invoice correction request can be automatically blocked by the system until it has been checked.

The system calculates the difference between the amount that was originally calculated and the corrected amount for each item.

Once it has been approved, you can remove the block. The system creates a credit memo with reference to the invoice correction request. If the remaining amount is positive, the total value does not have a + sign, if the remaining amount is negative, the total value has a – sign.

### Structure

An invoice correction request is a type of sales order, like the standard order. For more information on sales documents, see *Working With Sales Documents*.

An invoice correction request has the following structure:

- Header

This contains the data that is relevant for the whole invoice correction request, such as sold-to party and payer, and the total value of the invoice correction request.

- Item pairs

Two items are automatically created for each item from the invoice, to be copied for the invoice correction request:

- First: Credit item
- Second: Debit item

These contain the same value and quantity.

In the credit item, the system credits the customer with the full value. If you change the debit item (for example, due to new pricing or a change in quantities), this results in a difference amount.



In most cases, an invoice correction request is created with the aim that a credit memo is generated. In the standard system, the invoice correction request is therefore characterized as a credit memo request, which means that the system creates a credit memo based on the invoice correction request.

## Invoice Correction Requests

In Customizing, you can change this, so that the invoice correction request is characterized as a debit memo request. In this case, the system creates a debit memo, based on the invoice correction request. You can change these settings in Customizing under *Sales → Sales Documents → Sales document header → Define sales document types* in the *Sales document categ.* field.

Regardless of whether the invoice correction request is a credit or debit memo, the first item is always a credit item and the second is a debit item.

If you want the system to generate a credit memo for a positive remaining amount, and a debit memo for a negative remaining amount, you need to set an additional sales document type in Customizing, for example, **ZRK1** (invoice correction request for debit memos). This sales document should be characterized as a "debit memo request". In addition, you make the setting that this sales document type should be billed with a debit memo (for example, with the billing type **L2**).

Before you create an invoice correction request, you need to consider from the very start what it should be generated for. If the aim is a credit memo, you use the sales document type **RK** for the invoice correction request, if the aim is a debit memo, you use the sales document type **ZRK1**.

You can find further information about setting up a new sales document type in the implementation guide (IMG) under *Sales and Distribution → Sales → Sales Documents*.

You can find further information about setting up a billing type with which this sales document type should be billed in the IMG under *Sales and Distribution → Billing → Billing Documents → Maintain Copying Control for Billing Documents, Activity: Copying Control: Sales document to billing document*.

## Integration

You create invoice correction requests with reference to an invoice.

## Creating Invoice Correction Requests

### Purpose

An invoice correction request is used for correcting the quantity or price of one or several items in the invoice.

### Prerequisites

You create invoice correction requests with reference to an invoice.



In Customizing, the billing type for the invoice to be copied must contain value M. You can set this in Customizing for Sales and Distribution under *Billing* → *Billing documents* → *Define billing types* in the *SD document categ.* field.

### Process Flow

1. Create an invoice correction request with reference to a billing document.



You can refer to the same invoice correction request more than once.

In contrast to credit and debit memo requests, you cannot create an invoice correction request with reference to a quotation or a sales order.

The permitted billing types for the invoices are determined in Customizing under *Sales and Distribution* → *Sales* → *Maintain copy control for sales documents*.

You can block the invoice correction request from being billed in Customizing. Go to *Sales* → *Sales Documents* → *Sales document header* → *Define sales document type* in the *Billing block* field in the *Billing* section.

2. The system creates two items in the invoice correction request for each item in the invoice:

	Item	Indicator
First item	Credit item	Credits
Second item	Debit item	Debits



You can maintain the credit and debit indicators in Customizing for items under *Sales* → *Sales Documents* → *Sales Document Items* → *Define item categories*. The *Returns* field in *Business data* should be selected for credit items but not for debit items.

While working with the invoice correction request, you should regard the two items as belonging together.

You can also set the system so that it doesn't repeat pricing.

## Creating Invoice Correction Requests



You can control this in Customizing under *Sales and Distribution* → *Billing* → *Billing documents* → *Maintain copying control for billing documents* in the *Pricing type* field. The contents of the field depend on the category of the invoice correction request.

Sales document category	Field contents
CR (credit memo request)	E
DR (debit memo request)	F

You can run new pricing for the debit memo request by defining another pricing category in the *pricing category* field 2.

3. In the credit item, the system completely credits the incorrect invoice item. You cannot change the credit item (apart from the *Deletion*, *Reason for rejection*, *Billing block* and *Account assignment* fields).
  - Enter the correct price or quantity in the debit memo item. You can let a new pricing run for the item. The correct amount is finally posted.
4. The system calculates the difference between the credit and debit memo item. If there are several corrected items, the system cumulates the values of all the items and calculates a total value.
5. As in credit and debit memo requests, you can:
  - Set a billing block for the invoice correction request (or change the settings in the billing type in Customizing so that the system does it automatically).
  - Enter a reason for rejection for one or several items.
6. You can only delete credit items together with their corresponding debit items.
  - You delete items that you haven't changed with a function.
7. The system generates a credit memo. If the total value is positive, the credit memo item does not have a + sign, if the total value is negative, it has a – sign.
  - If the invoice correction request is characterized as a debit memo request, the opposite occurs.
- 8.



The title of the printout for the credit or debit memo depends on the characteristic that has been assigned to it (sales document category) and not the total value:

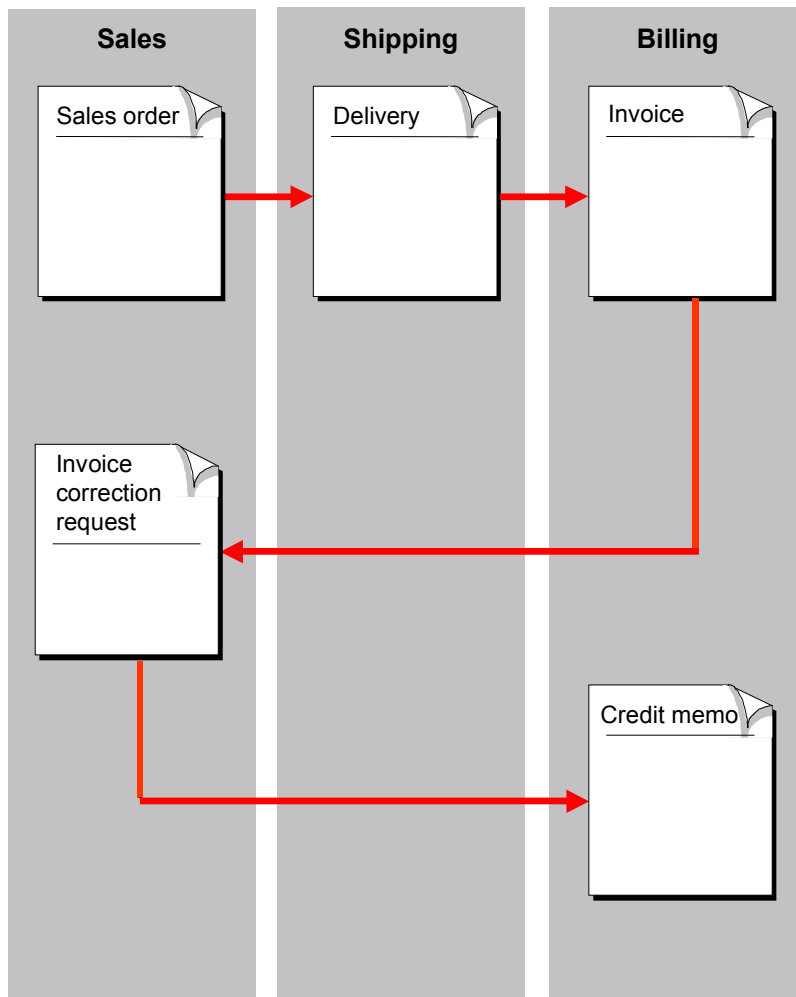
Sales document category	Title
CR (credit memo request)	Credit memo
DR (debit memo request)	Debit memo

**Creating Invoice Correction Requests**

The graphic below shows the document flow for creating an invoice correction request.

**Result**

You generate a credit memo with a positive or negative value with reference to an invoice correction request.



## Creating Invoice Correction Requests

# Creating Invoice Correction Requests

## Prerequisites

When you create an invoice correction request, you must refer it to an available billing document (invoice).

## Procedure

1. In the initial screen, choose *Logistics* → *Sales and Distribution* → *Sales*.
2. Choose *Order* → *Create*.
3. In the *Order type* field, enter the correct order type for an invoice correction request. This is **KK** in the standard system. If necessary, enter the organizational data.


Normally the system proposes the values for the sales organization, distribution channel and division from the user-specific parameters. Entries for the sales office and the sales group are optional.
4. Choose *Enter*.

A dialog box will appear, where you can enter the billing document number.
5. In the *Billing document* field in the dialog box, enter the billing document number that belongs to the invoice you want to refer to and choose *Copy*.

The system copies the relevant header and item data from the invoice into the invoice correction request. It then lists all the credit items, followed by the relevant debit items.

The *RefDoc* (reference document) and *RefIt* (reference item) fields in the overview screen show how the items relate to each other.
6. Change the necessary debit items.

The *Net value* field then displays the difference between the credit and debit items as a total value.



In credit items, you can only change the following data:

  - *Deletion*
  - *Reason for rejection*
  - *Billing block*
  - *Account assignment*
7. If necessary, delete unchanged items with the *Delete item* function.
8. Save the invoice correction request.

## Result

After you have [released \[Page 201\]](#) an invoice correction request, you can create a credit memo.



## Examples of Invoice Correction Requests

# Examples of Invoice Correction Requests

### Example 1: Invoice correction request vs. credit memo request

The quantity in the invoice is for 10 pieces. However, 8 were required so the customer expects a credit memo for 2 pieces.

You have to enter the following quantities in the relevant documents:

Sales document type	Quantity
Credit memo request	2 pieces (quantity to be credited)
Invoice correction requests	8 pieces (correct invoice quantity)

The invoice correction request then looks like this:

- Credit item: 10 pieces (copied from the invoice)
- Debit item: 8 pieces (correct invoice quantity)

### Example 2: Quantity difference

10 pieces are delivered and invoiced but 2 of them were damaged. The customer would like a credit memo.

Item	Contents	Total
Credit item	10 pieces at 100 USD	1000 USD
Debit item	8 pieces at 100 USD	-800 USD
Difference (credit memo)		200 USD

### Example 3: Price difference

10 pieces are delivered but their price in the invoice is too high. The customer would like a credit memo.

Item	Contents	Total
Credit item	10 pieces at 100 USD	1000 USD
Debit item	10 pieces at 80 USD	-800 USD
Difference (credit memo)		200 USD

## Blocking and Releasing Complaints

### Use

The system can automatically propose a delivery or billing block when you enter a complaint. This may be necessary if one department enters complaints and another department reviews them.

### Prerequisites

If you want the system to propose a delivery block automatically, you have to set a delivery block in Customizing. Go to *Sales* → *Sales documents* → *Sales document header* → *Define sales document type* in the *delivery block* field. The following delivery blocks are set in the standard system:

#### Delivery blocks in Customizing

Sales order type	Delivery block
FD (free of charge delivery)	none
SD (free of charge subsequent delivery)	none

If you want the system to propose a billing block automatically, you have to set a billing block for the sales document types. Go to *Sales* → *Sales documents* → *Sales document header* → *Define sales document types* in the *billing block* field in the *billing* section. The following billing blocks are set in the standard system:

#### Billing blocks in Customizing

Sales order type	Billing block
RE (returns)	08 (check credit memo)
CR (credit memo request)	08 (check credit memo)
CR (debit memo request)	09 (check debit memo)
RK (invoice correction request)	08 (check credit memo)

If you have not set any billing or delivery blocks in Customizing but you want to block a complaint, you can enter the delivery or billing block manually in the relevant sales document.

### Activities

If you set a delivery block, for example, you have to release the sales document by removing the block before you can create a delivery.

Once the complaint has been reviewed, either you need to remove the delivery or billing block so that it can be processed, or you enter a [reason for rejection \[Page 51\]](#). You can specify reasons for rejection for a whole sales document or for an individual item.

**Blocking and Releasing Complaints**

## Blocking or Releasing Complaints

### Prerequisites

If the complaint is not automatically blocked by the settings in Customizing, you can set a delivery or billing block manually.

### Procedure

1. In the initial screen, choose *Logistics* → *Sales and distribution* → *Sales*.
2. Choose *Order* → *Change*.
3. Enter the number of the sales document, or use a matchcode to search for it.
4. Choose *Enter*.
5. If all the items have been blocked, choose *Select all*.  
If only some items should be blocked, select the corresponding items.
6. Choose *Edit* → *Fast change of...* → *Delivery block or Billing block*.
7. Enter the delivery or billing block for the header or individual items.
8. Choose *Copy*.  
The system copies (or deletes) the delivery or billing block in all the selected items.
9. Save your document.

## Rejecting Complaints

## Rejecting Complaints

### Use

If you want to reject a complaint, you can:

- Enter a reason for rejection for the whole sales document (i.e. the whole complaint)
- Enter a reason for rejection for one or more items

### Features

The reason for rejection has the following effects on a complaint:

Sales document	Effect
Free of charge deliveries Free of charge subsequent deliveries	A delivery cannot be created.
Returns Credit or memo request Invoice correction request	A credit or debit memo can be created. The items that were rejected are not taken into account when you calculate a credit memo value in the billing document. However, they are copied into the billing document as statistical items. This means that you can see immediately in the invoice which items you have to pay for and which have been rejected.

### Activities

If you want to reject the whole complaint, you have to enter a reason for rejection in the sales document header.

If you only want to reject some items, you have to enter a reason for rejection for each individual item.

## Rejecting Complaints

### Prerequisites

You can enter a reason for rejection for one or more items.

### Procedure

The procedure is identical to the procedure for [Rejecting Items in a Sales Order \[Page 51\]](#).

### Result

If you reject a complaint, you cannot create a delivery or a credit or debit memo for it.

If you reject a return, you can create a free of charge subsequent delivery.

---

**Backorder Processing**

## Backorder Processing

Using backorder processing, you can list sales documents relevant for requirements for particular materials and confirm them manually. You can assign available-to-promise (ATP) stock to outstanding order quantities. In addition, you can withdraw already confirmed quantities and reassign them to different items.



Backorder processing is only available for materials with individual requirements. Summarized requirements are usually used for materials sold in bulk quantities. Backorders for bulk products are not, as a rule, processed manually.

The following display and processing functions are available for backorder processing:

- [Selecting Backordered Materials From a List \[Page 207\]](#)
- [Selecting Single Materials for Backorder Processing \[Page 215\]](#)

**See also:**

[Availability Check in Sales and Distribution Processing \[Ext.\]](#)

## Selecting Backordered Materials From a List

## Selecting Backordered Materials From a List

The selection list enables you to display information about the requirements for the selected materials. You can then select and process individual sales documents directly from the list.

### Creating a List of Sales Documents for Backorder Processing

To process backorders with a selection list, proceed as follows:

1. In the initial screen, choose *Logistics → Sales and distribution → Sales*.
2. Choose *Environment → Backorders → Backorder processing → SD documents*.
3. Enter your selection criteria (for example, the plant, sold-to party, purchase order number) and choose *Program → Execute*.

The system displays a list of the materials that meet your selection criteria. For each material, the list provides the relevant information for each corresponding sales document (for example, the first delivery date, order quantity, confirmed quantity, and open quantity).

You can branch directly from the selection list into the individual sales documents. In addition, you can display the status, the document flow, and any changes made to the document.

Select the documents that you want to process and select from the following options:

- *Environment → Document* to branch to an individual sales document
- *Environment → Document status* to display the document status
- *Environment → Document flow* to display the document flow
- *Environment → Document changes* to see the changes

### Processing Backorders for Sales Documents

Backorder processing from the selection list always takes place by material. This means that if you select several materials in the list, the system processes each one in turn.



If you want to reschedule in order to update the sales documents before you process the backorders, note that this may adversely affect system performance. Whenever possible, carry out rescheduling in the background.

To process backorders with a selection list, proceed as follows:

1. Select the materials and sales documents in the selection list that you want to process and choose *Edit → Backorders*.

This overview displays the requirements and received quantities, the quantity confirmed until now and the cumulated ATP (available-to-promise) quantity (the required and received quantities in stock still available for use) for each selected material, requirements/received date and MRP (materials requirements planning) element (such as the sales order). The requirements date generated by the sales document matches the material availability date.

2. Place your cursor on the MRP element that you wish to process and choose *Edit → Change confirmation*.

## Selecting Backordered Materials From a List



Note that you can only process the MRP elements for the lines that you selected in the list for which confirmed quantities exist. The MRP elements that you can process are highlighted. Deliveries cannot be processed as backorders so the overview does not contain any confirmed quantities for them. However, the system does take the size of the delivery quantities into account when calculating the ATP quantity.

You reach the *Backorder Processing: Change Confirmation* screen where you can see the details of the MRP element you selected (in the *Sales requirements* section for sales documents). In addition to the order and item numbers and the material availability date, the following data is displayed for a sales order item:

Field	Description
Open quantity	Quantity not yet delivered
Confirmed quantity	Quantity that has been confirmed in backorder processing
Total confirmed quantity	Total quantity confirmed for the sales order items (if there is more than one schedule line for the item, this is the total of all confirmed schedule lines)
ATP quantity	Quantity available for outwards goods movements

In the *Sales requirements* section, you can process the backorders in one of the following ways:

- [Distributing ATP Quantities \[Page 209\]](#)
- [Redistributing Confirmed Order Quantities \[Page 210\]](#)

Choose *Display* to branch directly to the sales document.

## Additional Functions

The overview screen for requirements processing contains the following additional functions:

[Variable Views \[Page 211\]](#)

[Scope of Check \[Page 212\]](#)

[Exception Messages \[Page 213\]](#)

[MRP Elements \[Page 214\]](#)

## Distributing ATP Quantities

To distribute ATP quantities, proceed as follows:

1. In the *Backorder Processing: Change Committed Quantity* screen, you can distribute some or all of the ATP quantity by entering a quantity in the *Committed* field in the *Sales requirements* section of the screen. This quantity fulfills some or all of the requirements for the backordered item.
2. Choose *Enter* to display the updated requirements situation.
3. Choose *Copy* to confirm the data.
4. Choosing *Backorder processing* → *Save*.

If you selected more than one material in the selection list, the system automatically displays the next material you selected.

### Example of Distributing ATP Quantities

140 pieces have been confirmed already for sales orders 14940, 14942 and 14981 in the unrestricted use stock. A backorder of 5 pieces exists for sales order 14943. Only 15 of the original order quantity of 20 pieces could be confirmed so the cumulative ATP quantity stands at 5.

The backordered quantity of 5 pieces can be fulfilled from the (in this case identical) ATP quantity. You do this by entering 20 pieces to replace the original 15 in the *Committed* field and choosing *Copy*. The cumulative ATP quantity is now used up and stands at zero. Sales order 14943 is fully confirmed.

---

**Redistributing Already Confirmed Order Quantities**

## Redistributing Already Confirmed Order Quantities

You can take back some or all of an already confirmed order quantity and reassign the quantity to a backordered item that has higher priority. To redistribute an already confirmed quantity in this way, proceed as follows:

1. In the *Backorder Processing: Change Committed Quantity* screen, reduce the quantity in the *Committed* field (in the *Sales requirements* section of the screen) by the amount that you want to assign to other backordered items.
2. Choose *Enter* to display the updated requirements situation.
3. Choose *Copy* to confirm the data.
4. Assign the freed up quantity to the appropriate backordered items using the procedure described above for distributing ATP quantities.

## Variable Views for Backorder Processing

You can select different views of backorder data. In addition to displaying a view of all data, you can also select a view of just the SD requirements, or just the reservations for production orders. The sales view shows you all the requirements that have resulted from sales orders. The production view shows you the requirements that have resulted from production orders.

To change the view, select from the following alternatives:

- *Settings* → *Total display* to display all requirements
- *Settings* → *Only SD requirements* to display only sales requirements
- *Settings* → *Reserv. for prod.ords* to display only requirements for production orders

---

**Displaying Scope of Check for Backorder Processing**

## Displaying Scope of Check for Backorder Processing

To display the scope of the check which the system carries out for backorder processing for a selected material, position the cursor on a line in the overview and choose *Goto* → *Displ. scope of check*.

## Displaying Exception Messages

If an exception message exists in the backorder processing overview for a particular MRP element, you can display the message by positioning the cursor on the relevant material and choosing *Edit* → *Disp. except. message*.

---

**Displaying MRP Elements for Backorder Processing****Displaying MRP Elements for Backorder Processing**

To display one of the MRP elements in the backorder handling overview, position the cursor on the relevant material and choose *Environment* → *Display element*.

## Selecting Single Materials for Backorders

As an alternative to processing backorders using a selection list, you can select the backorders for a single material.

To process backorders for a single material, proceed as follows:

1. In the initial screen, choose *Logistics* → *Sales and distribution* → *Sales*.
2. Choose *Environment* → *Backorders* → *Backorder processing* → *Material*.
3. Enter a material number, a plant, and choose *Enter*.

You reach the *Backorder Processing: Overview* screen. You can process the backorders from this screen in the same way as if you were using the selection list.

---

**Special Business Processes in Sales****Special Business Processes in Sales**

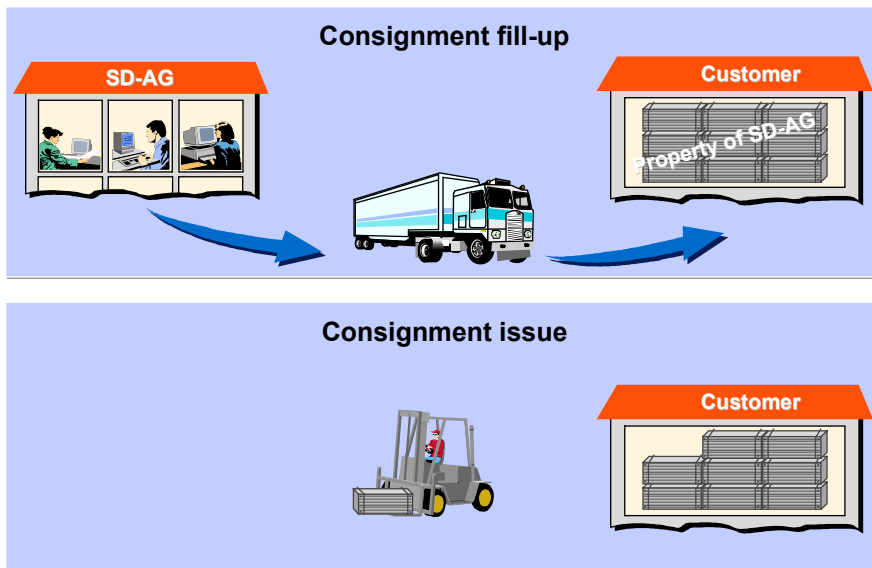
In addition to carrying out routine sales order processing in the SAP Sales & Distribution module, you can also implement more specialized business processes, such as the processing of make-to-order items, third-party business transactions, and configurable products.

## Consignment Stock Processing

### Purpose

Consignment goods are goods which are stored at the customer location but which are owned by your company. The customer is not obliged to pay for these goods until they remove them from consignment stock. Otherwise, the customer can usually return consignment goods which are not required.

Consignment processing offers the participating partners several advantages. Customers store the consignment goods at their own warehouses. The customer can access the goods in the consignment warehouse at any time. They are only billed for the goods when they are removed from the warehouse and only for the actual quantity taken.



Since consignment stocks still form part of your valuated stock, you must manage this stock in your system.

However, consignment stock must be

- Managed separately from the rest of your stock so that you know exactly what stock is stored at the customer location
- Managed separately for each customer

In inventory management, the consignment stock is managed as **special stock** in your inventory and is assigned to specific customers. This enables you to keep track of returnable packaging stock by customer.

If the consignment stocks are not managed by the sold-to party but by a central office, you can use the partner function for special stock partner.

## Consignment Stock Processing

### Prerequisites

#### Special Stock Partner

The special stock partner has been defined for carrying out consignment stock processing by means of a third party rather than the customer. This means you can manage all special stock under one partner. It makes sense to use the special stock partner if your customer is using decentralized order processing but manages consignment stock centrally.

#### Inventory Management Using the Special Stock Partner

If you want to process your consignment goods using a special stock partner, proceed as follows:

1. Create a customer master record for the special stock partner (account groups **0001** and **DEBI** are defined for this purpose in the standard system).
2. Enter the special stock partner in the relevant customer master record on the partner screen using the partner function **SB**.

When you create an order for this customer, the system automatically proposes the partner function **SB** in the document header and the document items. Consignment goods which have been entered in a consignment fill-up are always posted to the stock of the special stock partner when goods issue is carried out. You can also enter the partner function **SB** manually in the document header or in the relevant items if a special stock partner is required and is not proposed from the customer master record. If a special stock partner does not exist in the document header, inventory management is carried out using the sold-to party.

### Process Flow

There are four main transactions for processing consignment stock in the R/3 System, all of which support separate management of stock:

- [Creating a Consignment Fill-Up \[Page 222\]](#)
- [Creating Consignment Issue \[Page 223\]](#)
- [Creating a Consignment Pick-Up \[Page 224\]](#)
- [Displaying Consignment Returns \[Page 225\]](#)

#### Consignment fill-up

Consignment fill up is used to supplement the customer's consignment stock.

Goods issue of the appropriate stock is posted from the unrestricted-use stock to consignment stock (special stock). The goods remain in the possession of the vendor.

When you ship consignment stock to the customer, you record the transaction by creating a consignment fill-up order (order type KB). As a result, the system carries out the following actions:

- If special stock does not yet exist in your inventory for the customer (or special stock partner), the system creates it when goods issue is posted
- The relevant quantity is removed from regular inventory in your plant and is added to the special stock for the customer. The total valuated stock for the plant remains the same.

## Consignment Stock Processing

- The transaction is not relevant for pricing since the consignment stock remains the property of your company.

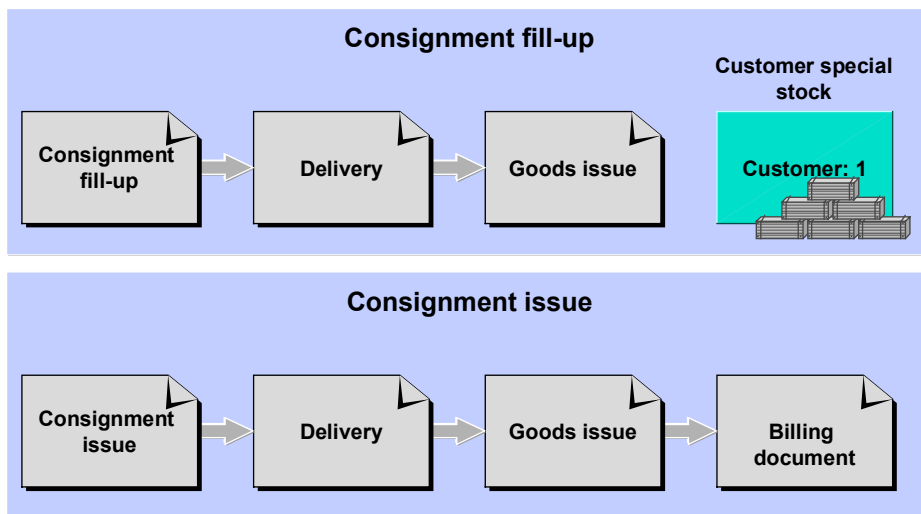
### Consignment pick-up

Consignment issue enables the customer to take consignment goods from the special stock for their use or to sell.

Consignment issue involves removing the goods from the special stock and making it the property of the customer.

When the customer removes consignment stock to use or sell, you record the transaction in the system by creating a consignment issue order (order type KE). As a result, the system carries out the following actions:

- When goods issue is posted, the relevant quantity is deducted from both the customer's special stock and your own total valuated stock.
- The transaction is relevant for pricing since the goods now become the property of the customer.



### Consignment issue

Any consignment goods stored at the customer's warehouse that haven't been used can be reposted to your company's warehouse with a consignment pick-up.

If the customer returns consignment stock to you, you record the transaction in the system by creating a consignment pick-up order (order type KA). As a result, the system carries out the following actions:

- When goods issue is posted, the relevant quantity is deducted from the customer's special stock and is added back into your regular stock at the plant where the goods are returned.

### Consignment Stock Processing

Your total valuated stock remains the same since the returned stock was regarded as part of your own inventory even while it was at the customer's premises.

- This transaction is not relevant for billing.

### Consignment return

Consignment returns are used for when your customer wants to return goods to the consignment stock.

If the customer wishes to claim on consignment goods which have already been issued, you can record this transaction by creating a consignment return order (order type KR). As a result, the system carries out the following actions:

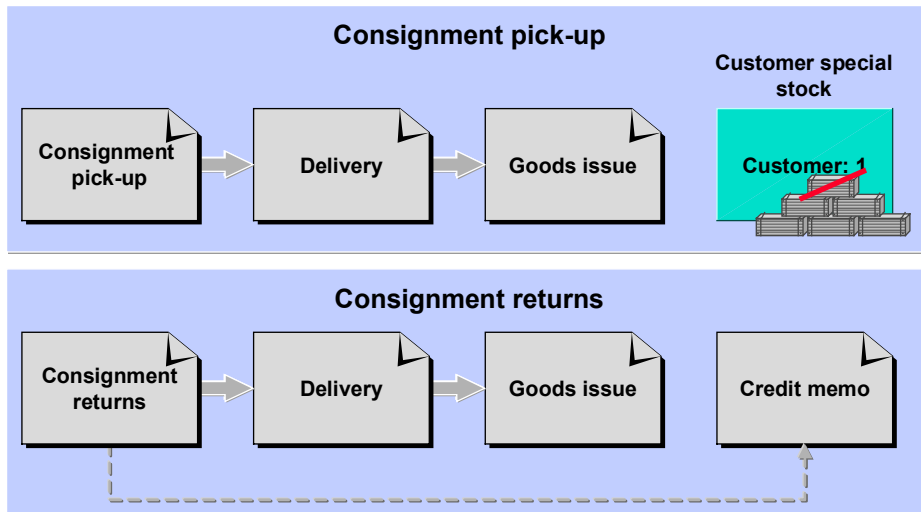
- When goods issue is posted, the relevant quantity is added to the customer's special stock at the plant where the goods are returned
- Since the ownership of the goods is passed from the customer back to your company, the transaction is relevant for billing. In this case, the customer receives a credit memo for the returned goods.

Depending on the settings in Customizing for Sales, you can create consignment returns with direct reference to a consignment issue. The consignment issue appears in the document flow for the consignment return. This function is not supported in the standard version of the SAP R/3 System.



When you create consignment returns in the standard version of the SAP R/3 System, the system automatically sets a billing block. To credit a return, you must first approve the request for a credit memo by removing the billing block in the return header. You can control the automatic setting of a billing block in Customizing for Sales.

Consignment Stock Processing



The following table provides an overview of the order types used in the standard system for processing consignments:

Transaction	Sales order type
Consignment fill-up	KB
Consignment issue	KE
Consignment pick-up	KA
Consignment return	KR

**Pricing and Availability Check**

Whether pricing is carried out for the individual transactions depends on the item category. The schedule line category controls the availability check and the transfer of requirements in each of the transactions. The schedule line category itself is determined by the item category and the MRP type of the material. The order types **KE** and **KA** check against the consignment stock for the customer involved and order type **KB** checks against your own plant stock. Requirement records for consignment stock are stored as individual requirements, independently of the setting in the material master record.

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**Creating a Consignment Fill-Up**

## Creating a Consignment Fill-Up

1. Create a sales order using order type **KB**.
2. Enter the required data on the customer, the consignment goods and the delivering plant.
3. Enter all other relevant data and save the order.
4. Create a delivery as the subsequent document for this sales order and, after picking has been completed successfully, post goods issue.
5. The underlying goods movement type is a stock transfer. This ensures that when goods issue is posted, consignment special stock is created for the customer concerned. If special stock of this kind already exists in the delivering plant for this customer, the goods are posted to this special stock.

## Creating a Consignment Issue

1. Create a sales order using order type **KE**.
2. Enter the required data for the customer, the consignment goods and the plant to which the goods are to be returned.
3. Enter all other relevant data and save the order.
4. Create a delivery as the subsequent document for this sales order and, after picking has been completed successfully, post goods issue.
5. The goods are then reduced by the relevant quantity in the special stock assigned to the customer. This goods issue also reduces your total stock.
6. Invoice the delivery which issues the consignment goods.

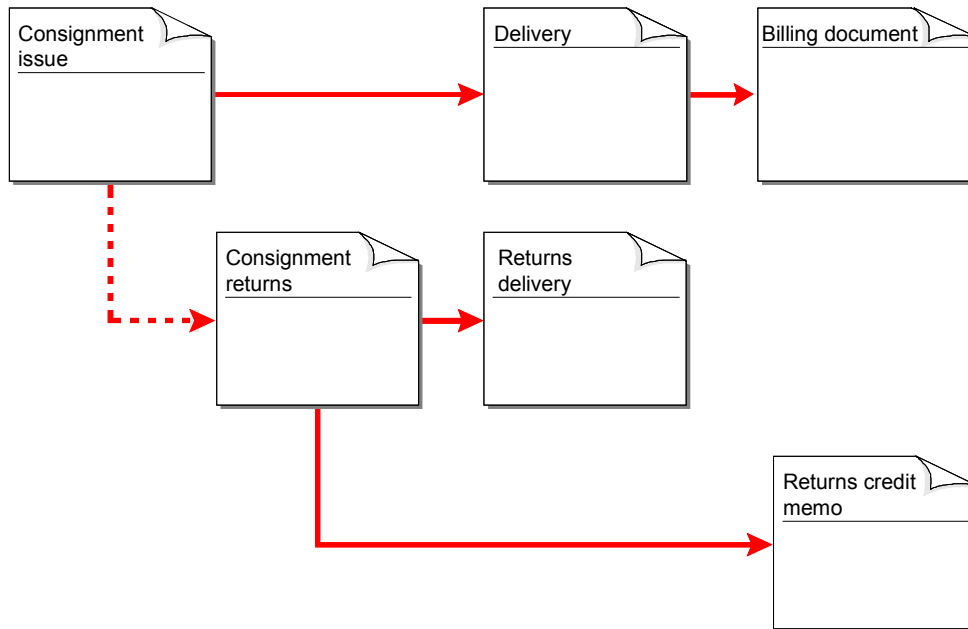
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**Creating a Consignment Pick-Up****Creating a Consignment Pick-Up**

1. Create a sales order using order type KA.
2. Enter the required data for the customer, the consignment goods and the plant to which the goods are to be returned.
3. Enter all other relevant data and save the order.
4. Create a returns delivery for the sales order (the system automatically chooses delivery type **LR**). The transaction is completed by the goods issue posting which initiates a transfer posting from the customer's special stock to your plant stock.

## Creating a Consignment Return

The following graphic shows the document flow for consignment returns.



To process consignment returns, proceed as follows:

1. Create a sales order using sales order type **CR**.
2. Enter the required data on the customer and the consignment goods.
3. Enter all other relevant data and save the order.
4. Create a returns delivery for the sales order (the system automatically chooses delivery type **LR**). The goods issue posting cancels the goods issue posting which was carried out when the consignment goods were issued. This posting records the return of the goods to the plant where goods receipt was carried out.
5. Create a credit memo for the consignment return you created in Step 1.

---

**Displaying Consignment Stock**

## Displaying Consignment Stock

If you want to display the consignment stock for one or more customers in a specific plant, proceed as follows:

1. Choose *Logistics* → *Materials management* → *Inventory management* on the main menu screen.
2. Choose *Environment* → *Stock* → *Stock overview*.
3. Enter your selection criteria and enter the special stock indicator **W**. Then select all fields in the *Select display levels* section.
4. Choose *Program* → *Execute*.
5. Position the cursor on the *Consignment stock at customer* line and choose *Edit* → *Choose*.

The system displays the current consignment stock with the customer for the material selected.

## Returnable Packaging

### Implementation Considerations

Returnable packaging consists of materials that are stored at the customer location but which remain the property of your company. The customer is only required to pay you for the returnable packaging if he does not return it to you by a specified time. Using this function you can, for example, process euro-pallets. You can also use it to resell returnable packaging to a third party. Since stocks of returnable packaging form part of your valuated stock even when they are at the customer site, you must manage them in your system.

However, stocks of returnable packaging must be

- Managed separately from the rest of your stock so that you know exactly what stock is stored at the customer location
- Managed separately for each customer

Inventory management treats returnable packaging as **special stock** in your inventory and is assigned to specific customers. This enables you to keep track of returnable packaging stock by customer.

### Prerequisites

#### Settings in the Material Master Record

A prerequisite for returnable packaging processing is that the value **LEIH** (returnable packaging) is entered in the material master record on the second sales screen in the *Item category group* field. This entry in combination with the document type automatically determines the appropriate item category for each transaction involving the material.

#### Settings for the Special Stock Partner

You must define a special stock partner for processing returnable packaging when a third party is involved. This means you can manage all special stock under one partner. You might use this partner function if your customer, for example, uses a decentralized order processing system but manages returnable packaging centrally. You can also use this partner function to process returnable packaging when a carrier is involved (for example, for euro-pallets). If you want to process returnable packaging using the special stock partner, first make the settings which are described for [Consignment Stock Processing \[Page 217\]](#).



If you want to manage returnable packaging for a carrier, for whom a vendor record already exists, you must also create a customer master record for the carrier. You are then able to assign returnable packaging stock to the carrier.

### Process Flow

There are three main transactions for processing returnable packaging, all of which support separate inventory management:

- [Creating Returnable Packaging Shipments \[Page 230\]](#)
- [Creating Returnable Packaging Pick-Up \[Page 231\]](#)

## Returnable Packaging

- [Creating Returnable Packaging Issue \[Page 232\]](#)

## Returnable Packaging Shipments

When you sell goods to a customer, you may send the goods in returnable packaging. During sales order processing, you simply enter the returnable packaging as an item in your order. You can process returnable packaging either as main items or as sub-items. For example, if you sell drinks in bottles and want the empty bottles to be returned, you can enter the bottles as sub-items for the drinks in the sales order. The item category group **LEIH** must be assigned to the bottles in the material master record so that they are processed as returnable packaging. During processing, the system recognizes that it is dealing with returnable packaging because the item category group **LEIH** is assigned to the material. The system then determines another item category in the sales order to allow the material to be processed as returnable packaging. As a result of entering returnable packaging in a sales order, the system carries out the following actions:

- If special stock does not yet exist in your inventory for the customer (or special stock partner), the system creates it when goods issue is posted
- The relevant quantity is removed from regular inventory in your plant and is added to the special stock for the customer. The total valuated stock for the plant remains the same.
- The transaction is not relevant for pricing since the consignment stock remains the property of your company.

## Returnable Packaging Pick-Up

If the customer returns the returnable packaging to you, you record the transaction in the system by creating a returnable packaging pick-up order (order type LA). As a result, the system carries out the following actions:

- When goods issue is posted, the relevant quantity is deducted from the customer's special stock and is added back into your regular stock at the plant where the goods are returned. Your total valuated stock remains the same since the returned stock was regarded as part of your own inventory even while it was at the customer's premises.
- This transaction is not relevant for billing.

## Returnable Packaging Issue

In the following situations, you can create a returnable packaging issue order (order type LN):

- The customer decides to keep the returnable packaging
- The customer damages the returnable packaging and you decide to charge the customer
- The customer sells the returnable packaging to a third party

As a result of processing a returnable packaging issue, the system carries out the following actions:

- When goods issue is posted, the relevant quantity is deducted from both the customer's special stock and your own total valuated stock.
- The transaction is relevant for billing since the goods have become the property of the customer.

## Sales Order Types

The following table provides an overview of the order types used in the standard system for processing returnable packaging:

Transaction	Sales order type
Returnable packaging pick-up	LA
Returnable packaging issue	LN

When you ship returnable packaging to the customer, you do not need to use a special order type. The transaction is a normal business transaction and you can use either a standard sales order or, if appropriate, a free of charge delivery.

## Pricing and Availability Check

Whether pricing is carried out for the individual transactions depends on the item category. The schedule line category controls the availability check and the transfer of requirements in each of the transactions. The schedule line category itself is determined by the item category and the MRP type of the material. The order types **LN** and **LA** check against returnable packaging for the relevant customer. Requirement records for returnable packaging stock are stored as individual requirements, independently of the setting in the material master record.

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**Creating a Returnable Packaging Shipment**

## Creating a Returnable Packaging Shipment

To ship returnable packaging using a standard sales order, for example, proceed as follows:

1. Create a sales order using the order type **OR**.
2. Enter the required data on the customer, the materials , and the delivering plant.
3. Enter the returnable packaging as a main item or sub-item as required.
4. Enter all other relevant data and save the order.
5. Create a delivery as the subsequent document for this sales order and, after picking has been completed successfully, post goods issue.

## Creating a Returnable Packaging Pick-Up

1. Create a sales order using order type **LA**.
2. Enter the required data on the customer, the returnable packaging, and the plant to which the materials are to be returned.
3. Enter all other relevant data and save the order.
4. Create a returns delivery for the sales order when the materials reach your company. The system proposes delivery type **LR** automatically. The transaction is completed by the goods issue posting which initiates a transfer posting from the customer's special stock to your plant stock.

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**Creating a Returnable Packaging Issue**

## Creating a Returnable Packaging Issue

1. Create a sales order using order type **LN**.
2. Enter the required data on the customer, the returnable packaging, and the plant from which the materials are to be taken.
3. Enter all other relevant data and save the order.
4. Enter a delivery for the sales order and post goods issue.
5. Invoice the delivery.

## Displaying Returnable Packaging Stock

To display the returnable packaging stock situation for several or one particular customer, proceed as follows:

1. Choose *Logistics* → *Materials management* → *Inventory management* on the main menu screen.
2. Choose *Environment* → *Stock* → *Stock overview*.
3. Enter your selection criteria and enter the special stock indicator **V**. Then select all fields in the *Select display levels* section.
4. Choose *Program* → *Execute*.
5. Position the cursor on the *Returnable packaging stock at customer* line and choose *Edit* → *Choose*.

The system displays the returnable packaging stock of the selected material currently with the customer.

## Make-To-Order Production

# Make-To-Order Production

## Implementation Considerations

Make-to-order production is a process in which a product is individually manufactured for a particular customer. In contrast to mass production for an unspecified market where a material is manufactured many times, in make-to-order production a material is created only once though the same or a similar production process might be repeated at a later time.

You can use make-to-order production:

- For branches of industry or products where a small quantity of products with a large number of different characteristics are manufactured
- When a product has to be assembled particularly for a sales order

Stockkeeping is not usually carried out for products that are made to order. In companies using make-to-order production, the demand program only determines the production area, in which various variant types are produced. Depending on how you track the costs associated with make-to-order production, there are two ways to process make-to-order items during sales order processing:

[Make-to-Order Production: Cost Management Using the Sales Order \[Page 235\]](#)

[Make-to-Order Production: Cost Management Using the Project System \[Page 250\]](#)

## Using Assembly Orders

You can also use a sales order to create an assembly order for a make-to-order item. The assembly order triggers the automatic creation of a production order, planned order, or network and provides you with an accurate delivery schedule. The schedule is based on the availability and the manufacturing requirements of the relevant components and assemblies. For more information, see the *LO Assembly Processing Guide*.

### See also:

- For more information about allocating the costs of order items made to order, see *CO Cost Object Controlling*.
- For more information about profitability analysis, see *CO Profitability Analysis*.
- For more information about inventory management, see the *MM Inventory Management* documentation.
- For more information about the Project System, see *PS Project System*.
- For more information about Customizing for Sales, see the online *Implementation Guide*.

## Make-to-Order Production: Cost Management Using the Sales Order

For make-to-order production with cost management using a sales order, all costs and revenues involved for an order item are assigned collectively to the item. The costs are allocated to profitability analysis using a particular settlement rule which the system automatically proposes. You can change the proposal manually.

### Prerequisites

Make-to-order production is controlled by the requirements type. The requirements type is determined on the basis of the MRP group and the strategy group in the material master record.

Up to Release 3.0, the requirements type is determined on the basis of the item category. For this reason, special item categories are used up to Release 3.0 for controlling make-to-order production. To make a material to order with cost management using a sales order, you must maintain the following fields in the material master:

Screen	Field
MRP 1	MRP Group
MRP 2	Strategy Group

In addition, a plant must be assigned for make-to-order items in the sales order.

#### See also:

[Creating a Sales Order With Make-to-Order Items \(Cost Management Using the Sales Order\)](#)  
[\[Page 236\]](#)

## Creating a Sales Order With Make-to-Order Items (Cost Management Using the Sales Order)

# Creating a Sales Order With Make-to-Order Items (Cost Management Using the Sales Order)

To create a sales order for make-to-order goods where cost management is performed using the sales order, proceed as follows:

1. In the initial screen, choose *Logistics* → *Sales and distribution* → *Sales*.
2. Choose *Order* → *Create*.
3. Enter the order type and, if necessary, the organizational data.

The values for sales organization, for distribution channel and the division are usually proposed from user-defined parameters. Entries for the sales office and the sales group are optional.

4. Choose *Enter*.
5. Enter the following data:
  - Customer number of the sold-to party
  - Customer purchase order number
  - Material number
  - Order quantities for the material
6. Choose *Enter*.

If the prerequisites for [Creating a Sales Order With Make-to-Order Items \(Cost Management Using the Sales Order\) \[Page 235\]](#) have been met, the system automatically determines the appropriate requirements type for the material. This requirements type controls make-to-order production.

At the same time, a business segment for allocating the costs to profitability analysis and a settlement rule are determined at item level.



If you want to settle costs to a general ledger account rather than to a profitability segment, you can change the settlement rule manually and enter the relevant general ledger account number in the account assignment screen for the item.

7. If you want to pass on specific information to production, choose *Goto* → *Item* → *Texts* to create a production memo at order item level.

This memo is automatically copied into the production order.

8. Save your document.

The system saves the sales order and creates individual requirements for the make-to-order items. This initiates production. The production orders which are created on the basis of the requirements are assigned to the appropriate sales order items.



If the order is created with reference to a quotation, costs and stocks can be managed in the quotation. The quotation number is then adopted into the sales order

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**Creating a Sales Order With Make-to-Order Items (Cost Management Using the Sales Order)**

as account assignment. Alternatively, you can change the settings in Customizing so that cost management and sales order inventory management only starts with the sales order. For this, you must assign a requirement type to the item category of the quotation that does not permit make-to-order production .

**See also:**

[Make-to-Order Production: Make-to-Order Production: Account Assignment for Cost Management Using the Sales Order \[Page 239\]](#)

[Displaying the Current Stock Situation \[Page 245\]](#)

[Unit Costing for a Make-To-Order Item in a Sales Order \[Page 244\]](#)

[Scheduling in Make-to-Order Production \[Page 238\]](#)

[Reporting in Make-to-Order Production \[Page 249\]](#)

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**Scheduling in Make-to-Order Production****Scheduling in Make-to-Order Production**

The total replenishment lead time (which is found on the MRP 2 screen in the material master) as well as delivery scheduling form the basis for scheduling orders items for make-to-order production. Unconfirmed order items can be confirmed automatically by updating backorders, when the production dates that prevented the confirmation change. The new, earlier production dates are then copied into the order items.

## Make-to-Order: Account Assignment for Cost Management to the Sales Order

In account assignment, all costs and revenues are allocated to the relevant account assignment objects. The data necessary for the assignment is maintained on the account assignment screen at item level.

To reach the account assignment screen, select the item and then choose *Goto* → *Item* → *Account assignment*. You reach the account assignment screen where the data relevant for account assignment and cost accounting is displayed and where you can change the profitability segment and the settlement rule manually. The relevant data includes the following:

### Business Area

The business area is a legally independent organizational unit within a client, for which balance sheets for internal reporting can be created. It is determined either on the basis of sales organization/division or the delivering plant.

### Profit Center

A profit center is an area of responsibility within a company for which a separate operating profit can be calculated. The profit center is proposed from the material master record, if maintained. You can change the proposed value manually.

### Profitability Segment

The profitability segment consists of criteria which have been defined for the particular operating concern in the controlling area. You can enhance the profitability segment manually.

To do this, select the *Details* field next to the business segment number and choose *Enter*. The *Account Assignment to Business Segment* dialog box appears where you can enter further characteristics. If you choose *Derivation*, the characteristics are automatically proposed.

For more detailed information about profitability analysis and especially about the maintenance of the criteria values, see *CO Profitability Analysis*.

### Settlement Rule

The settlement rule consists of the sender and the settlement distribution rule which includes the settlement receiving accounts, distribution factor, settlement type, and validity period. You can change the settlement rule manually.

There are two possibilities for settling sales orders. You can either:

- Settle to a business segment  
In this case, the settlement rule is determined automatically. You can only use this method of settlement if CO-PA is activated.
- Settle to a general ledger account  
In this case, you enter the settlement rule and the general ledger account number manually in the sales order.

To change the settlement rule, choose *Edit* → *Settlement rule*.

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**Make-to-Order: Account Assignment for Cost Management to the Sales Order**

For more detailed information about settlements and especially about processing settlement rules, see the *CO Cost Object Controlling* documentation.

## Results Analysis Key

The results analysis key controls how the relationship of costs and the base (such as revenue or produced quantity) for an order's progress toward completion is valued. By assigning a results analysis key you determine, among other things,

- Whether results analysis is revenue-based, quantity-based or manual
- On which basis (planned or actual data) results analysis is carried out
- How profits are realized
- Whether the inventory, reserves, and cost of sales are split

The results analysis key proposed by the system depends on the requirement type. You can change the key manually.

**See also:**

[Working With Object Statuses in Make-to-Order Production \[Page 241\]](#)

## Working With Object Statuses in Make-to-Order Production

Order items made to order have an object status which can be divided up into the following phases:

1. Released

The system sets this status automatically when the item is created. It indicates that production can be initiated.

2. Revenue posted

The system sets this status automatically, as soon as revenue was posted for the item for the first time.

3. Fully invoiced

This status must be set manually, as soon as all revenues have been posted for the item.

4. Completed

This status must be set manually when the procedure is completed.



The status affects accrual so once the *fully invoiced* status has been set, for example, no more revenues can be posted. If the status "completed" is set, no further costs can be posted.

**See also:**

[Displaying the Object Status \[Page 242\]](#)

[Setting the Object Status \[Page 243\]](#)

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**Displaying the Object Status**

## Displaying the Object Status

To display the object status of an item, proceed as follows:

1. Select the appropriate item on the *Item Overview* tab page when in change mode and choose *Goto → Item → Status*.
2. Choose *Object status*.

## Setting the Object Status

To set the status "fully invoiced" or "completed" manually, proceed as follows:

1. Select the item on the single-line entry screen for changing a sales order, for example, and then choose *Item* → *Status*.
2. Depending on the status you want to set, choose either *Edit* → *Set status* → *Fully invoiced* or *Edit* → *Set status* → *Completed*.

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**Unit Costing for a Make-To-Order Item in a Sales Order**

## Unit Costing for a Make-To-Order Item in a Sales Order

As of Release 3.0, you can create a unit cost estimate for an item (for example, a make-to-order item) in a sales order. The unit cost estimate covers all planned costs for components used to manufacture a material for sale. The cost estimate is calculated based on the bill of materials and routing for the material. In addition, you can use costing items to calculate overhead surcharges. The calculation of the unit cost estimate is carried out in Controlling (CO-PC). The cost estimate is then copied into the sales document and can be used for pricing or for calculating the profit margin.



If you carry out costing for a quotation item, you can only copy this pricing into an order once. Reference can only be made to partial quantities once.

**See also:**

[Sales Order Costing in Pricing \[Ext.\]](#)

## Displaying the Current Stock Situation

In make-to-order production, sales order stock is set up for each order item. This means that stock is assigned to the sales order and item number in inventory management.

To display the sales order stock, proceed as follows:

1. Choose *Logistics* → *Materials management* → *Inventory management* on the main menu screen.
2. Choose *Environment* → *Stock* → *Stock overview*.
3. Enter the required selection data, select the special stock indicator **E**, and select all fields in the screen section *Select display levels*.
4. Choose *Program* → *Execute*.
5. Position the cursor on the sales order line and then choose *Edit* → *Choose*.

**See also:**

[Working With Sales Order Stock \[Page 257\]](#)

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**Shipping in Make-to-Order Production**

## Shipping in Make-to-Order Production

Shipping activities are carried out according to delivery scheduling in the sales order. The system carries out an availability check against sales order stock in the delivery.

## Billing for Make-to-Order Production

During billing, the revenues for order items from make-to-order production are passed on to financial accounting. Once the item has been fully invoiced, the status is set to "fully invoiced."

You have several possibilities for billing make-to-order transactions:

- You can bill the entire amount in the usual way using the billing due list.
- You can bill partial amounts over a specified period using a milestone billing plan.
- You can bill actual costs using the resource-related billing function.

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**Settling a Make-to-Order Transaction**

## Settling a Make-to-Order Transaction

To settle an make-to-order item, that is, to assign the costs incurred to the appropriate receiving accounts, proceed as follows:

1. On the Sales screen, choose *Sales order* → *Subsequent functions* → *Settlement*.
2. Enter the sales order and the item number and carry out the settlement. You can carry out a selection of sales orders to be settled by entering a range of values.

For more detailed information on settlements, see the CO documentation on Cost Object Controlling.

You can carry out the settlement after the whole process of make-to-order production has been completed. However, you can also carry out settlements during the process, if you want to keep up more closely with the cost development.



You can also carry out the settlement as a background task.

## Reporting in Make-to-Order Production

In profitability analysis reporting you can collect information about the costs and revenues on sales orders allocated to profitability analysis. When you create the report, you must define the sales order as a criterion. For more detailed information about reporting in profitability analysis, see *CO Profitability Analysis*.

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**Make-to-Order Production: Cost Management Using the Project System**

## Make-to-Order Production: Cost Management Using the Project System

In make-to-order production with cost management using a project, all costs and revenues relating to the make-to-order item are collected and allocated to a project in the SAP Project System. The costs are allocated to profitability analysis.

### Prerequisites

Make-to-order production is controlled by the requirements type. The requirements type is determined on the basis of the MRP group and the strategy group in the material master record.

Up to Release 3.0, the requirements type is determined on the basis of the item category. For this reason, special item categories are used up to Release 3.0 for controlling make-to-order production. To carry out make-to-order production for a material with cost management using the project, you must maintain the following fields in the material master:

MRP 1	MRP Group
MRP 2	Strategy Group
<b>Screen</b>	<b>Field</b>

In addition, a plant must be assigned for make-to-order items in the sales order.

## Creating a Sales Order With Make-to-Order Items (Cost Management With The Project System)

To create a sales order for make-to-order goods where cost management is performed using the Project System, proceed as follows:

1. In the initial screen, choose *Logistics* → *Sales and distribution* → *Sales*.
2. Choose *Order* → *Create*.
3. Enter the order type and, if necessary, the organizational data.

The values for sales organization, for distribution channel and the division are usually proposed from user-defined parameters. Entries for the sales office and the sales group are optional.

4. Choose *Enter*.
5. Enter the following data:
  - Customer number of the sold-to party
  - Customer purchase order number
  - Material number
  - Order quantities for the material
6. Choose *Enter*.

If the prerequisites for [Creating a Sales Order With Make-to-Order Items \(Cost Management Using the Sales Order\) \[Page 250\]](#) have been met, the system automatically determines the appropriate requirements type for the material. This requirements type controls make-to-order production.

7. To assign an item to a project, select it and choose *Item* → *Account Assignment*.
8. Enter the project number in the *Project* field on the *Account Assignment* screen.



The document is considered incomplete until this number has been maintained.

9. Alternatively, choose *Header* → *Account Assignment* to reach the screen where you can enter a project number at header level.

The project number is then proposed in the items if they require project account assignment



The field in the header is only a proposal value and not a completed account assignment. If you want to manage items in a project even though they do not require project account assignment, you must maintain the account assignment manually in the corresponding item, because a project number maintained in the header is not automatically copied in the item.

10. Save the document.

**Creating a Sales Order With Make-to-Order Items (Cost Management With The Project System)**

If the project number is maintained in the make-to-order items, individual requirements are created for these items, when you save the sales order. These initiate the production. The production orders which are created on the basis of the requirements are assigned to the project.



Scheduling, inventory management, shipping and billing are carried out in the same way as for the make-to-order production with cost management using a sales order. Status management is part of the Project System and can therefore not be edited in Sales and Distribution.

**See also:**

[Make-to-Order Production: Make-to-Order Production: Account Assignment for Cost Management Using the Sales Order \[Page 239\]](#)

---

**Make-to-Order: Account Assignment for Cost Management With the Project System**

## **Make-to-Order: Account Assignment for Cost Management With the Project System**

The business area is determined using the sales organization/division or the delivering plant. The system proposes the profit center from the appropriate project. The Project System controls results analysis and determines the settlement rule. Thus, you cannot edit them on the account assignment screen for the item.

### **Settlement**

Settlement is carried out in the project system. You can reach the project system by choosing *Logistics* → *Project management* on the main entry screen. Here you can also collect information on the cost and revenue situation of the project using the integrated information system.

For more detailed information about project management in the SAP R/3 System, see *PS Project System*.

---

**Intercompany Processing for Make-to-Order Items**

## Intercompany Processing for Make-to-Order Items

You can carry out intercompany processing for make-to-order items.



Companies A and B belong to the same group but have different company codes.

An order is placed with Company A for a configurable material. The configurable material is to be delivered by Company B. Company A creates a sales order and Company B a production order.

- Costs for the make-to-order item in the sales order and the production order of 100 USD are combined in a controlling object in Company B.

Company A sends an invoice of 200 USD to its customer.

- Revenue is updated in Profitability Analysis, Company A.

Company B sends Company A an internal invoice of 120 USD.

- Costs are posted in Company A for the 120 USD billed in the invoice from Company B.
- Company B compares the 120 USD billed in the invoice from Company B and the costs of 100 USD posted in Company B. The difference of 20 USD is posted as revenue.

## Components in Stock For Make-to-order Production

If a component of make-to-order material is kept in stock, ensure that you set secondary requirements indicator 4 (except collective requirements) in the *Individual/collective* field on the *MRP 2* view in the material master record for the component. Otherwise, MRP does not consider stock and only creates independent requirements.

---

**Canceling Requirements for Make-to-Order Items**

## Canceling Requirements for Make-to-Order Items

You can cancel requirements by rejecting the relevant sales order item.



When you delete items, the system does not check whether any planned orders or production orders have been created for these items. Any such documents must be deleted manually.

## Working With Sales Order Stock

Sales order stock is inventory that results from a make-to-production sales order. Products are made or assembled in response to the customer's order. The resulting stock is assigned specifically to the customer's sales order and becomes part of sales order stock. The stock components can only be used for the production of the make-to-order items ordered by the customer. Finished products can only be delivered to the customer by means of the assigned sales orders.



If sales order stock has already been assigned to a quotation, the stock of the resulting orders is also managed under the quotation number.



Sales order stock is not valuated but is instead subject to cost collection.

## Special Stock Data

In order to manage sales order stock of a material for different sales orders, special stock data is required in the material master record. Special stock data for a material is managed at the storage location level. If the material must be managed in batches, special stock data must be created for each batch.

The system automatically creates special stock data during the first inward movement of sales order stock. The data cannot be maintained manually but instead is automatically updated with every goods movement (or taking of physical inventory).

## Special Stock Types

The following stock types are available for use with sales order stock:

- Unrestricted use
- quality inspection
- Blocked stock

Sales order stock is not available for material requirements planning (MRP).

## Movement Types

The following movement types are available for sales order stock (in each case, including cancellation and returns):

- Inward movement of goods
  - Goods receipt on the basis of a purchase order, provided that the purchase order item is assigned to an account
  - Goods receipt for a production order, provided that the production order is assigned to a sales order
  - Goods receipt without a purchase order
  - Goods receipt without a production order

---

**Working With Sales Order Stock**

- Initial entry of stock balances
- Outward movement of goods
  - Goods issue for a sales order
  - Goods issue for an order
  - Taking a sample of stock
  - Scrapping stock
- Transfer posting
  - Transfer into customer's own stock
  - Transfer from one storage location to another
  - Transfer between stocks which have the status *unrestricted use*, *quality inspection*, and *blocked*.

When you carry out a goods movement for sales order stock, please take the following points into account:

- If you carry out a goods movement based on a purchase order or production order, the sales order number and items are copied from the reference document.
- If you change a goods movement, you must enter the sales order number and the item.

## Individual Purchase Orders

### Implementation Considerations

Individual purchase orders are used when your customer orders goods from you that are not in stock and must be ordered from one or more external vendors.

### Process Flow

During sales order entry, the system automatically creates a purchase requisition item. The purchasing department creates a purchase order based on the requisition and the vendor ships the goods directly to you (unlike [third party order processing \[Page 276\]](#), where the vendor ships directly to your customer). You then ship the goods to your customer. While the goods are part of your inventory, you manage them as part of the sales order stock. Sales order stock consists of stock that is assigned to specific sales orders and cannot be used for other purposes. For more information, see [Make-To-Order Production \[Page 234\]](#).

The processing of individual purchase orders is controlled by the material type. Material types define whether a material is produced only internally, can be ordered only from third-party vendors, or whether both are possible. For example, a material that is defined as a trading good can only be ordered from a third-party vendor. However, it might be advantageous at times to procure products that are normally produced internally (such as finished goods) from an external vendor.

### Tracking Costs

You can track costs and revenues for individual purchase orders in the same way as you track costs for make-to-order production. The material in question must be maintained for the MRP group 0020 and a plant must be assigned at the item level in the sales order.

#### See also:

Materials Management documentation for Purchasing.

## Creating Individual Purchase Orders in Sales

# Creating Individual Purchase Orders in Sales

***During sales order processing, the system automatically determines individual purchase order items.*** However, you can also change standard items to individual purchase order items during sales processing manually.

## Creating Automatically

If you procure a material exclusively by individual purchase order, you can define in the material master record that the material is always treated as an individual purchase order item during sales processing. The system will then automatically determine the appropriate item category TAB.

To identify a material as an individual purchase order item in the material master record, enter **BANC** in the field *Item category group* on the *Sales: sales org. 2* screen.

## Creating Manually

If you want to use an individual purchase order to purchase a material that you normally produce yourself, you can overwrite the item category in the sales order, provided that the configuration of your system permits it. The standard version of the SAP R/3 System, however, does not support this transaction.

Enter the item category group **NORM** in the *Item category group* field in the *Sales: sales org. 2* screen of the material master record for materials that you normally produce yourself.

If, as an exception, you purchase a material using an individual purchase order, change the entry in the *ItCa* field in the sales document from TAN to TAB.

## Changing the Sales Order

You cannot subsequently change the quantity or the delivery date for an individual purchase order item in the purchase requisition. You can only change them in the sales order. Changes you make in the sales order are always automatically reflected in the corresponding purchase requisition, as long as this is permitted by the release status for the purchase requisition.

## Shipping and Billing

When you create a delivery, the system checks if goods are available in the sales order stock. You then create a delivery-related billing document.

## Displaying the Current Stock Situation

The stocks for items in individual purchase orders are managed at order item level as sales order stock. Sales order stock is assigned to the relevant sales orders and item numbers. To display the sales order stock, proceed as follows:

1. Choose *Logistics* → *Materials management* → *Inventory management* on the main menu screen.
2. Choose *Environment* → *Stock* → *Stock overview*.
3. Enter the required selection data, select the special stock indicator **E**, and select all fields in the *Select display levels* section.
4. Choose *Program* → *Execute*.

---

**Creating Individual Purchase Orders in Sales**

5. Position the cursor on the sales order line and then choose *Edit* → *Choose*.

---

**Creating an Individual Purchase Order in Purchasing**

## Creating an Individual Purchase Order in Purchasing

When you save a sales order that contains one or more individual purchase order items, the system automatically creates a purchase requisition in Purchasing. For each individual purchase order item, a corresponding purchase requisition item is created. During the creation of the purchase requisition the system automatically determines a vendor for each purchase requisition item. If the individual purchase order item contains more than one schedule line, the system creates a purchase requisition item for each order quantity.

### Creating the Purchase Order

Purchase orders are created from purchase requisitions in the usual way. For more information about the creation of purchase orders, see the MM Purchasing Guide. In a sales order, you can enter purchase order texts for each third-party item. When you create the corresponding purchase order, the texts are automatically copied into the purchase order. The number of the purchase order appears in the document flow information of the sales order.

### Changing the Purchase Order

If the vendor confirms dates and quantities that differ from those in the purchase order and they are then entered in the purchase order, the changed data is automatically copied into the sales order.

## Displaying Purchase Requisition Details

After you save a sales order containing individual purchase order items, the system automatically copies the numbers of the corresponding purchase requisitions into the sales order.

### Displaying Procurement Details

1. Select the individual purchase item on the *Item Overview* tab page in the sales order, on the overview screen, and choose *Goto → Item → Schedule lines*.
2. Select a schedule line and choose *Procurement*.

The system displays a screen showing the procurement details.

### Displaying Purchase Requisition Item

Select the individual purchase item on the *Item Overview* tab page, and choose *Goto → Item → Schedule lines*.

You receive a log listing the changes that have been implemented. In the *Ordering party* field in the table, you will receive the purchase requisition numbers for the schedule line. In the *Purchase requisition* field, you will receive the item number for the purchase requisition.

---

**Scheduling Individual Purchase Order Items**

## Scheduling Individual Purchase Order Items

If you create a sales order for which the determined delivery date differs from the requested delivery date, the *Purchase Order Scheduling* dialog box appears. In this window the determined delivery date is displayed as the proposed delivery date.

If the customer accepts this delivery date, select the *Fix qty/date* field to fix the date and the confirmed quantity. The provision date determined by the scheduling of the confirmed quantity is copied into the corresponding purchase requisition as the delivery date. If the customer requests that you deliver the goods earlier than the system can confirm, leave the field empty. In this case the provision date for the requested delivery date is copied into the purchase requisition. This is based on the assumption that it is still possible to deliver on the requested delivery date by shortening the procurement lead time, for example.

During the automatic scheduling of individual purchase order items, the lead times determined by Purchasing, such as the delivery processing time and the purchasing processing time, are also taken into account.

## Costs in Individual Purchase Orders

The cost is used to compare the determined prices with the costs and to determine contribution margin accounting. To do this, you can use the condition type **VPRS** as the cost price, used as a statistical value in the pricing determination procedure.

The condition type **VPRS** accesses the valuation segment in the material master and from here, determines the standard or average price.

The values from the vendor invoice, or from the purchase order, can be used as the cost price in individual purchase orders. You can make the necessary settings for this in Customizing.

### Settings in Customizing

Billing is related to the delivery for customer individual purchase orders. You need to make certain settings in Customizing for billing document copying control at item level if you want the cost for the billing document to be taken from the vendor invoice or purchase order, and not the valuation segment in the material master. The quantity indicator in the billing document's document flow then controls where the cost comes from.

- If you activate **F** in the *Billing quantity* field, the value is calculated from the incoming invoice and copied to the VPRS condition. This assumes that the customer billing document can't be created until the vendor invoice has been posted, checked by copying requirement 004.
- If you activate **F** in the *Billing quantity* field, the value is calculated from the incoming invoice and copied to the VPRS condition. Goods receipt for customer purchase orders is not normally valued and the value from the purchase order is used as the cost.



You can find more information about costs in the *Conditions and Pricing* documentation under [Cost \[Ext.\]](#).

---

**Bills of Materials in Sales Documents**

## Bills of Materials in Sales Documents

### Implementation Considerations

A bill of material (BOM) describes the different components that together create a product. A BOM for a bicycle, for example, consists of all the parts that make up the bicycle: the frame, the saddle, wheels, and so on.

### Process Flow

When you enter the material number of a bill of materials that is relevant for sales order processing, the system displays the material that describes the whole bill of materials as a main item. The individual components are displayed as lower-level items.

There are two ways to process a bill of materials in Sales. Once you have entered a bill of material in a sales order, the system runs pricing, inventory control, and delivery processing at:

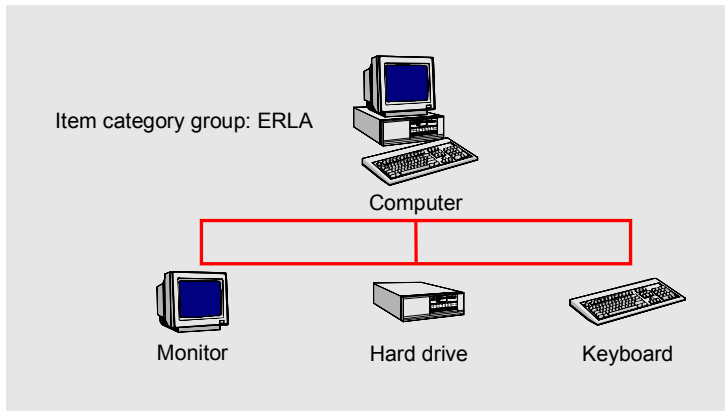
- Main item level if the material is assembled, or
- Component level if the material is not assembled

The type of processing used by the system is determined by the item category group that you enter in the material master record for relevant materials.

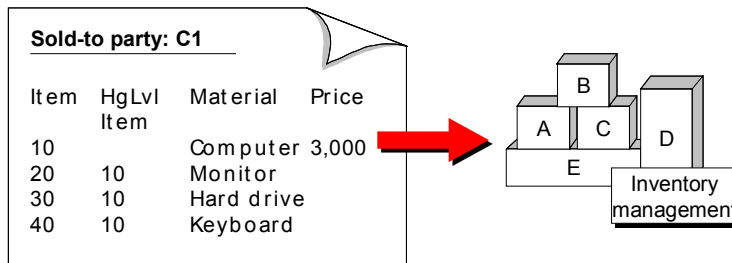
### Processing at Main Item Level

If you want the system to carry out pricing, inventory control, and delivery processing at main item level, enter **ERLA** in the *Item category group* field of the *Sales: sales org. 2* screen in the material master record of the finished product. This means that the components only function as text items and are not relevant for delivery. The following graphic shows how a bill of material is processed at main item level.

Bills of Materials in Sales Documents



Order



Processing at Component Level

If you want the system to carry out pricing, inventory control, and delivery processing at the component level, enter **LUMF** in the *Item category group* field of the *Sales: sales org. 2* screen in the material master record of the finished product. In this case, only the components are relevant for delivery. During processing the system automatically creates a delivery group. The latest delivery date among all the components becomes the delivery date for the entire delivery group.



For more information about how to create and maintain bills of material, see [PP - Bills of Material \[Ext.\]](#) documentation in the R/3 library.

---

**Creating and Editing Bills of Material**

## Creating and Editing Bills of Material

To create and edit bills of material which are relevant for sales, proceed as follows:

1. Choose *Logistics* → *Sales and distribution* → *Master data* on the initial screen.
2. Choose *Products* → *Bills of material*.

Alternatively, you can create and edit bills of materials by choosing *Logistics* → *Production* → *Master data* → *Bills of material*.



When you create a bill of material that you want to use during sales order processing, enter the appropriate value in the *BOM usage* field ('5' in the standard system).

## Exploding a Bill of Material

To explode a bill of material in the sales order, you use normal [sales order processing \[Page 111\]](#).

When you enter the bill of material as an item in the order and choose *Enter*, the system automatically displays the components.

## Selecting Alternatives for Bill of Material Explosion

### Selecting Alternatives for Bill of Material Explosion

If there are several different bills of material to choose from for making up an assembly, the choice of bill of material can be made either automatically or manually in the sales order when the bill of material is exploded.

#### Automatic Selection

Using the item category, you can control whether the bill of material alternative is selected manually or automatically. If you switch off the manual alternative selection function for a particular item category, the bill of material alternative is selected automatically and exploded in the sales order.



In Customizing for Production, you can control which BOM alternative for a material or assembly is selected by the automatic alternative selection function and exploded in the sales order. For more detailed information, see the online *Implementation Guide* for Production.

#### Manual Selection

If the manual alternative selection is switched on for an item category, the *Alternative Selection Bills of Material* screen appears when the bill of material is exploded in the sales order. All alternatives for the bill of material are displayed on this screen. You choose an alternative by placing the cursor on the appropriate alternative and then choosing *Edit* → *Choose*. The alternative selected is exploded in the sales order.

#### Item Structure

To obtain information regarding the structure of the bill of material item, select the item and choose *Item* → *Structure* → *Components*. You reach the *Item - Item Structure* screen, where the main item data and data on any sub-items, such as the component quantity and the order quantity, are displayed.



If you make changes to the component quantity, the schedule line quantity is automatically adjusted accordingly.

## Parameter Effectivity

### Use

Within R/3 Engineering Change Management, you can define specific effectivity types for changes to the product. This allows you to adapt your range of products quickly and easily to respond to any changes in the market, for example, seasonal changes, by changing the color for example, for a certain time period or a certain customer. The relevant functions are combined in Customizing (go to *Logistics - General Engineering Change Management **Parameter effectivity***) and are activated at client level.

The parameters that you can freely define (for example, material, date, customer, serial number) are assigned to an effectivity type (such as a serial number or time range). You can assign several parameters to one effectivity type (also known as validity type), for example customer and date, which allows you to make changes to a product for one particular customer for a certain time period.

In the standard system, you can set the effectivity types for time and serial number ranges in Customizing for the Engineering Change Management. You can also define additional effectivity types with freely-defined parameters.

To define the effectivity type parameters, you can:

- Use any attribute in the R/3 System (for example, plant, customer, product group) or a combination of several parameters
- Define new attributes specifically for your company (for example, assembly sequence, models)

You can also use parameter effectivity types to assign values to sales document items (such as bills of materials) in sales document processing.

The system forwards the result of this assignment to requirements planning, configuration, assembly and costing.

Materials that have been assigned effectivity parameters are displayed in a dialog box in the sales document. The values are also included in the incompleteness log.

### Prerequisites

You must configure the following settings so that an effectivity type for an item in the sales document takes effect:

- Select the *Param.effectivites* field in the *Basic Data 1* view for the material in the material master
- In Customizing for Sales and Distribution, go to *Sales → Sales Documents → Sales Document Items → Define item categories* and select the *Assgnmt par. eff* field (value assignment with parameter effectivity) in the *Bills of material/configuration* section.

### Constraints

The system does not consider parameter effectivity in the sales documents for exploding bills of material (without configuration). The system does not assign the parameter effectivities automatically if changes arise that are relevant to the effectivity.

---

**Parameter Effectivity**

You can find more information in the [LO – Engineering Change Management \[Ext.\]](#) document under [Working with Parameter Effectivity](#).

## Delivery Group Correlation in BoMs

### Use

If you want to combine a number of items in a sales document so that they are delivered together, you can create a delivery group.

If an item has more than one schedule line with confirmed quantities (for example, after an availability check) the system copies the date of the latest schedule line for this item and displays it on the delivery group overview screen.

When forming delivery groups, the system deletes the earlier schedule lines and copies their confirmed quantities into the latest schedule line.

If a complete delivery has not been requested, as soon as all the items for the bill of material are available, the system generates a correlated schedule line. This allows you to make a partial delivery on the first date on which all the items in the bill of material become available.

In other words, the first day on which all items in the bill of material are available, the system issues a confirmed quantity.

### Prerequisites

For correlated schedule lines in bills of material (BOMs) in delivery groups, there are certain prerequisites for the delivery group.

These are as follows:

- The delivery group may only contain one bill of material
- It cannot contain any fixed quantities
- It cannot contain any items that have partial delivery indicator C (one-time delivery)
- It cannot contain any partially-delivered items
- It can only contain items that can be at least partially delivered
- It can only contain items that have a maximum of one requested schedule line



In Customizing for item categories, you can control that the system should generate correlated schedule lines for the delivery group. You can do this by selecting **A** in the *Generate delivery group* field for the item category in the bill of material main item.

See also: [Combining Sales Document Items for Delivery \[Page 44\]](#)

## Example of a Correlated Schedule Line

## Example of a Correlated Schedule Line

The following example illustrates how a correlated schedule line is calculated:

Material	Materials Staging Date	Requested Quantity	Purchase Order Quantity	Correlation Steps		New Schedule Lines
				1	2	
10 pc header01	13.08.97	10	10			
	01.10.97			2,5		←
	08.10.97				2,5	
	20.10.97			5		←
15 pc ITEM01	13.08.97	10				
	01.10.97		5	2,5		
	08.10.97				2,5	←
	10.10.97		5			
	20.10.97			5		←
20 pc ITEM02	13.08.97	20				
	01.10.97		5	5		
	06.10.97		5			←
	08.10.97				5	←
	20.10.97		10	10		
25 pc ITEM03	13.08.97	40				
	01.10.97		10	10		
	08.10.97		10		10	
	14.10.97		10			
	16.10.97		10			
	20.10.97			20		←

**Example of a Correlated Schedule Line**

The quantity ratio of the bill of material is 1:1:2:4. The first date on which something can be confirmed for all items is October 1, 1997. Using the quantity ratio, we can see that item 25 has the lowest quantity.

Therefore, the following quantities are confirmed for October 1, 1997:

- Item 10:        2,5     Rest from 13.08:        7,5
- Item 15:        2,5     Rest from 01.10:        2,5
- Item 20:        5        Rest from 01.10:        0
- Item 25:        10       Rest from 01.10:        0

The next date is 6.10 for item 20 but nothing is available for item 20 on that day so the system takes the 8.10 as the next correlation date:

- Item 10: 2.5 Rest from 13.08: 5
- Item 15: 2.5 Rest from 01.10: 0
- Item 20: 5 Rest from 06.10: 0
- Item 25: 10 Rest from 08.10: 0

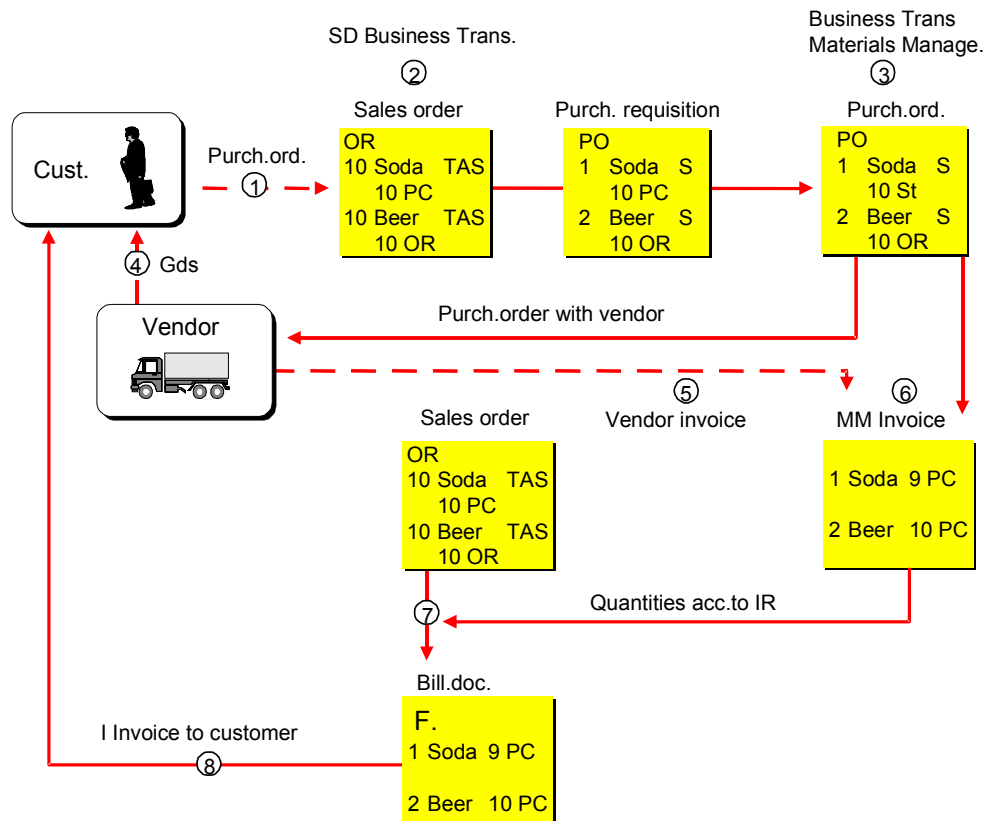
In item 20 nothing is available for item 15 on 10 Oct; or from item 35 on 14 and 16 Oct. so everything is confirmed for item 20 on 20 Oct.

## Third-Party Order Processing

## Third-Party Order Processing

## Purpose

In third-party order processing, your company does not deliver the items requested by a customer. Instead, you pass the order along to a third-party vendor who then ships the goods directly to the customer and bills you. A sales order may consist partly or wholly of third-party items. Occasionally, you may need to let a vendor deliver items you would normally deliver yourself. The following graphic shows how a third party business transaction is processed.



If you order products from a third-party vendor, who delivers the goods directly to you so that you can then deliver them to the customer yourself, you can use individual purchase order processing. For more information, see [Individual Purchase Orders \[Page 259\]](#).

## Process Flow

The processing of third-party orders is controlled via material types. Material types define whether a material is produced only internally, can be ordered only from third-party vendors, or whether both are possible. For example, a material that is defined as a trading good can only be ordered from a third-party vendor. However, if you manufacture your own finished products, you

## Third-Party Order Processing

may also want, from time to time, to be able to order the same type of product from other vendors.

### Processing Third-Party Orders in Sales

Third-party items can be created automatically by the system, depending on how your system is set. However, you can also change a standard item to a third-party item during sales processing manually.

- Automatic third-party order processing

If a material is always delivered from one or more third-party vendors, you can specify in the material master that the material is a third-party item. During subsequent sales order processing, the system automatically determines the appropriate item category for a third-party item: **TAS**. To specify a material as a third-party item, enter **BANS** in the *Item category group* field in the *Sales 2* screen of the material master record.

- Manual third-party order processing

In the case of a material that you normally deliver yourself but occasionally need to order from a third-party vendor, you can overwrite the item category during sales order processing. For a material that you normally deliver yourself, you specify the item category group **NORM** in the material master.

If, as an exception, you use a third-party material, change the entry **TAN** to **TAS** in the *ItCa* field when processing the sales document. The item is then processed as third-party item.



If address data for the ship-to party is changed in the sales order in third-party business transactions, the changed data will automatically be passed on to purchase requisition and also to the purchase order, if one already exists. In the purchase order, you can display the address data for the ship-to party in the attributes for the item.

You can only change the address data for the ship-to party in the sales order for third-party business transactions, and not in the purchase order.

### Processing Third-Party Orders in Purchasing

When you save a sales order that contains one or more third-party items, the system automatically creates a purchase requisition in Purchasing. Each third-party item in a sales order automatically generates a corresponding purchase requisition item. During creation of the requisition, the system automatically determines a vendor for each requisition item. If a sales order item has more than one schedule line, the system creates a purchase requisition item for each schedule line.

Purchase orders are created from purchase requisitions in the usual way. For more information about creating purchase orders, see the Purchasing documentation. During creation of the purchase order, the system automatically copies the delivery address of your customer from the corresponding sales order. In a sales order, you can enter purchase order texts for each third-party item. When you create the corresponding purchase order, the texts are automatically copied into the purchase order. The number of the purchase order appears in the document flow information of the sales order.

## Third-Party Order Processing



All changes made in the purchase order are automatically made in the sales order as well. For example, if the vendor confirms quantities and delivery dates different from those you request and enters them in the purchase order, the revised data is automatically copied into the sales order.

### How Purchasing Data Affects Delivery Scheduling

During the automatic delivery scheduling of third-party items, the system takes into account lead times specified by the purchasing department. For example, the system allows for the time required by the vendor to deliver the goods to your customer and also the time required by the purchasing department to process third-party orders.

### Comparing Purchasing Data with Sales Data

You can create a list of all sales orders with third party items for which there are discrepancies between the quantities ordered, invoiced, canceled, or credited in Sales and the quantities ordered, invoiced or credited in Purchasing. For more information, see [Monitoring Quantity Differences in Sales and Purchasing \[Page 287\]](#).

## Creating a Third-Party Sales Order

You process third-party items by creating a normal sales order. In overview for the order, you can then overwrite the default item category (TAN in the standard system) with the special item category for third-party items: TAS.

**See also:**

[Creating Sales Orders \[Page 111\]](#)

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**Changing a Third-Party Order**

## Changing a Third-Party Order

If there are no purchase orders, you can only make subsequent changes to quantity or delivery data in the sales order. These changes are always automatically copied to the corresponding purchase requisition, providing this is permitted by the release status.



If a purchase order already exists for the business transaction and you make changes in the sales order, you must also make these changes manually in the purchase order as it is not updated automatically. Alternately, you can change the quantities and dates in the purchase order and the system will then copy them automatically into the sales order.

**See:**

[Changing Sales Orders \[Page 116\]](#)

## Deleting a Third Party Order



Before you delete a third party order, you should first of all delete any purchase order which exists for the business transaction. Otherwise, although the customer has canceled the sales order for example, they still receive goods on the basis of the purchase order.

To delete a third party order, follow the steps described in [Deleting a Sales Document \[Page 49\]](#).

## Billing Third-Party Orders

### Billing Third-Party Orders

If relevance for billing indicator for the item category has been set to B (relevant for order-related billing on the basis of the order quantity) in Customizing, the system includes the order in the billing due list immediately. If, however, the indicator has been set to F (relevant to order-related billing on the basis of the invoice quantity), the system does not include the order in the billing due list until an invoice from the vendor has been received and processed by the purchasing department. In the standard system, item category TAS (third-party order processing) has been given billing-relevance indicator F.

In the first case, the third-party order is considered to be completely billed only when the invoiced quantity equals the order quantity of the sales order item. In the second case, each time a vendor invoice is received, a customer invoice is created for the quantity in the vendor invoice and the order is considered to be fully invoiced until the next vendor invoice is received.



If you have activated billing-relevance indicator F for item categories in Customizing, billing can refer to the goods receipt quantity instead of the incoming invoice quantity.

You can control whether the invoice receipt quantity or the quantity of goods received is relevant for billing in Customizing for copying control for billing at item level.

## Costs in Third-Party Business Transaction

The cost is used to compare the determined prices with the costs and to determine the contribution margin accounting. To do this, you can use the condition type **VPRS** in the R/3 System as the cost price. The condition type **VPRS** is used as a statistical value in the pricing procedure.

If Customizing has been configured appropriately, the system determines the cost for third-party order processing from the value of the vendor invoice plus proportional statistic conditions (for example, cash discounts or statistical freight) from the purchase order in Materials Management.

### Settings in Customizing

You need to make certain settings in Customizing for billing document copying control at item level, if you want the cost for the billing document to be taken from the vendor invoice with proportional conditions. The quantity indicator in the billing document's document flow then controls where the cost comes from. Activate indicator F in the *Billing quantity* field (billing quantity equals goods receipt quantity minus quantity already billed).



You can find more information about costs in the *Conditions and Pricing* documentation under [Cost \[Ext.\]](#).

---

**Credit Memo Processing in Third-Party Business Transaction**

## Credit Memo Processing in Third-Party Business Transaction

### Purpose

If the vendor grants you a credit memo on a quantity or a value basis, you can then send this credit memo directly to your customer.

The billing type *Third-party credit memo* (G2S) is available for this. The billing type *Third-party credit memo* works with the item category TASG (third-party credit memo item). The sales-relevant indicator *F* is set in Customizing for Sales for this item category. This means that the cost is not created. In Customizing for Sales, the item category TASG is set at item level in copying control for the billing type G2S (copying control sales document by billing document) as the target item category (source: TAS-> Target:> TASG.)

### Process Flow

Create a billing document with billing type *Third-party credit memo* (for further information, see the section [Creating a billing document \[Ext.\]](#) in the *Billing* document). Enter the third-party order as a document still to be processed. The quantities are automatically removed from the invoice.

## Retroactive Billing in Third-Party Business Transaction

### Purpose

If the vendor calculates additional costs for you once third-party business transactions have already been billed (for example, shipment costs), the costs from the invoice receipt are then corrected in the customer billing documents which have already been created.

### Profitability Analysis

Subsequent debits from the invoice receipt are copied to profitability analysis as a difference amount. This means that the cost is updated here also. In **accrued profitability analysis**, the costs are not copied from the invoice receipt, but from the customer billing document.



This is only the case for documents created from 4.6A onwards. With the SD\_VPRS\_UPDATE report, you can update the costs created for the billing document before Release 4.6A.

The profitability segment is copied to the purchase requisition, and, in this way, copied to the invoice receipt via the purchase order. If the invoice receipt takes place, an indicator informing you that it is third-party order processing, is copied to profitability analysis. In profitability analysis dependant on posting date, the costs are transferred from the invoice receipt to profitability analysis (in contrast to accrued profitability analysis, for which the costs are copied from the customer billing document).

### Example

In the context of a third-party business transaction, you create a sales order for over 100 pieces. A purchase requisition and a purchase order are generated. Ten pieces are delivered to the customer, and a billing document is then sent to the customer when the 10 pieces are delivered. The vendor sets a subsequent debit of 100 USD for shipping costs in the invoice. The cost is now updated in the billing document created, and in the profitability analysis (in this case, it is raised by 100 USD).

---

**Displaying Purchase Requisitions**

## Displaying Purchase Requisitions

After you save a sales order containing third-party items, the system automatically copies the numbers of the corresponding purchase requisitions into the sales order. Use the following procedure to view the information:

Select the third-party item on the *Item Overview* tab page, and choose *Goto* → *Item* → *Schedule lines*.

You receive a log listing the changes that have been implemented. In the *Ordering party* field, you will receive the purchase requisition number for the schedule line. In the *Purchase requisition* field, you will receive the item number for the purchase requisition.

## Monitoring Quantity Differences Between Sales and Purchasing

### Use

You can use report SDMFSTRP to create a list of all sales orders with third-party order items for which there are discrepancies between the quantities ordered, invoiced, canceled, or credited in Sales and the quantities ordered, invoiced or credited in Purchasing.

### Prerequisites

You have materials that were processed in third-party orders.

### Features

You can restrict the selection to certain orders and a specific time period.

If you select *List all open quantities*, the system also displays all third-party transactions with open quantities in Purchasing or Sales.



Note that the quantity in the purchasing or sales documents is displayed in the unit of measure used in that document. The totals are always specified in the base unit of measure.



A third-party order for 10 pieces of a material gives rise to a purchase order of 10 pieces. Three pieces were delivered in the first delivery and this has been billed to the customer. The vendor sends a credit memo for three pieces so that the open quantity is 10 in the purchasing document and 7 in the sales document.

The report lists all the documents that belong to this transaction and specifies the quantities that are contained in the documents.

### Activities

To run this report, proceed as follows:

1. Choose *Tools* → *ABAP/4 Workbench* on the initial screen.
2. Choose *Development* → *ABAP/4 Editor*.
3. Enter the report name SDMFSTRP in the program field and choose *Execute*.
4. You reach the selection screen.
5. Enter the interval of sales orders and the time period which you want to monitor.
6. Choose *Program* → *Execute*.

You receive a list of all third party orders for which quantity discrepancies exist between Purchasing and Sales.

---

**Monitoring Quantity Differences Between Sales and Purchasing**

## Batches in Sales Processing

For materials managed in batches, you can enter individual batch numbers in the following documents:

- Pre-sales documents (such as inquiries or quotations)
- Sales orders
- Delivery

If you enter a batch number directly into the sales document, the system checks whether its availability and expiration dates are valid. When you copy a pre-sales document to a sales order, any existing batch numbers are also automatically copied but cannot be changed in the sales order. If you create a sales order with materials to be managed in batches that does not have a preceding document, you can change the batch numbers until subsequent documents, such as the delivery, have also been created.

### Maintaining Master Data for Batches

If a material is managed in batches, you indicate this fact in the material master record in either the *Purchasing* or *Plant data/storage 1* views. You can also create and maintain master data for individual batches, specifying such information as the expiration date, valuation type, and the country of origin. If you are planning to use batch split at delivery time, you must also maintain the relevant customer master records for those customers who permit batches to be split.

### Checking Availability for Materials Managed in Batches

The availability of materials managed in batches is checked in two stages. The quantity which can be confirmed is the minimum quantity determined by the two separate checks.

Check	Description	System checks...
1	Batch level	against batch stock involving all inward and outward movements of goods relevant for batch material.
2	Plant level	against plant stock involving all inward and outward movements of goods relevant for batch material.

### Example of Availability Check

Material 3756 is managed in batches. Batch A has a plant stock of 100 pieces. The following two sales orders are processed:

Sales orders	Material	Batch	Quantity	Plant
1	3756	--	45	0001
2	3756	A	55	0001

After sales order 1 has been posted, the availability check for sales order 2 would be as follows:

- At plant level: 55 pieces for plant 0001
- At batch level: 100 pieces for batch A

In other words, batch A is still considered available, since no batch was specified in sales order 1. After sales order 2 has been posted, the availability check for the next sales order would be:

---

**Batches in Sales Processing**

- At plant level: 0 pieces for plant 0001
- At batch level: 45 pieces for batch A

Since batch A was specified in sales order 2, the system automatically reserves 55 pieces of this batch. At plant level, all stock is exhausted.

**See also:**

For more information on batches, see *LO Batch Management*.

## Entering Batch Number in Sales Document

Before you can enter a batch number in a sales document, a delivering plant must be entered for the item. If no delivering plant is entered, the *Batch* field remains inactive.

You can find the *Batch* field on the *Item overview* tab page in the table with the items.

If you do not know the batch number, you can display all the available batches in the delivering plant for your material, by using the input help.

An availability check is carried out for the batch which you have entered, and the quantity available is confirmed.

## Copying Batch Numbers to the Delivery

When copying a sales order with batch numbers to a delivery, all batch data is automatically copied. The batch numbers which are copied to the delivery cannot be changed again here. However, a validity check is again carried out for the batch in the delivery. If, when creating a delivery, the system discovers that the copied batch is not valid, a warning is issued by the system. In this case, the batch specification must be changed in the sales document source. You can find more information on batch handling in the delivery in [Working with Batches in Deliveries \[Ext.\]](#).



If no batch number is proposed in the sales order for an item with material to be handled in batches, automatic batch determination can be carried out in the delivery.

## Configurable Materials in Sales Documents

# Configurable Materials in Sales Documents

## Use

Configurable materials are complex products that can be produced in different variants. For example, cars have different paintwork and different-sized engines. You use characteristics to describe configurable materials.

There are different ways of processing configurable materials in sales documents. These processing options are described in the following scenarios:

- [No BOM Explosion \[Page 294\]](#)
- [Single-Level BOM Explosion \[Page 297\]](#)
- [Multi-Level BOM Explosion \[Page 299\]](#)
- [Process: Sales Order \[Page 301\]](#)
- [Process: Order BOM \[Page 306\]](#)

You can configure configurable materials in quotations and sales orders. You can copy the configuration from a quotation to a sales order.

## Prerequisites

Before you can configure a material in a sales document, the following prerequisites must be fulfilled:

### Settings for Variant Configuration

- You have created the material with a material type that supports variant configuration or defined the material as configurable in its material master record.
  - You have created sales data in the material master of the material (see [Material Master Data for Configurable Materials \[Ext.\]](#)).
- You have assigned characteristics to the material by allocating the material to a variant class (see [Classification \[Ext.\]](#)).
- You have created a configuration profile for the material, containing at least the configuration parameters that are essential for controlling processing in sales documents (see [The Configuration Profile \[Ext.\]](#)).
- You have created dependencies and allocated these to characteristics and characteristic values, to define the dependencies between characteristics and values. When you configure a material, some characteristic values tend to be mutually exclusive. This may be for technical reasons (for example, certain engines can only use a certain type of transmission) or for marketing reasons (for example, leather covers are only available with more expensive models). See [Object Dependencies \[Ext.\]](#).
- You have created selection conditions and allocated these to items in BOMs and operations in routings. Selection conditions ensure that the system selects the items and operations you need to produce your variant (see [Selection Conditions \[Ext.\]](#)).

## Configurable Materials in Sales Documents

### Settings in the Sales

- The item category of the order item must allow configuration. In Customizing for *Sales and Distribution*, the correct indicator must be set for the item categories in the *Structure scope* field.  

The item category group entered in the material master controls which item categories can be assigned.
- The *Configuration allowed or required* indicator must be set for the requirements class in Customizing for *Sales and Distribution*.  

The requirements class is determined using the strategy group and requirements type defined in the material master.

### Process Flow

1. If you enter a configurable material on the item entry screen, then confirm, you see the configuration editor with the characteristics of the configurable material. You configure the material by assigning values to the characteristics (refer to [Configuring Objects \[Ext.\]](#)).
2. Once you have finished configuring the configuration structure, go back to the sales document.
3. You see the result of the availability check. This tells you whether the requested delivery date is feasible. If possible, the system offers a delivery proposal (see the R/3 Library *Sales → Availability Check and Requirements in Sales and Distribution Processing → Availability Check in Sales and Distribution Processing → Working with the Availability Check in Sales and Distribution Processing ### Reactions to the Availability Check in Sales Documents*).  

Confirm a delivery date or select *Continue*.
4. You see the order item overview screen again.
5. You can continue processing the sales order.
6. Once you have finished processing, save your sales order.

### Result

The configuration of the material is saved with the sales order. Customer requirements are transferred to MRP.

## No BOM Explosion

## No BOM Explosion

### Use

You want to configure a material that can be supplied in a range of variants.

The material has a BOM that is not relevant to the sales order. The customer requires only the characteristics that describe the variant. The components required are not determined until the MRP or production stage, so it is not necessary to explode the BOM in the sales order.

If the BOM contains other configurable materials, you cannot configure these materials .

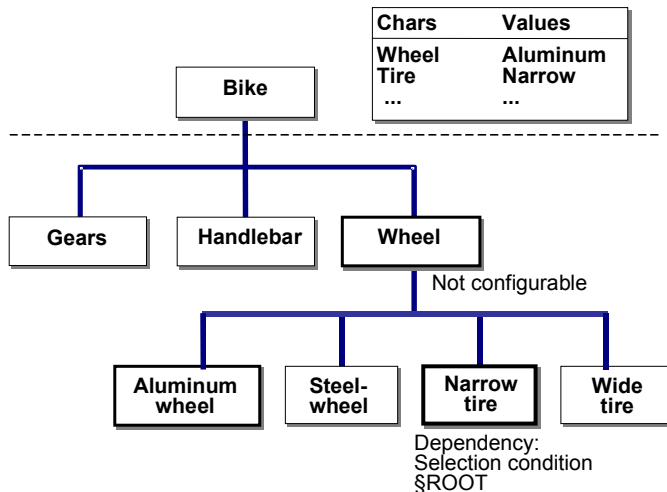
#### Simple Example

The material is a bike that the customers can put together according to their requirements. One customer wants a red racing bike with narrow tires, 21 gears, and a racing handlebar. Another customer may want a green trekking bike with wide tires, a trekking handlebar, and 12 gears. The bill of material for the bike includes the various components that can make up the variants of the bike.

You enter the features of material **Bike** in the form of characteristic values. The characteristic values assigned to the bike are saved in the sales order. The sales order is passed on to the shop floor. On the shop floor, the characteristic values assigned in the sales order are used to determine which parts are required to build the bike. If the customer ordered a bike with narrow tires and 21 gears, the production BOM contains exactly these components.

#### Example with Several Configurable BOM Items

The materials BIKE and WHEEL are configurable. The wheel of a bike can have its own configuration profile. This is especially useful if you also want to sell wheels separately. However, when you use the wheel as a component of a bike, you cannot configure the wheel separately. If the wheel has its own characteristics, you must define object dependencies that set the characteristic values for the wheel, according to the characteristic values assigned to the bike.



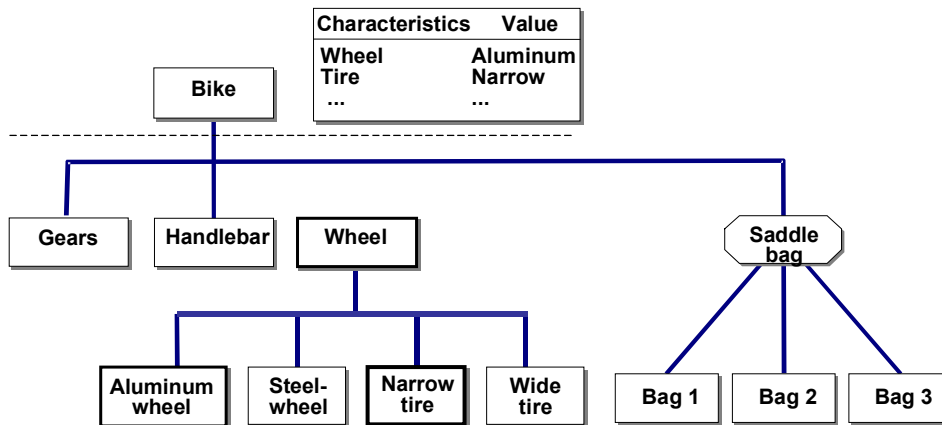
If you always want to sell the wheel as part of a finished bike, not as a separate product, you do not need a separate configuration profile for the wheel. You only need to describe the wheels

**No BOM Explosion**

when you configure the bike as a whole. To enable you do this, the characteristics of the wheels must be assigned to the configurable bike. By assigning characteristic values to the bike, you ensure that the necessary components and operations for the wheel are selected.

**Example with a Class as a BOM Item**

In the BOM for the bike, you can enter a class as a BOM item. For example, you can classify different saddlebags for a bike in a class called **Saddlebags**. To do this, use the classification functions in the classification system (see the SAP Library, under *CA Classification*).



In the BOM for the bike, you enter class **Saddlebags** as a class item. You do not enter each individual saddlebag. When you configure the bike in a sales order, the class item is replaced by a component. For more information on classes as BOM items, see [Selecting BOM Items \[Ext.\]](#).

In this case, too, characteristics are used to describe the different bags, so that the BOM need not be exploded in the sales order.

**Pricing**

In pricing, the system reads the conditions you maintained for the header material. For example, the price of a material can be determined using pricing condition PR00. You maintain pricing condition PR00 with the sales master data function *Conditions* → *Pricing* → *Material price* → *Create*. You can also maintain a customer-specific or price list-specific price for a material.



PR00 is only a mandatory condition in the standard pricing procedure. Depending on the Customizing modifications in your company, PR00 may no longer be a mandatory condition.

Individual prices for BOM components are not included in the calculation. However, you can define surcharges and discounts that are dependent on the characteristic values assigned, in the form of variant conditions. You can use dependencies to determine when these conditions are active.

## No BOM Explosion

### Prerequisites

- Materials whose BOMs are not to be exploded in the sales order have the following settings in their configuration profile:
  - Configuration parameter: *BOM explosion: None*
  - Under *UserInterf* in the configuration profile, you cannot specify the screens allowed for configuration.
- The configurable material must have all the characteristics that are needed to select the components required.
- LOW-LEVEL configuration principles are used for exploding BOMs and task lists because the BOM components and task list operations are first reported during requirements planning or production (see also: [Low-Level Configuration \[Ext.\]](#)).
  - You can only use constraints when assigning characteristic values to the header material. However, constraints do not affect the BOM explosion in MRP. For this reason, you cannot use constraints to infer values for subordinate configurable materials.
    - For more information on constraints, see [Constraints \[Ext.\]](#).
  - This is a single-level configuration, so the dependencies for configuration profiles of subordinate configurable materials are ignored when you explode the BOM. Dependencies for the BOM items and operations of subordinate assemblies are processed (except for constraints).

### Process Flow

1. Create a sales order and enter the configurable material as an order item.
2. You see the configuration editor, where you assign values to the characteristics of the material. As you enter characteristic values, dependencies for the characteristics and values are processed.
  - You cannot go to other overviews in the configuration editor if you select *None* under *BOM explosion*.
3. In MRP, requirements are determined for the item in the sales order. In the planned order or production order, the components of the BOM and the operations of the task list are determined according to the characteristic values assigned in the sales order. Low-level configuration applies.

## Single-Level BOM Explosion

### Purpose

The BOM is exploded on one level on the result screen in the sales order. Other configurable material can be contained in the BOM and these can be configured. However, the BOMs of these materials are not exploded in the sales order.

You can combine this setting with *Process: Sales order* when dealing with configurable material of the BOM that you want to assemble in a set structure.

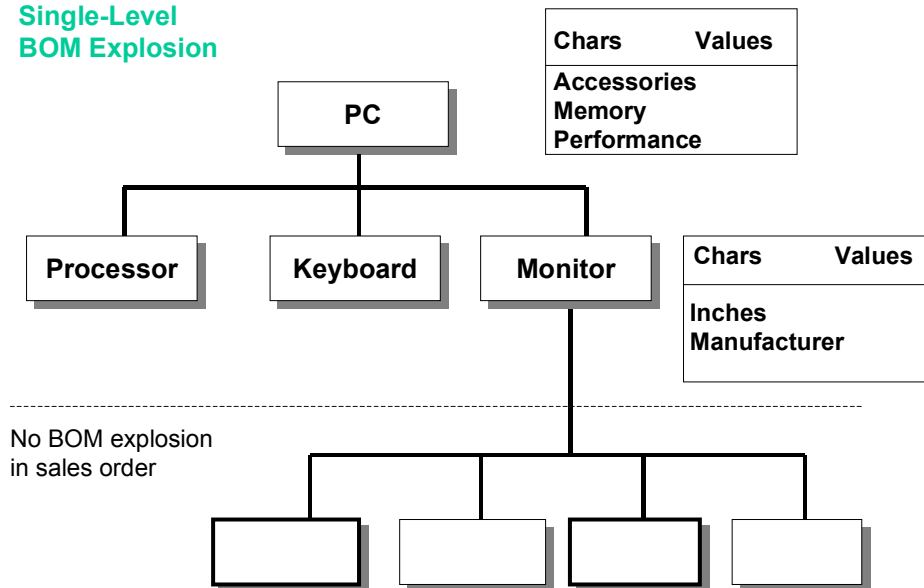
See also: [Process: Sales Order \[Page 301\]](#)

### Example

The materials PC and MONITOR are configurable. The monitor has its own configuration profile and characteristics. The configurable PC has the setting *BOM explosion: single level* in its configuration profile. On the result screen in the sales order, you see the selected components.

Configurable material MONITOR can also be configured in the sales order. However, the BOM of the PC is not exploded, because a single-level explosion only is defined for the header material. The configuration parameters for the material MONITOR are not important in this instance.

### Single-Level BOM Explosion



### Features

- All configurable items are configured in the sales order, not only sales-relevant items. The BOMs of these materials are not exploded in the sales order.



## Single-Level BOM Explosion

You can use filters in the configuration profile to restrict the scope of the BOM items (see [Filters for BOM Explosion \[Ext.\]](#)).

- Sales-relevant items are copied to the sales order as order items.
- The characteristic values assigned to each configured item are saved.
- In MRP the required components are determined based on the characteristic value assignments for the head material and the subordinate items as well as the task list operations based on low-level configuration. (See also [Low Level Configuration \[Ext.\]](#)).
- If you define selection conditions for the BOM items of a subordinate configurable assembly, and these selection conditions refer to the characteristics of the assembly, you must use the object variable \$PARENT to refer to the characteristics.



The selection conditions for BOM components of the monitor must refer to the characteristics of the monitor with object variable \$PARENT – for example, \$PARENT.MANUFACTURER = 'Sony'.

- This type of order processing lets you use constraints to infer values for configurable materials.

## Prerequisites

The configuration profile of the header material has the configuration parameter *BOM explosion: single level*.

## Process Flow

1. Create a sales order and enter the configurable material as an order item.
2. You see the configuration editor, where you assign values to the characteristics of the material. You can then display the result of the BOM explosion by choosing *Result*.
3. If any of the selected BOM components are also configurable materials, you can assign values to the characteristics of these materials. However, the BOMs of these materials are not exploded.
4. The header material appears as a sales order item. If the BOM contains further sales-relevant items, these are included as sub-items. The characteristic values assigned to the header material and the subordinate configurable materials are saved.
5. In the planned order or production order, BOM components and operations for the configured materials are determined according to the characteristic values assigned.

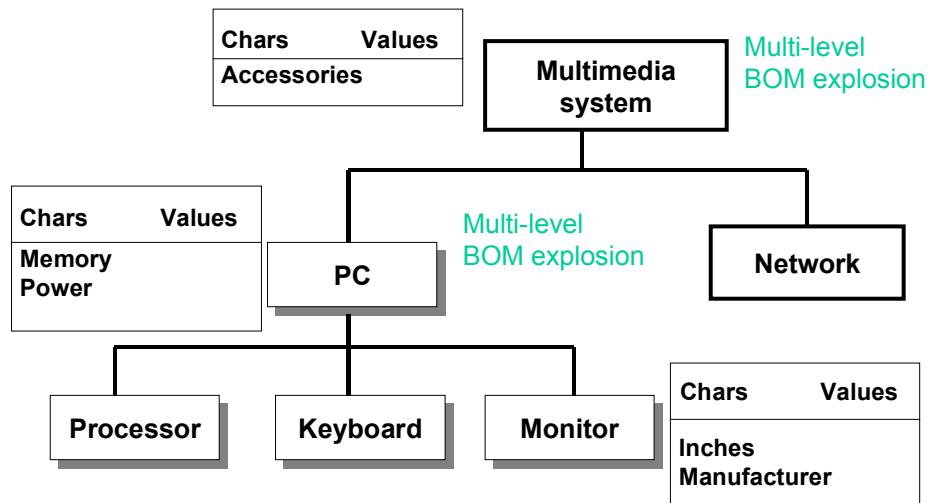
## Multi-Level BOM Explosion

### Purpose

The setting *BOM explosion: multi-level* means that multiple levels of the BOM of a configurable material are exploded in the sales order, if the configuration profiles of the configurable assemblies also support BOM explosion. You can configure assemblies across multiple levels.



Variant product MULTIMEDIA\_WORKSTATION supports multi-level BOM explosion. The BOM contains configurable material PC. This material supports single-level BOM explosion. The BOM of the PC contains another configurable material MONITOR.



### Features

- All configurable items are configured in the sales order, not only sales-relevant items.



You can use filters in the configuration profile to restrict the scope of the BOM items (see [Filters for BOM Explosion \[Ext.\]](#)).

- Sales-relevant items are copied to the sales order as order items.
- The characteristic values assigned to each configured item are saved.
- In MRP, components and operations selected depend on the characteristic values assigned according to the principles of low-level configuration (see [Low-Level Configuration \[Ext.\]](#)).

## Multi-Level BOM Explosion

- If you define selection conditions for the BOM items of a subordinate configurable assembly, and these selection conditions refer to the characteristics of the assembly, you must use the object variable \$PARENT to refer to the characteristics.



The selection conditions for BOM components of the PC must refer to the characteristics of the monitor with object variable \$PARENT – for example, `$PARENT.MANUFACTURER = 'Sony'`.

- This type of order processing lets you use constraints to infer values for configurable materials on different levels.

## Prerequisites

The configuration profile of the header material has the configuration parameter *BOM explosion: multi-level*.

The subordinate materials whose BOMs are to be exploded in the sales order must also have a BOM explosion parameter (single-level or, preferably, multi-level).

## Process Flow

1. Create a sales order and enter the configurable material as an order item.
2. You see the configuration editor, where you assign values to the characteristics of the header material. You can then display the result of the BOM explosion by choosing *Result*.
3. If any of the selected BOM components are also configurable materials, you can assign values to the characteristics of these materials. Depending on the configuration parameters, the BOMs of these materials are exploded on the result screen.
4. The header material appears as a sales order item. If the BOM contains further sales-relevant items, these are included as sub-items. The characteristic values assigned to the header material and the subordinate configurable materials are saved.
5. In the planned order or production order, BOM components and operations for the configured materials are determined according to the characteristic values assigned.

## Process: Sales Order

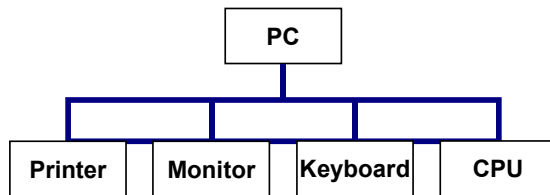
### Purpose

You can use this processing type to describe variant products that comprise salable configurable materials. These products are supplied together, but are not assembled in a production order.

This processing form means that in the sales order you can only process sales-relevant BOM items.

You can use the [item category group \[Ext.\]](#) to define that requirements transfer and pricing are at component level.

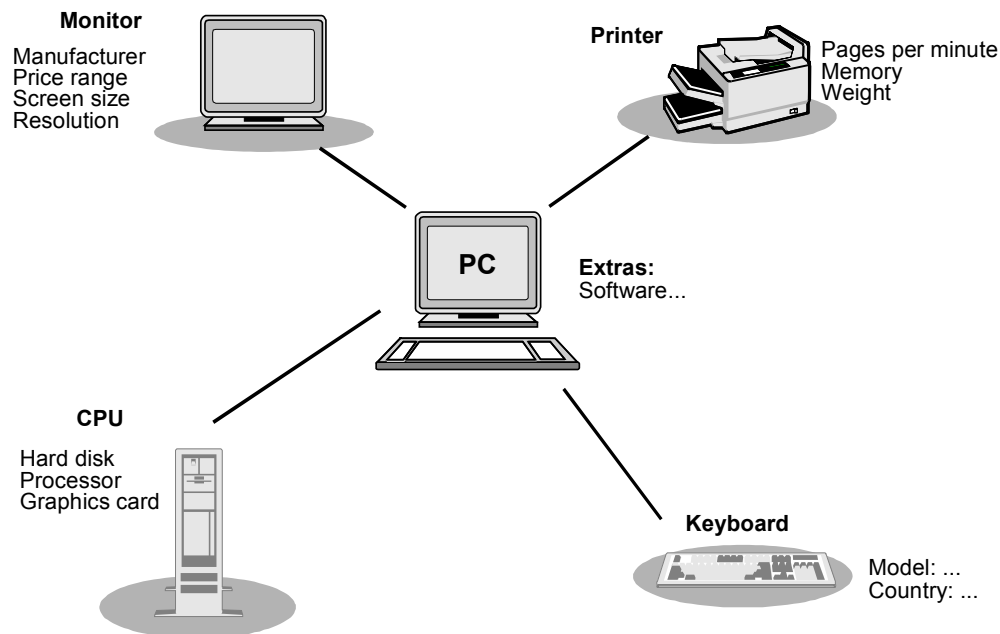
For example, a PC is made up of the components monitor, CPU, keyboard, and printer. These components are all salable materials that can be manufactured separately. In the sales order, you want to see the individual components that make up the computer as order items, as well as the whole computer. In sales order processing, these products are grouped together in a SET. For this reason, this type of processing is also referred to as **set processing**.



Sold-to party		XX
Requested delivery date		....
Item	Material	Pieces
10	PC	1
20	Printer	1
30	Monitor	1
40	Keyboard	1
50	CPU	1

The individual components of a BOM can be configurable products that are described by characteristics of their own. You must create a configuration profile for each of these materials, in order to assign the materials to a class. The superior configurable material only has a few characteristics that are relevant to all components.

## Process: Sales Order



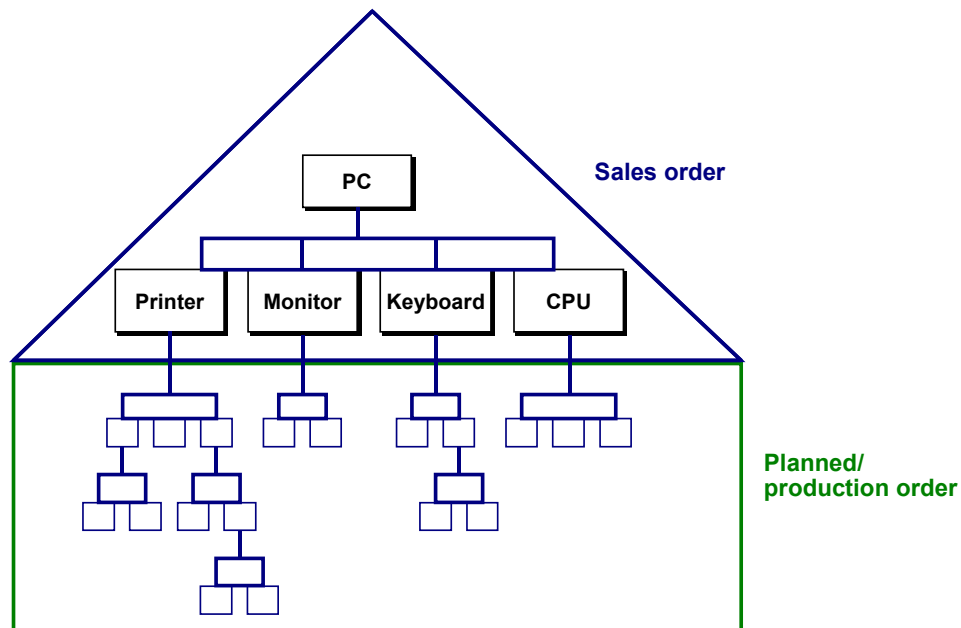
In addition to the process, the BOM explosion settings for the header material must be specified in the configuration profile.

- For a single-level SET structure, it is sufficient to define a single-level BOM explosion in the configuration profile of the PC.
  - *BOM explosion: single-level* setting and process *Sales order*.
- If the BOMs of the assemblies (such as the printer) contain other configurable materials, you need the multi-level BOM explosion setting for the PC:
  - *BOM explosion: multi-level* setting and process *Sales order*.

If the header material supports multi-level BOM explosion, the configuration parameters of the assembly determine whether the BOM is exploded in the sales order.



If you only want the assemblies of the header material to appear in the sales order, and the components of subordinate assemblies are relevant to production, you can select the setting *BOM explosion: Single-level* and process *Sales order* for the configuration profile of the header material. The sales-relevant BOM of the header material is exploded in the sales order, and the production-relevant BOM is exploded in the planned order or production order.



### Constraints

You can use constraints to infer values between configurable assemblies (for example, the printer and the CPU).

You can also use constraints to pass values from the PC to the assemblies, or from the assemblies to the PC.

### Object Variable \$PARENT

If you define selection conditions for the BOM items of a subordinate configurable assembly, and these selection conditions refer to the characteristics of the assembly, you must use the object variable \$PARENT to refer to the characteristics.



The selection conditions for BOM components of the printer must refer to the characteristics of the printer with object variable \$PARENT – for example, `$PARENT.Pages/min = '3'`.

### Prerequisites

- **Settings in the Configuration Profile**

Before the components of a configurable material can appear as a set in the sales order, the parameters *BOM explosion: Single-level* or *Multi-level* and the process *Sales order* must be selected in the configuration profile of the material.

- **Settings in BOM Maintenance**

Only BOM items that are defined as relevant to sales and distribution appear in the sales order.

**Process: Sales Order**

The BOM must be created with a usage that supports sales-relevant BOM items, and you must define the BOM items as sales-relevant by choosing *Item* → *Status/long text* (see [Controlling the BOM Explosion \[Ext.\]](#)).

- **Settings in the Material Master**

Sales data must be maintained in the material master of the individual materials in the BOM.

If you want requirements transfer and pricing at component level, the configurable material must have item category group 0004.

- **Allowing Manual Changes**

You can also change the BOM items of the header material to suit customer requirements. The change is copied to the sales order item. However, you can only change the BOM items if the *Manual changes allowed* indicator is set in the configuration profile of the header material. You can only change BOM items that are relevant to sales.

If manual changes are allowed, you can delete items from the BOM or insert items in the BOM. You can also make changes to existing items (for example, you can change the quantity).

## Process Flow

1. Create a sales order and enter the configurable material as an order item.
2. You see the configuration editor, where you assign values to the characteristics of the header material. You can then display the result of the BOM explosion by choosing *Result*.

You see all BOM components that are selected according to the values assigned, **and** are relevant to sales.

3. You can also configure the configurable assemblies. You can use constraints to infer characteristic values between assemblies. Once you have configured all materials, you return to the order item entry screen.
4. All BOM items that were selected and are relevant to sales are displayed as sub-items for the main item in the sales order.

For more detailed information on settings for item categories for transferring requirements and pricing, see [Item Categories for Configurable Materials \[Page 308\]](#).

## Note

If you select the process *Sales order* in the configuration profile, this may lead to problems in costing. You need to take note that each configured instance that has the *Sales order* setting represents a configuration of its own, so that each configurable material with this setting has its own CBase. The use of object variable \$ROOT in dependencies can easily lead to errors here.



Example

Item in the Sales Order	Material	Material Type	Settings in the Configuration Profile
10	Kmat1	KMAT	Sales order
20	Kmat2	KMAT	Sales order

: : 80	Fert1	FERT	→ No setting in profile, material is not configurable
--------------	-------	------	---

Items 10 and 20 both represent separate configurations. The structure information is in SD only.

For this reason, object variable \$ROOT must not be used if you use dependencies for item 80 (Fert1), because in this example item 20 (Kmat2) is the parent or root of item 80 (Fert1).

**See also:**

[Profile Scenarios: Possible Combinations \[Ext.\]](#)

---

**Process: Order BOM**

## Process: Order BOM

### Purpose

You use this processing option if you want to make customer-specific changes to the BOM of a material that you configure in the sales order. In the sales order, you assign values to the characteristics of the header material, but the BOM is not exploded in the sales order.

The BOM components that match these values are not determined until you call a special processing function. Subordinate configurable materials can be configured in this function, and you can make order-specific changes to the BOM.

There are 2 types of order BOMs:

- The **result-oriented order BOM** saves the configured BOM with the manual changes.
- The **knowledge-based order BOM** saves the super BOM with all manual changes and dependencies, not the configured BOM. When you explode the BOM, the dependencies are processed dynamically and only the selected items are displayed.



If you change the characteristic values assigned to the material in transaction VA01, VA02, or CU51, this may affect the order BOM.

### Prerequisites

The configuration profile of the configurable material has the *Process: Order BOM* indicator selected, with a single-level or multi-level BOM explosion.

### Process Flow

#### Maintenance of Order BOM not Allowed in Sales Order

1. Create a sales order and enter the configurable material as an order item.
2. You see the configuration editor, where you assign values to the characteristics of the header material. As you enter characteristic values, dependencies for the characteristics and values are processed.

The BOM is not exploded in the sales order. You cannot assign values to subordinate configurable materials in the sales order.

The header material appears as a sales order item.

3. Once you have saved the sales order, you can process the BOM for the sales order by choosing *Bill of material* → *Order BOM* → *Maintain multi-level* from the bills of material menu. The values assigned to the material in the sales order are displayed and cannot be changed.

#### Maintenance of Order BOM Allowed in Sales Order

You can only use this function if you select *Result-oriented BOM* in the configuration profile first.

1. Create a sales order and enter the configurable material as an order item.

**Process: Order BOM**

2. You see the configuration editor, where you assign values to the characteristics of the material. As you enter characteristic values, dependencies for the characteristics and values are processed.
3. Choose *Engineering* to process the order BOM.
  - You can assign values to subordinate configurable materials or change values already assigned.
  - Exit configuration and return to the sales order.

The order BOM is saved as a result-oriented order BOM when you save the sales order.
4. The header material is shown in the sales order as an order item.

## Result

In material requirements planning (MRP), requirements are determined for the order item. To ensure that MRP checks whether a material has an order BOM, set the *Sales order BOM* indicator in Customizing by choosing *Planning → BOM Explosion/Determine Routing → Define BOM explosion control*.

### See also:

For more information on maintaining order BOMs with and without Variant Configuration, together with the preceding and subsequent process, see the *SAP Library* under *Logistics → PP Production Planning → PP Order BOM*.

The following sections deal with maintenance of order BOMs with variant configuration:

[Order BOMs for Variant Configuration \[Ext.\]](#)

[Settings in the Configuration Profile \[Ext.\]](#)

[Creating a Knowledge-Based Order BOM \[Ext.\]](#)

[Creating a Result-Oriented Order BOM \[Ext.\]](#)

[Instantiating Configurable Materials \[Ext.\]](#)

[Fixing Configurable Assemblies \[Ext.\]](#)

## Item Categories for Configurable Materials

## Item Categories for Configurable Materials

In the standard R/3 System, the following item category groups determine which item categories are assigned to configurable materials in the sales order:

- Item category group 0002  
Pricing and transfer of requirements for header material (refer to [Graphic 1 \[Ext.\]](#))
- Item category group 0004  
Pricing and transfer of requirements for components (refer to [Graphic 2 \[Ext.\]](#))

The BOM of the configurable material may contain configurable assemblies, which are copied to the sales order as subordinate items. The item category group of the materials and the item category of the superior material determine the item category of these subordinate items.

### Determining Item Categories

	Superior configurable material	Non-configurable assembly	Configurable assembly
Item category group	0002	NORM	0002
Item category	TAC	TAE	TAE

Refer to: [Graphic 3 \[Ext.\]](#)

	Superior configurable material	Non-configurable assembly	Configurable assembly
Item category group	0002	NORM	0002
Item category	TAE	TAE	TAE

Refer to: [Graphic 4 \[Ext.\]](#)

	Superior configurable material	Non-configurable assembly	Configurable assembly
Item category group	0002	NORM	0004
Item category	TAC	TAE	TAE

Refer to: [Graphic 5 \[Ext.\]](#)

	Superior configurable material	Non-configurable assembly	Configurable assembly

**Item Categories for Configurable Materials**

Item category group	0004	NORM	0002
Item category	TAM	TAN	TAC

Refer to [Graphic 6 \[Ext.\]](#)

	<b>Superior configurable material</b>	<b>Non-configurable assembly</b>	<b>Configurable assembly</b>
Item category group	0004	NORM	0004
Item category	TAM	TAN	TAM

Refer to [Graphic 7 \[Ext.\]](#)

**See also:**

R/3 Library *SD Sales* [Item Categories \[Page 29\]](#)

## Variant Matching in the Sales Order

# Variant Matching in the Sales Order

## Use

If material variants already exist for a configurable material, the configurable material can be replaced in the sales order by a material variant. For this to happen, the configuration of the material must match the material variant exactly. Material variants that only partly match the configuration of the material in the sales order are ignored.

## Prerequisites

You define the settings for variant matching in Customizing for Sales and Distribution, where you maintain item categories.

- You activate variant matching for an item category
- You define how the system reacts if it finds a material variant:
  - The system automatically replaces the configurable material with the material variant.
  - You see a message telling you that a material variant with the same configuration exists.
- You determine whether you want an availability check to be executed.

If the material variant is not available, you can:

- Receive an automatic message with a list of the material variant stock situation. You can then decide whether to replace the material variant.
- Decide that you do not want to replace the variant.

## Restrictions

You can only replace materials that have the configuration parameter *BOM explosion: None* with material variants.

## Activities

1. Configure the configurable material in the sales order.
2. On the value assignment screen, you can check whether material variants match the configuration of the material (refer to [Variant Matching on the Value Assignment Screen \[Ext.\]](#)).

Before the material can be replaced in the sales order by the material variant, the configurations of the materials must match completely.
3. Once you have configured the material, leave the configuration editor.
4. Depending on the settings in Customizing, either the material is replaced by the material variant immediately, or you see a message telling you that a suitable material variant has been found.
5. If the material was replaced, the order item contains the material variant.

---

**Variant Matching in the Sales Order**

Individual or collective requirements can be generated for the material variant. Pricing also applies to the material variant, unless you define the configurable material as the pricing material for the material variant.

**See also:**

[Material Variants \[Ext.\]](#)

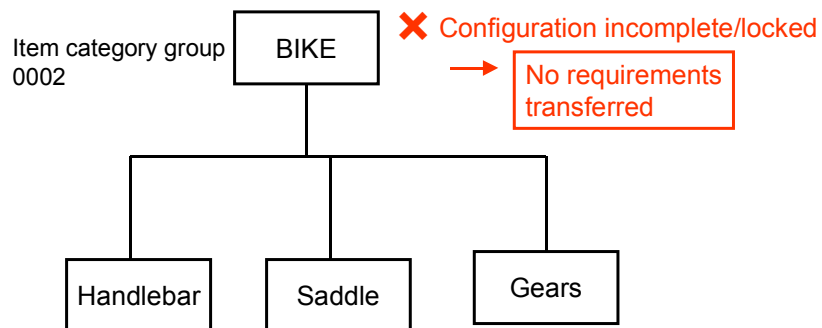
## Transfer of Requirements for Locked Configurations

## Transfer of Requirements for Locked Configurations

### Use

In the standard system, no requirements are transferred for sales order items with a locked or incomplete configuration status.

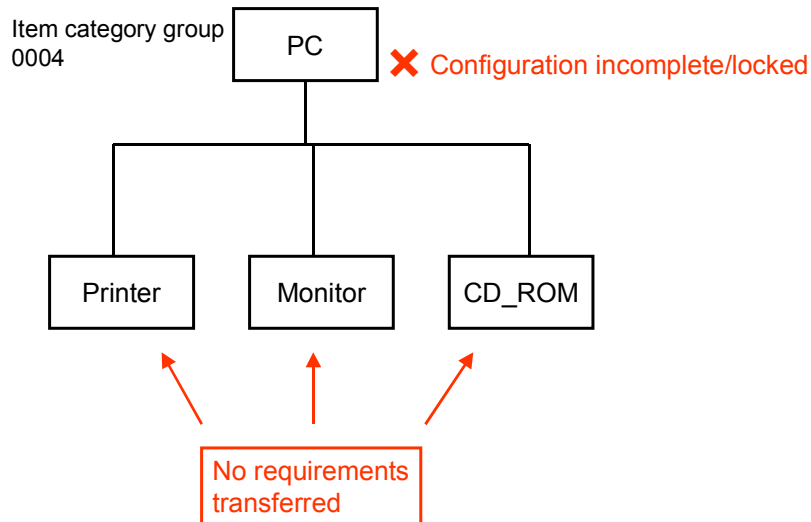
#### Requirements Transfer for Main Item



If the header material has a locked or incomplete configuration status, components that would normally transfer requirements lose their relevance to requirements transfer.

## Transfer of Requirements for Locked Configurations

## Requirements Transfer for Components



No planned order is generated in material requirements planning (MRP) for the order item.

## Features

### System Status *Configuration Incomplete*

If the configuration of a sales document item is incomplete, the item has system status KONU (configuration incomplete).

### Business Transaction Requirements *Transfer with Incomplete Configuration*

Business transaction *Incomplete req. configuration* controls transfer of requirements. In the standard system, no system status allows this business transaction. This means that requirements for the main order item and its components lose their relevance to MRP.

### User Status

In Customizing for *Sales and Distribution*, you can define a user status that allows this business transaction. This status can be set manually or by setting it as the initial status in the status profile. You can use it to ensure that requirements are transferred for order items, even if they have locked or incomplete configuration status.

In Customizing for *Sales and Distribution*, you can define a user status and assign it to a status profile, by choosing *Sales* → *Sales Documents* → *Define and assign status profile*. You can define a user status so that it allows business transaction *Incomplete req. configuration*. You can define this as the initial status, so that it is always set for the status profile.

You assign the status profile to an item category.



## Transfer of Requirements for Locked Configurations

You can use a user status to prevent further changes to the configuration data of an order item. Business transaction *Change configuration data* is defined for this purpose. You can use a user status to allow or disallow this transaction.

### Activities

The configuration status of a configurable material is defined in the configuration editor by choosing *Extras* → *Change status*. Status *Incomplete* is set automatically if any required characteristics do not have assigned values.

In the sales document, the system sets system status KONU for the order item that has an incomplete or locked configuration.

1. To display the status, select the item and choose *Goto* → *Item* → *Status*.

If a status profile is defined with an initial status, you see the user status.

2. For more detailed information, choose *Object status*.

You see the active system and the user statuses in the status profile. You can set a user status manually.

You can display the allowed and disallowed business transactions:

- With a user status, transaction *Incomplete req. configuration* is not allowed.
- If the status profile has a user profile that allows the transaction, and this status is set, the transaction is allowed.

## Internet Scenarios

In the Sales and Distribution area, two Internet scenarios are available:

- Sales order entry
- Sales order status

Both these scenarios are described in the following sections.

You can find more information about Internet applications in the R/3 library under *CA - Cross-Application Components* → *Business Framework Architecture* → *Web Basis*.

---

**Sales Order Entry in the Internet (SD-SLS-SO)**

## Sales Order Entry in the Internet (SD-SLS-SO)

### Use

A useful supplement to normal business transactions is the ability to accept purchase orders from customers over the Internet and forward them as sales orders to an R/3 System.

This is true for all kinds of business, such as catalogs, where the customer knows exactly what she or he wants and is probably only interested in comparing prices and receiving the goods quickly.

### Types of Internet Application Components

Consumer to Business

#### Advantages for your Customer:

- Your customer can order at any time of night or day
- Your customer can enter purchase orders directly into their web server without having to make a telephone call or send a fax
- Using the screen layout that you defined, your customer can enter data quickly and easily
- Your customer can find out quickly about the most up-to-date prices and delivery times
- Your customer can check the delivery status of the purchase order at any time

#### Advantages for you:

- You can design the layout of the screen so that the customer can enter data quickly and easily
- You receive the sales order online, as soon as it has been entered
- You are able to deliver the product rapidly, thanks to the short time span between entering the order and its arrival at your company
- You can react very quickly to the sales order
- You can ease congestion in sales order entry as peak times will be more dispersed

### Prerequisites

To enter an order in the Internet, the customer has to log on with his or her SAP customer number (or email address) and an initial password that you issued. The customer can replace the initial password with their own. The system asks for the customer number and password as soon as the customer assigns a product to shopping basket. New customers can register at this point by entering their information and the system assigns them an initial password that they can change later.

### Authorizations

- For customers with use master data in the R/3 System and are logging on for the first time in the Internet:

**Sales Order Entry in the Internet (SD-SLS-SO)**

You can use transaction SU05 to create, change and delete passwords for the customer. In order to create a unique identification for the customer, enter object category *KNA1* next to the customer number.

- For new customers who do not have any master data in the R/3 System and are logging on for the first time in the Internet:

The system creates a customer master record in the R/3 System with the data from the new customer. Essentially, the user just provides address data and additional information such as data for the company code and sales area are taken from a *reference customer*.

The reference customer is obligatory and you enter it as a global customer in the R/3 System with the company code, organizational data, account group, and internal number assignment data. You store the reference customer as a parameter value for the parameter CSM in the master record for the global user.

- In the VW01.SRVC service file you can use the ~customeridentification customer ID switch to decide how the customer should log on - either with the customer number or the email address. The following values are permitted:
  - sapnumber (standard value)  
The customer has to enter his or her assigned customer number to buy products
  - email  
The customer can enter his or her email address and the R/3 System then automatically finds the customer number by determining the customer master record for that address.

**Material Group**

Authorization group WWW must be saved for the material group that is being offered on the Internet. You can save it in the material master in Customizing by going to *Logistics - General* → *Logistics Basic Data: Material Master* → *Material* → *Define Material Groups*. If you want to offer several Internet application components in the same client, you can use the user parameter VBG (in combination with the R/3 user) to control several material groups.

**Preallocated Data and Parameters**

All the authorizations for the *Sales/Distribution* object class must be maintained for the R/3 user used by the Internet application component to log on to the R/3 System via the Interaction Transaction Server (ITS9). You must also save certain parameters for this user.

A sales order is created in your R/3 System based on the sales order that has been entered in the Internet. The sales order contains certain mandatory entries that have to be completed when it is being created.

This data is taken from the default parameters for the global user master record. The parameters are as follows:

AAT (sales order type)

VKO (sales organization)

VTW (distribution channel)

SPA (division)

CSM (customer number of reference customer)

VBG (service material group)

---

**Sales Order Entry in the Internet (SD-SLS-SO)**

If these parameters have not been completed, the system automatically enters the following values:

AAT (sales order type): OR

VKO (sales organization): 001

VTW (distribution channel): 01

SPA (division): 01

VKB (sales office) from customer master

VBG (material group): WWW

## Features

### Service Name

The service name of this Internet application component is VW01 and you can find all the relevant files under the service name in SAP@Web Studio.

## BAPIs

The following Business Application Programming Interfaces (BAPIs) are used for this Internet application component:

- BAPI\_SALESORDER\_SIMULATE
- BAPI\_SALESORDER\_CREATEFROMDAT1

## Flow (SD-SLS-SO Sales Order Entry)

If you use the Internet application component for entering the status of your sales orders, the following process takes place:

1. You offer a range of products to your customer. The customer can enter the product they want in the shopping basket.
2. The system asks the customer if he or she is new or an existing customer. If the customer is new in the system, it runs the registration process to record the customer data. It creates a customer master record in the R/3 System and assigns a customer number and an initial password to the customer. Company code, sales organization, division and other data are taken from a reference customer master record contained in the R/3 System. This means that the customer master record is almost complete when the customer logs on for the first time and he or she only needs to enter address data. They can change their password and address data at any time. The customer master records are created in real time so that the customer can order straight away.
3. The customer can create a quotation for the products in the shopping basket, according to the prices defined for that customer. The system then displays the total price and the delivery date for the selected prices.
4. If the customer accepts this quotation, the R/3 System creates a sales order that can be processed immediately.

The system displays the sales order number which the customer uses to inquire about the status of the order. This status inquiry displays exactly where the sales order is in the processing chain, for example, if the delivery is already on the way.

You can either now place the orders created on the Internet in a work list to be checked, or you can use the orders to create a work list to be processed immediately in the shipping department.

5. The customer can choose between paying by invoice or credit card. Invoices are managed in the R/3 System in the same way as normal billing documents. If the customer decides to pay by credit card, the system checks the card, and once it has been authorized, processing can continue.

**See also:**

[Example \(SD-SLS-GF Sales Order Entry\) \[Page 320\]](#)

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**Example (SD-SLS-SO Sales Order Entry)****Example (SD-SLS-SO Sales Order Entry)**

A company produces PCs and offers them to their customers in various configurations so that the customer can choose between different memory sizes, country-specific keyboards or different casings.

Once the customer has filled his or her shopping basket, the system creates a quotation with prices and delivery information specifically for that customer.

If the customer accepts the quotation, he or she can then let the system generate a sales order for that quotation. The system provides the customer with a number for the order and the customer can use it to check on processing status later. For example, he or she can then find out if the products are already on their way.

## Sales Order Status in the Internet (SD-SLS-GF)

### Use

Your customers can also see the status of their orders on the Internet. For example they can display their purchase orders, check whether shipping has been activated or whether the goods are already on their way.

### Types of Internet Application Components

Consumer to Business

#### Advantages for your Customer:

- Your customer can check the delivery status of the purchase order at any time
- Customers can check the status directly in their web server without having to make a telephone call or send a fax.

#### Advantages for you:

- You can design the layout of the screen so that the customer can find information quickly and easily
- The ability of customers to access their information on the Internet significantly reduces the workload for the order entry department, as there is no need to answer constant phone calls or faxes.

### Prerequisites

#### Authorizations/Security

To enter an order in the Internet, the customer has to log on with his or her SAP customer number (or email address) and an initial password that you issued, which the customer can then replace with their own.

You can use transaction SU05 to create, change and delete passwords for the customer. In order to create a unique identification for the customer, enter object category *KNA1* next to the customer number.

All the authorizations for the *Sales/Distribution* object class must be maintained for the R/3 user used by the Internet application component to log on to the R/3 System via the Interaction Transaction Server (ITS9). You should establish whether you want to restrict the authorizations for order types if there any that you do not want the customer to see.

#### Standard Settings and Preallocated Data

You do not need to enter any additional data in order for the customer to check the status of the sales orders. The customer number with which the customer logs on also provides the date, while the customer can enter any other selection data such as the article, time period or order number directly.

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**Sales Order Status in the Internet (SD-SLS-GF)****Features****Service Name**

The service name of this Internet application component is VW01 and you can find all the relevant files under the service name in SAP@Web Studio.

**BAPIs**

The following Business Application Programming Interfaces (BAPIs) are used for this Internet application component:

- BAPI\_SALESORDER\_GETSTATUS
- BAPI\_SALESORDER\_GETLIST
- BAPI\_CUSTOMER\_CHECKPASSWORD

## Procedure (SD-SLS-GF) Sales Order Status

If you set the internet application components to status inquiry for sales orders, the following process takes place:

You offer your customer the opportunity of a status inquiry for the sales orders contained in the R/3 System due to customer purchase orders. Using this method, you wish to provide the customer with information about the delivery progress of his ordered goods.

The customer has already entered his SAP customer number when he logged on, and can display sales orders for this customer number. This means that the customer can propose the following selection data:

- Sales order data from
- Sales order data to
- Order number
- Purchase order number
  - Material number

Finally, your customer will receive a list with one or several sales orders. This list provides the customer with the following information:

- the quantities of an article, which, depending on the availability check, can be delivered on the required date
- the quantities of an article which have already been assigned to deliveries

This assignment means that the shipping department begins its actions (for example, picking of goods and preparation for shipment).

### Additional Information on Shipment

Some shipping agencies provide transportation information in the Internet. If the delivery to the customer is carried out by a shipping agency such as this, you can call up the transportation information directly from the status inquiry for sales orders, via a hyperlink. The customer then receives additional information on shipment. This enables him to find out at which loading unit or transfer unit his delivery is situated at present.

Prerequisites in your R/3 System:

- Creating a forwarding agent master record for shipping
  - Maintaining the TCAURL table with the transaction SM30 with the following data:
    - Category: `track_url`
    - User ID: Name of shipping agent previously created
    - Internet address and parameters (example entries are maintained in the standard system)
  - Assigning data collection routines to the necessary parameters in the TCAVAR table (example entries are maintained in the standard system)
  - Entering shipping agency in the delivery

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**Procedure (SD-SLS-GF) Sales Order Status**

- Entering bill of lading number in the delivery (the *Bill of lading* field can be found in the header for the delivery, in the information relevant to shipping)

Once these prerequisites have been fulfilled, the deliveries selected in the status inquiry for sales orders appear as hyperlinks. You can then display shipping information by choosing a hyperlink. The customer automatically receives the exact shipping information relevant for his deliveries, via the parameters maintained in the aforementioned tables.

**See also:**

[Application example \(SD-SLS-GF Sales order status\) \[Page 325\]](#)

## Example (SD-SLS-GF Sales Order Status)

A customer is urgently awaiting a delivery so she uses the status information on the Internet to view the status of her sales orders. For this particular purchase order, she can see that the order has been confirmed and that the shipping department has started processing it. The type of delivery that has been agreed on and the customer's proximity to the vendor mean that the goods will be available the next day.