

SAP SD (Sales and Distribution) is one of the significant modules of SAP ERP. It is used to store the customer and product data of an organization. SAP SD helps to manage the shipping, billing, selling and transportation of products and services of a company. The SAP Logistics module manages customer relationship starting from raising a quotation to sales order and billing of the product or service. This module is closely integrated with other modules like SAP Material Management and PP. This is an introductory tutorial that covers the basics of SAP SD and how to deal with its various modules and sub-modules.

Audience

This tutorial will be extremely useful for professionals who aim to understand the basics of SAP SD and implement it in practice. It is especially going to help consultants who are mainly responsible for implementing sales, billing, and transportation of products.

Prerequisites

It is an elementary tutorial and you can easily understand the concepts explained here with a basic knowledge of how an organization deals with their customers and products. However, it will help if you have some prior exposure to inventory and how to deal with billing and shipping.

SAP Sales and Distribution is one of the key components of SAP ERP system and is used to manage shipping, billing, selling and transportation of products and services in an organization.

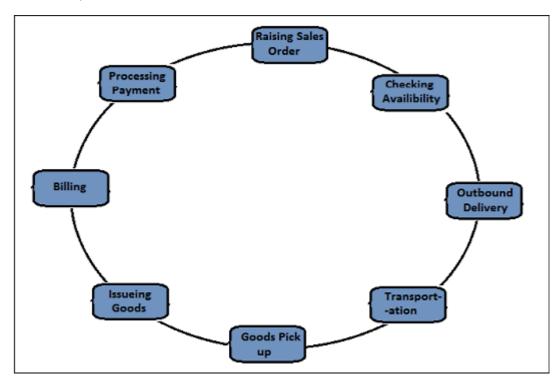
SAP Sales and Distribution module is a part of SAP Logistics module that manages customer relationship starting from raising a quotation to sales order and billing of the product or service. This module is closely integrated with other modules like SAP Material Management and PP.

Key Components in SAP SD

The key components in SAP Sales and Distribution module are –

- Customer and Vendor Master Data
- Sales Support
- Shipping of Material
- Sales Activities
- Billing related

- Transportation of products
- Credit Management
- · Contract Handling and Management
- Foreign Trade
- Information System



SAP SD - Organizational Structure

SAP provides many components to complete SAP Sales and Distribution organizational structure like Sales Areas, Distribution Channels, Divisions, etc. The SAP SD organization structure majorly consists of two steps –

- · Creation of Organization elements in SAP system, and
- second is to link each element as per requirement.

On top of this organization structure in the SD module, sales organization is at highest level and is responsible for distribution of goods and services. SAP recommends to keep the number of sales organization in an organizational structure to be minimum. This will help in making the reporting process easy and ideally it should have a single sales organization.

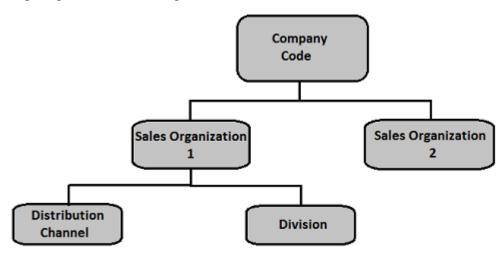
The next level is distribution channel, which tells the medium by which the products and services are distributed by an organization to its end users. Division in an organizational structure, which represents a product or service line in a single organization.

A sales area is known as entity, which is required to process an order in a company. It comprises of sales organization, distribution channel and a division.

In SAP SD organizational structure, each sales organization is assigned to a company code. Then the distribution channel and divisions are assigned to sales organization and all of these comprise to make a sales area.

In the first step of an SD organizational structure, sales organization is assigned to a company code and then is to define a distribution channel and then division to a sales organization.

The following diagram shows the organizational structure of a Sales and Distribution module



Material management

Material Management is one of the key modules in SAP ERP System and covers the day to day business operations related to inventory and procurement. This module is closely integrated with other modules of R/3 systems like Finance Accounting and Controlling, Sales and Distribution, Quality Management, Product Planning.

Integration with Sales and Distribution SD Module

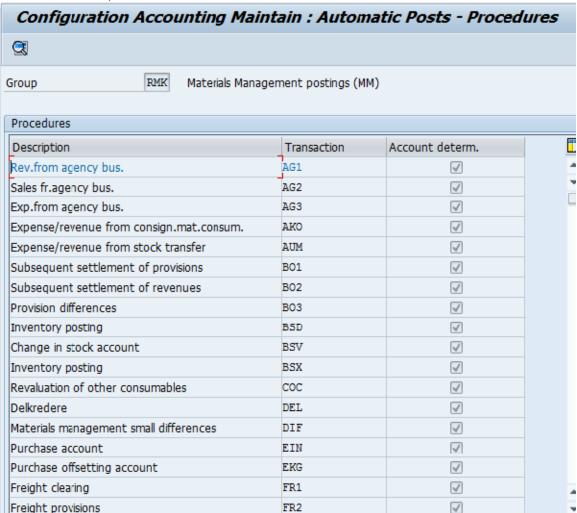
Consider an example of creating a sales order in SAP SD, it involves copying the details of items from Material Management. Availability check of the item and price details are also taken from MM, but this can be controlled in the SD module. To create inbound and outbound delivery of goods for a sales order, shipping details, loading point etc. also comes from the Material Master.

The item that is placed using a Sales order must be extended to the sales area of an organization to sales order/customer, otherwise it won't be possible to transact with this material. This confirms that there is a link between SAP SD and MM module, when a sales order is created and fulfilled. Similarly, there are many other links between two modules.

Finance and Accounting

SAP FI stands for Financial Accounting and it is one of the important modules of SAP ERP. It is used to store the financial data of an organization. SAP FI helps to analyze the financial condition of a company in the market. It can integrate with other SAP modules like SD, PP, SAP MM, SAP SCM etc.

For SAP FI-MM, use **T-code: OBYC**



In case of a standard sales order, you create an outbound goods delivery to the customer. Here movement 601 takes place. This movement is configured in MM and movement of goods hit some G/L account in FI. This shows the integration between SAP SD, FI and MM module.

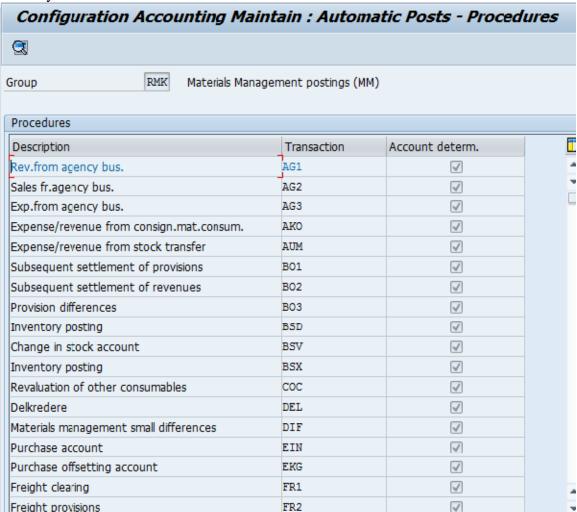
Document Flow

This shows how a transaction in one system effects the details in other systems of an SAP module.

Consider the following transaction –

For SAP FI-MM, use **T-code: OBYC**

Whenever there is a delivery created with reference to a sales order, goods movement takes place in the system.



Example

In case of a standard sales order in the SD module, you create an outbound goods delivery to the customer. Availability check and retail price of that product is checked in the MM module. Here, movement 601 takes place. This movement is configured in the MM and movement of goods hit some G/L account in FI. Every such movement of goods hits General Ledger account in FI.

The accounts posting in FI is done with reference to the billing documents like credit and debit note, invoice etc. created in SD and hence this is the link between SD and FI. This shows the document flow between different modules.

Process Chain

SD module is closely integrated with other SAP modules. The following tables will give you a brief idea on how SD is linked with other modules –

Sales Order

Link Points	Module Involved	
Availability Check	MM	
Credit Check	FI	
Costing	CO/MM	
Tax Determination	FI	
Transfer of Requirements	s PP/MM	

Billing

Integration Point	Module
Debit A/R	FI/CO
Credit Revenue	FI/CO
Updates G/I (Tax,discounts,surcharges,etc)	FI/CO
Milestone Billing	PS

Goods Delivery and Issue of goods

Integration	Module
Availability Check	MM
Credit Check	FI
Reduces Stock	MM

Master data is one of the key factors in Sales and Distribution module. There are two levels of masters in SD.

The first level master includes –

- Customer Master
- Material Master
- Pricing Conditions

While, the second level master is -

Output condition

Create a Customer Master Record

The customer master data contains the information about business transaction and how transactions are recorded and executed by the system. A Master contains the information about the customers that an organization uses to do business with them.

Key tables in Customer Master

Table Name	Кеу	Description
KNA1	KUNNR	General Information
KNB1	KUNNR,BUKRS	Company Code
KNVV	VKOGRG,VTWEG,SPART,KUNNR	Sales Area
KNBK	KUNNR,BANKS,BANKL,BANKN	Bank Data
VCNUM	CCINS,CCNUM	Credit Card
VCKUN	CCINS,CCNUM,KUNNR	Credit Card Assignment
KNVK	PARNR	Contact Person
KNVP	VKORG,VTWEG,SPART,PARVW,KUNNR	Partner Functions

Main Transaction Codes in a Customer Master

S.No

Transaction Codes & Description

1 XD01, XD02, XD03

Used to create/change/display customer centrally

2 VD01,VD02,VD03

Used to create/change/display customer sales area

₃ FD01,FD02,FD03

Used to create/change/display customer company code

4 XD04

Display change documents

XD05

Display change documentsUsed to block Customer – Global, order, delivery, billing, sales area, etc.

6 XD06

5

Used for deletion

7 XD07

Change Account Group

8 VAP1

Create Contact Person

Creating a Customer Master Data

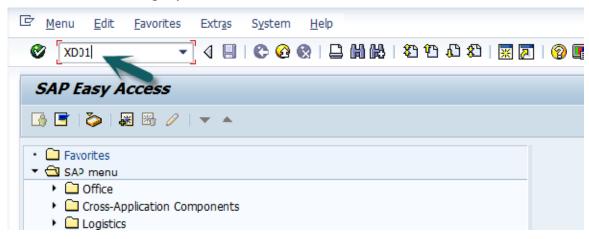
To create a customer master data, you need to use an Account group.

T-Code: XD01/VD01/FD01

Note that if you use –

- **XD01** This Includes sales area in the customer master and data is stored in tables KNA1, KNB1 and KNVV.
- **VD01** This includes sales area & data, which will be stored in tables KNA1, KNB1 and KNVV and there is no company code data in this.

• **FD01** – This is company code level & data is stored in tables KNA1 and KNB1.



Then a new window will open. Enter the following details –

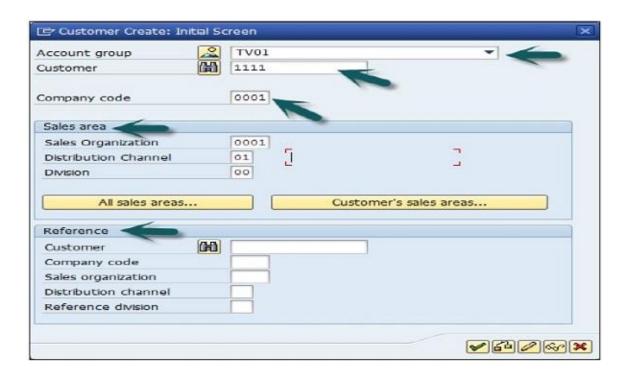
- Select the Account Group from the list.
- Enter the customer number and select the company code.

Then you can enter the Sales Area details like -

- Sales Organization
- Distribution Channel
- Division

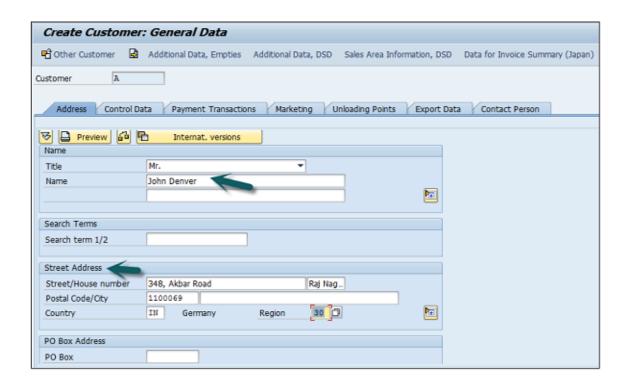
In case you want to take reference from an existing customer to create customer master, you can use the reference option.

Once all the details are selected, click the **Tick** mark.

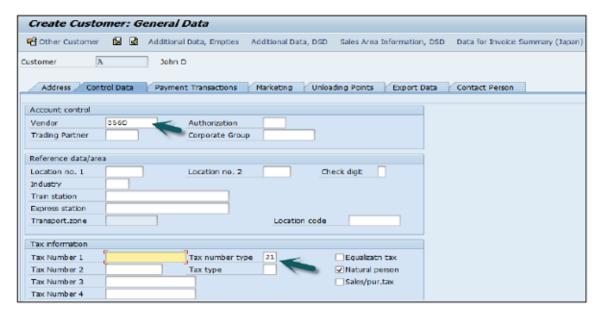


A new window will open to enter the customer master data. This customer master data has 3 key sections -

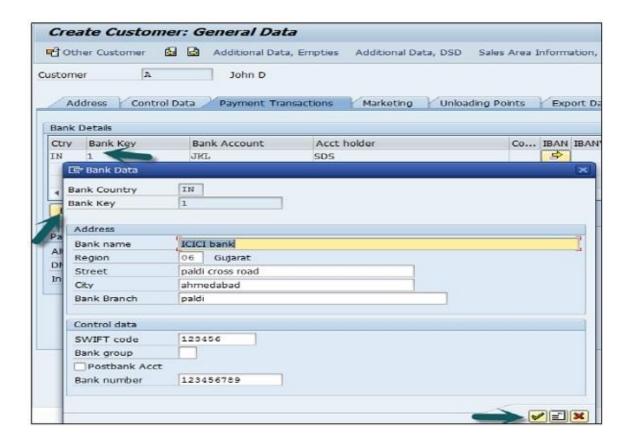
- General Data like Title, Name, Address, etc.
- Company Code Data and
- Sales Area Data.



Note that this region fields define the tax calculation like VAT, CST, etc. The next step is to go to Control Data and enter the following details.



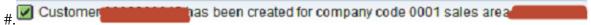
Then you have to enter the particulars in Payment Transaction tab and enter the details of – Bank City, Bank Key, Bank Account and Account Holder Name. You can also add more details by clicking on the Bank data button.



The next step is to go to the Sales Area data and enter the details – Shipping Data, Customer Pricing and Partner Functions, etc.



Next is to click on the Save icon at the top and you will get a confirmation that the customer has been created with



If you have to make any further changes to the customer's master data, you can use T-Code: XD02.

Partner function allows you to identify which functions a partner has to perform in any business

process. Consider a simplest case, where all the customer functions are performed by the partner customer. As these are mandatory functions, they have to be defined as obligatory functions in a SD system.

These functions are categorized as per partner type in Sales and Distribution system. The below partner types are Customer, Vendor, Personnel, Contact Person and common partner functions as per these partner types are —

- Partner Type Customer
 - Sold-To-Party
 - Ship-To –Party
 - o Bill-To-Party
 - Payer
- Partner Type Contact Person
- Partner Type Vendor
- Forwarding Agent
- Partner Type Personnel
- Employee Responsible
- Sales Personnel

The following tables show the main partner types and their corresponding partner function in Sales and Distribution –

Note that if a partner belongs to a different partner type, in this case you need to create a master records for that partner.

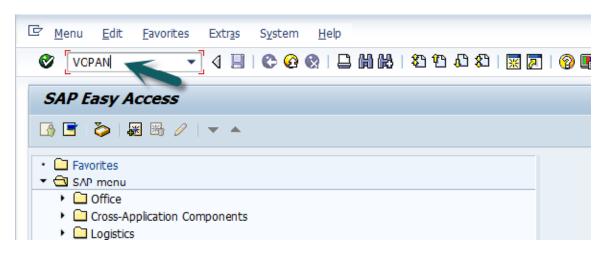
Partner Type	Partner Function	Entry from System	Master Record	
Customer(CU)	Sold-to Party(SP)			
	Ship-to Party(SH)	Customer number	customer master record	
	Bill-to Party(BP)			
	Payer(PY)			
Vendor(V)	Forwarding agent(fwdg agent)	Vendor number	Vendor master record	
Human Resource(HR)	Employee responsible(ER) Sales Personnel(SP)	Personnel number	Personnel master record	

(created in customer master record, no master record of its own)

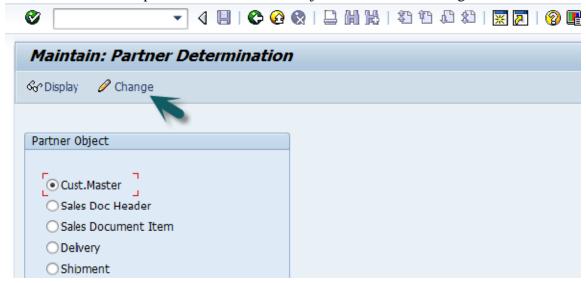
Creating a Partner Function

Use T-Code: VOPAN

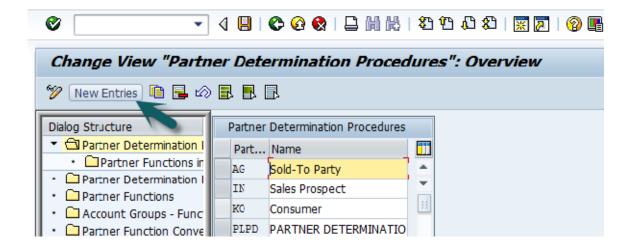
Contact



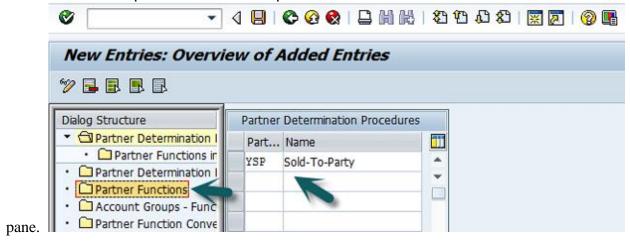
A new window will open. Select the Partner Object and click the Change button.



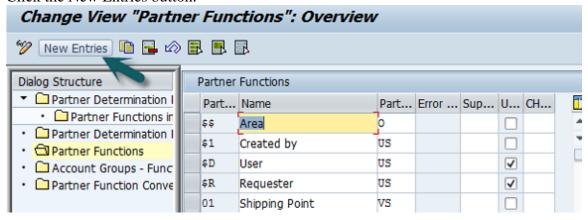
It will open a new window with the name Partner Determination Procedures. Go to New Entries.



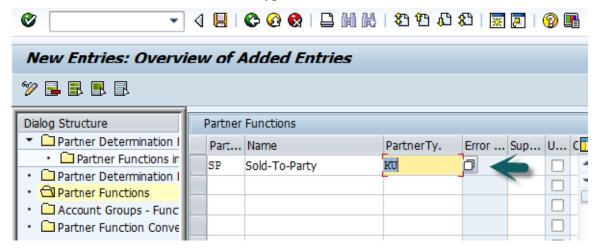
Enter the name and partner determination procedure and double click on Partner Function in left



Click the New Entries button.



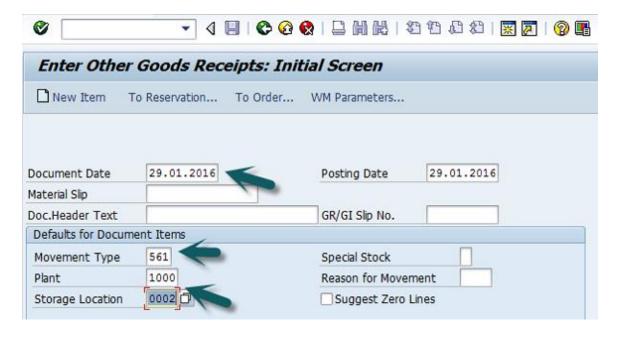
Enter the Partner function details – Name, Type, etc. KU- stands for Customer.



Next is to click on the Partner Function under Partner Determination Procedure node and enter the details Partner Det. Procedure, Name, Partner Function.

Then, we need to assign this partner determination procedure to the Partner Object. The Partner Object would be a Customer for this example. Then Click on Account Groups and Select the Account group name from the list. Once it is done, Click **Save**, it will save the partner function.

Suppose you have implemented SAP in your company and now you want to put all your stocks in the SD system. For this, **use T-Code: MB1C Movement Type: 561** this is for Good receipts without reference.



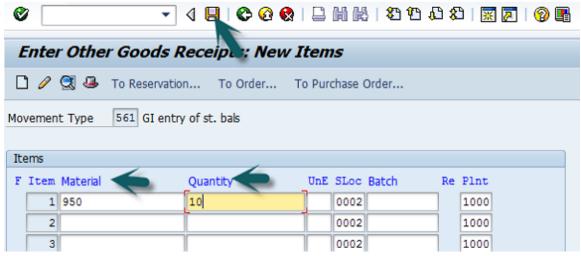
Movement Type: 501 – this is used for receiving goods with a Purchase Order.

A new window will open. Enter the document date, Plant and storage location, Movement type, etc.

Select the Movement type from the list and Press Enter after selecting all the details. 526 Receipt w/o production order into blocked stock - reversal 526 Receipt w/o prod. order into blkd sales order st. - reversal 526E 526 Q Reveipt w/o production order into blocked project st. - rev. 5260 531 Receipt of by-product into unrestricted-use stock 531 531 E Receipt of by-product into unrestr. sales order stock 531E 531 Q Receipt of by-product into unrestricted project stock 531Q Receipt of by-product into unrestricted-use stock - reversal 532 532 E Receipt of by-product into unrestr. sales order - reversal 532E 532 Q Receipt of by-product into unrestr. project stck - reversal 532Q Receipt per initial entry of stock balances into unr.-use 561 561 561 E Receipt per init, entry of stck balances to unr. sales ord. 561E Receipt Per Init. Entry of Stk Bal. to Unres. Subcon Sls Ord 561F 561 I Receipt Per Init. Entry of Stock Bal. to Unrestr. Subcon RTP 561I

A new window will open. Enter the material code and quantity for which stock needs to be created and then click Save.

5613

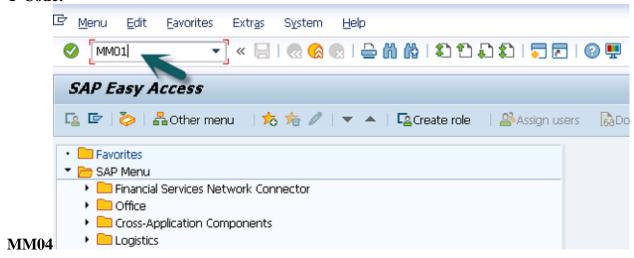


A message Document 300045646 posted will be displayed.

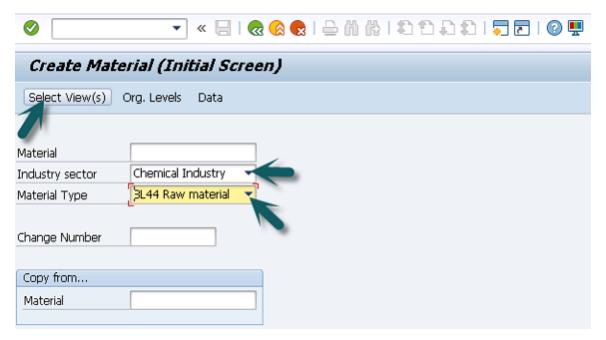
561 J Receipt Per Init.Entry of Stock Bal. to Unres. Subcon Consid

Material Master is created in SAP SD system by the material department. Once it is created, the person who manages sales related material has to extend sales views.

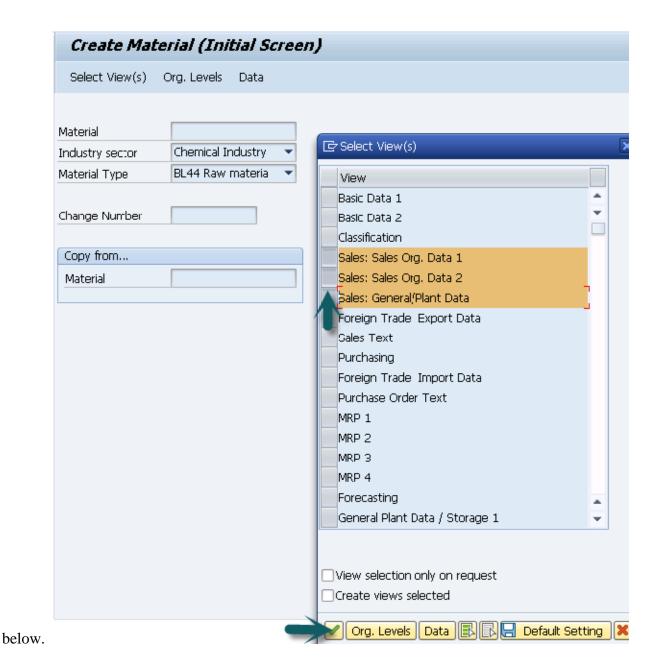
Use **T-Code: MM01** to create material master for different views. To check the changes, use **T-Code:**



A new window will open. Enter the Industry Sector and Material Type. Click Select View(s).



Select Sales Org Data 1, Sales Org Data 2, Sales: General/Plant Data and click the Green tick mark



Then a new window will open. Enter the Plant, Sales Organization and Distribution Channel for which the material is to be extended. Repeated entries have to be made for various materials with the above selections.



A new window will open, then you can enter the following details –

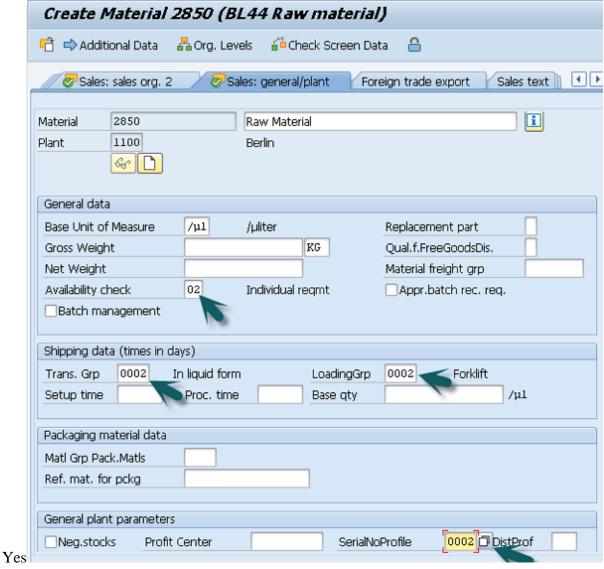
- Material Details
- Base unit of Measure
- Division
- Material Group
- Tax

Then, go to Sales Org 2 tab. This information is required for analysis.

- **Material Statistics Group** Value should be '1' always. Value in this field with Customer Statistical Group maintained in customer master will update the information system.
- **Gen Item Category Group and Item Category Group** Generally for Finished Products value NORM will default in both the fields.

Create Material 2	2850 (BL44 Raw mat	terial)	
Additional Data	🖧 Org. Levels 🛮 🚰 Check Scre	een Data 🔒	
Sales: sales org. 1	Sales: sales org. 2	Sales general/plant Fi	oreig
Material 2850	Raw Material		i
Sales Org. 0005	Germany Frankfurt	t	
Distr. Chl 01	Direct Sales		& D
Grouping terms			
Matl statistics grp	1 Mar	iterial pricing grp	
Volume rebate group	Acc	ct assignment grp	
Gen. item cat. grp	NORM Ite	em category group NORM 🗇	
Pricing Ref. Matl			
Product hierarchy			,
Commission group			
Material groups			
Material group 1	Material group 2	Material group 3	
Material group 4	Material group 5		
Product attributes			
Product attribute 1	☐Product attribute 2	2 Product attribut	e 3
Product attribute 4	■Product attribute 5	5 Product attribut	e 6
Product attribute 7	Product attribute 8	8 Product attribut	e 9
Product attribute 10			

Go to Sales – General/Plant tab. Enter the value of Availability check, Transport group and loading group, SerialNoProfile (managed if base unit of measure is discrete, not required here) and Press Enter →



Material 2850 created

You will get a confirmation message.

here are different types of customer account groups that can be created.

Group Name

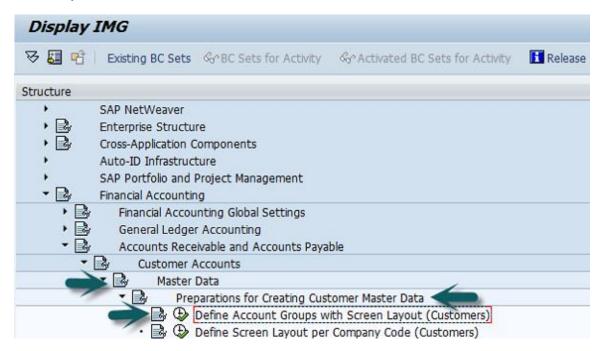
X001 Domestic Customers

X002 Export Customers

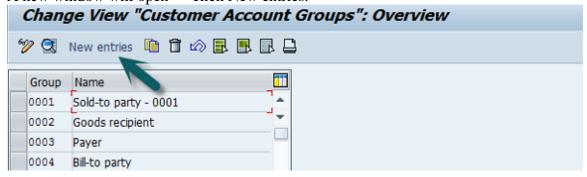
X003 One Time Customers

How to create a Customer Account Group?

Go to SPRO \rightarrow SAP Reference IMG \rightarrow Financial Accounting \rightarrow AR and AP \rightarrow Customer Accounts \rightarrow Master Data \rightarrow Preparations for creating customer master data \rightarrow Define Account Groups with screen layout (Customers) \rightarrow Execute

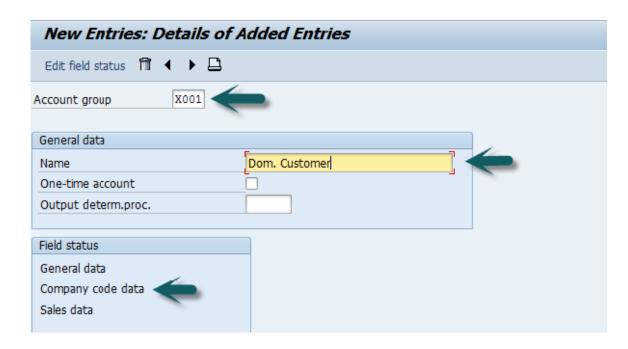


A new window will open \rightarrow click New entries.



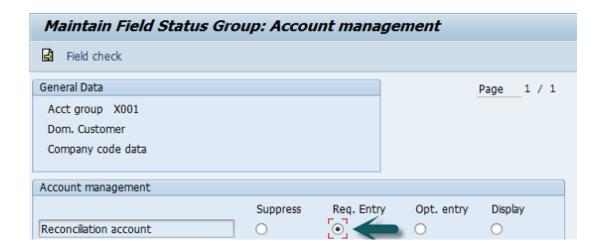
Then again a new window will open. Enter the following details in it.

- **Customer Account Group** Enter a 4-digit account group.
- Name Enter a name under the General data field.
- **Field Status** Click on the Company code data.



Once you select the field status, a new window will open. Then, select Account Management from the selected group and the click Reconciliation account 'Req. Entry'





Once this is done, click **Save** to save this configuration. Similarly, you can also create X002, X003 for other customers.

All Sales activities in this SAP SD system can be divided into presales and post sales activities. **Pre-sales activities** are classified as activities that take place before a product is sold to the customer. In contrast, **post-sales activities** are those that take place after a product is sold.

There are two types of pre-sales activities in Sales and Distribution –

Inquiries

Inquiries are the inquiries received from customers like, if a product is available, costing of product, delivery of a product, etc.

Different T-Codes

- VA11 Create Inquiry Logistics \rightarrow Sales and Distribution \rightarrow Sales \rightarrow Inquiry \rightarrow Create.
- **VA12** Change Inquiry
- VA13 Display/Search Inquiry

Quotation

A quotation is a legal document to the customer for delivery of goods and services.

Different T-Codes

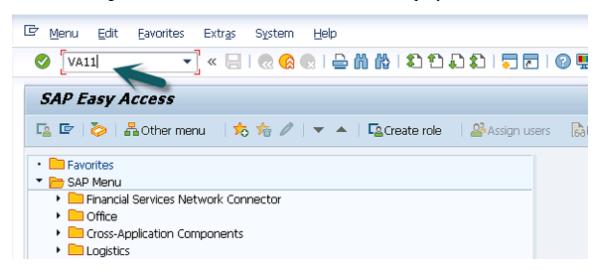
- VA21 Create Quotation
- VA22 Change Quotation
- VA23 Display/Search Quotation

In this chapter, we will see how to create inquiries in SAP SD.

Create Inquiries

An Inquiry is not a legal document and is used to record the information about delivery or services from customers. The information that is captured using an inquiry is related to materials and quality of goods.

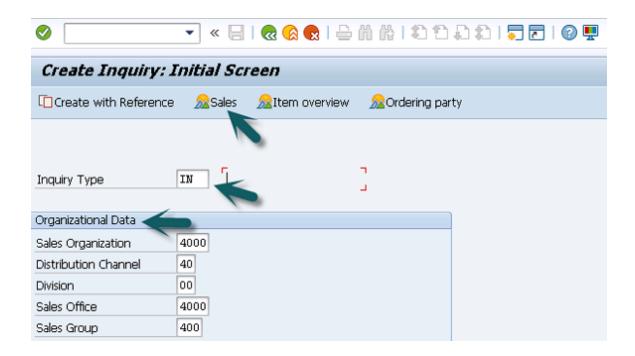
Menu Path: Logistics \rightarrow Sales and Distribution \rightarrow Sales \rightarrow Inquiry \rightarrow Create T-Code: VA11



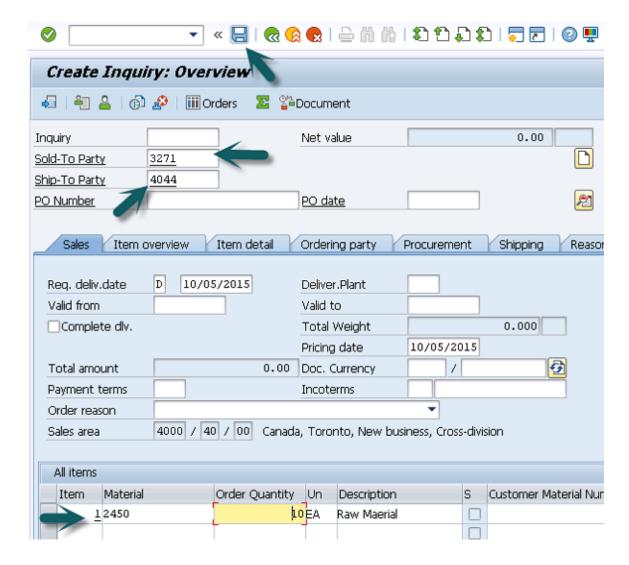
When you run this T-code, you need to fill the below information to create an inquiry.

Field	Data
Inquiry type	ZEC 1 (IECPP inquiry)
Sales organization	4000
Distribution channel	40
Division	00

Enter Inquiry Type as IN and Organizational Data as below and then click Sales.



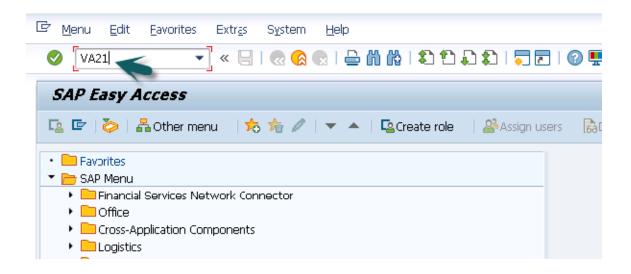
The Sales Office is an optional entry, which helps in reporting. Then a new window will open. Enter Partner Function (Sold-To-Party/Ship-To-Party). Enter the material code and quantity and then Click Save.



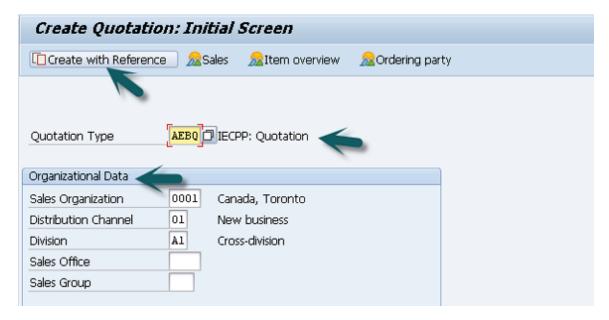
A Message – Inquiry 10000037 has been saved will be displayed.

A **quotation** is a legal document to the customer for delivery of goods and services. This is normally issued after an inquiry from the customer or without an inquiry.

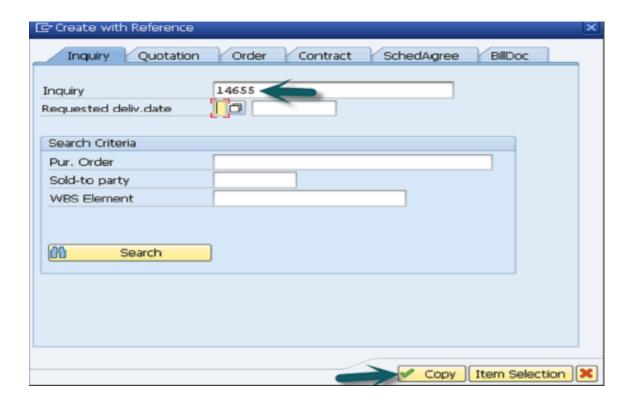
SAP R/3 Menu – Logistics \rightarrow Sales and Distribution \rightarrow Sales \rightarrow Quotation \rightarrow Create **T-Code: VA21**



Enter the Quotation Type, then you can enter the Sales Organization, Distribution Channel, Division and then click Create with Reference.



A new window will open, then enter the Inquiry number and click Copy. It will fetch all the details from that Inquiry document.



Then another new window will open. Enter the following details –

- Enter Partner Function, Sold-To-Party, Ship-To-Party
- Enter Purchase Order #
- Enter Valid from and Valid to Date
- Enter Quantity of material



After this, click save. A Message will be displayed Quotation 40000047 has been saved.

Sales support is one of the key components in Sales and Distribution module. It is also called computer Aided Selling, SD-CAS. This module helps organizations to create new sales, tracking of existing sales, and performance as well, which eventually helps in improving the marketing and sales of an organization.

This SAP SD Sales support module provides an option of creating an email list of the customers and directly sending mails for new leads. The sales support stores all the data pertaining to the sales and distribution related to customers, products, materials, competitor products, etc.

SAP Sales Support Tables

- VBKA
- TKSF
- TVC6
- TVC5

SAP Sales Support Transaction Codes

- VC01
- OV4Z
- VC05
- VC00

There are various modules which are helpful in creating, processing, as well as controlling the sales and distribution operations. These include –

- Sales Order Processing
- Creation of Sales Order with Reference
- Item Categories
- Schedule Lines Categories
- Copy Control
- Log of Incomplete Items

In this chapter, we will discuss how to process sales orders in SAP SD.

Sales Order Processing

Sales order processing describes a function related to the wholesale part of an organizational business.

The most common functions under the sales order processing are –

- Availability of the articles purchased.
- Checking for incomplete data.
- Checking the status of the sales transaction.
- Calculation of pricing and taxes.
- Schedule the deliveries of goods.
- Printing of documents or e-transfer of documents.

All these functions can be configured automatically or manually as per the system configuration. The data from these functions is stored in a sales document and can be changed manually during the processing. A sales document can be a single document or can be part of a series consisting of interrelated documents.

Example

There is a customer telephone inquiry in the system. Then the customer requests a quotation, which can be created by referring to the same inquiry. Next, assume that the customer places an order on

the basis of that quotation and a sales order is created by copying the information from this quotation and if at all there are any modifications that are required. The merchandise is then shipped and the bill is sent to this customer. After the delivery of goods, this customer raises a claim of damaged articles. Then a delivery can be created free of charge with reference to the sales order.

All these sales documents – starting with the inquiry, quotation, raising a sales order, delivery of goods, billing document to customer and the free of charge delivery forms a document flow. The data flow from one document to another removes or decreases the practice of manual processing and helps in simpler problem resolution.

A Sales order is a request made by a customer to the company for delivery of some defined quantity of goods or a service in a specific time period.

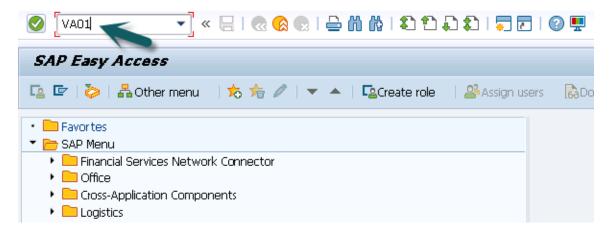
The Structure of a Sales Order

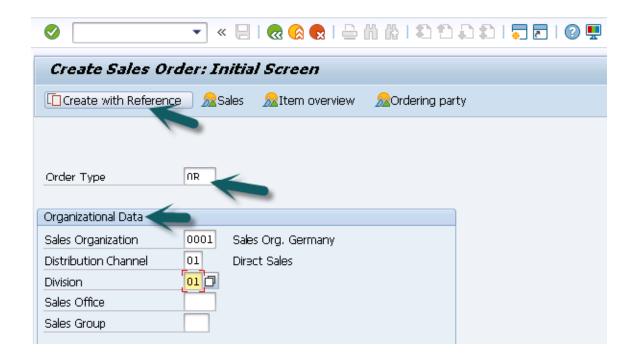
An inquiry from a customer consists of one or more items that contains the quantity of a material or service entered in the order. The quantity in a sales order is further divided into business lines and comprises of various subsets and delivering dates. The items mentioned in the Sales order are combined in a hierarchy and allows to differentiate between batches or to use combinations of materials. All the valid conditions on these items are mentioned in item conditions. These conditions for an item can be derived via a full condition and can be valid for the entire sales order.

You can divide an item to multiple billing plan deadlines and each of them will tell you the time, when a fixed amount of the item is to be billed.

- VA02 Edit a Sales Order.
- VA03 Display a Sales Order.

T-Code: VA01 Create a Sales Order





A new window will open, then you can enter the below details –

Enter the Order Type, below order types are available. Enter the sales organization, distribution channel and division. You can also click on Create with Reference option to open a Sales order with reference to an inquiry or even a quotation.

CR	Credit Memo
GK	Master Contact
KA	Consignment Pick-up
KB	Consignment fill-up
KE	Consignment issue
FD	Delivery free of charge
cq	Quantity contract
SD S	Subsequent Del. Free of charge
KR	Consignment returns

DR Debit memo request
PV Item Proposal

RE Returns

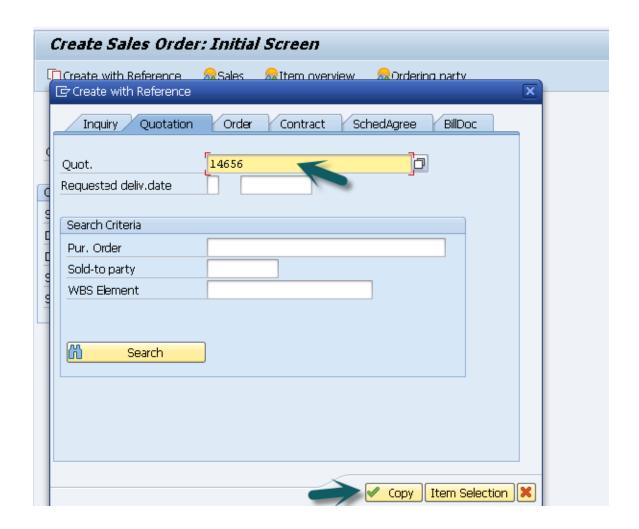
RK Invoice correction request

RZ Returns scheduling agreement

SO Rush order

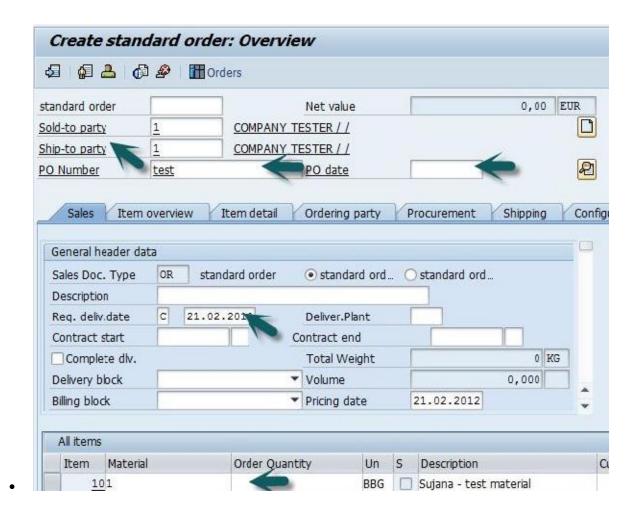
OR Standard Order

Once you click on Create with Reference, a new window will open. Enter the Quotation number and click on Copy.



It will open a new window. Enter the following details -

- Enter Ship-To-Party, Purchase Order and Date.
- Enter the Required Delivery Date.
- Enter the item details.



In VA01, it allows you to enter header data and item data. Then to enter Header data, click on Goto Tab \rightarrow Header and select header data. The next step is to click on the Goto tab \rightarrow Item \rightarrow select item data and once done click on OK.

After this you can click on the save icon at the top. You will get a confirmation message –

