

# SAP SD Training

By Praveen



By failing to prepare, you are preparing to fail.  
(Benjamin Franklin)



Practice does not make perfect. Only perfect practice makes perfect.  
(Vince Lombardi)



# SAP SD Study Material & Configuration Guide

## Prepared By Praveen

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## What is SAP

SAP stands for “System, Applications and Products in Data Processing”. It is the largest business software company in the world and also the largest Enterprise Resource Planning (ERP Software) solution software provider.

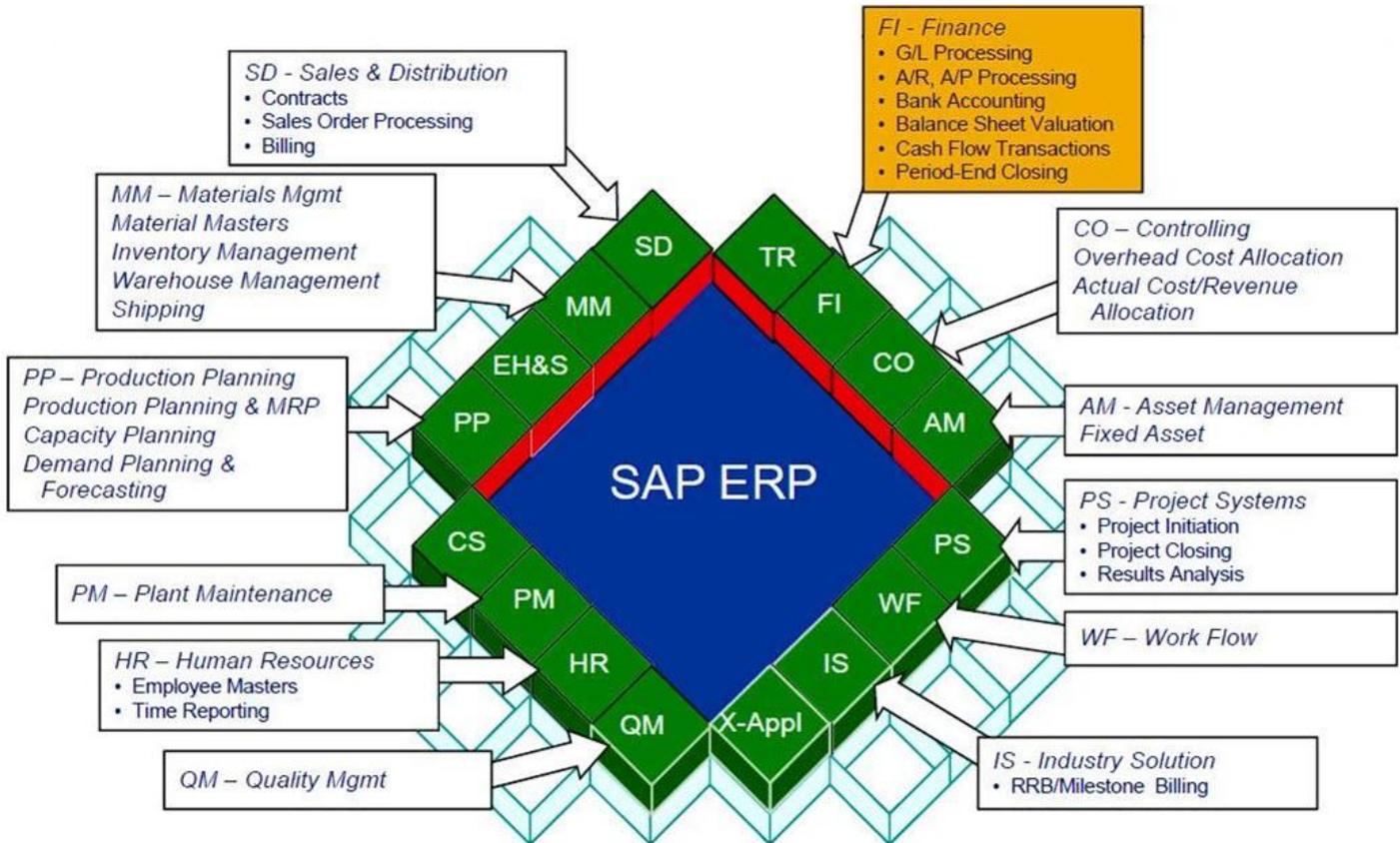
SAP’s main products are SAP ERP (formerly known as SAP R/3) and SAP Business Objects software. SAP software has three-tier application architecture: database, application server and client SAP GUI (presentation layer). As per the reports there are over 100,600 SAP installations at more than 41,200 companies in more than 120 countries /3 architecture was replaced with the introduction of **ERP Central Component (ECC)**.

SAP’s Business Suite contains five enterprise applications.

- ✚ SAP ERP
- ✚ Customer Relationship Management (CRM)
- ✚ Product Life-cycle Management (PLM)
- ✚ Supply Chain Management (SCM)
- ✚ Supplier Relationship Management (SRM).

SAP SD ( Sales and Distribution ) is one the largest functional Module in SAP. It handles all the processes from an Order to delivery. The main operations, this module handles are Customer Sales Orders processing , pricing, Picking, packing , Shipping, billing and risk management etc.

## Various Modules in SAP ERP



- ✚ SAP APO module – Advanced Planner Optimizer
- ✚ SAP CO module – Controlling
- ✚ SAP CRM module – Customer Relationship Management
- ✚ SAP CS module – Customer Service
- ✚ SAP EC module – Enterprise Controlling
- ✚ SAP EHS module – Environment, Health & Safety
- ✚ SAP EWM module – Extended Warehouse Management
- ✚ SAP FI module – Financial Accounting
- ✚ SAP FM module – Fleet Management
- ✚ SAP FSCM module -Financial Supply Chain Management
- ✚ SAP HR module: – Human Resources
- ✚ SAP IM module – Investment Management
- ✚ SAP MM module: – Materials Management
- ✚ SAP PLM module – Product Lifecycle Management
- ✚ SAP PM module – Plant Maintenance
- ✚ SAP PP module – Production Planning
- ✚ SAP PS module – Project Systems
- ✚ SAP QM module: – Quality Management.
- ✚ SAP RE module – Real Estate
- ✚ SAP SCM module – Supply Chain Management
- ✚ SAP SD module – Sales and Distribution.
- ✚ SAP SEM module – Strategic Enterprise Management
- ✚ SAP SM module – Service Management
- ✚ SAP TR module: – Treasury



- ✚ SAP WM module – Warehouse Management
- ✚ SAP LO module – Logistics General

#### TECHNICAL MODULES

- ✚ SAP ABAP module – Advanced Business Application Programming
- ✚ SAP Basis module – Basis Admin, administration of SAP
- ✚ SAP BI module – Business Intelligence
- ✚ SAP BPC module – Business Planning and Consolidation
- ✚ SAP BODI module – Business Objects Data Integrator
- ✚ SAP EP module -Enterprise Portal

#### INDUSTRY SPECIFIC MODULES (KNOWN AS SAP IS)

- ✚ SAP IS Aerospace & Defense – Air and military industries
- ✚ SAP IS Automotive – Automobile manufacturing industries
- ✚ SAP IS Banking – Financial Industries, Banking, and Market Risk Management
- ✚ SAP IS Chemicals – Chemical industries
- ✚ SAP IS Consumer Products – Consumer product industries
- ✚ SAP IS Defense & Security – Defense and security industries.
- ✚ SAP IS Engineering, Construction, and Operations – Construction and engineering companies
- ✚ SAP IS Healthcare – Hospitals and healthcare institutions
- ✚ SAP IS Higher Education & Research – Campus management
- ✚ SAP IS High Tech – High tech industries
- ✚ SAP IS Industrial Machinery and Components – Heavy machinery manufacturing companies
- ✚ SAP IS Insurance – Insurance companies and Currency Markets
- ✚ SAP IS Life Sciences – Life sciences industry
- ✚ SAP IS Media – Communication and Publishing industries
- ✚ SAP IS Mill Products – Mill product industries
- ✚ SAP IS Mining – Mining industries
- ✚ SAP IS Oil & Gas – Oil and Gas Industries
- ✚ SAP IS Professional Services – Professional services industry
- ✚ SAP IS Pharmacy – Pharmaceutical industries
- ✚ SAP IS Public Sector – Public Sector and Administration
- ✚ SAP IS Retail – Supermarkets and Retail industry
- ✚ SAP IS Telecommunications – Telecommunication operators
- ✚ SAP IS Transportation & Logistics – Transportation and logistics industry

Any organization success is depended on 4m's. They are Machinery, Material, Man Poour, Money

These M's are well maintained and coordinated using an ERP

#### Reasons for preferring only SAP in the companies:-

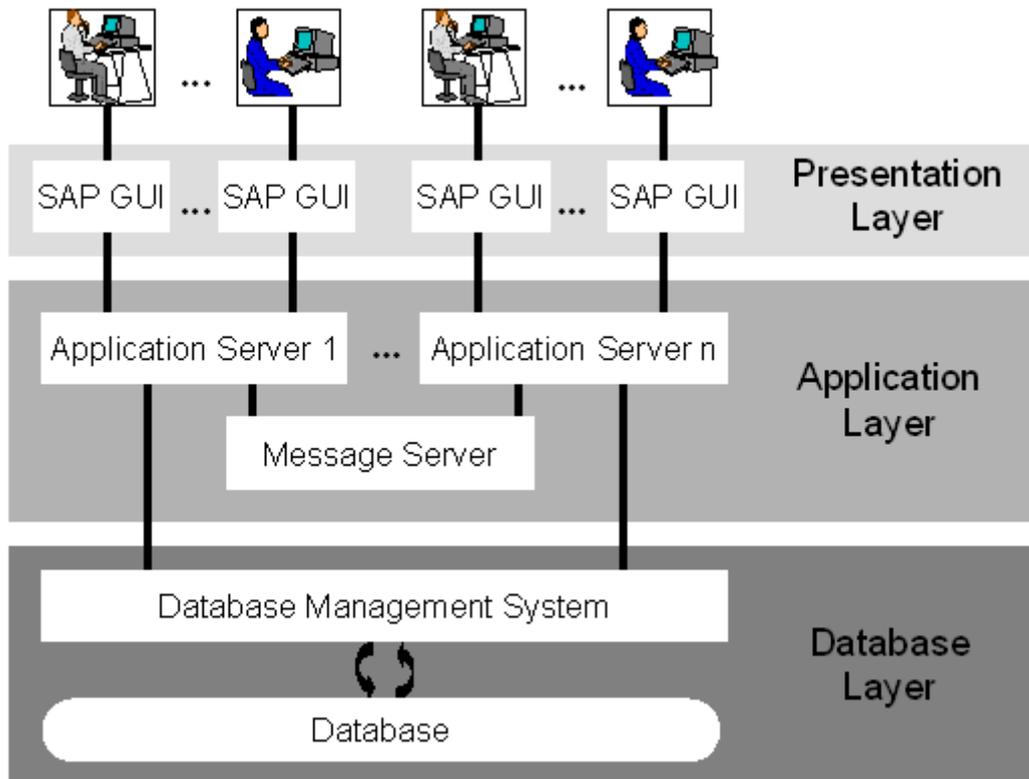
- 1) SAP Gives solution to all departments in enterprise to gain success.
- 2) Tightly integrated product. (Means if we update something in one department i.e. Mfg. It automatically reflects in relevant departments. No need to inform other departments.)
- 3) Data Security.



### Future of SAP:-

- ✚ Most of the Mfg Company's around the world already implemented SAP, Career in sap for Next 40-50 yrs is Brilliant.
- ✚ SAP will do continuous process of R&D with up-gradation in version as per the time i.e.  
⇒ 4.6c ⇒ 4.7 ⇒ 5.0 ⇒ ECC6.0... EHP 7(present Version)
- ✚ Presently SAP is giving support only for ECC 6.0. Market share of SAP is 65 to 70%

## The Architecture of SAP



**SAP Landscape:** - A landscape is an arrangement of servers. Any client if they want to implement SAP they need to purchase servers.

SAP Suggest to go for minimum 3 Server:-

- ✚ Development Server
- ✚ Quality Server
- ✚ Production Server



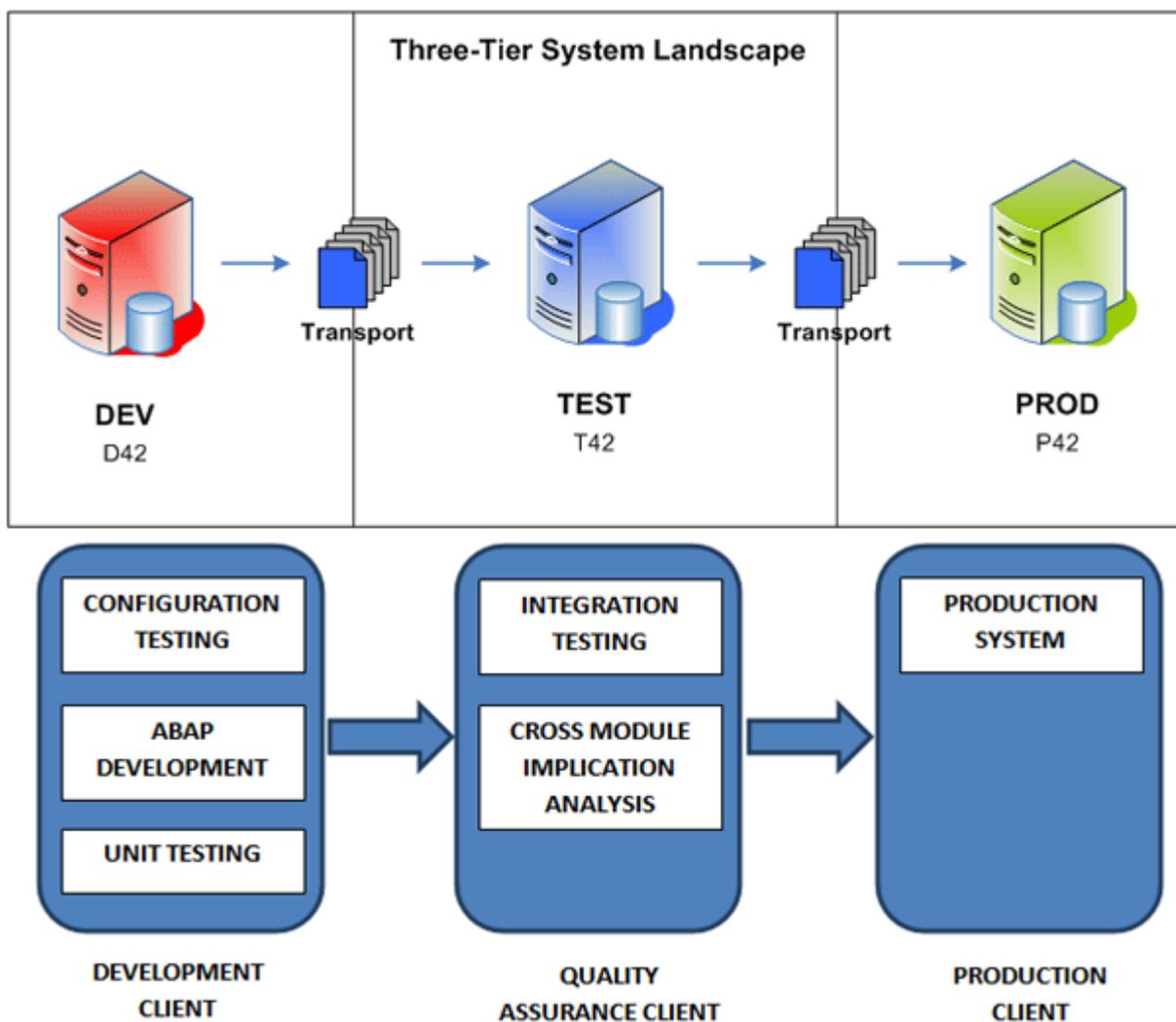
**Development Server:** - will be used to configure the client business process into SAP. Development server will be used by consultants only.

**Quality Server:** - will be used to test the scenarios. Quality server will be used by consultants and core users.

**Core User** is the employee of the company who has good experience & exposure in client business process.

**Production Server:** - It is the live server, where end user will do day to day transactions in SAP.

- ✦ Production server will be used by end users and core users.
- ✦ Consultants will not have access to production server.
- ✦ Users will not have access to development server.

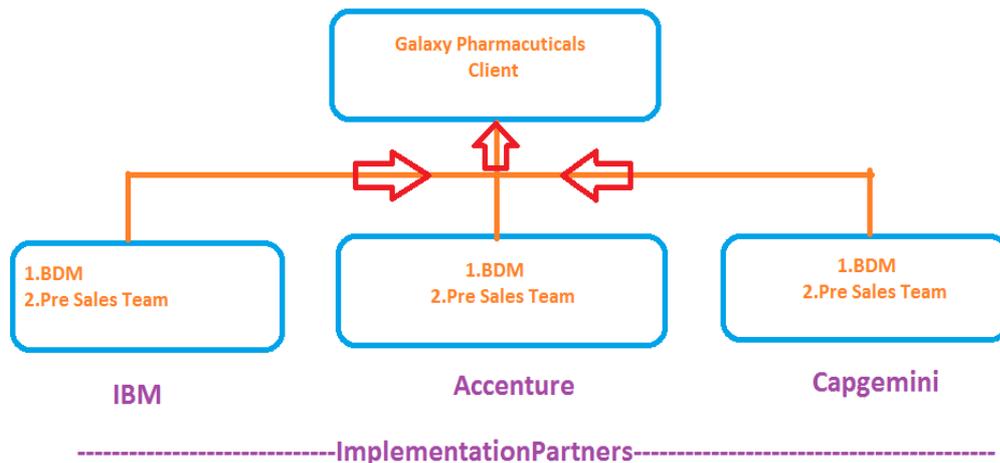


## Roles & Responsibility of consultant

As a consultant we will be placed into either implementation project , support project, Rollout Project, Upgrade Project.

## Implementation Project

Configuring client business process newly into SAP.



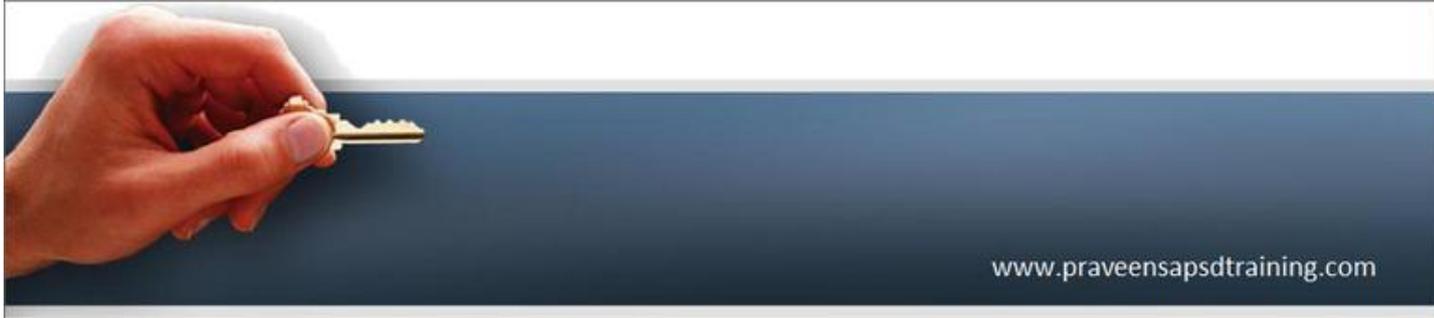
Whenever implementation partner receives the order from client to implement SAP, then they start using ASAP methodology (ASAP stands for accelerated SAP).

ASAP methodology consists of guidelines to implement SAP, that is step by step implementing of SAP.

### ASAP Methodology consists 5 Phases:-

1. Project Preparation
2. Business blue print (BBP)
3. Realization
4. Final Preparation
5. Go-Live & Support

**As a consultant we will be involved from business blue print phase.**



**Project Preparation Phase: -**

In project preparation phase the management from implementation partner and management from client will involve.

**Management from Implementation Partner**

- BDM
- Delivery Head
- Technical Expert
- Project management

**Management from Client**

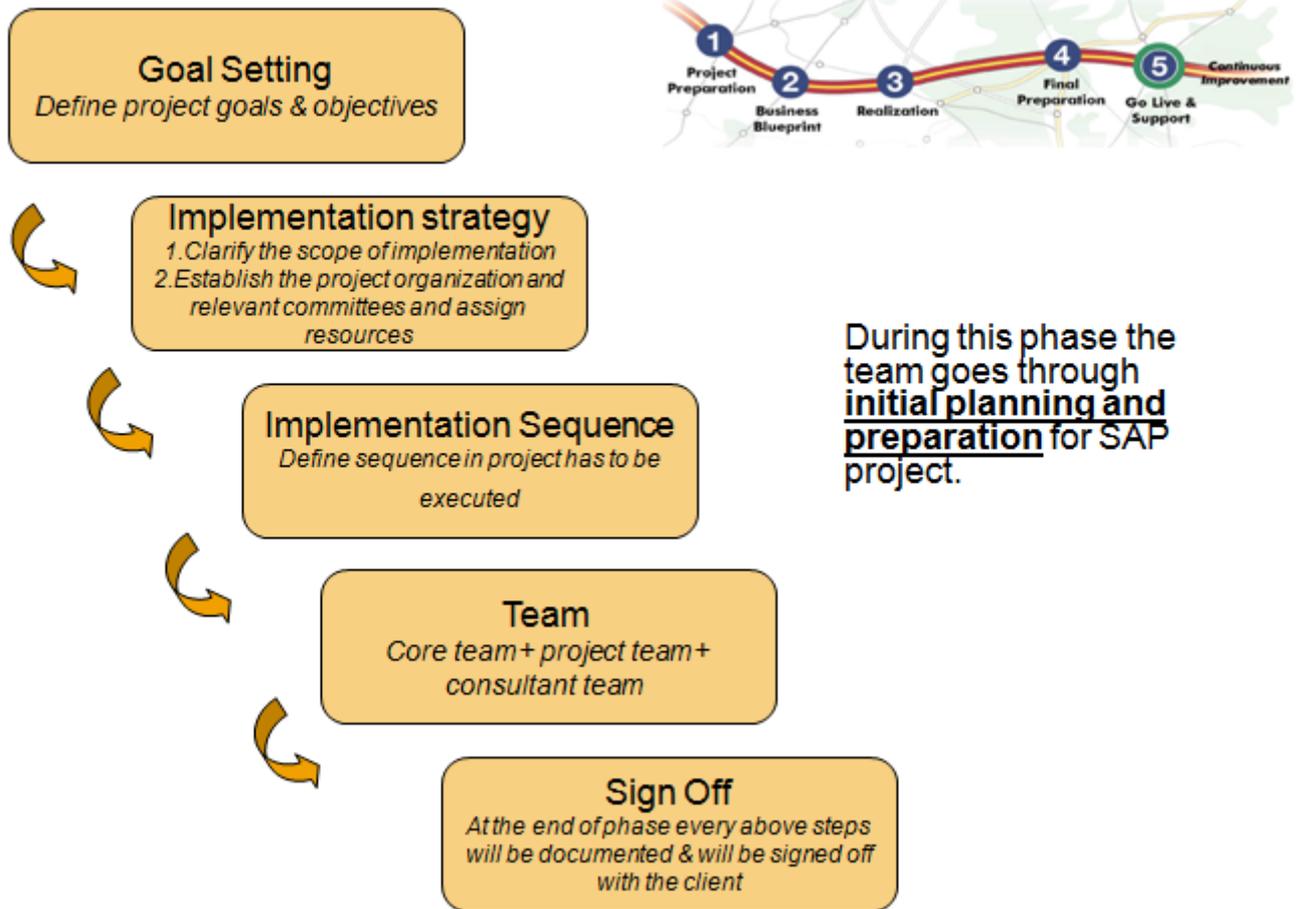
- VP- IT
- VP- Finance
- Project Manager
- Technical Head

**As a consultant we don't involve in project preparation phase.**

**ASAP**



## Phase 1 : Project Preparation



### 1) Project Preparation Phase

#### Activities:

- 1. User Licenses:** - Any client if they want to implement SAP they need to purchase user licenses from SAP. Based on number of end users they decide on how many user licenses to be purchased from SAP.

Eg:-

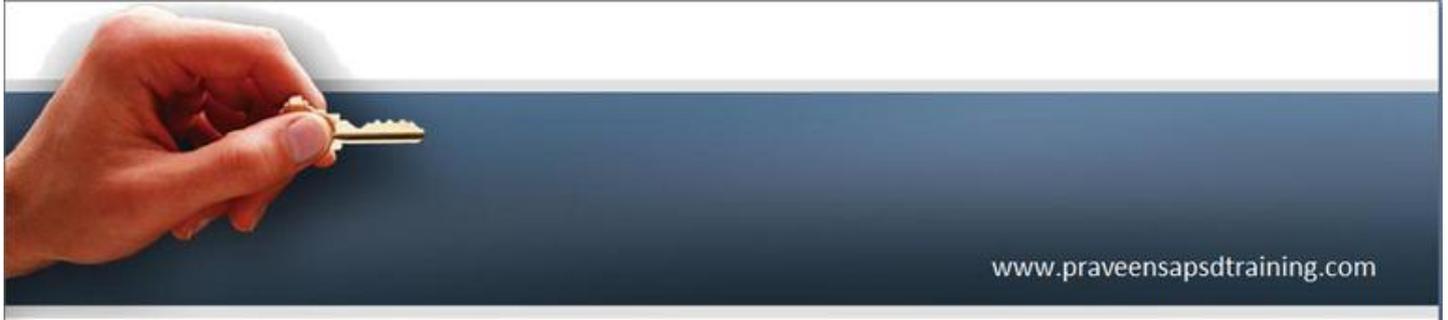
Total no of end users in Galaxy Pharma is 1000, each user license costs around Rs. 80000/-

The client has to pay this money to SAP and get the user licenses.

1000 user licenses X Rs. 80000 = Rs. 8 cr.

This is not one time payment to SAP. Every year client has to pay 22% license cost to SAP in the form of AMC .i.e 22% of Rs 8 cr. as AMC (Annual Maintenance cost)

- ➔ Sharing of licenses can be done in manufacturing plant if they have shift wise work system.



2. **Landscape:-** A landscape is an arrangement of servers.  
Any client if they want to implement SAP they need to purchase servers.

SAP Suggest to go for 3 Servers:-

- ✚ Development Server
- ✚ Quality Server
- ✚ Production Server

Development Server:- will be used to configure the client business process into SAP.  
Development server will be used by consultant.

Quality Server:- will be used to test the scenario. Quality server will be used by consultant and core user.  
**Core User** is the employee of the company who has good experience & exposure in client business process.

Production Server:- It is live server where end user will do day to day transaction in SAP.  
Production server will be used by end users and core users. Consultant does not have excess to production server.  
User does not have excess to development server.

- After deciding how many servers to purchase, then they decide on **sizing** of the server.  
Ex - Hard disk, RAM etc. On the basis of number of Pc's

Where to purchases the servers? Popular Manufacturers of servers in the market are HP, IBM, HCL, DELL .

### 3. **Infrastructure:-**

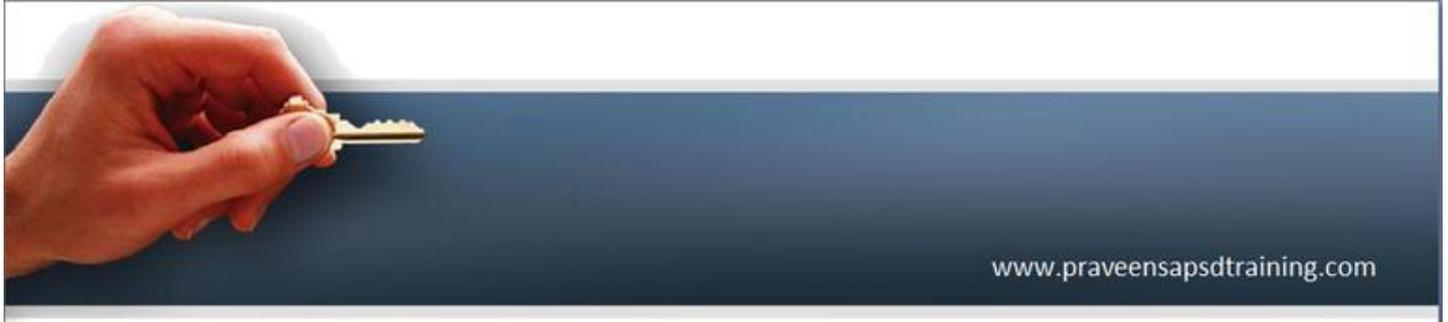
A). How many new pc's to be purchased for implementation of SAP.

Ex. - 1000 licenses means 1000 pc's required  
Present pc's – 400 nos. (Out of 400, 200 pc's don't support SAP)  
Total no. of pc's needed  $800+200= 1000$  nos

B). **Server Environment: -**

- ✚ Decide where to place the servers.
- ✚ Server room security
- ✚ Temperature requirement

C). VPN connectivity (Virtual private Network)



**4. Implementation Partner:** - will list out all the consultants who are going to involve in this implementation Project.

On an average the team size for implementation of SAP to Domestic or Unknown client is 15.

The team size for implementation of SAP to foreign client or known client is 60.

Team of Galaxy Pharma will list out all the core users.

They will pick one core user from each module, and core user will be in touch with consultant, throughout the implementation project whatever consultant require, we need to consult only core user.

**5. Consultant Facilities:** - If it is domestic project all the consultants will go to client place for implementing SAP. If it is foreign project, from each module one consultant will go to client place (On-Site) and rest of the team will work from Off- shore (it means Implementation Partner office).

If its domestic project and all consultants are moving to clients place for implementing SAP, then they will decide responsibilities of each consultant.

Ex- Accommodation, food expenses, travel expenses, work environment etc.

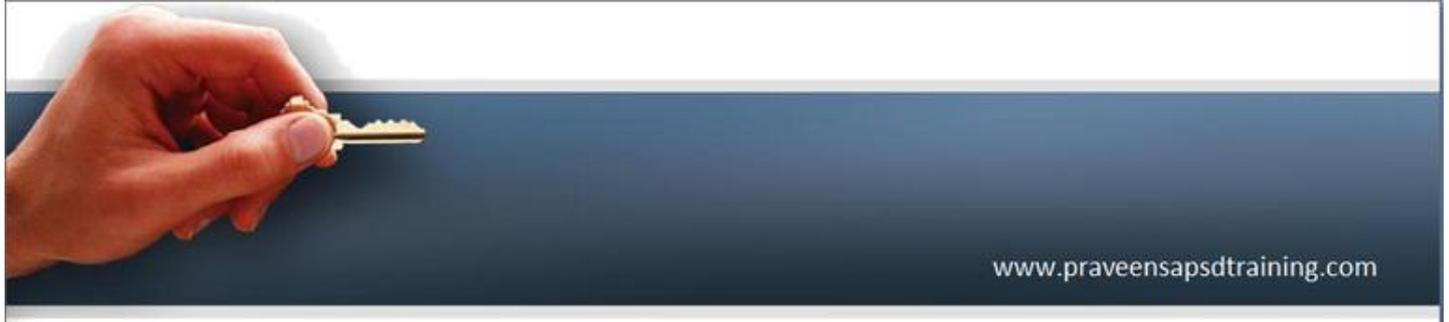
The Average project tenure for domestic project is 9 months.

For foreign project 18 months



**6. Go-Live Date:** - It is a date from which client(Galaxy Pharma) will start using SAP or the date the client will start entering day to day transactions in SAP.

**7. Scope for the project:** - Which is not possible in standard SAP. Also called as GAP's, will not be considered.



After **completion of project preparation phase**, the implementation partner management will come back to office and conduct kick-off meeting.

**Kick-off**: - It means starting off. For kick –off meeting they will invite all the consultants across all the modules that are going to involve in this implementation project.

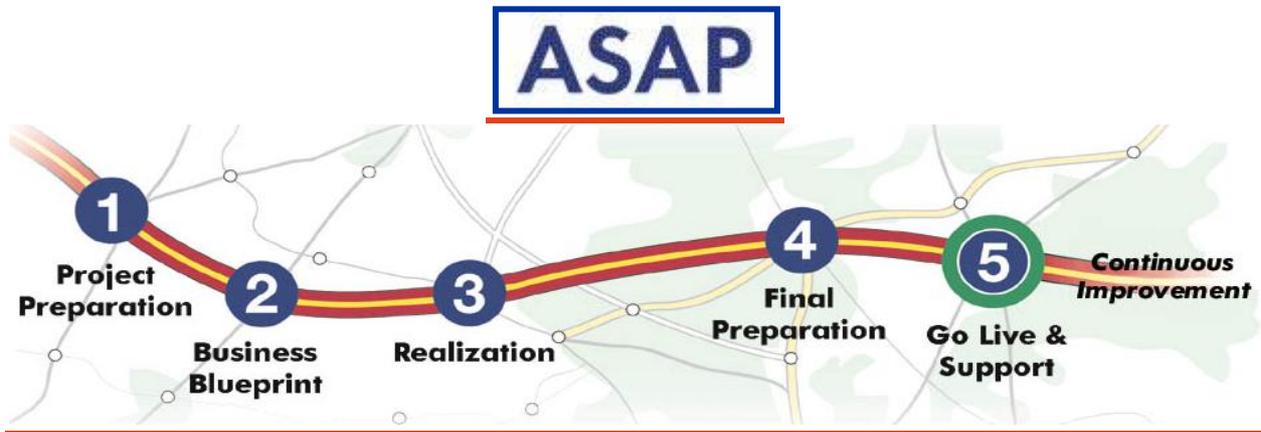
Kick-off meeting agenda:-

- ✚ Introduction about client
- ✚ Rules & regulations of client
- ✚ Role & Responsibility's of consultant
- ✚ Core users list.
- ✚ Go live date.
- ✚ Staring date.

After kick –off meeting all the consultants will move to client's place for implementing SAP (Domestic).

When all the consultants move to client place to implement SAP then we start 2<sup>nd</sup> phase of ASAP methodology that is Business Blue Print (BBP).

## 2) Business Blue Print Phase (3 Months)



### Phase 2 : Business Blueprint

#### SCOPE DOCUMENT

This document will consist of questionnaire of entire business process



#### ASIS

1. Understanding the business Process from the core team. 2. Based on the input ASIS document has to be created according to module wise

The purpose of this phase is to achieve a **common understanding of how the company intends to run SAP to support their business**. The result is the Business Blueprint, a detailed documentation of the results gathered during requirements workshops.

#### TO BE

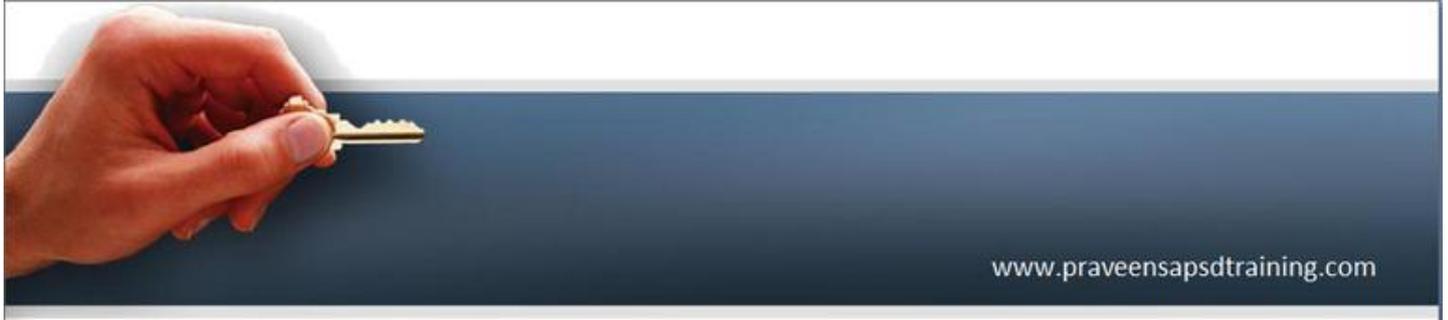
1. In this process will map the business process in SAP based on ASIS  
2. Module wise TOBE document has to be created

#### GAP ANALYSIS

1. The GAP b/w ASIS process & TOBE process is called GAP analysis i.e., The inputs or the business process which can't be mapped into standard SAP will be analyzed here  
2. GAP document has to be created

#### SIGN OFF

Each process above has to be taken sign off from client



## Business Blue Print Phase (3 Months)

**As an SD consultant we involve from Business blue print phase.**

Generally the 1<sup>St</sup> day of client visit, we will have introduction with core user and core user will take us for site visit (Mfg plant visit).

on 2<sup>nd</sup> day, the first activity in BBP is

**1)Requirement Gathering:** - Client will allocate separate room for each and every module for requirement gathering.



Everyday consultant has to go to core user place, ask the questions and whatever core user will explain note it down as-it is.

Every day after completion of requirement gathering (time allot 10am to 3pm) consultant has to prepare a document called AS-IS document.

**AS-IS document consist of the present business process of client, whatever core user explain as it is we mention in the document.**

- Based on questionnaires provided by the implement partner we gather requirement from core user.
- The requirement gathering activity we do for 2 months.

**2)Prepare BBP document and sign-off:** - After completion of requirement gathering ,we need to prepare BBP document.

**BBP document consist of AS-IS and TO-BE document.**



**Example of AS-IS – TO BE**

<b>AS-IS</b>	<b>TO-BE</b>
<p><b><u>Cash Sales</u></b>            This process occurs when the customer is ready to take the Product by paying the required amount immediately.</p>	<p>In SAP standard system this sales process can be configured by sales document type (CS) available. The delivery is done automatically along with the sales order, while an Invoice is raised when the order is created.</p>
<p><b><u>Rush Order</u></b>            The Rush Order also follows a cycle similar to the Cash Sales except that an Invoice is raised later and customer pays the amount at a later date.</p>	<p>In SAP standard system this sales process can be configured by special sales document type (RO) available. Only difference to that cash sales and rush order is that invoice is raised later and customer pays the amount at a later date.</p>
<p><b><u>Third Party Sales</u></b>            All orders of the company are procured through the Vendor using third party sales process. Vendor directly sends the goods to the customer as per the requirement mentioned in the sales order and vendor bills the company.</p>	<p>In the SAP standard system, control parameters like Item Category group (BANS) and Item Category (TAS) map Third party sales. The Standard sales document type is used to execute the third party sales.</p>

**TO-BE document consist of, how the present business of the client is going to be in SAP.**

While preparing TO-BE document we may find some GAP's.

**GAP: - For client business process, if there is no solution in standard SAP then we call it as a GAP.**

Whenever we find GAP we will prepare GAP analysis document.

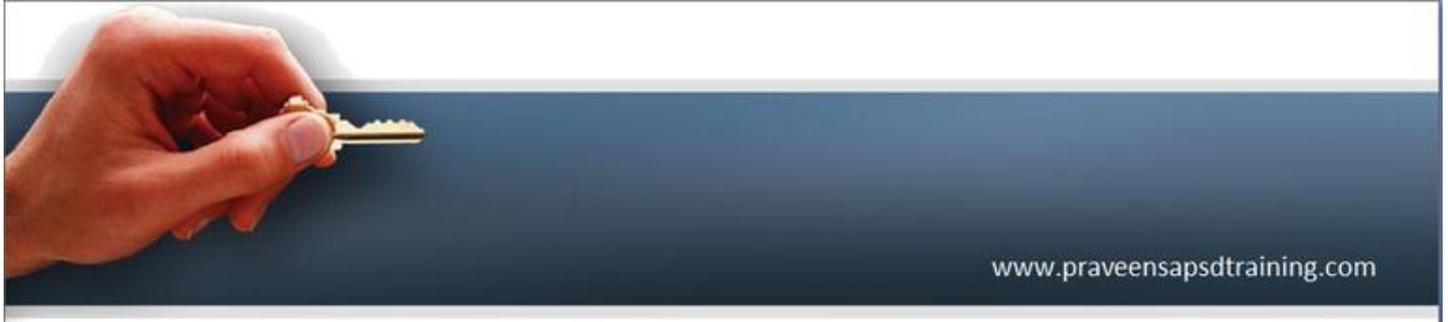
Gap analysis document consist of Clear description of client process, which is a GAP in SAP.

Is there any alternate solution or not? If yes, then what is the solution we are going to provide?

Estimated efforts

- Functional man days – 35 days
- Technical man days – 30 days

After preparing BBP document, we will send this document to core user for sign-off.



Now core user has to go through the BBP document. If everything is fine then he will send confirmation mail to consultant.

After getting confirmation mail we take the signature of core user and PM in sign-off form and one copy will be with Implementation Partner and one copy we will submitted to client.

**Without sign off, we are not supposed to move to the next phase of ASAP methodology.**

- BBP preparation documentation and sign off will take one-one and half month.
- The tenure for BBP phase is 3-1/2 months.
- We spend more time on BBP phase, BBP phase is most critical phase because the success of the project is totally depended on how accurate we gather the requirements from core user.

#### **In BBP phase we prepare two documents:-**

- 1) BBP document.
- 2) GAP analysis document.

#### **Common Problem's we face in BBP phase:-**

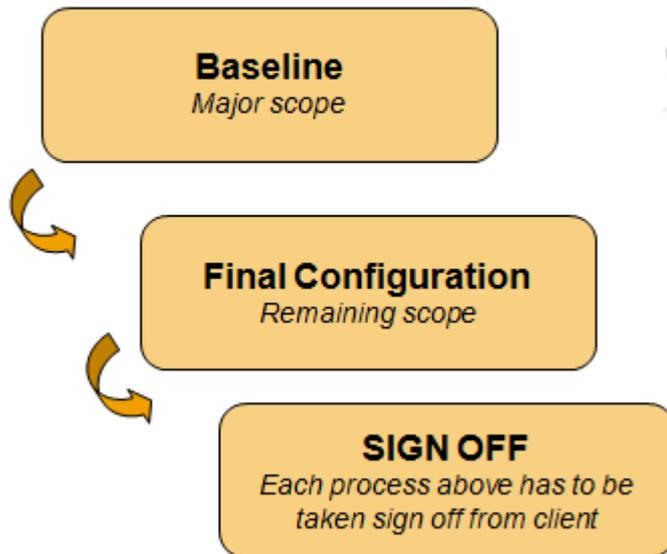
- 1)Most of the core users they don't support for gathering requirement, and also they don't come on time. (If it happens continuous then after 4 or 5 days we need to inform our PM and our PM will inform to client PM).
- 2)They don't want change. (They don't want to implement SAP, they may have threat to their job).
- 3)Core user having knowledge on SAP configuration (They will join some institute & they will ask some error and check our knowledge or waste time for gaining their knowledge).

After receiving BBP sign-off from core user then we move to the next phase of ASAP methodology that is realization.

## 3. Realization Phase



### Phase 3 : Realization



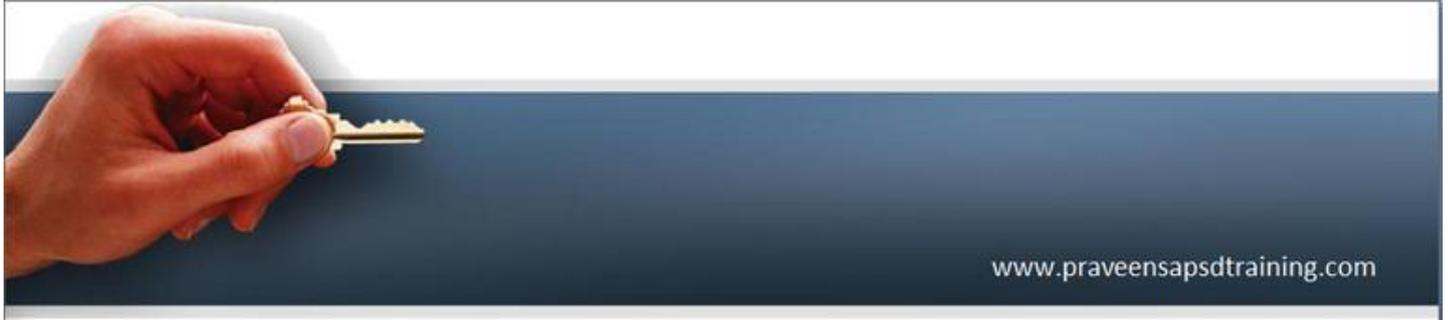
The purpose of this phase is to **implement all the business process** requirements based on the Business Blueprint. The system configuration methodology is provided in two work packages: Baseline (major scope); and Final configuration (remaining scope).

**Realization:** - Configuring the client business process into SAP or mapping TO-BE process in SAP.

In this phase we Login into development server, to configure the client business process into SAP.

**We have two types of configurations:-**

1. Base Line configuration
2. Final configuration

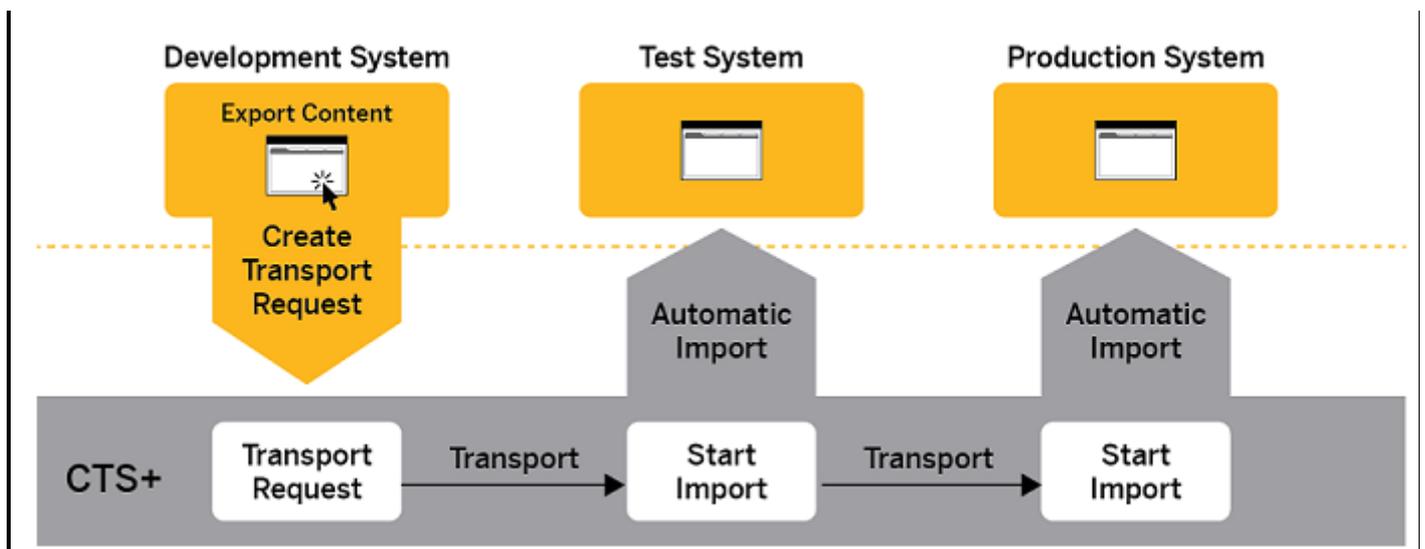
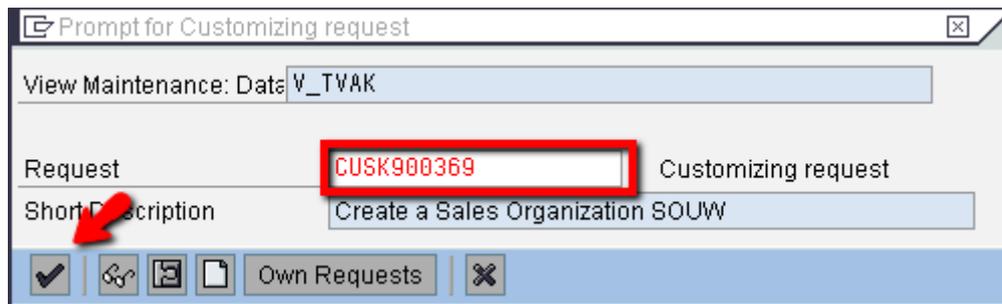


1. **Base line configuration:** - It is the configuration for which, we don't depend on other module consultant (it is a configuration which is specific to one module).

2. **Final configuration(Integration between Modules):** - it is the configuration for which we need to depend on other module consultants(MM,PP,FI). This configuration we can't do on our own. Ex- Credit Management, Third party.

In SAP whenever we are saving the configuration, we need to save it in a particular TRANSPORT REQUEST NUMBER

Request number will help to transport the configuration from one server to another server.

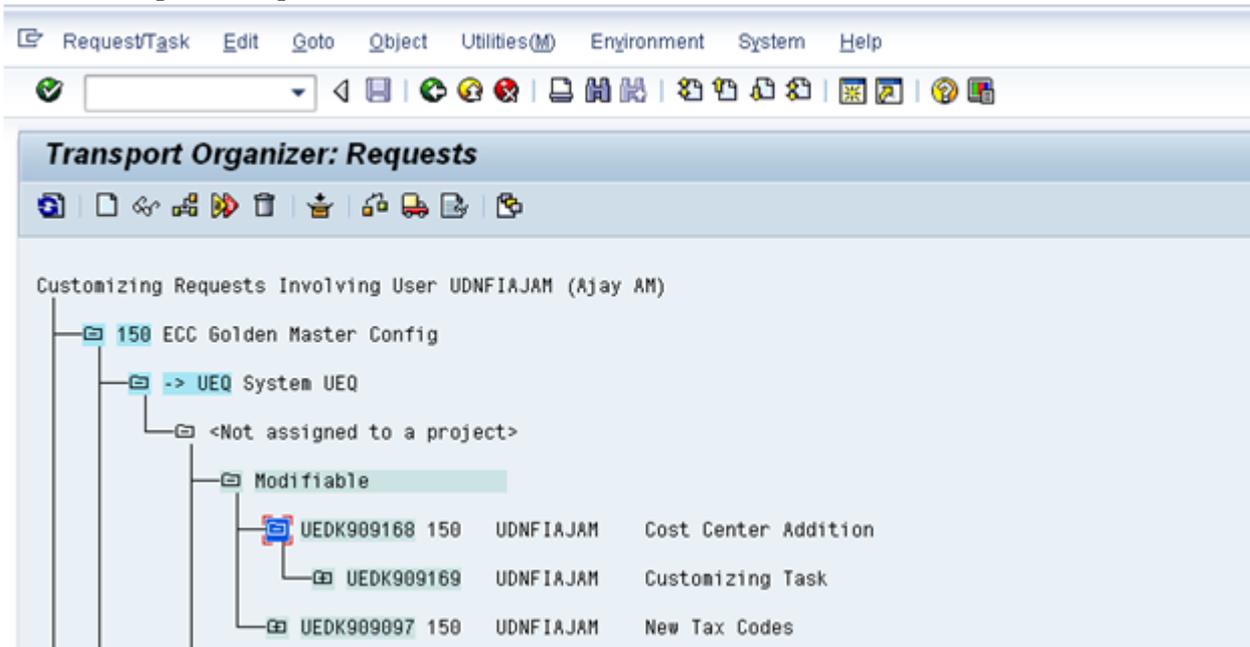


Ex. - Transport request number will help to transfer the configuration from development server to quality server for testing purpose.

After completion of base line configuration and final configuration we transport the entire requests from development server to quality server.

## Functional consultant role in transporting request

1. We need to release the entire request. Each request consist of parent & child, first release the child request then release parent request.



2. List out all the request number in excel file along with the description & sequence, and send this excel file to basic consultant, basic consultant will transport the entire request from one server to another server.

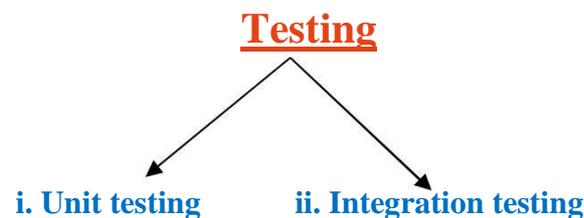
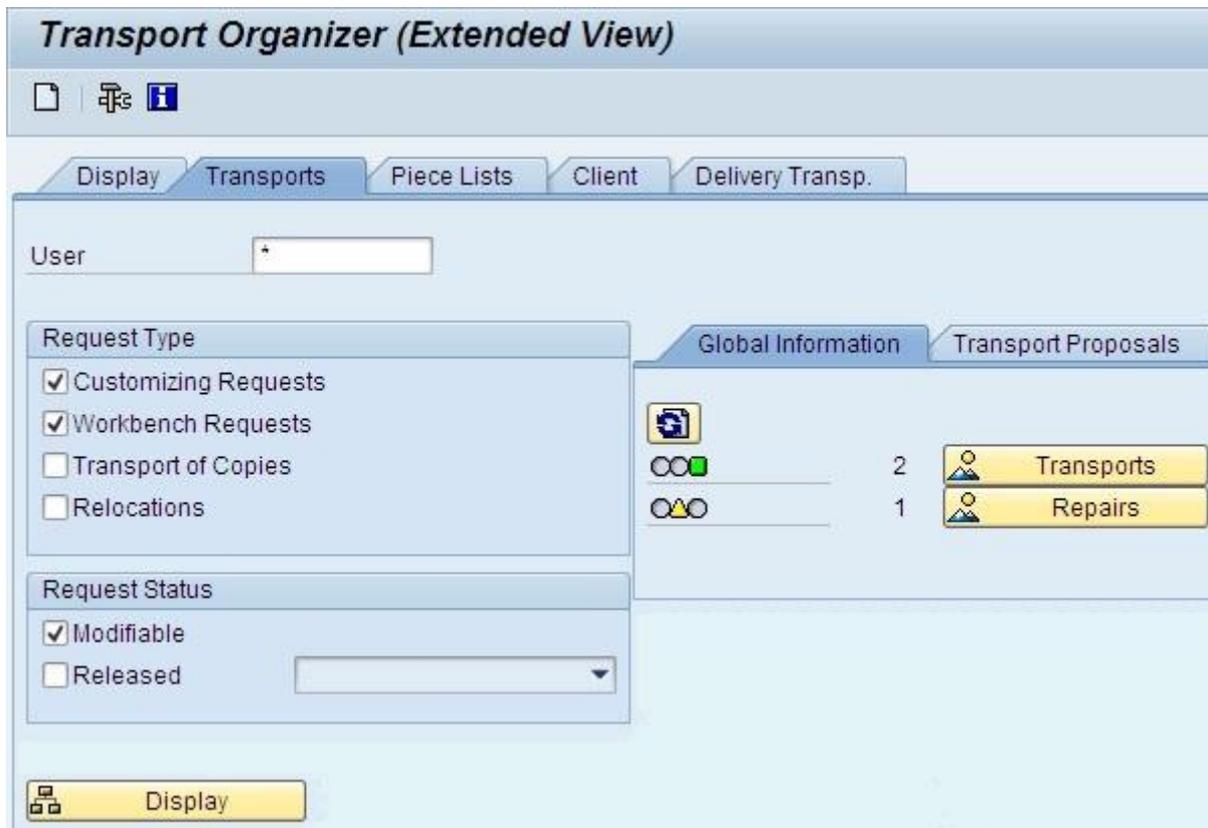
### Transport request is of two types:-

- A). Customizing request
- B). Workbench request

**A). Customizing request**(Client Dependent): - Whatever configurations functional consultant will do, that will save in customizing request.

**B). Workbench request** (Client In-Dependent): - Whatever developments technical consultant will do, that will store in workbench request.

After transporting the request from development server to quality server then we do internal testing in quality server.



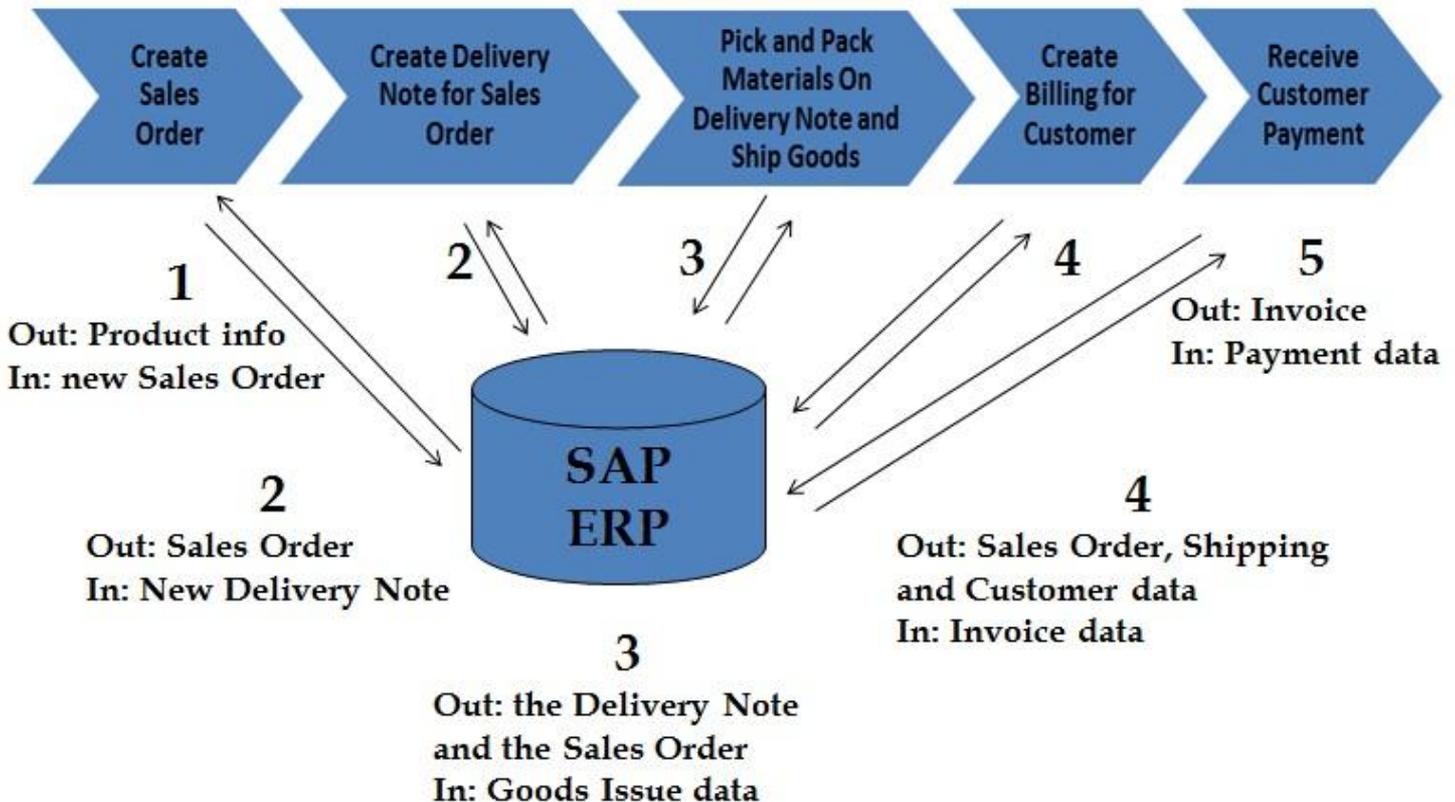
**I). Unit testing:** - It is the testing which is specific to one module and no need to depend on other module consultants.

**II). Integration testing:** - It is the testing for which we need to depend on other module consultants.

**Before testing we need to prepare test case document or test scenario document. Based on this test case we will do unit and integration testing**

**Test Case**

- |                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>a) What to test</li> <li>b) How to test</li> <li>c) Expected result</li> <li>d) Actual result</li> <li>e) Status</li> <li>f) Tested document number</li> </ul> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



After completion of testing, we prepare user manual document.

**User Manual document:**-It is a guideline to end users, this document consist of step by step process of creating master data and transaction data along with the screen shots. After preparing user manual document, we will give it to core user.

**Configuration document:** -

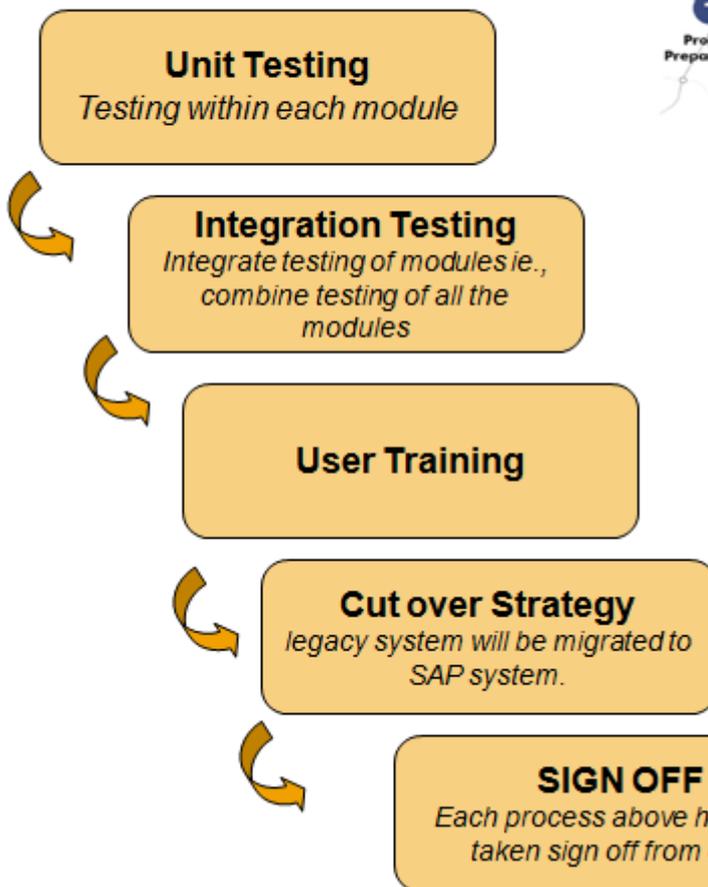
This document consists of the entire configurations made for that particular client along with the screen shots. Configuration document will be used for KT (knowledge Transfer) purpose. This document will be given to core users.

**Functional Specification document (FS):**- We prepare FS whenever we require the help of ABAPER.

## 4. Final Preparation Phase (2Months)



### Phase 4 : Final Preparation



The purpose of this phase is to **complete the final preparation** (including testing, end user training, system management and cutover activities) to finalize your readiness to go live. The Final Preparation phase also serves to resolve all critical open issues. On successful completion of this phase, you are ready to run your business in your live SAP System.



## Final Preparation

### Activities:-

- i) **Training to core users (Train-the-Trainer):** - We give training to core user for 15 days. After that core user will give training to (15 days) their end User.
- ii) **UAT Sign-off:** - After training we will ask core user to test the scenarios and confirm. Core user has to (10 days) test all the scenarios; if everything is fine he will give UAT sign-off (User acceptance test).

Throughout the implementation project we take two sign-off's from core user. One is BBP sign-off and 2<sup>nd</sup> one is UAT sign-off.

- iii) **Quality to production:** - After getting UAT sign-off we transport all the requests(configurations) from quality to production Server.
- iv) **Cutover activities:** - Uploading of master data and open transactions data from legacy to SAP. Legacy means Non-SAP.

### Consultant role in cutover activities

- a) We list out what master data and what open transaction data should be uploaded from legacy to SAP

Master data consist:-

- + Customer master
- + Material master
- + Pricing master

Open transaction data: - Open Order (The order which created but yet not delivered or pending)

- b) We do recording and send this recording to ABAPER while doing recording simultaneously prepare excel sheet with the same sequence of recording and send this excel sheet to core user.

- + Basing on the recording ABAPER will develop BDC (batch data communication) and give it to consultant.
- + Core user will fill all the excel sheet and give it to consultant.
- + As consultant we first go to quality server and do MOCK run (testing) if everything is fine then we go to production server and upload the data from legacy or excel sheet.

- V) **Cutover Strategy:** - It is the planning for uploading data from legacy to SAP. During this strategy we decide when exactly to upload the data from legacy to SAP. Whenever we plan to upload the data from legacy to SAP, we request the client to stop the business transactions. The reason is to avoid data inconsistency.

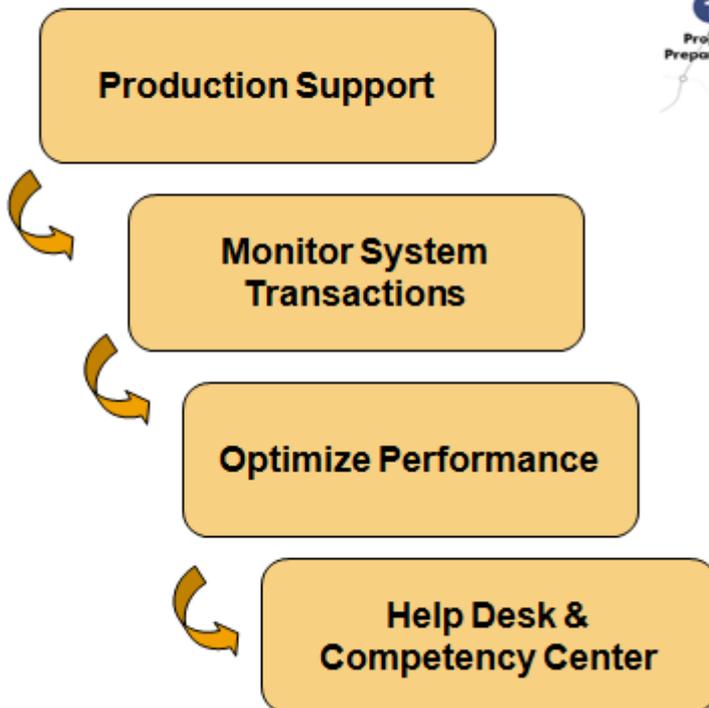
vi) **Cutover Period:** - Generally we take 2 days to upload the data from legacy to SAP. The 2 days period is called cutover period.

After cutover period we go to the next phase of ASAP methodology that is GO-LIVE & Support.

## 5.GO-LIVE & SUPPORT PHASE



### Phase 5 : Go Live & Support



The purpose of this phase is to move from a project-oriented, pre-production environment to live production operation.

## 5<sup>th</sup> Phase

**Go-Live:** - Handing over SAP to client, from that date onwards users will start entering day to day transaction in SAP. After implementation we provide 3 months of post production support.

## Interview Questions On IMPLEMENTATION PROJECT

1. What is your team size?
2. Did you ever attend kickoff meeting?
3. Where is your client located?
4. Can you draw the organization structure of your client?
5. What you did on the first day of your implementation project?
6. What is your project tenure?
7. On what basis you gather requirements?
8. From which phase of ASAP methodology you involved in implementation project?
9. What are the activities they do in project preparation phase?
10. What are the documents you prepared in BBP phase?
11. Where exactly you will find in GAP's?
12. What is GAP?
13. Did you find any gaps in implementation project?
14. Did you face any gaps in BBP phase?
15. What is the tenure for BBP?
16. What is the most critical phase of ASAP methodology?
17. Where the servers are located?
18. How many modules you implemented?
19. Did you visit all the manufacturing plants of our client?
20. Did you visit depots?
21. How many types of configurations do you have?
22. Do you have clients in your development server?
23. What are the documents you prepared in realization phase?

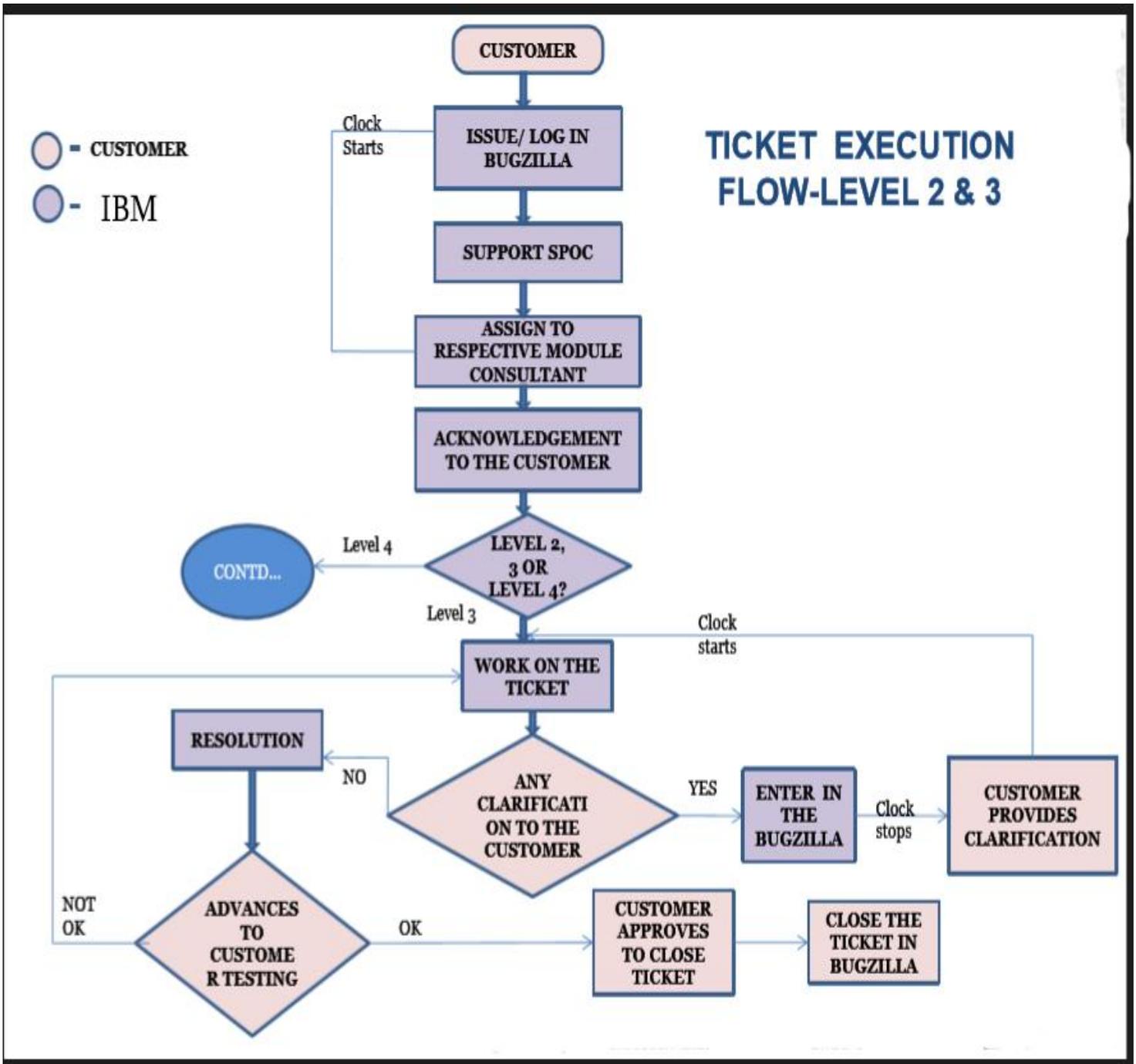
24. How many types of testing do you have?
25. What is your role in transporting request?
26. What is the T code for importing request?
27. What is the T code for releasing request?
28. What is the T code for transporting request from one server to another server?
29. How many types of requests do we have?
30. In what scenarios we're getting workbench requests in SD?
31. What is cross client?
32. What happens if we save condition table in local object?
33. What is the T code to transport number ranges?
34. What do we have in test case document?
35. What is the purpose of preparing configuration document?
36. After transporting the request from one server to another server how to take it back?
37. After releasing the request can i use the request to save further configurations?
38. What is the tenure for realization phase?
39. Out of 15 team size how many are SD?
40. How many core users do you have?
41. How many pour users do you have?
42. To whom you will give training?
43. How many days you will give training?
44. How many times you will take signoff from core user?
45. What is your role in cutover activities?
51. What is cutover period?
52. How many months we will support after go-live?
53. What are the issues during 3months of support period?
54. How many total documents we prepare in implementation project?
55. After go-live what we will do?
56. On what basis we do configuration?
57. What is the role of shadow consultant?
58. Explain your total activity in final preparation phase?

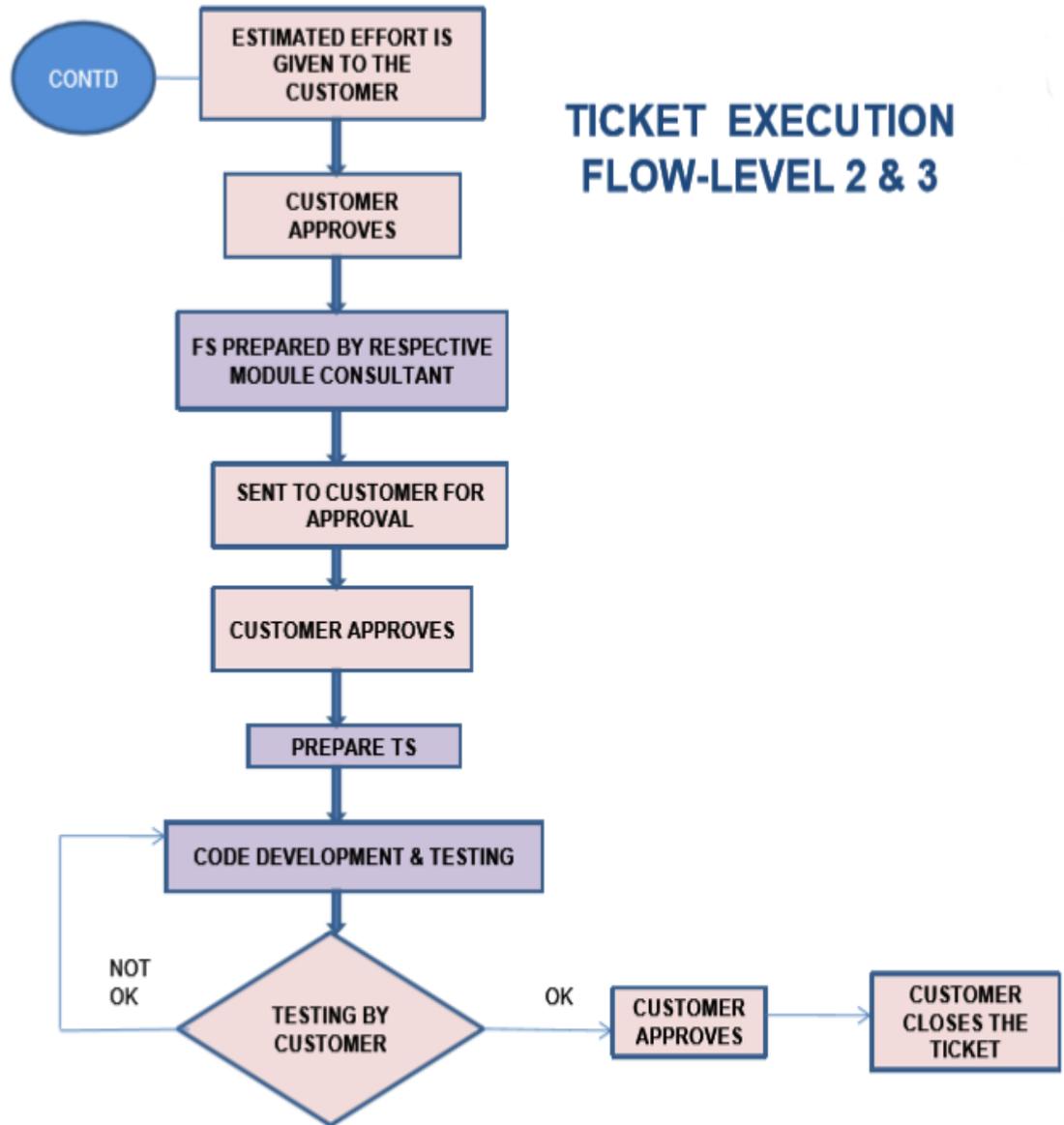


59. How many end users?
60. What is the difference between developer user id's and normal user id's?
61. In which server we do cutover activities?
62. What happens if you get an error while uploading the data?
63. Did you face any scenario for which we need to contact sap for configuring client's business process?



## SAP SD SUPPORT PROJECT-OVERVIEW





# SLA Recommended Matrix

Mean Times – Regular Business hours							
Severity 1		Severity 2		Severity 3		Severity 4	
Response	Resolution	Response	Resolution	Response	Resolution	Response	Resolution
30 minutes	8 Hours	2 Hours	1 Business Day	4 Hours	3 Business Days	5 Business Days	20 Business Days

Mean Times – On call hours							
Severity 1		Severity 2		Severity 3		Severity 4	
Response	Resolution	Response	Resolution	Response	Resolution	Response	Resolution
45 minutes	12 Hours	2.5 Hours	1 Business Day	4 Hours	3 Business Days	5 Business Days	20 Business Days

## Escalation Mechanism

Severity	Escalation Criteria	Escalation Point
Severity 1 & 2 issues	All issues	Level 1 and Level 2 Managers
Severity 3	Resolution time < 3 days	Level 1 Manager
	Resolution time between 3 – 5 days	Level 2 & so on...
Severity 4	Resolution time < 20 days	Level 1
	Resolution time between 20 – 30 days	Level 2 & so on...

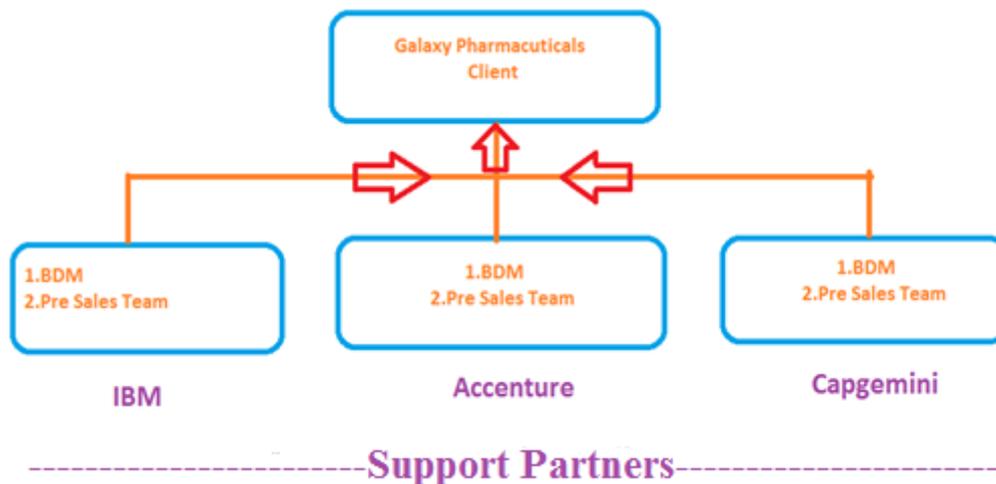
## Escalation Matrix for Support

Escalation Level	Escalated to
Escalation Level 1	Program lead
Escalation Level 2	Program manager
Escalation Level 3	Account Manager
Escalation Level 4	Delivery Head

- If the issue is not resolved within the stipulated timeframe it can be escalated to the next level as per the escalation matrix.

### Roles & Responsibility of consultant in Support Project

**Support:** - Support is solving the issues raised by the clients who already implemented SAP.



Whenever a support partner get a new project, both the client and support partner will enter into an agreement called SLA (Service level agreement).



- In SLA, as a consultant we should know the information of priority of issues.

Generally issues are classified into three types:-

1. High Priority – 4 Hrs

2. Medium Priority – 24 Hrs

3. Low Priority – 48 Hrs

1. Any issues if it is stopping client business process then we treat it as High Priority.

2. Issues in Order Creation are treated as Medium Priority.

3. Issues in enquiry, quotation and contract are treated as Low priority.

Other information we should know from SLA is change request.

**Change Request:** - If client is requesting any new change or a new configuration for which there is no present configuration in the system, than we treat it as change request. Whenever we get change request, we need to prepare change request document.

This document consists of:-

- ✚ Issue description (Ticket details).
- ✚ Expected solution
- ✚ Approximate efforts
  - ✚ Functional man days 15 days
  - ✚ Technical man days – 10 days

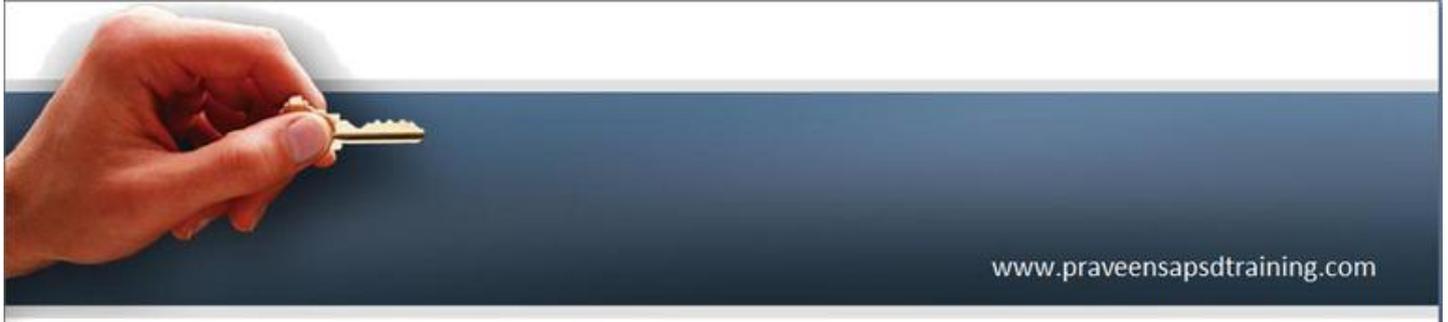
After preparing change request document we need to send this document to superior for review, after review we send this document to core user for approval, after approval we start working on this issues.

Whenever the organization get new support project, management will conduct kick-off meeting. They invite all consultants who are going to involve in support project.

For unknown client the project team size is 12 and out of this SD is 2, and for MNC or well known client the support team size is 50 or more and SD is 10.

Kick-off means – start off

- ✚ In kick-off meeting all will discuss about client:-
- ✚ Introduction of client
- ✚ Rules & regulation of client
- ✚ Roles & responsibility of consultant
- ✚ Share core user list
- ✚ Agreement period
- ✚ Starting date



After kick-off meeting all the consultants will move to client place for knowledge transfer which is called KT.

**KT process:** - When all the consultants go to client place for KT process. Core users will hand over the configuration document to consultant. Consultant has to go through the configuration document and simultaneously does the system study (development server). After system study consultant has to prepare understanding document, After understanding document consultant has to give reverse KT to core users. The tenure for KT process is 15-20 days.

After reverse KT all the consultants will come back to their office and start supporting the client.

**Ticketing tools (Help Desk) available in the market:** - HP-QC, Citrix, Remedy, JIRA, Peregrine  
It will help to track the tickets and its time.

#### **Ticket cycle process:-**

In day to day business transactions End users will get the errors. Whenever he get the error, he will send the mail to help desk where core users will be available. Core user will try to solve the errors if it is configuration issues then he will log the ticket into ticket tool along with priority of issues. After placing tickets in ticketing tool mail will be send to support partner co-coordinator. Co-coordinator will open the ticketing tool and analyze the ticket and allocate the tickets to relevant consultant then the mail will send to consultant.

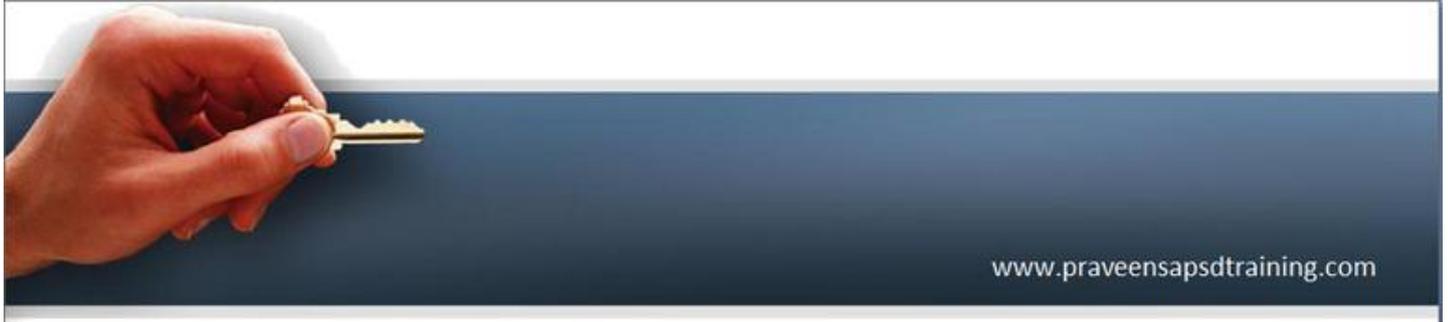
The basic responsibility of a consultant once he receive the ticket is, send acknowledgement to core user and end user.

After acknowledgement we will go to pre-production server and try to do the same what end user is trying to do in production server then we should also get the same error in pre-production . Because pre-production server is mirror image of production server. After getting error we analyze it and we go to development server and do the necessary configuration and transfer the request from development to quality server and ask the core user to test it and confirm, after confirmation we transfer the configuration from quality to production server.

#### **Status of Tickets:-**

When we receive the ticket the status is open, after acknowledgement will change the status from open to being process. If We send a mail to user requesting for some more information then we change status to waiting for information .once we receive the required information then again we change the status to being process. After completion we send a mail to user to test it and confirm, then we change status to waiting for confirmation, after user confirmation we change the status to close.

**Issues Resolution document:** - After solving the issues consultant has to prepare Issue Resolution document.



**Issues resolution document consist of:-**

- Ticket number
- Ticket Date
- Ticket description
- Solution description
- Core user description
- Consultant description

Issue resolution document will be used for future reference.

**Consultant role in weekly meeting in support:** - List out all the issues which are in pending and discuss on each and every issue in Weekly meeting.

**Escalation in support:** - IF The issue is not properly solved or addressed by the consultant then core user will send escalation mail to superior.

**Levels of consultant in support:-**

- Level 1 – consultant work only in high priority.
- Level 2 – Medium & low priority.
- Level 3 – work only in change request.

If core user is assigning wrong priority to the ticket, as a consultant we should request core user to change the priority ,then only we need to accept the issues.

Every client may not have a ticketing tool. If client doesn't have ticketing tool then ticket process will be manual, that is end user will send a mail manually to core user and core user will send a mail manually to coordinator and co-coordinator will send a mail manually to consultant and lastly consultant will send a mail(Acknowledgment) manually to core user and end user.

## Roll Out Project

- 1) **Company code roll out:** - If the client is starting their business in another country then they extend SAP configuration from one company code to another company code.
- 2) **Plant roll out:** - If the client is introducing new plant into the business then we have to do configuration for that plant in SAP, this we call as plant roll out.
- 3) **Up gradation Project:** - Up gradation is upgrading the SAP system from one version to another version.

**Login into SAP:** - Double click on SAP logon pad on desk top.

Select IDES (client name). Click on Log on  
Client – 800  
User – sapuser  
Password – india123

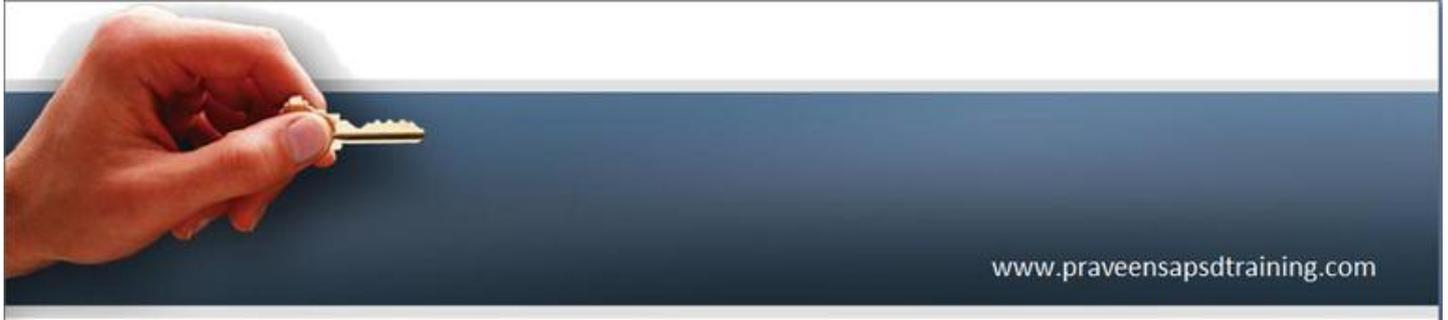
Whenever we are entering to SAP the default screen system propose is “Easy Access”.

- End user will work in easy access screen.

- Consultant will use “IMG Screen” IMG (Implementation Guide).

## Interview Questions On SUPPORT Project

1. What is your support team size?
2. How you got KT form the support client?
3. Tell me the process how we will get ticket from the client?
4. What is SLA? And what information we should know from SLA?
5. What documents you prepare in support?
6. Did you worked on any high priority issues?
7. Did you worked on any user exit?
8. Did you develop any Z reports?
9. Tell me one critical issue that you solved for this client?
10. What you did yesterday?
11. What is the pending issue you are working on now?
12. What is your present client's business process?
13. What is the ticketing tool your client is using?
14. Where is your client located?
15. What is change request?
16. Do you have levels in support team?
17. What is your role in weekly meeting?
18. If core user is assigning the wrong priority as consultant what you will do?
19. Did you worked on any change request?
20. What do you mean by escalation?
21. What happens if you are not in a position to solve high priority issue within 4 hrs?
22. We got a ticket from core user for which there is no solution from you end?



### Navigation to IMG screen

- ✚ Enter T-Code (Transaction code) SPRO in T-code bar. Then click on SAP reference IMG (f5).
- ✚ End user doesn't have access to IMG screen.
- ✚ If we are other than easy access screen then we have to enter either /n or /o before the T-code.
- ✚ If we mention /n before T-code then present screen will disappear and next screen will appear.
- ✚ If we mention /o before T-code then without disturbing the present session system will open the screen in new session.
- ✚ At a time maximum we can have 6 sessions.

If we want to log off from SAP, in the menu bar click on system and log off.



## Enterprise Structure

Enterprise structure is an organizational structure that is mapped into SAP

Ex. - Corporate office, Branch office, sales head office, manufacturing plant, etc

### Organizational Units

**1. Company code:** - Company code is an organizational unit which is responsible for all the external financial transactions which happens in the company.

**Example:** - Balance sheet and profit & loss statement.

Every company has to prepare Balance sheet and profit & loss statement on the name of company code. It is the organizational unit, which is registered under company's act 1956(INDIA).

- ✚ Company code is a physical entity.
- ✚ FI consultant is responsible to define company code in SAP.
- ✚ A company code is 4 digit codes.

Z	A	L	k
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In our project we have one company code and the name of company code is Galaxy Pharmaceuticals

Address of company: - Galaxy Pharmaceuticals  
Industrial Estate#14  
Hyderabad

The company code is: - ZALK (the company code can be numeric or alpha numeric or character).

**Q. What scenarios a client will have multiple company codes?**

**Ans.** Group of company or sister concern. Example – Tata group, Reliance group, etc.

Having operations in multiple countries. Example – Ranbaxy India and Ranbaxy US.

**2. Sales Organisation:** - It is an organizational unit which is responsible for all sales & services happen in the Company.

Or

It is an organizational unit where strategic decisions related to sales will be taken.

Or

It is organisation unit where we find director sales and VP sales.

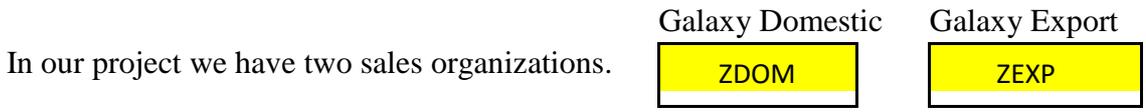
SD consultant is responsible to define sales organisation in SAP.

Sales organisation is of 4 digit code.

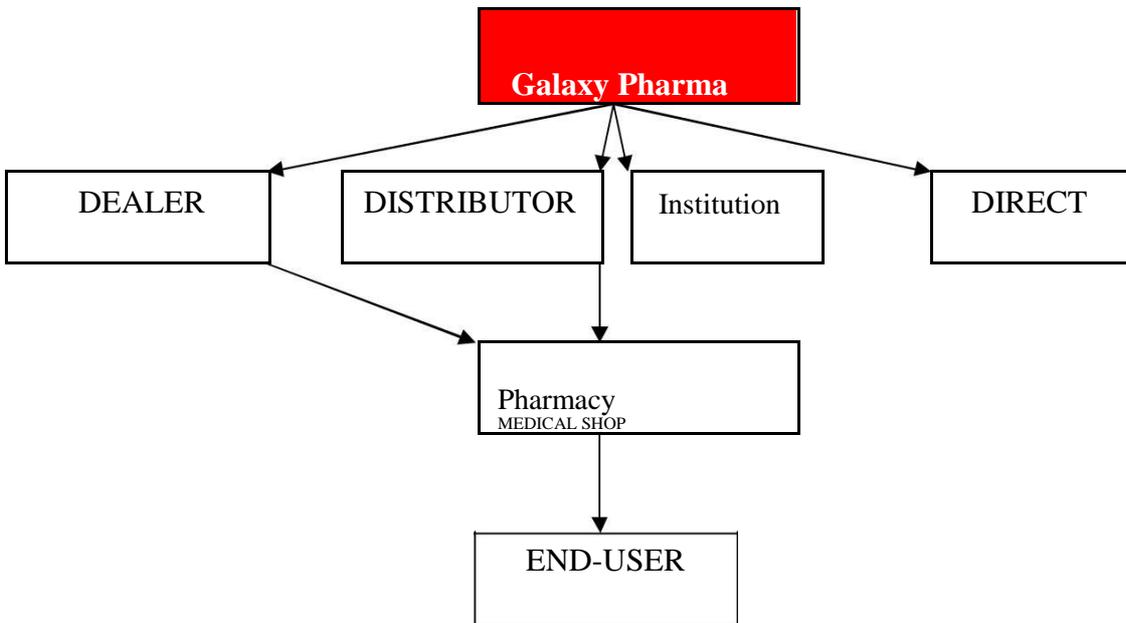


**Q. What scenarios client will have multiple sales organizations?**

**Ans.** If client is having multiple company codes. Bifurcation of sales responsibility region wise. Domestic and Export sales.

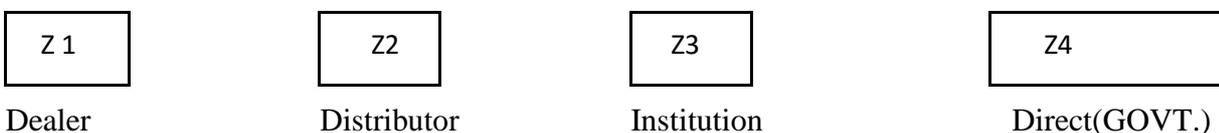


**3. Distribution Channel:** - The Channel of selling the goods to end customers or the way of distributing goods to end customer.



SD consultant is responsible to define distribution channel. Distribution channel is a logical entity.

The length of distribution channel is 2 digits. In our project we have 4 distribution channels.



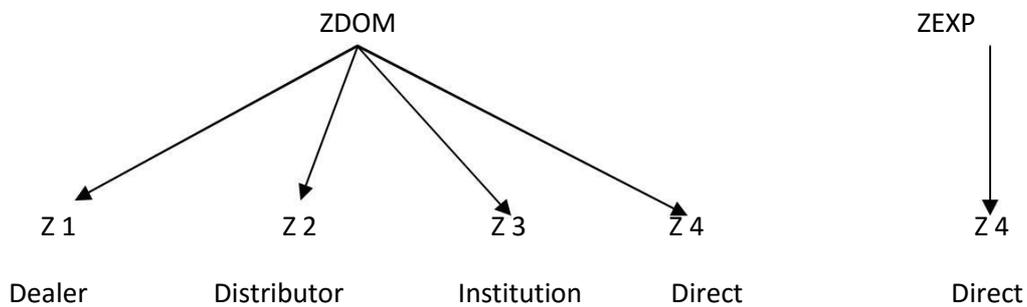


**4. Division:** - Division is a range of products or product line. Grouping of products which are similar in nature.

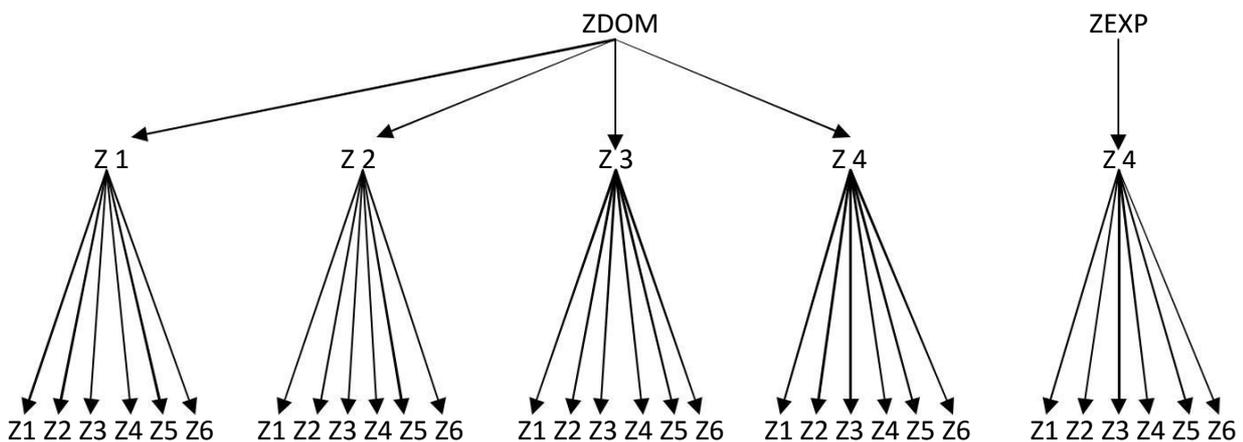
- ✚ SD consultant is responsible to define division in SAP.
- ✚ A division is 2 digit codes.
- ✚ In our project we have 4 divisions.



**Sales Line:** - The combination of sales organisation and distribution channel is called as sales line.



**Sales area:** - A sales area is a combination of sales organisation, Distributor channel and Division.





$4*4 = 16 + 4 = 20$  Sales areas

**5. Sales office:** - It is a physical location where group of people work together to perform sale. (We also call it as branch office).

In our project we have 28 sales offices in India. (Note: - we have to maintain only one sales office). SD consultant is responsible to define sales office.

Sales office is a 4 digit codes. It is physical location.

The difference between sales office and sales organisation is, in sales organisation we will take strategic decision related to sales but in sales office we can't take strategic decisions. In a sales organisation we will find vice president sales and direct sales but in sales office we will find sales manager, zonal manager.

**6. Sales Group:** - Group of people within a sales office working for different activities. Hierarchy of employees in sales office.

Example: - HDFC bank has 5 different sales activities like; CASA, Personal loan, home loan, Vehicle loan and miscellaneous loan.

There is no relation between two groups.

If they don't have group then they follow hierarchy. SD consultant is responsible to define sales group.

Sales group is a 3 digits code.

In our project we have 2 sales groups. Ex.:- Insulin & Antibiotic in one group and remain in other group. Sales group is a logical entity.



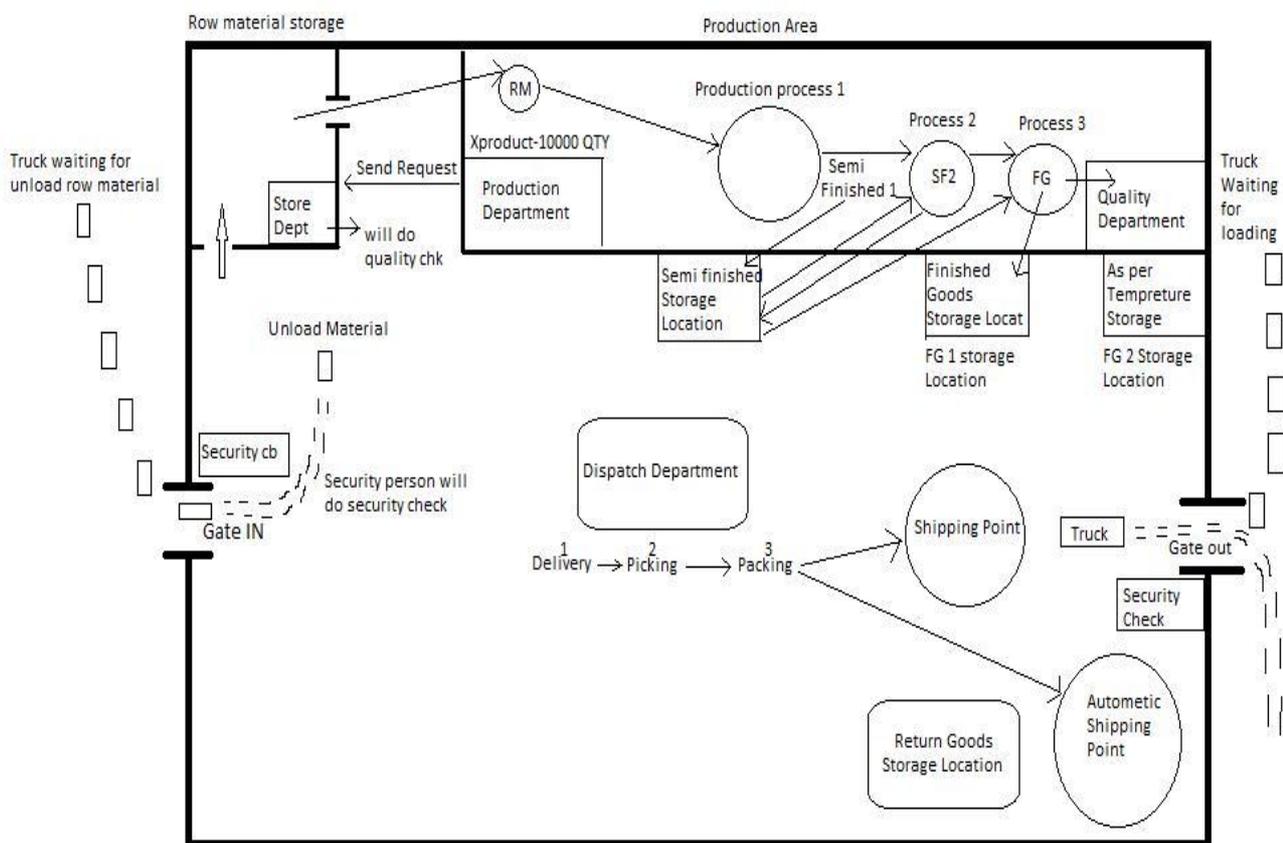
**7. Plant:** - “It is a physical location where we do the process of manufacturing finished goods.”

MM consultant is responsible to define plant in

SAP. A plant is 4 digits code.

It is physical location.

### Production Process in Plant



Raw material is a product which is used to manufacture finished goods and loses its identity in the process.

Whenever production department plan to manufacture particular X product they will send request to store department.

Store department will cross check the raw materials. If all raw materials are available then they issue raw materials to production department.

The dispatch department 1<sup>st</sup> they plan for delivery and then they do picking activity and then packing. After packing they send the goods to shipping point.



**Shipping point:** -It is a physical location where we do the process of loading goods into trucks ,Rail for dispatching it to customers.

**Storage location:** - It is a physical location where we store the goods within plant.

**8. Depot:** - Depot is a physical location where we store finished goods to easy distribution goods to customer. In SAP depot is also defined as Plant.

**9. C&F:** - Carry and forward, It is a physical location where we store the finished goods for easy distributing goods to customers. Owned by third party Vendor.

In SAP C&F is also defined as plant.

In our project we have two manufacturing plants, one in Vapi and one is in Mumbai and 28 depot but for practice purpose define only 2 manufacturing plants.

1. Vapi
2. Mumbai

**10. Storage location:** - It is a physical location where we store the goods within a plant.

In our project each manufacturing plant have 5 storage locations

MM consultant is responsible for storage location definition.

It is also 4 digit code.

**11. Shipping Point:** - It is a physical location where we do the process of loading the finished goods into trucks for dispatching it to customers.

SD consultant is responsible to define shipping point. Shipping point is 4 digits

code.



## Defining Organisational units in SAP

### 1. Define company code

**Menu Path line:** - SPRO → Enterprise structure → Definition → Financial Accounting → Edit, copy, delete, check → Click on IMG activity (clock symbol) → then double click on edit company code data → select the standard company code 1000 and click on copy → and change our company code(ZGAL) → change the company name(Galaxy Pharma) → City(Hyderabad) → Country(India-IN) → currency (INR) Language (EN) → Enter (after enter system will automatically ask for address) → Title (Company) → Name (Galaxy Pharma) → Search team1/2(Galaxy) → Address of company → Address of company → Company (IN) → Region specify the state (Andhra Pradesh) → Press Enter → after creating company code save it → Create your own request number or same number and enter it.

### 2. Define Sales organisation

**Path Line:** - SPRO → EP structure → Definition → S&D → Define copy, delete, check sales organisation → click on IMG activity (clock symbol) → Double click on define sales organisation → select the standard 1000 sales org → Click on copy → change our sales org code (ZDOM) and change name (Galaxy Pharma) → Change the currency (INR) → Enter → Enter → select title (company) → Name (Galaxy Pharma domestic sales org) → search term1/2 (Galaxy) → Address → Country (IN) → Region (13) → Time Zone(India) → Press enter and save it → use some request number

### 3. Define distribution channel

**Path Line:** - SPRO → EP structure → Definition → S&D → Define copy, delete, check channel distribution → click on IMG activity (clock symbol) → Double click on define distribution channel → (any organisation unit if we don't detail step then no need to copy, we can directly go to new entry) Z2-dealer, Z3-Distributor, Z4-Institution, Z5-Direct → Then save it.

### 4. Define Division

**Path Line:** - SPRO → EP structure → Definition → Logistic general → Define copy, delete, check Division → Double click on define division → New entries → Z2- Gynocologic, Z3-pediatric, Z4-Insulin, Z5- Antibiotic, Z6-Cordologic, Z7-Orthopedic. → Save it

### 5. Define Sales office

**Path Line:** - SPRO EP structure definition Sales & distribution maintain sales office click on IMG activity click on new entries mention our sales office (ZHYD) maintain sales office address Region (01) Language (EN) Mobile Phone click on copy Save it.

### 6. Maintain Sales group



**Path Line:** - SPRO E EP structure definition Sales & distribution maintain sales group click on IMG activity click on new entries mention our sales group (Z01- Insulin & Antibiotic), (Z02- Other) Save it.

## **7. Define Plant**

**Path Line:** - SPRO EP structure definition Logistic general Define copy, click, delete and check plant click on IMG activity Double click on define plant select the standard plant (1000) and click on copy change the plant code (ZVAP) change the name (Vapi mfg plant) Enter Maintain address Search ½ (VAP) Region, Time zone, Language, Telephone Click on copy Save it.

For making another plant (Mumbai)

Plant (ZMUM) change the name (Mumbai Mfg Plant) Maintain address till last click on copy and save it.

## **8. Define Storage Location**

**Path Line:** - SPRO EP structure Definition Materials Management Maintain Storage location Click On IMG activity Plant (ZVAP) Enter Go to new entries SLOC (ZFG1 – Finished 1 storage location), (ZFG2- Finished 2 St location), Save it.

Go back and maintain storage location for another plant (ZMUM) go to new entries

## **9. Define Shipping Point**

**Path Line:** - SPRO EP structure definition Logistic Execution define copy, delete, check shipping point click on IMG activity Double click on define shipping point select the standard shipping point (1000) and click on copy change the shipping code (ZVP1) (Vapi manual shipping point) Enter Mention address Region (06) Language (EN) Enter save it.

Select same shipping point Code (ZVP2) Vapi automatic shipping point and save it.

For Mumbai shipping point need to do same process with Mumbai code and address. (ZMU1) (ZMU2).



## Assignment of Enterprise structure

This is maintaining references between the organisation units which we already defined..

### 1<sup>st</sup> Assignment

**Assign Sales organisation to company code:** - SD consultant will do this assignment

**Path Line:** - SPRO EP Structure Assignment S&D assign sales organisation to company code click on IMG activity click on position go to our sales organisation and assigned our company code (ZALK – ZALK) Enter and save it.

The relation between company code and sales organisation is one to many i.e. one company code can have many sales organisation but one should be assign to single company code.

### 2<sup>nd</sup> Assignment

**Assign Distribution channel to sales organisation:** - SD consultant will do this assignment.

Path Line: - Path line is same as above.

The relationship is many to many i.e. one sales organisation can have many distribution channels and one distribution channel can be assigned to many sales organisation.

Go to new entries ZDOM- Z2, ZDOM- Z3, ZDOM- Z3, ZDOM- Z4, ZDOM- Z5, ZEXP- Z6 after that save it.

This assignment we also call it as sales line.

### 3<sup>rd</sup> Assignment

**Assign Division to sales organisation:** - SD consultant will do this assignment

The relationship is many to many i.e. one sales organisation can have many division and one division can be assign to many sales organisation.

**Path Line :-** SPRO EP Structure Assignment S&D assign division to sales organisation click on IMG activity Go to new entry ZDOM - Z2, .....up to ZDOM - Z7 and same with ZEXP – Z2 .....up to ZEXP – Z7 Save it.

### 4<sup>th</sup> Assignment

**Setup Sales Area:** - Sales area is the combination of sales organisation, Distribution Channel & Division.

Sales area places a vital area role in S&D module because whatever we do in sales it should be routed through a particular sales area.

**Path Line:** - SPRO EP Structure Assignment S&D setup sales area go to new entries ZDOM – Z2 – Z2, ZDOM – Z2 – Z3,.....up to ZEXP – Z5 – Z7 (up to 30<sup>th</sup> sale area) save it enter.

### 5<sup>th</sup> Assignment



**Assign Sales office to sales area:-**

**Path Line:** - SPRO EP Structure Assignment S&D setup sales area go to new entries  
ZDOM

- Z2 - Z2 - ZHYD, ZDOM - Z2 - Z3 - ZHYD..... up to ZDOM - Z5 - Z7 - ZHYD (Total 24) save it.

**6<sup>th</sup> Assignment**

**Assign Sales group to sales office**

**Path Line:** - SPRO EP Structure Assignment S&D go to new entry ZHYD - Z01, ZHYD - Z02 Save it.

**7<sup>th</sup> Assignment**

**Assign plant to company code:** - MM consultant will do this assignment

The relationship is many to many i.e. one company code can have many plants can be assign many company codes.

**Path Line:** - SPRO EP Structure Assignment Logistic general assign plan to company code click on IMG New entry ZALK - ZVAP, ZALK - ZMUM Save it.

**8<sup>th</sup> Assignment**

**Assign Sales organisation, Distribution channel to plant (Sales line to Plant)**

**Path Line:** - SPRO EP Structure Assignment S&D assign sales org, distribution channel to plant go to new entry ZDOM - Z2 - ZVAP, ZDOM - Z3 - ZVAP, ZDOM - Z4 - ZVAP, ZDOM - Z5 - ZVAP, ZEXP

- Z5 - ZVAP, ZDOM - Z2 - ZMUM, ZDOM - Z3 - ZMUM, ZDOM - Z4 - ZMUM, ZDOM - Z5 - ZMUM, ZEXP

- Z5 - ZMUM Save it.

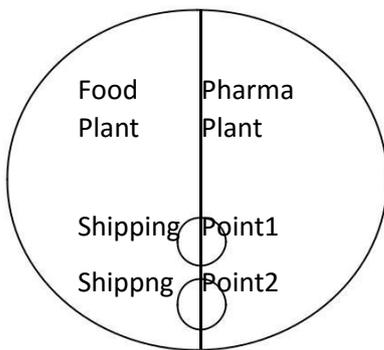


## 9<sup>th</sup> Assignment

**Assign Shipping point to plant:** - SD responsible for this assignment

Actually the relationship is one to many i.e. one plant can have many shipping point but one shipping point should be assign to single plant.

But SAP says relationship is many to many (if both the plant located in same premises).



Here food plant and Pharmacy plant both are located in same Premises and both shipping point are also in same so in this case one plant can have many shipping point and also one shipping point can have many plant for food and Pharmacy plant so SAP says relationship is many to many.

**Path Line:** - SPRO EP Structure Assignment logistic execution assign activity point to plant IMG activity (The screen for shipping point assignment will look different up to 4.7 version all assignment will be like this) go to find symbol put the ZVAP and ZMUM for plant select the plant click on assign select our shipping point by scroll click on copy select ZVAP Click on assign select our shipping point for Vapi (ZVA1 and ZVA2) click on copy save it.

EC01 is T- code to see the EP structure Click on structure click on navigation enter double click on our company code (ZALK).

### **Other units in organizational unit not relevant to SD consultant**

**Company:** - A company is an organizational unit which will help to group several company codes into one.

Ex. - Tata Group, Reliance group etc.

FI consultant is responsible to define company.

**Business Area:** - Business area is an organizational unit which will help to generate internal B/S plant wise. [The Business area concept is not in use from ECC 6.0 version].

FI consultant is responsible to define Business Area.

**Credit Control Area:** - It is an organizational unit which is responsible for credit activities. (Credit department).

**Controlling Area:** - It is an organizational unit which is responsible for controlling the cost of the product.

CO consultant is responsible to define controlling Area.



**Purchases Organisation:** - It is an organizational unit which is responsible for all purchases happening in the company. MM consultant is responsible to define purchases organisation.

### **“The controls in Sales Organisation”**

=> **The Address text in sales organisation:** - Address text in sales organisation will help to determine the address of the sales organisation to print it in relevant output.

The output can be printout or email or fax.

=> **Sales Organisation Calendar:** - The calendar specifies all holidays and working days.

**Define Factory calendar:** - SPRO SAP Net weaver General setting maintain calendar public holiday click on change button (Pencil ICON) go to create floating public holiday year (2014 – month – day) mention sort criteria (IN) religious (22 Hindu) Short holiday – long holiday (Gudipadwa) Enter

Go Back

Click on holiday calendar (in holiday calendar we list out all public holidays – in real time HR consultant create calendar) click on change go to create calendar ID (P1) (Galaxy Calender) click on assign holiday go to short key and select all IN (India) holiday assign holiday then select all public holiday save it.

Go Back

Select factory calendar click on change click on create factory calendar ID (P2) (Galaxy Calender) assign holiday calendar select the day Monday to Friday or Saturday and save it.

After creating the factory calendar we assign the factory calendar to sales organisation.

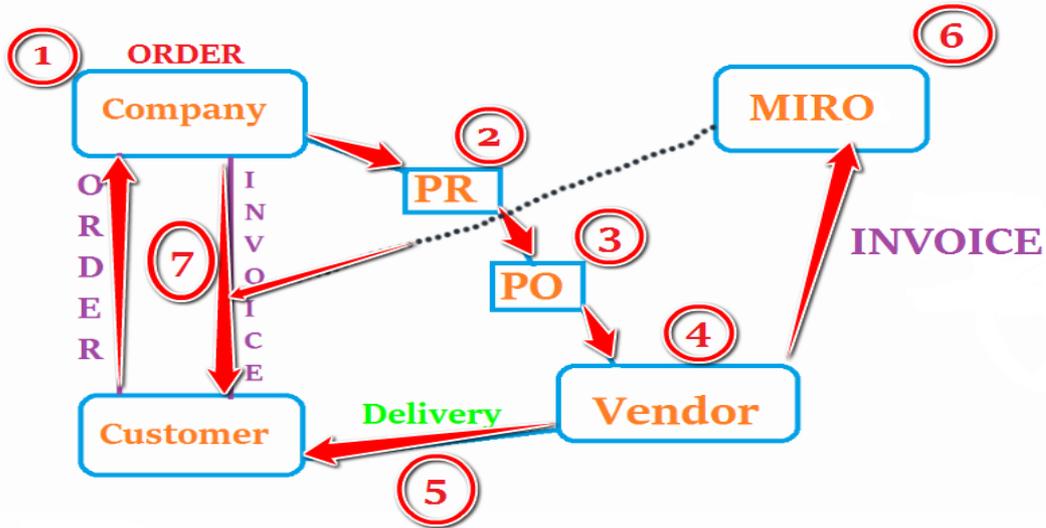
**We assign factory calendar for three organizational units 1. Sales organisation 2. Plant and 3. Shipping point.**

**Rebate Proc Active:** - Rebate is a special kind of discount which is a conditional discount and will be valid for specific period of time

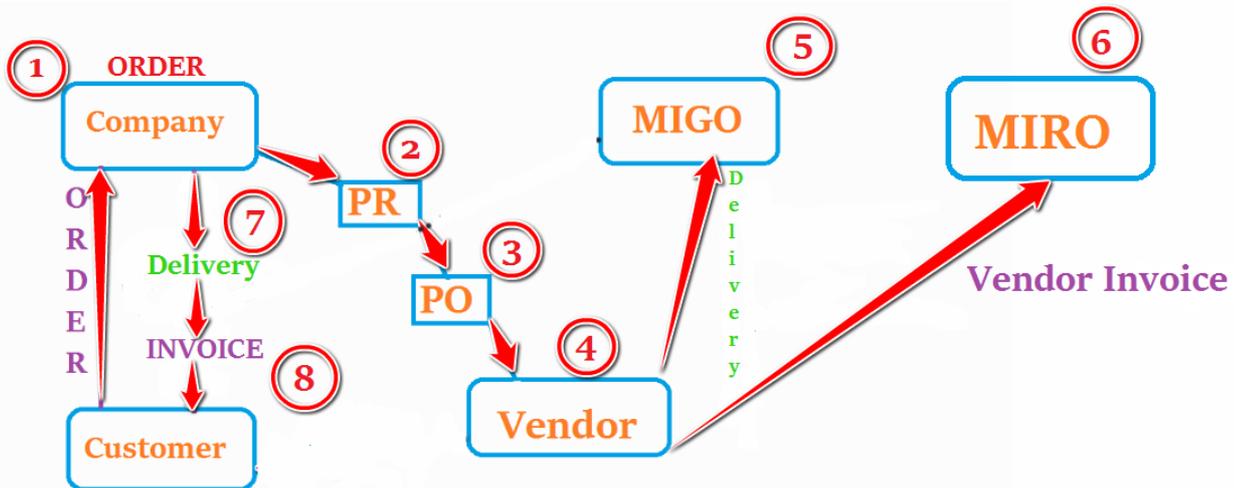
Example: - The rebate scheme if any customer purchases 15000 nos. Cartoon from January to December then he will be eligible for rebate of 15%.

This field is pre requites to process rebate in an organisation i.e. if we check this then only system will allow to process rebates.

**ALE: data for purchases order** (ALE – Application linking enabling):- We use this only for third party process and individual purchases order process.



### Third Party Business Process - With Out Shipping Notification



### Individual Purchase Order(IPO) Business Process

If we maintain ALE data for PO while creating sales order in third party process and IPO process, system automatically generate purchases order.



### **Controls in shipping Point**

Path line: - go to shipping point loading time (it is time taken to do the process of loading the goods into trucks for dispatching to customer).

Pick Pack Time: - It is time taken to pick the material from storage location and to pack it.

Loading time and pick pack time will help to perform delivery scheduling (delivery scheduling is the process of determining the delivery date and confirm quantity).



## **MASTER DATA**

It is the data which is stored centrally and used in day to day transactions. In SAP SD we have 4 types of Master Data.

- 1) **Customer Master**: - It is the details of the customer which is stored centrally and used in day to day transaction.

**Ex.** – Customer Name, address, communication details, payment info, sales info,  
etc. Master data is a data which is not changed frequently.

The advantages of Master data:-

- I. No need to enter the details of the customer every time, which will save the time of end-user.
  - II. Master data will avoid manual mistake.
- 2) **Material Master**: - It is the details of the products which we store centrally and use in day to day transactions. Ex- Specification of products, weight
  - 3) **Customer material info record (CMIR)**:- We use CMIR if customer is placing order with their own material code. By using CMIR we assign customer material number with our material number then while creating sales order if user enter customer material number and system automatically determine our material number.
  - 4) **Condition Master**: - Condition master is nothing but pricing master. In this master data we maintain pricing data for all the products.



## 1) Customer Master

End user will create customer master in SAP Easy Access Screen

### Roll of consultant

As a consultant we have to give training to core user, so we should have knowledge of customer master data.

We should know how to create customer master.

We define new entries in customer master data fields.

The length of customer number is max up to 10 digits.

Customer master data will be divided into three screens:-

General Data	Company code Data	Sales Area Data
SD – Address FI – Control Data FI – Payment transaction SD – Marketing SD – Unloading points SD – Export Data SD – Contact Person	FI – Account FI – Payment Transaction FI – Correspondence FI – Insurance	SD – Sales SD - Shipping SD – Billing SD – Partner Functions.

In real time authorization to create customer master will be given to one or two users. If we give authorization to two users, First SD User will create customer with sales data and send it to FI user. Then FI user will enter FI related data, the other scenario is, we give training to one user to maintain both SD and FI data. In that case only one person will be authorized to customer master record.

T. Code	Customer Centrally	Company Code Data	Sales Related
CREATE	XD01	FD01	VD01
CHANGE	XD02	FD02	VD02
DISPLAY	XD03	FD03	VD03



### Path for creating customer Master

**Easy Access > logistics > S&D > master data > business partner > customer > create XD01 complete**

click on account group overview select standard 0001 company code (ZALK) select org (ZDOM) Dist. Channel Division enter (when we are creating customer for the 1<sup>st</sup> time with the new sales area we will get the error message that **sales area is not define for customer**. (To solve this error).

Go to the path SPRO S&D master data define common distribution channel go to our sales organisation (ZDOM) fill D.CH- Common Distribution channel same which mentioned in dist channel and enter it and save it.

Go back

Define common division go to our sales organisation enter Division and Common Division same which we mentioned in division save it.

### Copying reconciliation account from standard company code 1000

SPRO financial accounting (new) general ledger accounting (new) master data G/L A/ creation and processing alternative methods copy G/L A/c copy company code.

Before copying G/L A/C go to the **T.code OBY6** and go to our company code, select it go to details chart of accts [INT] fiscal year variant (V3)

**fiscal year variant specify the financial year of the company**

- ✚ Indian company financial year is April to March so for Indian company we maintain fiscal year variant as (V3).
- ✚ For foreign companies the financial year is January to December. So we maintain fiscal year variant as (K4)

Maintain fiscal variant as [1000] pstng period variant as [1000] save it.

Now go to SPRO ...to copy company code in copy from maintain company code [1000] uncheck test run execute (F8) ⌚ will get some msg enter save in a particular request no.

Go back and select the recon account [140000].



## TABS in General Data Screen

**Change Customer: General Data**

Other Customer | Company Code Data | Sales Area Data | Additional Data, Empties | Additional Data, DSD

Customer: 9990000031 | Appolo Hospital | Mumbai

Address | Control Data | Payment Transactions | Marketing | Unloading Points | Export Data | Contact Person

Preview | Internat. versions

**Name**

Title: Mr.

Name: Appolo Hospital

**Search Terms**

Search term 1/2: APPOLO

**Street Address**

Street/House number: Andheri

Postal Code/City: Mumbai

Country: IN | India | Region: 13 | Maharashtra

Time zone: UTC+53

**PO Box Address**

PO Box:

Postal code:

## TABS in General Data Screen

**1. Address:** - Address TAB consists of the personal info of the customer. i.e. his name, address and communication details.

Title (Mr.) name (Apollo hospital) street – house no. Postal code country region

**Transportation Zone:** Transportation Zone will help to determine route into sales document

**2. Control Data:** - FI user is responsible to maintain control data. Control data TAB consists of tax information of the customer,

**3. Payment Transaction:** - This TAB consists of the customer bank details and cards details. FI user is responsible .



4. **Marketing:** - SD user is responsible to maintain marketing TAB.

**Change Customer: General Data**

Customer: 9990000031 Appolo Hospital Mumbai

Address | Control Data | Payment Transactions | **Marketing** | Unloading Points | Export Data | Contact Person

**Classification**

Nielsen ID	Y1	GUJ/RAJ	Regional Market	A
Customer class.	Y1	8CR TO 10 CR	Hierarchy assignment	1
Industry	HLTH	Health & Hospitals		
Industry Code 1	1	Stand Ind Code 1		

**Key figures**

Annual sales	3,000.00	INR	in	2012
Employees	1000		in	2012
FI.Year Variant	01	Calendar year, 1 spec. period		

**Sales prospecting**

Legal status	02	Ltd
--------------	----	-----

**4. Marketing:** - SD user is responsible to maintain marketing TAB.

1. **Nielsen ID:** - Nielsen id will be used to track the customers who are located in market survey regions. Whenever we are launching new products we do market survey in specific regions. If the customers are located in market survey regions then we have to maintain this field.

### Define new entries in Nielsen ID

Shortcut method to define entries in fields Place the Cursor in the field and press F1 and click on customizing (key symbol) continue without specifying project. OR

Take path SPRO S&D master data business partner customer marketing define Nielsen ID new entries Y1 (GUJ/RAJ), Y2 (TN/KE), Y3(OR/KOL) save it.

Nielsen id (Y1) Customer classification (Y1)

2. **Customer classification:** - Classifying the customer based on their sales turnover.

The purpose of this field is 1) Helps to offer discounts 2) Helps to fix credit limits.



### Define customer classification

SPRO S&D master data business partner customer marketing define customer

classification go to new entry Y1- 8cr to 10 cr, Y2- 5cr to 8cr, Y3-3cr to 5cr, Y4 -1 to 3cr, Y5 – o to 1cr save it.

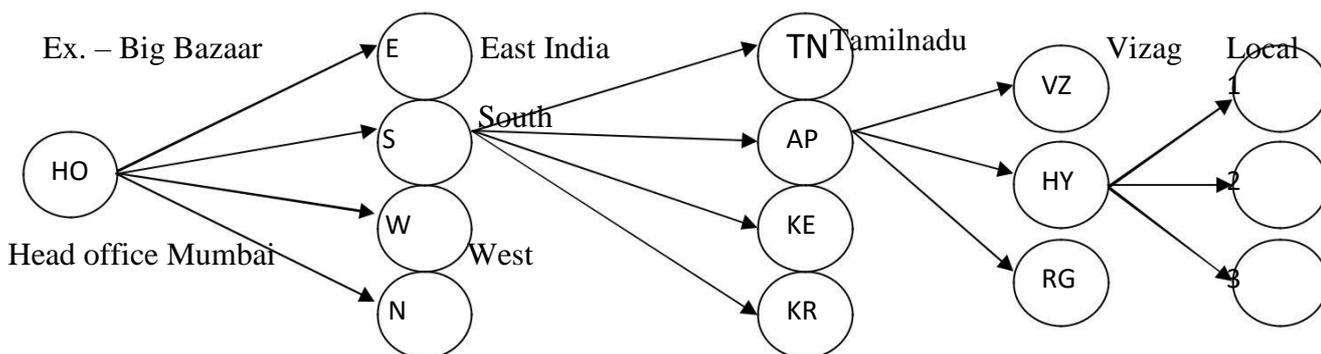
**3. Industry:** - classifying the customer based on the industry they belong to, the purpose of this field is 1) Reporting (Analysis) and 2) Helps to offer discounts.

**Industry code 1:** - its sub classification of industry.

**4. Regional market:** - Dividing the customer in local market into A class or B class or C Class based on the revenue it's generate. The main purpose of this field is reporting.

### 5. Hierarchy assign

Customer Hierarchy: - A customer is having different labels.



**6. Key figure:** - Key figure will be used to compare the Last year sales with present year sales. In annual sales field we maintain last year sales.

**7. Legal status:** - This field controls whether customer is Pvt Ltd, or Public Ltd,

**5. Unloading Point:** - It is the physical location where we unload the goods at customer place. Unloading point will be used to plan the delivery for customers.

We assign customer calendar in unloading point. **While doing deliver system will consider customer calendar.**

**a. Goods receiving hours:** - This will specify the time of customer's goods receiving hours.

### Defining receiving hours

Take Path – SPRO Master Data business partner customer shipping define goods receiving hours go to new entries fill the hours.



**Q. There is a customer who will receive the goods only on Saturday. Where we do control?**

**Ans. In goods receiving hours.**

**6.Export data:** - If the customer is located in outside countries then we have to maintain export data TAB.

**7.Contact person:** - Contact person is the employee of customer who is responsible for various activities.

### TABS in Company Code Data Screen

**Change Customer: Company Code Data**

Other Customer | General Data | Sales Area Data | Additional Data, Empties | Additional Data, DSD

Customer: 9990000031 | Appolo Hospital | Mumbai  
Company Code: ZALK | ALKEM Labroetries Ltd

Account Management | Payment Transactions | Correspondence | Insurance

**Accounting information**

Recon. account	140000	Sort key	
Head office		Preference ind.	
Authorization		Cash mgmt group	
		Value adjustment	

**Interest calculation**

Interest indic.		Last key date	
Interest cycle		Last interest run	

**Reference data**

Prev.acct no.		Personnel number	
Buying Group			

## 1. Account Management

**a. Reconciliation account:** - Reconciliation account is G/L account which will be used to accumulate total outstanding of the customer.

Whenever we are creating invoice system will generate accounting document. i.e. system will post the invoice values into the accounting and

**Accounting entry is:**

**Customer Account Debit**  
**To**  
**Revenue Account Credit**

For the customer account system determine G/L account from reconciliation A/c.



Select reconciliation A/c as 140000

## 2. Payment Transaction

- a. **Terms of Payment:** - It is an agreement between company and customer for the number of days given to make the payment. (We also called it as credit period).
- b. **Payment history record:** - If we check this then customer payment information will be updated into credit management.

### TABS in Sales Area Data Screen

#### 1. Sales

**Change Customer: Sales Area Data**

Other Customer | General Data | Company Code Data | Additional Data, Empties | Additional Data, DSD

Customer: 9990000031 Appolo Hospital Mumbai  
 Sales Org.: ZDOM ALKEM Domestic  
 Distr. Channel: Z1 Dealer Alkem  
 Division: Z1 Gyenocology

Sales | Shipping | Billing Documents | Documents | Partner Functions

**Sales order**

Sales district	PUNE01	pune -mumbai	Order probab.	100 %
Sales Office	ZHYD		AuthorizGroup	
Sales Group	Z01	insulin & antibiotic	Item proposal	50000033
Customer group	01	Industrial customers	Acct at cust.	
ABC class	A		UoM Group	
Currency	INR	Indian Rupee	Exch. Rate Type	M
<input type="checkbox"/> Switch off rounding			PP cust. proc.	B

Product attributes

**Pricing/Statistics**

Price group	01	Bulk buyer
Cust.pric.proc.	1	Standard
Price List	03	Industry
Cust.Stats.Grp		



## 1. Sales

**a. Sales District:-** It is a sub-classification of sales office, for the purpose of generating sales report. The main purpose of sales district is reporting.

Defining sales district:-

Path: SPRO S&D Master Data Business partner Customer Sales Define sales districts

go to new entries and define own sales districts.

**b. Sales Office: -** It is a physical location where group of people with in the office work together to perform sales. Assign the sales office in which customer belongs to

**c. Sales group: -** Group of people within a sales office working for different activity.

**d. Customer Group: -** Grouping of customers who will share the same attributes in volumes

**Ex-**

Dealer	Distributor	Institution
P1- Bulk dealer	P4 - Bulk distributor	P7 - Bulk institution
P2 - Medium dealer	P5 - Medium distributor	P8 - Medium institution
P3-Low dealer	P6 -Low distributor	P9 -Low institution

The purpose of customer group is 1. Reporting 2. Pricing

The path is same assales district.

**e. ABC Classification: -** Customers are classified into A,B,C classification.

Parameters for classification: > Turnover, > Payment history etc...

The purpose of this field is

1. Reporting
2. Response time to solve the issues or queries raised by customer.

**f. Currency: -** If the customer is located outside the country then we maintain customer currency.

If the customer currency is different from company code currency then while doing sales transaction system will display the values in customer currency but in accounting document system will display the value in company code currency.

This conversion will be happened based on exchange rate.



The T-code to maintain exchange rate is **T.Code OC41**

The Standard exchange rate type is “M”.

**g.Switch off rounding:** - If we check this, system will not perform rounding while creating sales order.  
Quantity Decimals

**h.Order probability:** - After placing the order what is the chance that the customer will not cancel the order.

**i.Item Proposal:** - If customer is regularly placing order for similar items then instead of entering the items manually into sales document every time, we prepare a list and call the list while creating a sales order. The end user will select the items from the list and copied into sales order which will save the time of end users.

The T-code for creating item proposal is **T.CodeVA51**. Mention the item proposal as PV  
Maintain sales area enter description mention material and Tgt quantity, UOM, Description and save it.  
Go to the item proposal to customer master and assign the number and save it.

**j. Exchange Rate type:** - If we have an agreement with the customer for fixed exchange rate throughout the month then we maintain exchange rate for the exchange rate type other than “M” and we assign that exchange rate type in customer master.

If we don't assign exchange rate type then system consider the standard rate type “M”

**k. PP customer procedure:** - This field will be used for cross selling concept or product proposal concept.

Cross selling is selling additional products along with the main product. For cross selling maintain B

For Product proposal maintain A

Product proposal is automatic determination of item proposal in sales document.

**L.Price group:** - Grouping of customers who will share the same pricing attributes. The purpose of this field is to maintain discounts.

Price group field will help to simplify the maintenance of discount condition records.

Define Price group:-

SPRO S&D basic function pricing Maintain price relevant master data field define price group and double click new entries

**M. Customer pricing procedure:** - This field is one of parameter to determine pricing procedure into sales document.



N. **Price list:** - Grouping of customers who will share the same base price.

Price list will be used to maintain base price. Ex. Dealer pricelist, Distribute pricelist, institution pricelist & direct pricelist etc.

O. **Customer statics group:** - This field controls whether to update customer sales data into LIS (Logistics information system) or not and LIS is reporting system.

## 2)Shipping TAB

**Change Customer: Sales Area Data**

Other Customer | General Data | Company Code Data | Additional Data, Empties | Additional Data, DSD

Customer	9990000031	Appolo Hospital	Mumbai
Sales Org.	ZDOM	ALKEM Domestic	
Distr. Channel	Z1	Dealer Alkem	
Division	Z1	Gyenocology	

Sales | **Shipping** | Billing Documents | Documents | Partner Functions

**Shipping**

Delivery Priority	High	<input checked="" type="checkbox"/> Order Combination
Shipping Conditions	01	As soon as possible
Delivering Plant	ZMUM	MUM Mfg plant Alkem
<input checked="" type="checkbox"/> Relevant for POD		
POD timeframe	30.00	

**Partial deliveries**

<input checked="" type="checkbox"/> Complete delivery reqd by law		
Partial delivery per item	C	Only complete delivery allowed
Max. partial deliveries	1	
<input type="checkbox"/> Unlimited tol.		
Underdel. Tolerance	20.0	
Overdeliv. Tolerance	20.0	

**General transportation data**

Transportation zone		
---------------------	--	--

a. **Delivery priority:** - This field will be used for classifying the customers into high delivery priority, medium delivery priority, and low delivery priority.

The purpose of this field is it will help to process Back orders and rescheduling.



**Back Order processing** :- Whenever high delivery priority customer place order, if stock is not available then we go back to the open orders of low priority customer and cancel the confirmation of low delivery priority and assign to high delivery priority customer.

**Rescheduling:** - Doing the back order process automatically by the system.

### **Define delivery priority**

SPRO S&D Master data business partner customer shipping define delivery priority

- b. **Order combination:** - This field is prerequisite to combine multiple orders into single delivery. If we check this then only system will allow combine multiple orders into single delivery.
- c. **Shipping condition:** - This field is one of the parameter to determine shipping point into sales document.
- d. **Delivering Plant:** - If we maintain plant here then it will be determine into sales document.

The criteria for determining plant into sales document

**CMIR**

**Customer**

**master**

**Material**

**master**

- e. **Relevant for POD (proof of delivery or acknowledgement):**- If we check this, system will not allow to create invoice for the customer until we receive acknowledgement from the customer.

The T-code to receive POD is **T.Code VLPOD**.

In POD process while creating invoice to customer, system will copy the quantity from VLPOD.

- f. **POD timeframe:** - If we mention Number of days here, if customer fails to send the acknowledgement within the number of days then system will allow creating invoice for the total delivered quantity.
- g. **Complete delivery required by law:** - If we check this field then system will not allow creating partial deliveries and system will not allow confirming partial quantities.
- h. **Partial Delivery per item:** - This field controls whether to allow partial delivery or not and it also controls how many maximum partial deliveries to be allowed.

If partial delivery is not allowed then maintain C (only complete delivery allow).

If we want to allow partial delivery then maintain either Blank or D.

If partial delivery per item is blank then we can restrict maximum partial deliveries up to

9. If partial delivery per item is “D” then there is no limit to partial deliveries.



**Q. How many maximum numbers of partial deliveries can be allowed for a single order?**

**Ans. Depends on Partial Deliveries per item**

i. **Unlimited Tolerance:** - if we check this then system will allow increasing or decreasing the quantities in delivery document without any limitation.

**Under delivery tolerance:-** If we maintain some percentage here then system will allow to decrease the quantity in delivery document up to that percentage, if the percentage exceed then system will give warning message.

**Over delivery tolerance: -** If we maintain some percentage here then system will allow increasing the quantity in delivery document up to that percentage, if the percentage exceed system will give warning message or error message.

### **3)Billing Document TAB**

**Change Customer: Sales Area Data**

Other Customer | General Data | Company Code Data | Additional Data, Empties | Additional Data, DSD

Customer: 9990000031 Appolo Hospital Mumbai  
Sales Org.: ZDOM ALKEM Domestic  
Distr. Channel: Z1 Dealer Alkem  
Division: Z1 Gyenocology

Sales | Shipping | **Billing Documents** | Documents | Partner Functions

**Billing document**

Subs. invoice processing     Rebate     Price determin.  
Invoicing dates: P5 Invoicing dates  
InvoicingListDates: P6 invoicing list

**Delivery and payment terms**

Incoterms: CIF carriage in freight  
Terms of payment: 0002    Paym.guar.proc.:   
Credit ctrl area:

**Accounting**

Acct assgmt group:

**Taxes**

Country	Name	Tax category	Name	Tax c.	Description
DE	Germany	MWST	Output Tax	0	Tax exempt
IN	India	MWST	Output Tax	0	Tax exempt

a. **Rebate:** - This field is prerequisite to process rebate for a customer.

b. **Invoicing Dates:** - If the clients requirement is, invoice to be generated only on specific date of every month for all the dispatches made during the month then we go for invoicing dates.



### **Configuration for invoicing dates**

SPRO S&D master data business partner customer billing document define billing schedule factory calendar change create factory calendar id [P5] invoicing dates holiday calendar remove all working days save it . Click on special Rules (in same screen) click on create from date 30.09.15 TO date 30.09.15 for September, SAVE.same to do for each and every month.

**C.Invoicing List dates:** - Consolidating all invoices raised during a particular month into one and sending it to payer, it's called as invoice list.

Configuration is same like above (invoicing Dates).

The T-code for invoicing list is **[VF21] or [VF24]**.

**D. Incoterms:** - It is an international commercial terms which is an agreement between Consigner and Consignee for the successful completion of deliveries.

This field specifies who is responsible for freight charges, insurance charges, loading charges etc. That is whether customer is responsible or company is responsible.

**Inco terms is one of the split criteria for deliveries.**

**E.Terms of Payment:** - It is an agreement between company and customer for the number of days given to make the payment. It also called it as credit period.

#### **Defining terms of payment**

SPRO S&D master data business partner customer billing document define terms of payment go to new entries pay terms [PO45 or 45 days] sales text [45 days or 30 days].

**Base line date:** - it is the date from which system start calculating payment terms. Generally base line date is invoice date.

**Fixed day:** - if we mention someday here then every month from that day onwards system start calculating payment terms irrespective of invoice date.

**Additional month:** - If we mention number of months here then after creating invoice system will wait up to that months and then system starts calculating payment terms.

**Cash discount:** - It is the discount which we offer to customer, if he is making payment well before due date. The cash discount percentage what we maintain here will be determine into sales document with the help of SKTO condition type.



**F.Payment guarantee procedure:** - If the customer is liable for payment guarantee, then system will not allow creating delivery until we receive payment guarantee from the customer. The payment guarantee can be bank guarantee or letter of credit.

Generally Overseas Customers are liable for payment guarantee.

**Q. Without configuring credit management system is blocking the order for credit, what could be the reason?**

**Ans. Customer is liable for payment guarantee procedure.**

**G.Account assignment group:** - This field is one of the parameter to determine the G/L A/C while posting invoice values into accounting.

**H.Tax Classification:** - This field controls whether customer is liable for TAX or not.

## **4. Partner Function TAB**

SAP classified the customers into four partner function

- i. Sold to party (SP) – He is the customer who will place an order to company.
- ii. Shift to party (SH) – He is the customer to whom we deliver the goods.
- iii. Bill to party (BP) – He is the customer who will receive the bill.
- iv. Payer (PY) – He is the customer who will make the payment.

XD04 – Tracking the change log in customer master.

XD05 – Blocking / Unblocking the customer master.

XD06 – Customer flag for deletion

XD07 – Changing the customer from one account group to another A/C group.

### **Extending the customer from one sales area to another sales area**

**Ex.** ZDOM + Z1+Z1 ZDOM+Z1+Z2 ZDOM+Z1+Z3.....up to last sales area ZEXP+Z4+Z6

Take path: - XD01 0001 9990000030(Apollo) as customer no. ZALK, Z1, Z2 (New sales area) in reference again put 9990000030 as customer no company code Z1 Z1 (because it's already created so take as reference division) enter and save it and see customer's sales area.



### Creating customers with multiple partner functions and assigning to sold to party

**Ex.** Apollo banjarahill (SP-SH-BP-PY)  
Apollo Scunedrabad (SH-BP)  
Apollo VIZAG (SH-BP)

XD01 Select 0001 customer name complete till partner function and see how many partner function in partner function TAB.

XD01 Select 0002 (for creating ship to party) and go till partner function

XD01 Select 0004(to create bill to party) and go till partner function

XD02 for change (assigning) SH and BP to SP.

**Q. I don't want user to duplicate the customer master data in SAP. I want system to restrict this. Where is control?**

**Ans. Maintain message no 145**

SPRO logistics general business partner customer control change message control for customer data in this configuration TAB, mention the message number 145 online (I) batch (I) save it.

**Q Which data from customer master will automatically update in to already created sales order? If we make changes in customer master.**

**Ans Address.**

Tables in customer Master

Table will help to store the data

KNA1 – General data

KNB1 – Company code data

KNVV – Sales area data

KNVP – Partner data

ADRC – Address data

VBKD - Business Data

The T. Code to see the table entries – **SE16**



### **Common Division**

We use common division concept if the client is having more number of divisions.

Common division will help to save the time of end-users and also save the space in data base. If we don't have concept of common division then we have to create customer for each and every division.

**Ex. -** If we have 100 division then we need to create customer in one division and extend the customer to other 99 divisions. Extending the customer will also take same space and time of data base and end-users.

To overcome this SAP has given a provision code is COMMON DIVISION.

Ex. – In our scenario division are Z1, Z2, Z3, Z4, Z5, and Z6 but instead of all we take common division Z0.

**Configuration of common division:** - Define one new division is called common division.

Define as same as division name common division and code Z0.

**Assign Common division to sales org.**

**Setup Sales area with common division**

Assign S&D go to new entries fill and save it

**Define common Division**

SPRO S&D master data define common division assign new division with existing division save it.

**Common Distribution:** - **Q. Do we use common distribution concept for customer master?**

**Ans.** No, because each customer should belongs exactly one distribution channel and we don't extend the customer from one distribution channel to another distribution channel, so we don't use common distribution channel.

**Fields in Customer A/c group**

**Account Group:** - The standard account group for sold to party is "0001", Ship to party is "0002", Payer is "0003" and Bill to Party is "0004".

**Purpose of Account group:** -

- 1) Account group will help to differentiate the number ranges.
- 2) Account group will help to control the fields in customer master. Controlling the fields means making the fields mandatory, optional, suppress,.
- 3) Account group will help to control the partner functions.

In real time we need to define new account groups based on client's requirements.



### **Configuring the Customer number ranges**

SPRO logistics general business partner customer control define and assign number ranges define number ranges for customer master click on change interval click on insert interval mention some number (Z8) mention From no. and To no. (Press F4) and select a number.

**External check box** : If we check this system will treat it as external number and while creating customer master user has to enter the number manually, if we uncheck this then system will treat it as internal number then while saving the customer master system automatically propose the number. save it.

- ✚ Internal number can be numeric, Alfa-numeric or characters.
- ✚ Alfa-numeric and character should be always external.
- ✚ Numeric can be either external or internal.
- ✚ Number ranges are not transportable from one server to another server.
- ✚ The Status field in number range will help to change the current number.

### **Define Account Group:-**

SPRO logistics general business partner customer control define a/c group and field selection for customer select the a/c group “0001 (SP) click on copy mention our own A/c group (Q001) and assign our own number range (Z8) enter save it.

Again do the same for A/c group 0002 (SH) – Q002

Again do the same for A/c group 0003 (PY) – Q003

Again do the same for A/c group 0004(BP) – Q004

**One Time Account**: - We use this only for one time customers. One time customer is the customer who may not place order for the next time, for those one time customer we don't waste the space in database by creating customer master record.

But without customer master system will not allow to create sales order, so we create one common customer for all one time customers without name and address. (It is like dummy customer). Whenever one time customer will place order we use this dummy customer number.

If we check this one time account then while creating sales order for one time customer system automatically ask for name and address.

The standard A/c group for one time customer is “CPD” (Internal number) “CPDA” (External number).

**Field Status**: - Field status will help to control the fields in customer master i.e. making the fields mandatory, or optional, or display or suppress.

**Text procedure**: - Every customer will have their own specific text information. This text information we maintain in customer master.

Ex. - Packing instruction, delivery instruction, payment instruction, term & condition etc.



This text information whatever we maintain in customer master will be copied into sales order and then delivery and then to invoice and we also print the text in relevant outputs.

Ex. - Printout, E-mail, fax etc.

**Customer Pricing Procedure:** - If we maintain customer pricing procedure here then system will propose it by default while creating customer master.

**Partner determination Procedure:** - It is the procedure which consists of relevant partner function and which will help to determine relevant partner function in customer master.

✚ The standard partner determination procedure (PDP) for sold to party is “AG”.

AG procedure will have four partner functions that is the reason when create sold to party system will propose 4 partner function which are **SP-SH-BP-PY**.

✚ The standard PDP for Ship to party is “WE”.

WE procedure will have one partner functions that is the reason when create ship to party system will propose 1 partner function which is **SH**.

✚ The standard PDP for Bill to party is “RE”.

RE procedure will have one partner functions that is the reason when create Bill to party system will propose 1 partner function which is **BP**.

✚ The standard PDP for Payer is “RG”.

RG procedure will have one partner functions is **PY**

**Output determination procedure:** - The standard output determination procedure for A/c group is {DB0001}.

If access to condition field in output type determination is unchecked then system will determine the output type into sales document from customer master with the help of DB0001 procedure.

In customer master document TAB we maintain output type.

**Partner Determination for customer master**

This configuration will help to determine partner functions in customer master.

Take path SPRO S&D basic function partner determination setup partner determination setup partner determination for customer master.

**1st step Define partner function**

Partner Function	Partner Type	Unique
SP	KU	
SH	KU	
BP	KU	
PY	KU	

If we check unique then system will not allow adding more partner function in customer master.



**2<sup>nd</sup> step Partner determination procedure**

The standard partner determination procedure for sold to party is “AG”.

Double click on PDP go to new entries define our own PDP (QAG) (Galaxy Sold to party ) save it.

**3<sup>rd</sup> step Partner function in procedure**

Select the PDP and double click on partner function in procedure and go to new entries.

Place the partner function SP-SH-BP-PY in PDP.

PDP	PF	Not Modifiable	Mandatory
QAG	SP		
QAG	SH		
QAG	BP		
QAG	PY		

If PDP is for sold to party then we check not modifiable for SP. If PDP is for ship to party then we check not modifiable for SH. If PDP is for Bill to party then we check not modifiable for BP. If PDP is for Payer then we check not modifiable for PY.

If we check not modifiable then system will not allow changing the partner function in customer.

If we check mandatory then if any of the partner function is missing then system will not allow saving the customer master.

**4<sup>th</sup> Step Double Click on PDP Assignment**

In this configuration step we assign partner determination procedure to A/c group

A/c Group	PDP
Q001	QAG

In place of AG, Mention QAG and Save it

**5<sup>th</sup> Step Double click on A/c group function assignment**

In this configuration step, we assign partner function to account group. go to new entries fill this and save it.

SP	Q001
SH	Q001
BP	Q001
PY	Q001



**Bill to Party**

**2<sup>nd</sup> step Partner determination procedure**

The standard partner determination procedure for Ship to party is “WE”.

Double click on PDP go to new entries define our own PDP (QWE) (Galaxy Bill to party) save it.

**3<sup>rd</sup> step**

Select the PDP and double click on partner function in procedure and go to new entries. Place the partner function SH in PDP.

PDP	PF	Not Modifiable	Mandatory
QWE	SH		

**4<sup>th</sup> Step Double Click on PDP Assignment**

In this configuration step we assign partner determination procedure to A/c group

A/c Group	PDP
Q002	QWE

In place of WE, Mention QWE and Save it

**5<sup>th</sup> Step Double click on A/c group function assignment**

In this configuration step, we assign partner function to account group go to new entries fill this and save it.

SH	Q002
----	------

**Note: - Same we need to do for Bill to party (BP) and Payer (PY).**

**Q.What are the parameters we have in Account Group**



## **Interview Questions on CUSTOMER MASTER**

1. What is the purpose of ALE data for purchase order in sales organization?
2. Where we maintain pick pack time and loading time? What is the purpose of it?
3. Where can I maintain pick pack time other than shipping point?
4. What is the relationship between plant and shipping point?
5. How many sales organizations your client is having and why?
6. What is business area?
7. How many divisions your client is having and what are they?
8. How many distribution channels your client is having and what are they?
9. How many places we assign calendar?
10. What is reconciliation account?
11. What is invoicing dates?
12. What is invoicing list dates?
13. What is the t.code for invoice list?
14. What is sales area and sales line?
15. What is purpose of shipping conditions?
16. From which partner function system considers shipping conditions?
17. What is POD? What happens if I check POD?
18. How many partial deliveries we can make?
19. What is the prerequisite to combine multiple orders into single delivery?
20. Where we maintain cash discount percentages? And how it determines into sales documents?
21. What is fixed day in payment terms?
22. How many places we maintain payment terms in customer master? Consider from payer?
23. Without configuring credit management my order ID blocking for credit what could be the reason?
24. System considers incoterms from which partner function?
25. What is the criteria for determining plant into sales document?
26. Without configuring credit management system is blocking the order for credit, what could be the reason?
27. What is the prerequisite to process rebates?
28. What is difference between price group and price list?
29. What is the purpose of customer pricing procedure?
30. What is the purpose of account group?
31. What happens if we check one time account in account group?
32. Why we assign partner function to partner procedure and account group?
33. What is the purpose of status field in number ranges?
34. If user is duplicating customer master record, that is creating twice the same customer master I want system to give warning message where is the control?
35. Where we assign customer calendar in customer master?
36. Client's requirement is they want to receive goods only on Saturday how to configure this?
37. What is the prerequisite to process rebates?
38. Which data from customer master will automatically update into already created sales order?
39. What happens if we check not modifiable in partner determination procedure?
40. What happens if we check mandatory?



## Material Master

The Specifications of the product which is stored centrally and used in day to day transactions.

The T-code to create material Master are:-

**Create MM01**

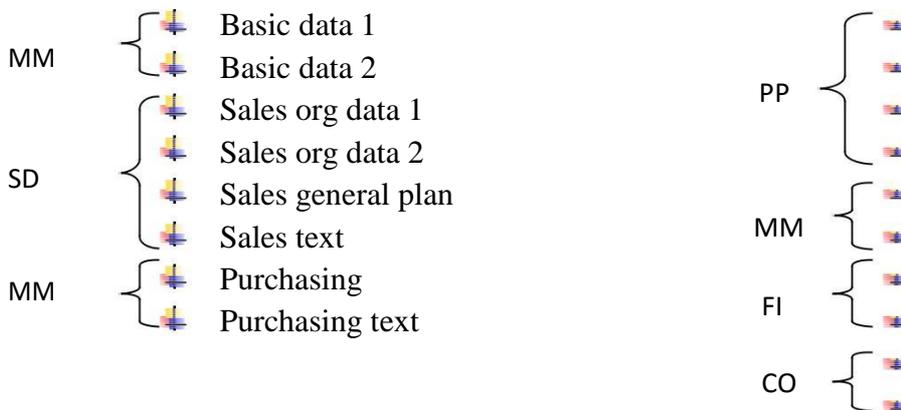
**Change MM02**

**Display MM03**

**Material master is integration between SD+MM+PP+FI+CO+QM.**

The Length of material master is 18 characters.

Material master will be further classified into multiple views:-

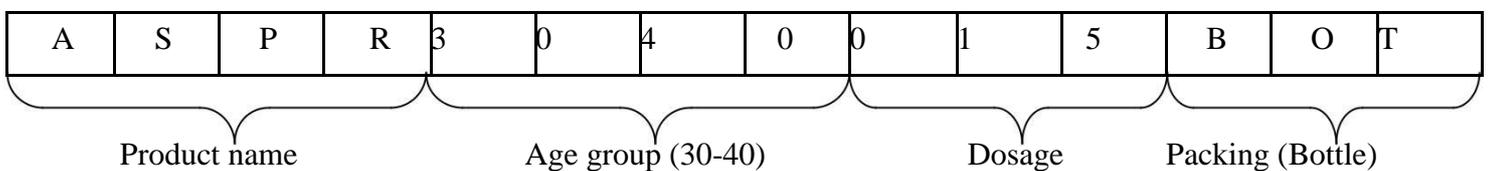


MM consultant will take active role for Material master. In real time End-user will create material master.

### The Consultant role in material master

Define new entries in the field. We give training to core user.

**Material Code Logic:** - The purpose of material code logic is it will save the time of end-user to identify two products.



Mention the material code [ASPR3040015BOT]



The material code will have option of both external and internal.

If we mention some code while creating material master then system will treat it as external number. If the material code is blank while creating material master then system will propose internal number.

**Industry Sector:** - The field specified the type of the industry the material belongs to.

**Material Type:** - We have Different material types

1. A raw material (ROH - Material Type) is the material which is used to manufacture finished goods.
2. Semi finished (HALB – Material type) is the product which is under the process of manufacturing finished goods.
3. Finished Goods (FERT – Material Type) is the products which we manufacture and sell to customer.
4. Trading Goods (HAWA – Material type) is the material which we don't manufacture but we procure it from vendors and sell it to customer.

Mention the plant, storage location, sales organisation, distribution channel then click on continue.

### **Error1.**

If we are creating material for the first time with the new organisation structure then we will get the message that material is not fully maintain for company code.

#### 1<sup>st</sup> step

To solve this go to **T-code OBY6** select our company code go to details TAB mention chart of A/c [INT] mention fiscal year variant [V3] maintain field status variant [1000] posting period variant [1000] save it.

#### 2<sup>nd</sup> step

**T-code OMSY** go to company code and maintain the period (current month as per V3) and year save it.

In MRP 1 view select MRP type as “ND”.

In Accounting maintain cost of product in standard price field.

**Sales people are responsibility for only finished goods and trading goods.**

### Basic Data 1 view

**Base unit of measure:** - It is the unit in which we manufacture and store the goods. Example – Each, one piece, liter, bottle, strips, etc.

**Material Group:** - Grouping of materials which will share same attributes. The purpose of this field is 1) Reporting and 2) pricing.



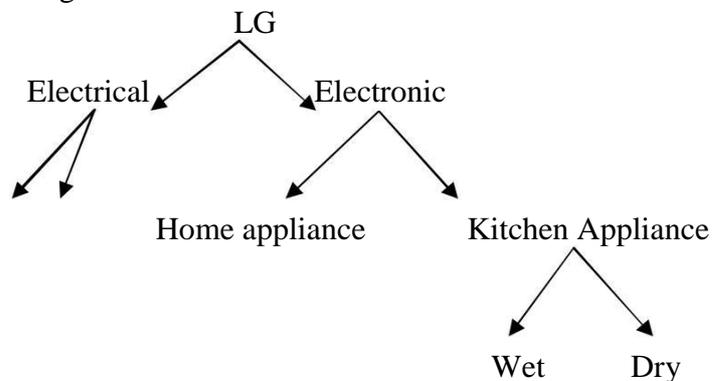
**Old material number:** - This field will be used if the legacy material number is different with SAP material number. In this field we maintain legacy material number for reference purpose.

**Division:** - Whatever the division we maintain in material master, it will be determine into sales document line item.

**Product allocation:** - It is a process of reserving the stocks to customer, customer groups, and distribution channel.

**X-Plant material status:** - This field will be used to block the materials across all the plants.

**Product Hierarchy:** - IF product is having different labels.



**General Item Category Group:** - This field is one of the parameter to determine item category in inbound deliver process.

**Gross Weight:** - It is the weight of the product including packaging.

**Net weight:** - It is the weight of the product excluding packaging.



## Basic Data 1 View

### Create Material LEXI3040015BOT (Finished product)

Additional data | Organizational levels | Check screen data

Basic data 1 | Basic data 2 | Classification | Sales: sales org. 1

Material: LEXI3040015BOT

**General data**

Base Unit of Measure	<input checked="" type="checkbox"/>	Material Group	<input checked="" type="checkbox"/>
Old material number		Ext. Matl Group	
Division		Lab/Office	
Product allocation		Prod.hierarchy	
X-plant matl status	<input type="checkbox"/>	Valid from	
<input type="checkbox"/> Assign effect. vals		GenItemCatGroup	NORM Standard item

**Dimensions/EANs**

Gross Weight		Weight unit	KG
Net Weight			
Volume		Volume unit	
Size/dimensions			
EAN/UPC		EAN Category	

**Packaging material data**

Matl Grp Pack.Matls	
Ref. mat. for pckg	

**Basic Data Texts**

Languages Maintained: 0 | Basic Data Text | Language:



### Sales Org Data 1 View

### Create Material LEXI3040015BOT (Finished product)

Additional data | Organizational levels | Check screen data

Classification | Sales: sales org. 1 | Sales: sales org. 2 | Sales: G...

Material	LEXI3040015BOT	Lexine syrup bottle
Sales Org.	ZDOM	ALKEM Domestic
Distr. Chl	Z1	Dealer Alkem

**General data**

Base Unit of Measure	BT	Bottle	Division	<input type="checkbox"/>
Sales unit	CAR		<input type="checkbox"/> Sales unit not var.	
Unit of Measure Grp				
X-distr.chain status	03		Valid from	25.09.2013
DChain-spec. status	12		Valid from	28.09.2013
Delivering Plant	ZMUM	MUM Mfg plant Alkem		
Material Group	017	Pharmaceuticals		

Cash discount Conditions

**Tax data**

C	Country	Tax	Tax category	T	Tax classification
DE	Germany	MWST	Output Tax	0	tax
IN	India	MWST	Output Tax	0	No tax

Entry 1 of 2

**Quantity stipulations**

Min.order qty	100	BT	Min. dely qty	1	BT
Rnding Profile			Delivery unit		

**Sales unit:** - It is the unit in which we sell the goods to customers.

If base unit and sales unit is different, than system will ask for conversion. (if we want to do conversion go to additional data unit of measure there we can see the conversions).

**Sales unit not vary:** - This field controls whether to change the sales unit or not in sales document. If we check this then system will not allow change the sales unit in sales document.

**X- Distribution chain status:** - This field will be used to block the material for sales across all distribution channels.



**D-Chain specific Status:** - Thus field will be used, if we want to block the material for sales in a particular distribution channels.

**Delivery Plant:** - If we maintain plant here then it will be determined into sales document line item.

**The Criteria for determining plant into sales document is: CMIR, Customer Master, and Material Master**

**Cash Discount:** - This field is prerequisite to determine the cash discount condition type SKTO into sales document.

**If we check this then only the cash discount will be determined into sales document.**

**Tax Classification:** - This field controls whether the material is liable for tax or not.

**Minimum Order quantity:** - While creating sales order system will check the sales order quantity with minimum order quantity. If sales order quantity is less than minimum order quantity then system will give warning message.

**Minimum delivery Quantity:** - If we maintain some quantity here then while creating delivery document system will check the delivery quantity with minimum delivery quantity.

If the delivery quantity is less than minimum quantity then system will give warning or error message.



## Sales Org Data 2 View

### Create Material LEXI3040015BOT (Finished product)

Additional data | Organizational levels | Check screen data

Sales: sales org. 1 | Sales: sales org. 2 | Sales: General/Plant | Forei...

Material: LEXI3040015BOT | Lexine syrup bottle

Sales Org.: ZDOM | ALKEM Domestic

Distr. Chl: Z1 | Dealer Alkem

**Grouping terms**

Matl statistics grp	1	Relev. f. statistic	Material pricing grp	01	Standard Parts
Volume rebate group	02	Minor Rebate	Acct assignment grp	03	Finished goods
Gen. item cat. grp	NORM	Standard item	Item category group	NORM	Standard item

Pricing Ref. Matl:

Product hierarchy: 00160 | Pharmaceuticals

Commission group:

**Material groups**

Material group 1	<input type="checkbox"/>	Material group 2	<input type="checkbox"/>	Material group 3	<input type="checkbox"/>
Material group 4	<input type="checkbox"/>	Material group 5	<input type="checkbox"/>		

**Product attributes**

<input type="checkbox"/> Product attribute 1	<input type="checkbox"/> Product attribute 2	<input type="checkbox"/> Product attribute 3
<input type="checkbox"/> Product attribute 4	<input type="checkbox"/> Product attribute 5	<input type="checkbox"/> Product attribute 6
<input type="checkbox"/> Product attribute 7	<input type="checkbox"/> Product attribute 8	<input type="checkbox"/> Product attribute 9
<input type="checkbox"/> Product attribute 10		

**Material statics group:** - This field control whether to update material sales data into LIS or not.

**Material pricing group:** - Grouping of materials which will share the same pricing attributes. This field will be used for group condition concept in pricing.

**Volume rebate groups:** - We use this field for group rebate concept. Group rebate is announcing the rebate for group materials.

**Account Assignment Group:** - This field is one of the parameter to determine revenue G/L A/c while posting invoice values into accounting.

**Item category group:** - This field is one of the parameter to determine item category in sales document.

- ✚ The standard item category group is “NORM”.
- ✚ Third party item category group is “BANS”.
- ✚ IPO item category group is “BANC”.



- ✚ Make the order item category group is “0001”
- ✚ BOM (Bill of material) – Header Pricing
  - Header item – **ERLA**
- ✚ BOM – Item pricing
  - Header item – **LUMF**

**Pricing Reference material:** - If pricing is same for multiple products then instead of maintaining pricing for all the products we maintain pricing for one material and that material we assign it as pricing reference material for other materials.

### Sales General / Plan View

**Create Material LEXI3040015BOT (Finished product)**

Additional data | Organizational levels | Check screen data

Sales: sales org. 2 | Sales: General/Plant | Foreign trade export

Material: LEXI3040015BOT | Lexine syrup bottle

Plant: ZMUM | MUM Mfg plant Alkem

**General data**

Base Unit of Measure	BT	Bottle	Replacement part	<input type="checkbox"/>
Gross Weight		KG	Qual.f.FreeGoodsDis.	<input type="checkbox"/>
Net Weight			Material freight grp	
Availability check	01	Daily requirements	Appr.batch rec. req.	<input type="checkbox"/>
<input checked="" type="checkbox"/> Batch management				

**Shipping data (times in days)**

Trans. Grp	0005	Lot for truck	LoadingGrp	0003	Manual
Setup time		Proc. time	Base qty		BT

**Packaging material data**

Matl Grp Pack.Matls	
Ref. mat. for pckg	

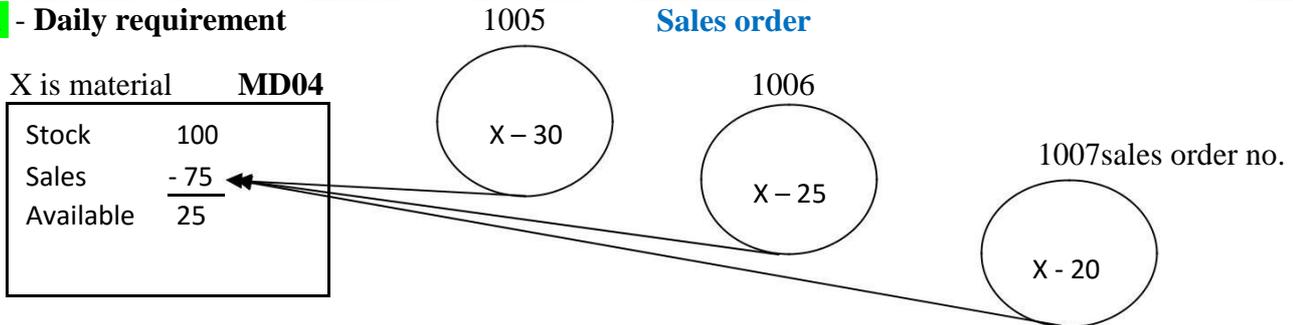
**General plant parameters**

<input type="checkbox"/> Neg.stocks	Profit Center		SerialNoProfile		DistProf	
-------------------------------------	---------------	--	-----------------	--	----------	--

**Availability check:** - This field is one of the prerequisite to perform availability check in sales document. This field controls how the sales order quantity should be update in MRP (T-code – MD04 – Stock requirement).

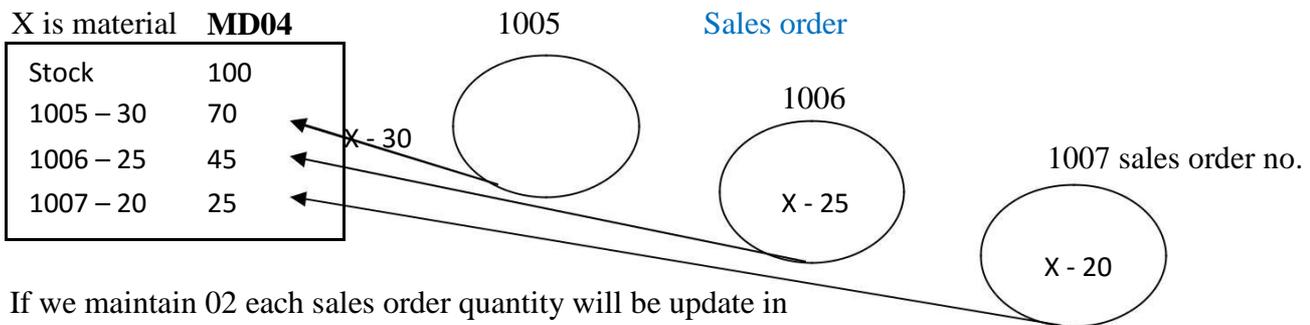


**01 - Daily requirement**



If we maintain 01 then system accumulate the sales order quantities on the particular date and update in single line in MD04.

**02 – Individual requirement**



If we maintain 02 each sales order quantity will be update in MD04 along with the sales order number.

**Batch Management:** - Batch is a unique number which system generate for a single lot of manufacturing.

The purpose of this Batch is: -

- i. It will track expiry date.
- ii. It will track the defective goods.
- iii. It will track the person responsible.

If the material is relevant for batch then check this.

**Transportation group:** - This field is one of the parameter to determine route into sales document.

**Loading Group:** - This field is one of the parameter to determine shipping point into sales document.

**Shipping point determination:** -Shipping point determination is based on shipping condition+ loading group+ plant. **T.Code OVL2**



### Path for shipping point determination

SPRO Logistic execution shipping basic shipping function shipping point & goods receiving point determination assign shipping points new entries

01 / 0001 / ZMUM = ZMU1  
01 / 0002 / ZMUM = ZMU2  
10 / 0001 / ZMUM = ZIMM

### Sales text View

In sales text we can maintain additional information of the material.

### Purchasing View

**Plant specific material status:** - If we want to block the material for a particular plant then maintain this field.

**Automatic PO:** - If we check this, while creating sales order in third party process and IPO process system automatically generate purchase order.

If we uncheck this the system generates purchase requisition.

**Purchasing value key:** - It will help to send the reminder to vendors to deliver the goods on time.

**GR Processing type:** - GR (Goods receipt). After unloading the goods at manufacturing plant location, how much time it will take to take the goods into storage location.

### Purchase order text View

In this view we maintain some additional information related to material.

### MRP 1 View

**MRP group:** - This field is one of the parameter to determine requirement type into sales document.

**MRP Type:** - This field controls whether the material is relevant for planning or not. If the material is relevant for planning then maintain [PD].

If the material is not relevant for planning then maintain [ND].

This field is one of the parameter to determine requirement type into sales document.

This field is one of the parameter to determine schedule line category in sales document.



**MRP controller:** - He is the person responsible to run MRP (Material requirement planning).

F4 yes customizing without specification select MRP controller click on continue select the standard plant 1000 and click on copy mention our plant enter and save it go back select then maintain LOT size [EX].

### MRP 2 View

**Schedule Margin key:** - Same as MRP controller.

**Procurement Type:** - This field controls whether the material is manufactured internally or procured externally or both.

**In house production:** - It is the time taken to manufacture the goods.

**Planned delivery time:** - It is the approximate time taken to deliver the goods from vendor location to manufacturing plant location.

**Safety Stock:** -It is the minimum stock which company has to maintain to meet the future emergency requirement.

Generally we are not supposed to go below to the safety stock level.

### MRP 3 View

**Strategy Group:** - This field controls whether the material is relevant for Make to stock or Make to order.

*Make to stock:* - Irrespective of the customer order we manufacture the goods and keep stock of it. When orders come then we deliver the goods from the stock.

If it is make to stock then we maintain strategy group as “Blank” or “10”.

*Make to Order:* - When we receive the order from customer then only we start manufacturing the product because the specifications of the products is not standard. Every customer will place order with their own specifications.

For make to order maintain strategy group “20”.

This field will help to determine requirement type into sales document.

**The criteria for determining requirement type into sales document.**

**1. Strategy group 2. MRP group 3. MRP type+ Item Category**

**Total Replenishment lead time:** - It is the time taken to manufacture the goods and finally take the goods into storage location.

This field will help to perform delivery scheduling.

Delivery scheduling is the process of determining delivery date into sales document. While performing delivery scheduling system consider replenishment lead time if stock is not available.



### General plan data storage 1 view

**Storage condition:** - It is one of the parameter to determine storage location into delivery document.

#### Path for storage location determination

SPRO logistic execution shipping picking determine picking location assign picking location  
storage location will be assign to the combination of  
Shipping point + Plant + Storage condition **T.Code OVL3**

$\left[ \begin{array}{l} \text{ZMU1 - ZMUM - 01 = ZFG1} \\ \text{ZMU1 - ZMUM - 02 = ZFG2} \end{array} \right]$  New entries save it

**Total Shelf life:** - This field will help to calculate the shelf life of the product.

### Accounting 1 view

**Valuation class:** - It will help to determine G/L A/c while generating inventory accounting document.

Inventory accounting document generates at the time of PGI (Post goods issue) and accounting entry is,

**Cost of goods sold account Debit**

**TO**

**Inventory Account Credit**

If it is finished product then valuation class is [7920].

If it is trading goods then valuation class is [3100].

**Price Control:** - This field controls whether the cost of product is standard or moving price.

For all finished goods system propose “S”

For all trading goods system propose “V”

If price control is S then maintain cost in standard price field.

If price control is V then maintain cost in moving price field.

**Whatever the cost we maintain here it will be determine into sales document with the help of “VPRS” condition type.**



## Tables in Material Master

Basic Data	MARA
Sales Data	MVKE
Plant Data	MARC
Finance data	MBEW

## Extending the material from one plant to other plant

Go to the T-code MM01 mention the material and all in copy from mention same material number select the views take reference ZVAP in place of ZMUM and copy from mention ZMUM, ZFG1, ZDOM, Z1 till last view and save it.

## Extending the material from one sales organisation to other sales organisation

Same like plant

## Extending the material from one distribution channel to other distribution channel

Same as previous.

## “Customer Material Information Master” (CMIR)

We use CMIR if customers are placing order with their own material number.

By using CMIR we link customer material code with our material code then while creating sales order if user enter customer material code in sales document then system automatically determine our material code.

The T-code to create CMIR master is **[VD51]**.

Whatever the information we have in CMIR system will give first preference to that while determining into sales document.

The fields we have in CMIR are :

1<sup>st</sup> – Plant, 2<sup>nd</sup> – delivery priority, 3<sup>rd</sup> – Minimum delivery quantity, 4<sup>th</sup> – partial delivery per item, 5<sup>th</sup> – maximum partial delivery, 6<sup>th</sup> – under delivery tolerance, 7<sup>th</sup> – over delivery tolerance, 8<sup>th</sup> – unlimited tolerance, 9<sup>th</sup> – Item usage.



## **Interview Questions on MATERIAL MASTER**

1. What is the purpose of valuation class?
2. What happens if we don't maintain cost in material master?
3. I want to block the material for sales, where is the control?
4. What is the material type for semi finished goods?
5. What is the material type for configurable material?
6. What is the purpose of product allocation?
7. What is the purpose of volume rebate group?
8. What is the purpose of material pricing group?
9. What is the purpose of shipping conditions?
10. What is the purpose of loading group?
11. What is the purpose of general item category group?
12. What is the item category group for third party material?
13. What is the item category group for BOM header pricing main item?
14. System should not allow to change the sales unit while creating sales order where is the control?
15. While creating delivery if delivery quantity is less than 50 quantity then system should give a error message?
16. What is the purpose of item category group?
17. What is the prerequisite to determine cash discount percentage into sales document?
18. What availability check field controls in material master?
19. What is the diff b/w daily requirements & individual requirements?
20. What is automatic PO check?
21. What happens if we don't maintain cost in material master?
22. After creating material master how to change the cost in material master?
23. How requirement type determines into sales document?
24. What is the purpose of RLT?
25. What is price control?
26. T-code to create CMIR?



27. How plant determines into sales document?
28. What is the purpose of check division?
29. What is the purpose of item division?
30. If document is incomplete i don't want system to save the order, where is the control?
31. What is the purpose of transaction variant?
32. What is status profile?
33. What is the purpose of ALT TYPE1 & ALT TYPE2?
34. What is the purpose of document pricing procedure?
35. What is the purpose of condition type line item?
36. What is Make to order?
37. What is Make to stock?
38. What is safety stock?
39. What is the purpose of business item check box?
40. What is the purpose of item relevant for delivery in item category?
41. Which item category we assign special stock?
42. I don't want to update the line item value into credit management, where is the control?
43. What is the prerequisite to determine cost into sales document?
44. What is the T code to run MRP?
45. What is the purpose of valuation class?
46. What is the T code for storage location determination?
47. What is the T code to determine shipping point?
48. How shipping point determines?



## SALES PROCESS

### SALES DOCUMENTS

The Structure of sales document will is divided into three parts:-

#### 1. Header data

#### 2. Item Data

#### 3. Schedule line Data

1. **Header data:** - It is the data which is applicable to all the line item in sales document.

Example: - Customer data.

The source of header data is

- + Customer master
- + Control data (enterprises structure)
- + Some part of configuration data

Header data will be controlled by document types.

The table of header data is [VBAK].

2. **Item data:** - It is the data which is applicable to particular line item in the sales document.

Example: - Material data

The source of item data is

- + Material master
- + CMIR
- + Some part of control data
- + Some part of configuration data

Item data will be controlled by item category. The table for item data is [VBAP].

3. **Schedule line data:** - It is the data which consist of delivery dates and confirmed quantity information.



The source of scheduling line data is only configuration data.

Schedule line data will be control by schedule line category.

The table for schedule line data is [VBEP].

**Sales document:** - It is the document which consists of sales related information.

**Sales document types**

<b>No.</b>	<b>Process</b>	<b>Document Type</b>	<b>T-Code</b>
1	Enquiry	IN	VA11
2	Quotation	QT	VA21
3	Order	OR	VA01
4	Rush Order	RO	VA01
5	Cash Sale	CS	Do
6	Returns	RE	Do
7	Credit memo request	CR	Do
8	Debit memo request	DR	Do
9	Invoice collecting request	RK	Do
10	Free of charge	FD	VA01
11	Subsequent delivery free of charge	SDF	Do
12	Consignment fill up	CF	Do
13	Consignment issue	CI	Do
14	Consignment return	CONR	Do
15	Consignment pick up	CP	Do
16	Quantity contract	QC	VA41
17	Value contract general	WK1	Do
18	Value Contract material specific	WK2	Do
19	Scheduling agreement	DS	VA31



## Create Sales order

T-code VA01 Order type [OR] Fill ZDOM – Z1 – Z1 enter

**1<sup>st</sup> Error:** - When we are creating sales order for the 1<sup>st</sup> time with the new organisation structure then we will get error message that order type [OR] has not been defined in sales area.

To **solve** this Path for only checking SPRO S&D master data define common distribution channel go to our sales organisation and distribution channel check common division for checking only.

SPRO S&D sales sales document sales document header assign sales area to sales document type combine sales org go to sales org (ZDOM) assign our sales org (remove 1000 and maintain ZDOM & ZEXP save it.

Go back and double click on combine dist channel go to our sales org and dist channel and assign same dist channel in reference dist channel save it

Again double click on combine division go to our division and assign the same division in reference save it.

Assign sales order types permitted for sales area go to new entries [ZDOM – Z1 – Z1 – RO] till last ZEXP – Z4 – Z6 – RO] first complete one sales area with all documents types then go for other sales areas {Total entries 570}.

## Create Standard Order

Enter the customer number (sold – to – party)

Enter the PO number

**2<sup>nd</sup> Error:** - No pricing procedure could be determined.

**Solution:-** Path Go to T-code [V/08] go to new entries mention proceed name any (Y00001) (New procedure) select the procedure double click on control data go to new entries 1st-Step-10, 3rd-Condition type-PR00, 12th-Requirement -2, 15th-Accounting Key-ERL enter & save it.

After this go to the T-code [OVKK] go to new entries ZDOM – Z1 – Z1 – A (maintain document procedure as A) – 1 (customer pricing procedure) – Y00001 (Pri proced) – PR00 (C type) Save it.

After this assignment



**Condition Master:** - Go to the T-Code [VK11] Mention the condition type PR00 select material with release status enter search material and select the material, put some amount Rs. 10000, INR Save it.

Again go to create sales Order

T-Code [VA01]      customer number      PO No.      Material      order quantity      enter.

To check      go to menu EDIT      in completion log      go to missing data & mention input.

Whenever we save the sales order system will propose one number.

### **Posting the stocks**

The **T-code is MB1C** mention the movement type [561]      plant [ZVAP]      storage location [ZFG1]      enter

**Error3:** - parameter for plant not maintained in inventory management.

**Solution 1** → SPRO Materials management inventory management and physical inventory plant parameters select the standard plant 1000 and copy mention your plant enter save it do again for ZMUM.

**Solution 2** → SPRO production material requirement planning plant parameters copy mention the standard plant 1000 and in To plant mention our plant click on copy save it Again do for ZMUM.

Again go to T-code [MB1C].

Mention all and enter      mention the material      mention the quantity      enter.

**Error4:** - Combination of plant and material type does not exist.

**Solution** → T-code [OMS2] select the material type FERT and double click on quantity / Value updating go to our plant and check quantity / value updating do for other plant also save it.

Same do for HAWA for both plants.

→ Again go to T-code [MB1C].

**Error5:** - No controlling area has been assigned to company code ZALK.

**Solution** SPRO controlling general controlling organisation maintain controlling area maintain controlling area go to new entries mention our some controlling [ZA00] give some name cocd >co area [cross company code cost accounting] mention currency type [10] currency [INR] chart of account [INT] fiscal variant year [V3] cctr ctd hierarchy [any] enter yes save it.

Select controlling area double click on assignment of company code new entries ZALK Enter & save it.

Double click on activate component / controlling area go to new entries controlling area fiscal year (2013) save it.

Again go to [MB1C]



**Error6:** - Check table [T169P]: entry ZALK does not exist.

**Solution** Go to T-code SE16N table [169P] enter go to T-code enter go to T-code & SAP\_Edit enter message SAP editing function is activated execute new entry mention our company code PO text (mention same as above) check amount currency type [10] enter yes save it.

Go to again [MB1C]

**Error7:** - For object bele ZALK. Number range internal [49] does not exist **FBN1**.

**Solution** T-Code [FBN1] enter company code click on change intervals go to insert intervals mention the no. interval [49] year from number [00010000] to no. [0000199990] save it.

The T-code to see the stock overview [MMBE] mention material, plant, and storage location, execute can see unrestricted.

### **VA01 create sales order with quantity.**

#### **Create Delivery**

**T-Code [VL01N]** mention the shipping point mention date sales order no. Enter.

Then go to picking TAB mention the storage location mention picked quantity.

**Error1:** - Material is not defined for sales from India.

**Solution** SPRO S&D basic function taxes define tax determination rules go to entries tax country [IN] sequence [1] tax category [MWST] save it.

Go to T-code [OBBG] country IN [assign some tax procedure].

Go to customer master in billing TAB; maintain tax classification [0] save it

Go to material master, sales organisation 1 view; maintain tax classification [0].

After picking quantity click on post goods issue.

**Error2:** - INT GBB – BSA 7920 not possible.

**Solution** Go to T-code OBYC double click on GBB mention our chart of A/c [INT] click on continue scroll down and find 0001 BSA 7920 and select and click on copy and make it blank 0001 enter save it.

**Error3:** G/L A/c is not maintaining in our company code.

**Solution** Go to T-code [FS00] mention the G/L A/c company code standard 1000 message click on block uncheck save it.

Then again mention our company code click on with template mention same G/L A/c company code 1000 enter save it.



### Create Invoice

VF01 already delivery no. enter & save it.

**Error1:** Number not maintained for trans / event WE & WA for year 2013.

**Solution** → Go to the T- code [OMBT] click on change group the select WA and click on change select the previous year edit insert year mention year 2013 mention some number enter save it.

**Error2:** Posting period for A/c type S and G/L A/c with number is not open in 2013.

**Solution** → GO to OBY6 check posting period variant [1000] then go to T-code OB52 select all 1000 variant 2<sup>nd</sup> year coloum mention future year [2013 < i.e. 2014, 2015] save it.

**Error3:** Calculation procedure is not assign.

**Solution** → Go to OBBG go to country India (IN) assign some tax procedure [TAXD].

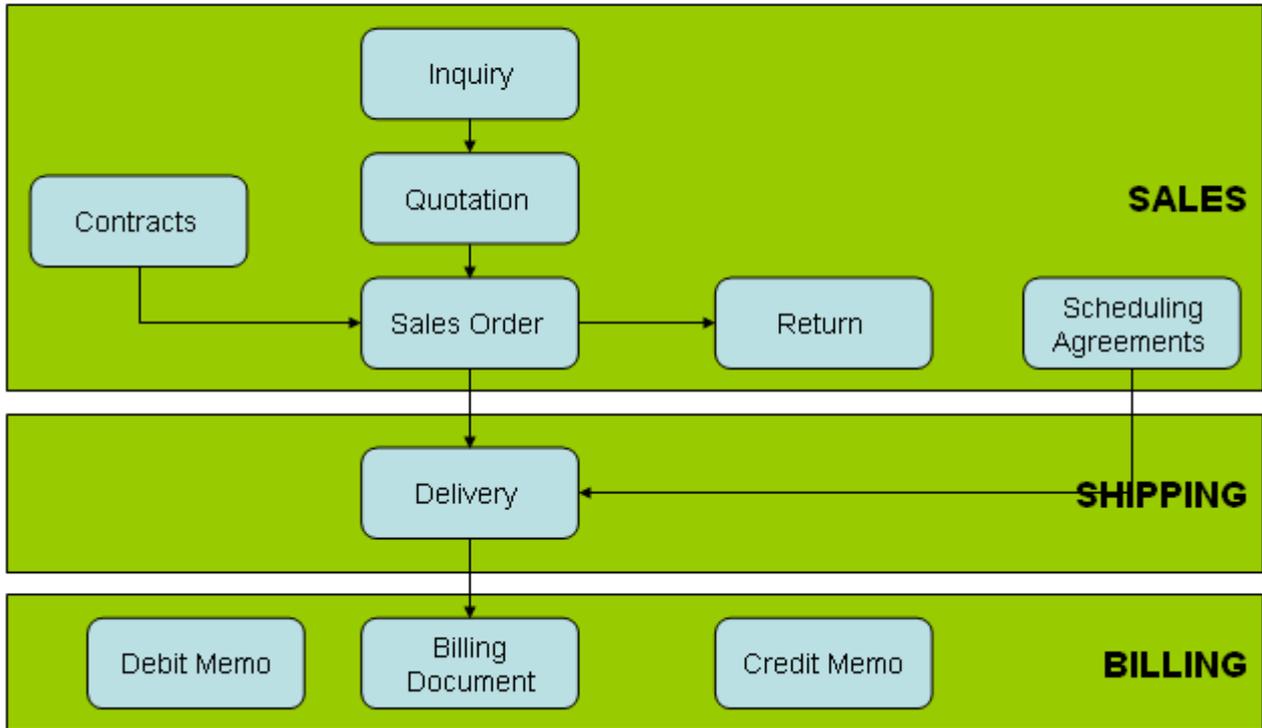
**Error4:** Field selection for mvmt type 561/ acct 399999 differs for ext GA amount in LC (023), for cost centre, profit centre.

**Solution** Go to [SE38] programme [RM07CUFA] execute mention the movement type whatever mention in the error [Here 561] company code mention G/L A/c whatever mention in the error [399999] execute go to highlight area and click on pointed point and go to particular group and manage or balance suppress or optional as per field description save it.



Standard business process: -

# SALES PROCESS



SAP Sales Distribution (SD) Flow with Tcodes and Tables.

TCode	Flow	Tables
VA11	Inquiry	VBAK, VBAP
	↓	
VA21	Quotation	VBAK, VBAP
	↓	
ME21N	Purchase Order	EKKO, EKPO
	↓	
VA01	Sales Order	VBAK, VBAP
	↓	
VL01N	Delivery	LIKP, LIPS
	↓	
VT01	Shipping	VTTK, VTTT
	↓	
VF01	Billing	VBRK, VBRP
	↓	
VF21	Invoice	VBRK, VBRP



**Inquiry:** - Whenever customer enquires about the product we create enquiry document in SAP.

Enquiry document is an internal document.

Types of Enquiry: - Walkin, phone, E-mail, or website, tender notice.

Enquiry document consists of customer details, material details, quantity details, and validity periods.

**Quotation:** - Whenever customer enquires about the products, in return we create quotation document with reference to enquiry and send this quotation to customer.

Quotation document is an external document which we submit to customer. Quotation document is a legal document.

Quotation document consists of: - customer details, material details and specification, details, pricing, validity period, terms & conditions.

**Order:** - If customer is not satisfied with the quotation then he will further negotiate. If everything works out for customer, he will place order. Then we create order in SAP with reference to quotation.

Order is an agreement between company and customer, for supplying the goods to the customer.

Sales order consists of customer details, delivery details, material details, quantity details, pricing, terms and conditions. Etc.

**Delivery:**-After order we deliver the goods to customer for that we have to create delivery document in SAP. In delivery we have three activities.

1. Picking 2.Packing 3.PGI (Post goods issue).

Picking List consists of material, Quantities and Storage Location.

**Invoice:**-After PGI we create invoice and send the goods to customer.

While creating invoice system generates accounting document

The accounting entry is: -

Customer Account Debit  
TO  
Revenue Account Credit

We have 3 kinds of invoices 1.Commercial Invoice 2.Proforma Invoice 3. Excise Invoice (CIN)



## **BUSINESS PROCESSES**

### **1. Inquiry (VA11)**

Document Type IN, Enter sales area and mention the customer no. in sold to party, mention the date, mention the material detail, mention the order quantity, enter save it Make a note of inquiry no.

### **2. Quotation (VA21)**

Document Type QT, click on create with reference mention the inquiry no. Click on copy, save it system will generate a quotation number note it down.

### **3. Order (VA01)**

Document Type OR , Click on create with reference mention quotation no click on copy save it. Make a note of Sales order Number.

**Whenever we create sales order in SAP, in the background system performs various activities:-**

- 1. Partner Determination**
- 2. Listing Exclusion**
- 3. Material Determination**
- 4. Free Goods**
- 5. Delivery Scheduling**
- 6. AvailabilityCheck**
- 7. Pricing**
- 8. Credit Management**
- 9. Text Determination**
- 10. Output Determination**
- 11. Transfer of Requirements**



## **Delivery (VL01N)**

Enter the shipping point, Enter Delivery date which we mentioned in the sales order, Enter sales order number. Go to picking TAB mention the storage location, mention the picking quantity click on post goods issue and save it .Make a note of delivery no.

**When we do PGI, system performs various activities in the background**

1. It Updates Stocks

2. Inventory Accounting Document generates

Accounting Entry Is:-

**Cost of goods sold account debit**

**TO**

**Inventory Account Credit**

3. It updates in document flow

4. It updates in credit management

5. It updates in LIS

6. It updates in billing Due List

## **5. Invoice( VF01)**

Delivery Number will be automatically copied into billing document, if we create invoice immediately after delivery. Press enter and save it.

**When we create INVOICE, system performs various activities**

1. Accounting Document Generates

Accounting Entry is:-

**Customer Account Debit**

**TO**

**Revenue Account Credit**

2. Profitability analysis document generates

3. Cost Center Document generates

4. It Updates in Document Flow

5. It Updates in Credit Management

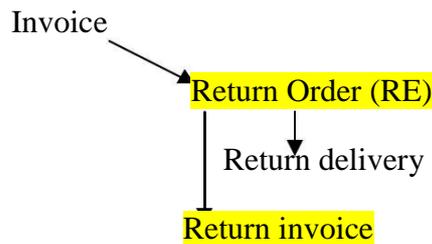
6. It Updates in LIS



## **6. Return Process(VA01)**

Whenever customer finds damage or fault in the delivered goods or expired stocks, then customer will inform to company. Company will send the service employee to customer place to cross check and he will prepare return note and submit to company, then **we create return order with reference to original invoice** and the customer return the goods to company then we do return delivery then **we create return invoice with reference to return order.**

Process:



**Q. Why SAP says return invoice should be created with reference to return order and not return delivery?**

**Ans. Because we need to create return invoice for the quantity damaged at customer place (return note) but not the quantity received.**

**When we create return invoice, Accounting Document generates Accounting entry is:-**

**Revenue Account Debit**

**TO**

**Customer Account Credit**

### **STEPS TO CREATE RETURN ORDER**

Document Type RE ,

Enter Sales area,

create with reference to billing document

But don't click on no copy Button

Press ENTER,

mention order reason (damage in transit)

billing block should be blank

save it.

**Return delivery:** - VL01N Order no. Picking PGR(Post Goods Receipt )save it. VF01 with ref to return order no. save it



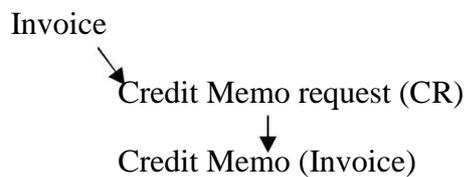
## 7. Credit Memo request

Credit memo is used to deduct the amount from customer outstanding, without receiving the goods from customer.

Example – 1. User mistakenly over charged the previous invoice.

2. The goods are totally damaged at customer place and which are not in a position to take back
3. Return Delivery may be more costly.
4. Secondary promotional activity.

### Process Flow:



When we create credit memo Accounting Document generates and Amount will be deducted from customer outstanding.

Accounting Entry is

**Revenue Account Debit**

**TO**

**Customer Account Credit**

### Steps to create CR

VA01 CR Create with reference, mention billing document, no copy, billing block (blank) save it. Give some reason.

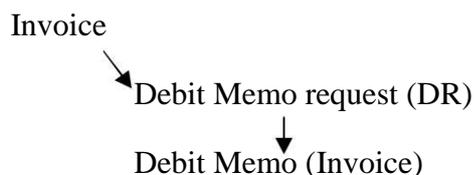
VF01 enter save it

## 8. Debit memo request

We Create debit memo, if we want to add some amount to customer outstanding.

- Example: -
1. Charging interest to customer for late payment.
  2. User mistakenly under charged the previous invoice.

### Process Flow:



**Customer Account Debit**

**TO**

**Revenue Account Credit**

**In both Credit Memo & Debit Memo we don't have delivery**

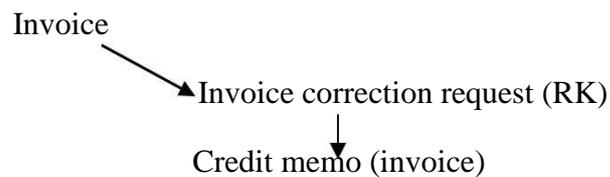


## 9. Invoice correction request

Invoice correction request(RK) is used to make any corrections in Invoice, the mistakes can be overcharged or undercharged.

By using invoice correction request, we can either deduct the amount from customer outstanding or add to customer outstanding.

### Process Flow:



Each line item from invoice will be copied as two line items in invoice correction request document.

1<sup>st</sup> one is credit item (disable) +

2<sup>nd</sup> one is debit item (enabled) –

**If we increase item value then the value of document will be negative.**

Accounting entry is:

Revenue Account Debit  
TO  
Customer Account Credit

**If we decrease item value then the document value will be positive.**

Accounting entry is:

Customer Account Debit  
TO  
Revenue Account Credit

VA01 RK click on reference billing number copy will get 2 line item we can change the price in 2<sup>nd</sup> line blank the billing block order reason save it

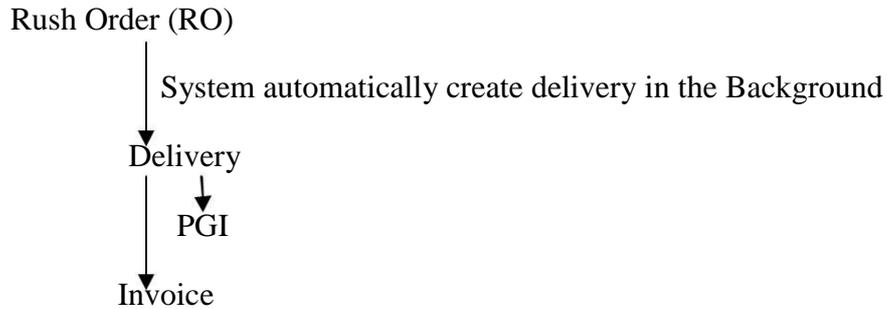


## 10. Rush order

Rush Order is an immediate delivery order.

Whenever customer asking delivery immediately then we do rush order process.

**Process Flow:**



VA01 RO sales area enter SP materials quantity save it

VL02N Picking qty PGI Save it.

Invoice.

When we create Invoice in Rush Order Process, System generates accounting entry document.

Accounting Entry is: -

**Customer Account Debit**  
**TO**  
**Revenue Account Credit**

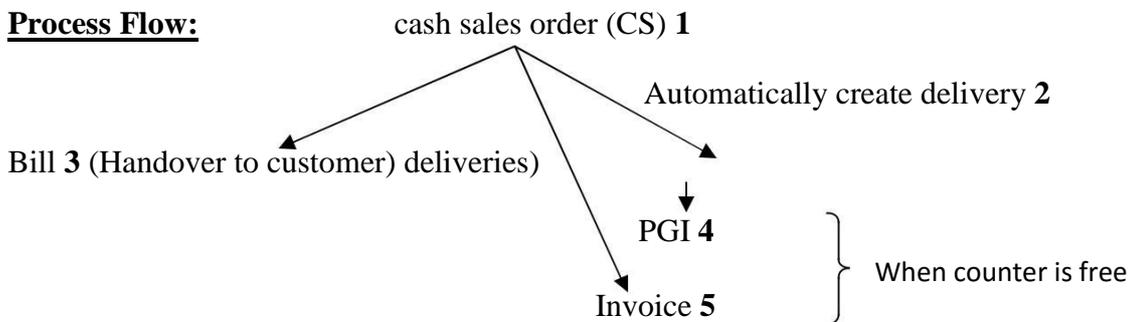
## 11. Cash sales

It is also called as counter sale. Here Customers are one time customers.

Customer will walk into outlets, pick the materials and go to the counter, pay the cash, take the bill and leave the counter.

Example: - Big Bazaar, Wal-Mart

**Process Flow:**



VA01 CS Sales area SP Material Qty Save it. VL02N PGI Invoice enter save it

When we Create Cash Sales Invoice, system generates Accounting Document.

Accounting Entry Is :-

**Cash Settlement Account Debit**  
**TO**  
**Revenue Account Credit**

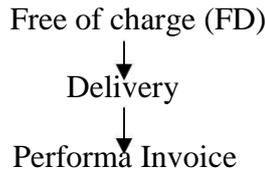


**For Cash Sales & Rush Order, shipping condition is 10 in shipping point determination**

## **12. Free of charge Delivery**

Sending the goods or Product Samples to customers without charging i.e. without raising invoice.

### **Process Flow:**

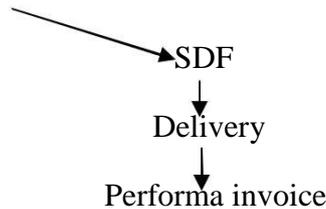


**Accounting Entry Document will not generate.**

## **13. Subsequent delivery free of charge**

Whenever customers return the goods, we deduct the amount from customer outstanding by raising credit memo. Instead of deducting the amount from customer outstanding, if we want to replace the goods to customer then we do subsequent delivery free of charge.

### **Process Flow:** Return Order



- ✚ Whenever we create SDF with reference to return order, the return order items should be rejected. Then only system will allow creating SDF.
- ✚ If we mark return order items as rejected, the system will not allow creating return invoice.
- ✚ If user already created return invoice, then system will not allow creating SDF. Because we cannot reject return order items.

**Reason For Rejection:** - If we assign reason for rejection in return order it controls 2 Things.

1. If we assign reason for rejection, and we create SDF for that return order. Then system will not allow creating return Invoice.
2. If we create return invoice then system will not allow assigning reason for rejection. Without reason for rejection, system will not allow to create SDF.

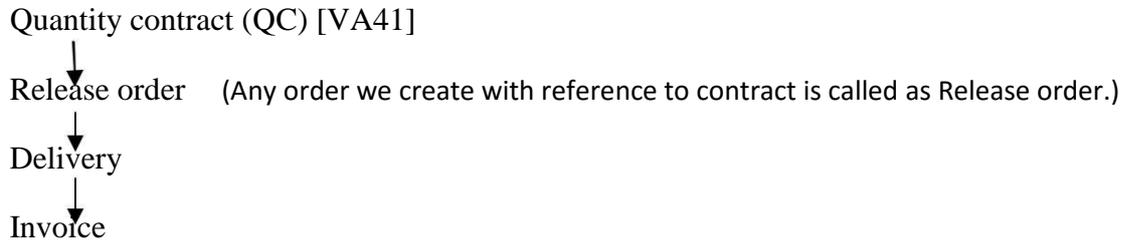
## **14. Quantity contract**

It is an agreement between company and customer for supplying the goods of a particular quantity within a specific validity period.

In agreement both the parties should have benefit, here benefit to customer is less price or discount and benefit to company is assured sales.



**Process Flow:**

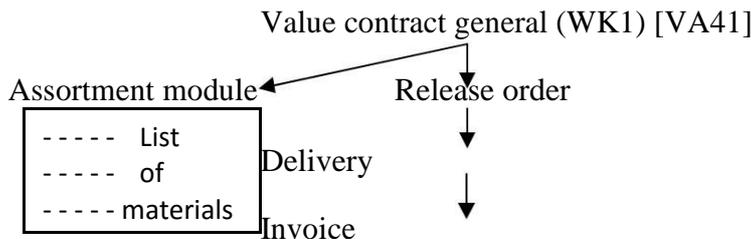


VA41 QC sales area enter customer PO no valid from and valid to material quantity save it.

### **15. Value contract general**

It is an agreement between company and customer for supplying the goods for a particular value within a specific validity period. Value contract is not specific to one material. It is for group of material.

Process:



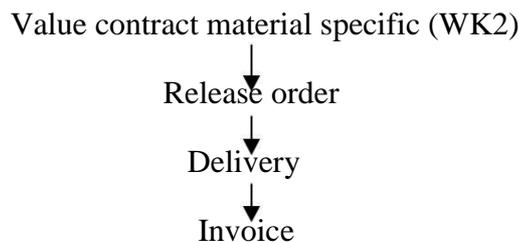
In value contract general we create assortment module which consists of group of materials, and assign this module to value contract general.

**Createing assortment module path:-** easy access logistic S&D master data products value contract assortment module WSV2(create) enter give some description list out materials valid from & To save it get some number note it down.

VA41 WK1 Sold to party valid from – valid to target value (30L) Assortment module number save it.

**16. Value contract material specific:** - It is an agreement between company and the customer for supplying the goods of a particular materials and value within a specific validity period.

Process:





**17. Scheduling agreement:** - It is an agreement between company and customer for supplying the goods of a particular quantity within a specific validity period with pre define delivery dates

Process:

~~Scheduling agreement (DS) [VA31]~~

↓  
Delivery

↓  
Invoice

*W/O Order*

**Consignment Process:** - Dumping the stocks at customer place and retaining the ownership with the company. When customer [Consignment Service Agent (CSA)] sells the goods to their customers (B2C), then company will raise invoice to their [Consignment Service Agent (CSA)] (B2B).

We do consignment process for slow moving item and newly launched products.

When the company decided to send the goods on consignment basis, they'll inform to all customers, if customers accept then we do 1<sup>st</sup> process i.e.

**18. Consignment Fill up:** - (CF) when we do delivery in consignment fill up stock will be reduce from unrestricted stocks and stock will be added to consignment stock.

CF    delivery    Performa invoice.

**19. Consignment Issue:** - (CI) when [Consignment Service Agent (CSA)] (B2B) sold the goods to their customer(B2C) then [Consignment Service Agent (CSA)] will inform the same to company. Then we do consignment issue process.

CI    delivery    invoice

When we do delivery in consignment issue the stocks will be reduce from consignment stocks.

**20. Consignment returns:** - (CONR) we do consignment return when end customer return the goods to [Consignment Service Agent (CSA)], then [Consignment Service Agent (CSA)] will inform the same to company, then we do consignment returns.

CONR    return delivery    return invoice.

When we do return delivery in consignment return the stock will be added back to consignment stock.

**21. Consignment Pick Up:** - (CP) if [Consignment Service Agent (CSA)] request to take back the consignment stock, then we do consignment pick up. When we do return delivery in consignment pick up the stock will be reduce from consignment stock and add back to unrestricted stock.

CP    return delivery



**Example** to understand consignment process

Company: Maruti

Vendor: Varun motors

Unrestricted Stocks: 1000 Cars  
 Less delivery car - 400 Cars  
 Available balance 600 Cars  
 Return consignment+ 180 Cars  
 Final Stocks 780 Cars

Consignment Stocks: 400 Cars  
 Sold to end users - 250 Cars  
 Stock balance 150 Cars  
 Return Cars +30 Cars  
 Stocks 180 Cars  
 Return to Company -180 Cars  
 Final stocks balance 000 Cars

Consignment Fill up (CF)	Consignment Issue (CI)	Consignment Return (CONR)	Consignment Pick Up (CP)
↓ Deliver (400) ↓ Performa Invoice	↓ Deliver (250) ↓ Invoice (250)	↓ Return delivery (30) ↓ Return Invoice	↓ Return delivery (180)

The table for business data is [VBKD].

The table for sales document partner data is [ VBPA]

The table for header status is [ VBUK ].

The table for item status is [ VBUP ].

The table for document flow is [ VBFA ].

The table for sales document pricing is [~~KNOV~~].

KONV



## Document Type controls

The T-code to define document type is [VOV8]

Path for defining document type : SPRO S&D sales document sales document header define sales document type go to OR

### Change View "Maintain Sales Order Types": Details

**New Entries** [Icons]

Sales Document Type	OR	Standard Order	Sales document block	<input type="checkbox"/>
SD document categ.	C			
Indicator				
<b>Number systems</b>				
No.range int.assgt.	01	Item no.increament	10	
No. range ext. assg.	02	Sub-item increment	1	
<b>General control</b>				
Reference mandatory	<input type="checkbox"/>	Material entry type	<input type="checkbox"/>	
Check division	<input type="checkbox"/>	<input checked="" type="checkbox"/> Item division		
Probability	100	<input checked="" type="checkbox"/> Read info record		
Check credit limit	D	Check purch.order no	<input type="checkbox"/>	
Credit group	01	<input type="checkbox"/> Enter PO number		
Output application	V1	Commitment date	<input type="checkbox"/>	
<b>Transaction flow</b>				
Screen sequence grp.	AU	Sales Order	Display Range	UALL
Incomp1 . proced.	11	Sales Order	FCode for overv.scr.	UER1
Transaction group	0	Sales order	Quotation messages	B
Doc. pric. procedure	A		Outline agrmt mess.	B <input type="checkbox"/>
Status profile			Message: Mast.contr.	<input type="checkbox"/>
Alt.sales doc. type1			ProdAttr.messages	<input type="checkbox"/>
Alt.sales doc. type2			<input type="checkbox"/> Incomplet.messages	
Variant				
<b>Scheduling agreement</b>				
Corr.delivery type	<input type="checkbox"/>		Delivery block	<input type="checkbox"/>
Usage	<input type="checkbox"/>			
MRP for DivSchType	<input type="checkbox"/>			
<b>Shipping</b>				
Delivery type	LF	Delivery	Immediate delivery	<input type="checkbox"/>
Delivery block	<input type="checkbox"/>			
Shipping conditions	<input type="checkbox"/>			
ShipCostInfoProfile	STANDARD	Standard freight information		
<b>Billing</b>				
Dlv-rel.billing type	F2	Invoice (F2)	CndType line items	EK02
Order-rel.bill.type	F2	Invoice (F2)	Billing plan type	<input type="checkbox"/>
Intercomp.bill.type	IV	Intercompany billing	Paymt guarant. proc.	01
Billing block	<input type="checkbox"/>		Paymt card plan type	03
			Checking group	01
<b>Requested delivery date/pricing date/purchase order date</b>				
Lead time in days	7		<input checked="" type="checkbox"/> Propose deliv.date	
Date type	<input type="checkbox"/>		<input type="checkbox"/> Propose PO date	
Prop.f.pricing date	<input type="checkbox"/>			
Prop.valid-from date	<input type="checkbox"/>			
<b>Contract</b>				
PricProcCondHeadr	<input type="checkbox"/>		Contract data allwd.	<input type="checkbox"/>
PricProcCondItem	<input type="checkbox"/>		FoillUpActivityType	<input type="checkbox"/>
Contract profile	<input type="checkbox"/>		Subseq.order type	<input type="checkbox"/>
Billing request	DR		Check partner auth.	A
Group Ref. Procedure	<input type="checkbox"/>		<input type="checkbox"/> Update low.lev.cont.	
<b>Availability check</b>				
Business transaction	OR	Sales Order		



**SD document category**: - Document category is the actual control, that controls the functioning of sales document. Ex. – Inquiry and quotation is different that will be determined by document category.

Q. Where is the control that, system will not allow creating delivery with reference to inquiry or quotation?

Ans. Document category.



S.NO	Transaction	Doc Types (VOV8)	Doc Type Controls	Item Category (VOV7)	Item Cat Group	Schedule Line Cat (VOV6)	Delivery Type (OVL/0VL)	Billing Type (VOFA)
1	Inquiry	IN	A	AFN	NORM	AN or AT	-	-
2	Quotation	QT	B	AGN	NORM	BN or BT	-	F5
3	Order	OR	C	TAN	NORM	CP or CN	LF	F2
4	Rush Order	RO	C	TAN	NORM	CP or CN	LF	F2
5	Cash Sales	CS	C	BVN	NORM	DN	BV	BV
6	Return Order	RE	H	REN	NORM	-	LR	RE
7	Credit Memo Req	CR	K	G2N	NORM	-	-	G2
8	Debit Memo Req	DR	L	L2N	NORM	-	-	L2
9	Invoice Correction Req	RK	K	G2N	NORM	-	-	G2
10	Free Of Charge	FD	I	KLN	NORM	CP or CN	LF	F8
11	Subsequent Del Free Of Charge	SDF	I	KLN	NORM	CP or CN	LF	F8
12	Consignment Fill Up	CF	C	KBN	NORM	E1	LF	F8
13	Consignment Issue	CI	C	KEN	NORM	C1	LF	F2
14	Consignment Returns	CONR	H	KRN	NORM	D0	LR	RE
15	Consignment Pick Up	CP	H	KAN	NORM	F1	LR	-
16	Quality Contract	QC	G	KMN	NORM	-	-	-
17	Value Contract General	WK1	G	WKN	NORM	-	-	-
18	Value Contract Material Specific	WK2	G	WKN	NORM	-	-	-
19	Scheduling Agreement	DS	E	LPN	NORM	CP or CN	LF	F2
20	Free Goods	-	-	TANN	NORM	CP or CN	-	-
21	STO	-	-	NLN	-	NN	NL	F2
22	STO Returns	-	-	NLRN	-	NR	NLR	RE
23	Inter Com. STO	-	-	NLC	-	NC	NLCC	IV
24	Inter Com. STO Returns	-	-	NCRN	-	NS	NCR	IV
25	BOM Header Pric Main Item	-	-	TAQ	ERLA	CP or CN	-	-
26	BOM Header Pric Sub Item	-	-	TAE	NORM	CT	-	-
27	BOM Item Pric Main Item	-	-	TAP	LUMF	CT	-	-
28	BOM Item Pric Sub Item	-	-	TAN	NORM	CP or CN	-	-
29	Material Det Header Pric Main	-	-	TAX	PSHP	CX	-	-
30	Material Det Header Pric Sub	-	-	TAPS	PSEL	PP	-	-
31	Material Det Item Pric Main	-	-	TAPA	PSA1	CD	-	-
32	Material Det Item Pric Sub	-	-	TAN	PSA2	CP or CN	-	-
33	Third Party Process	-	-	TAS	BANS	CS	-	-
34	IPO Process	-	-	TAB	BANC	CB	-	-
35	MTO Process	-	-	TAK	0001	CP or CN	-	-
36	Variant	-	-	TAC	0002	CP or CN	-	-
37	Third Party Returns	-	-	TASG	BANS	CS	-	-
38	Text Item	-	-	TATX	-	-	-	-
39	Value Item	-	-	TAW	-	-	-	-
40	Service Item Cat	-	-	TAD	-	-	-	-
41	Cross Selling	-	-	-	-	-	-	-



**Sales document block:** - If we don't want to use a particular document type then maintain this field, then system will not allow creating the sales document with that document type.

**Indicator:** - We use indicator only for RK.

For RK we maintain indicator as "D".

Indicator D controls that each line item from invoice will be copied as two line items in invoice correction request document.

**Number systems:** - In sales document we have option of both internal number and external number.

**Defining number ranges for sales document.** [VN01]

SPRO sales & distribution sales sales document sales document header define number ranges for sales document change interval mention some number either internal or external and save it.

**Item number increment:** - This fields control how the line item number should be incremented in sales document.

**Sub item increment:** - Sub item concept is used for below scenarios:

- i.) Free goods: - Free goods are in relation to main item so free goods will have main item and sub item.
- ii) BOM: - Material with multiple components.
- iii) Material determination: - Substituting one material in place of other material.
- iv) Cross selling: - Selling other products with main product.

In below scenario we substitute the materials:

- ✚ Unavailability of stocks
- ✚ Stopped manufacturing old products and coming out with new products

This field controls how the sub item number should be incremented in sales document.

**Reference mandatory:** - This field controls whether any preceding document required or not to create a sales document.

For Doc. Type RK and SDF will have reference mandatory.

**Q.** The client's requirement is for dealer & distributor system should allow creating order directly but for institution & direct customer while creating sales order system should mandatorily ask for quotation. How to configure this?

**Ans.** First create new sales document ZOR for institution & direct customer and OR will be used for Dealer and Distributor then go to OVAZ and assign document type with sales area OR Z1 &Z2 and ZOR Z3 & Z4.

**Check Division:** - This field controls how system should response if the division in the header deviates from division in the item i.e. whether to give warning message or error message or no message.



If we want warning message then maintain 1

If we want error message then maintain 2

**Item Division:** - If we check this the line item division in sales document will be copied from material master. If we uncheck this the item division in sales document will be copied from header division.

**Material Entry Type:** - This field controls how the material should be entered in sales document i.e. whether to enter the material based on material number or product category.

**Probability:** - This field specifies the chances of converting the document into order.

SAP standard says inquiry convert order is 30% and quotation convert order is 70%.

**Read Info record:** - This field control whether to determine CMIR into sales document or not. If we check this then only system will read CMIR and determine it into sales document. If we uncheck this then system will not read CMIR and system will not determine it into sales document.

**Check purchases order number:** - It will help to restrict the duplication of purchases order number or sales order number while creating order. If PO number exist then system checks whether customer is same or not if same then system will give warning message.

**Enter PO number:** - If we check this while creating sales order, if PO number is blank then system will copy sales order number as PO number.

**Check Credit limit:** - This field specifies whether to perform simple credit check or automatic credit check. If we want to perform simple credit check then maintain either "A" or "B" or "C"

- ✚ If we want to perform automatic credit check then maintain "D".
- ✚ "A" means run simple credit check and warning message.
- ✚ "B" means run simple credit check and error message.
- ✚ "C" means run simple credit check and delivery block.



**Difference between Simple Automatic credit check**

<b><u>Simple credit check</u></b>	<b><u>Automatic credit check</u></b>
In this if customer credit limit exceed we can block only at order level.	In this if customer credit limit exceed we can block it At order level or delivery level or PGI level.
In this there is no concept of risk category.	Based on risk category of the customer i.e. High risk customer block at order level. Medium risk customer block at delivery level. Low risk customer block at PGI level.
In simple system considers only receivable while performing credit check.  Receivable means open items (Open items means invoice raised but not yet paid)	In automatic system consider open order value, open delivery value, open invoice value and open item value while performing credit check.

**Credit group**: - This field will be used only for automatic credit check and this field controls which transaction to block.

**Commitment date**: - If we maintain this field we will get an extra field in line item scheduling tab . Any order with committed quantity will be given 1<sup>st</sup> performance while delivering the goods to customer.

**Q.** Client requirement is for some orders they promise the delivery date. How to give solution to client?

**Ans.** Copy OR to ZOR and in ZOR maintain commitment date as “B” and ask client to use ZOR if they promise the date to customer. If the date is not promised then use OR.

**Screen sequence group**: - This field controls which screen should be displayed in sales document.

**Display range**: - This field controls whether to display all items or only main items (this field is used only if we have main item & sub item concept).

**Creating BOM**

Creating BOM 1<sup>st</sup> create material master for computer MM01 Q computer

Maintain item category as ERLA in sales org 2

ERLA Header pricing

LUMF Item Pricing

Create material master for CPU, Monitor, key board, and mouse

Here item category group will be NORM.



Maintain pricing to go to T-code VK11

### Create BOM

T-Code CS01 Q computer plant BOM usage [5] enter maintain the component and quantity (QCPU -1, Q monitor – 1, Q keyboard – 1, Q mouse – 1) maintain item category as [N] save it.

**Incompletion procedure:** - This procedure consists of list of mandatory fields which user has to enter while creating sales document. If any of the mandatory field is missing then either system will not allow saving the sales order or even system will allow to save the status of the sales document will be incomplete and incomplete document cannot be processed further.

**F . Code for overview screen:** - This field controls which screen should display by default while entering into sales document.

**Transaction group:** - Transaction group controls the T- code of the sales document type.

**Quotation Messages:** - If we maintain this then while creating sales order system will check for this customer is there any open quotation existing or not, if yes then system will propose that quotation.

**Outline agreement message:** - If we maintain this then while creating sales order system will check for this customer is there any open contracts existing or not. If yes system will propose the open contract.

**Document pricing procedure:** - This field is one of the parameter to determine pricing procedure in sales document.

Pricing procedure determination: - T-code (OVKK)

The pricing procedure determination is based on below combinations:-

Sales area + Document pricing procedure (A) + Customer pricing procedure (1) = Pricing procedure (CVAA01)

DO + B + 1 = GVAA01 for FD

DO + C + 1 = REAA01 for RE

If we want to differentiate the pricing procedure based on document wise then we use document pricing procedure i.e. A or B or C.

If we want to differentiate the pricing procedure based on customer wise then we use customer pricing procedure i.e. 1 or 2, 1 for domestic customer and 2 for export customer in customer master.

**Status Profile:** - It is an order release process. After creating sales order by end user, the order will be sent to authorized person to cross check the order; if everything is fine then authorized person will release the order .Then only system will allow creating delivery and invoice.



**Alternate sales document type 1 and 2:** - If users are confusing between any two types of document type i.e. instead of rush order user mistakenly created OR then user has to come out from OR document create again the sales document with RO document, this confusion waste the time of end user.

To overcome this SAP has given a provision of alternate sales document type 1 and alternate sales document type 2. By using this we can swap the sales document from one document type to another document type.

**Incomplete Message:** - If we check this then if any of the mandatory field is missing then system will not allow saving the sales document. If uncheck this even if some mandatory fields are missing in sales document then system will allow to save.

**Variant (Transaction variant):** - It will help to control the fields in sales document i.e. mandatory or optional or display or suppress.

The T-code to create variant is [SHD0]

### **Shipping**

**Delivery Type:** - Whatever the delivery type we maintain here system by default takes it while creating delivery document.

- ✚ Standard delivery type is “LF”
- ✚ Return delivery type is “LR”
- ✚ Cash sale delivery type is “BV”
- ✚ Delivery without order reference “LO”
- ✚ STO delivery type is “NL”
- ✚ STO return delivery type is “NLR”
- ✚ Intercompany STO is “NLCC”
- ✚ Intercompany STO return is “NCR”

**Immediate delivery:** - We use this field only for “CS” and “RO”. If we maintain ‘X’ then while creating sales order system automatically creates delivery in the background.

In immediate delivery we can maintain either A or X.

If we maintain A then system will not check whether stock is available or not and system will create delivery automatically.

If we maintain X and if stock is available then system will create delivery automatically in the background.

**Deliver block:** - If we maintain this field then order will be automatically blocked for delivery and system will not allow creating delivery for that order. An authorized person has to release the block then only system will allow to create delivery.



**Shipping condition:** - This field is one of the parameter to determine the shipping point in sales document. If we maintain shipping point here then system over right the shipping condition in customer master while determining shipping point into sales document.

We use this field only for “CS” and “RO” document types and maintain “10” (immediate).

**Delivery related billing type:** - if we maintain billing type here then system by default create invoice. If the document type is delivery related billing then maintain in delivery related billing

Ex. – OR, RO, CI, DS ----- delivery related

RE, CS, CONR, CR, DP, RK ----- order related billing types

QC, WK1, WK2, FD, SDF, CF, CP, IN, QT ----- not related for billing

- + The Standard billing type is “F2”
- + Cash sale billing type is “BV”
- + Return billing type is “RE”
- + Credit memo billing type is “G2”
- + Debit memo billing type is “L2”
- + Invoice cancellation type is “S1”
- + Return invoice / Credit memo cancellation S2”
- + Performa invoice order related “F5”
- + Performa invoice delivery related “F8”
- + Intercompany billing type is “IV”

Intercompany billing is a sale between two company codes of the same company

Performa invoice is a dummy invoice which will not post the values into accounting.

**Billing Block:** - If we maintain this field then the order will be automatically blocked for billing and an authorized person has to cross check and release the block then only system will also to create invoice.

**In standard RE, CR, DR, RK will have billing block.**

**Condition type line item:** - We have two types of condition types to determining product cost into sales document.

i) EK01      ii) EK02

We use EK01 if the selling price is totally depended on cost.

We use EK02 if the selling price is totally not depended on cost.

**Billing plan type:** - We have two types of billing plan

- + Periodic billing
- + Mile stone billing

1. Periodic billing is billing on regular intervals. Ex. - monthly billing (Service and rental contracts)



2. Mile stone billing is activity based billing i.e. billing based on work done. Ex. – Construction industry & project industry (Railway).

**Lead time in days:** - If we maintain lead time in days here, then it over right RLT in material master while **performing** delivery scheduling.

**Propose delivery date:** - If we check this then system will propose today date as requested delivery date in sales document. If we uncheck this system will not propose request delivery date in sales document.

**Propose PO date:** - If we check this system will propose today as PO date, if we uncheck this system will not propose PO date in sales document.

**Date Type:** - This field controls how the requested delivery date should appear in sales document i.e. day wise, week wise, month wise. If we maintain 1 then day wise, 2 week wise, 3 month wise etc.

### **"Real-time Scenarios (client's Requirements) for Sales Document types"**

1. For dealers & distributors system should allow creating order directly but for institute customer and direct customer system should not allow creating order directly.
2. Clients requirement is system should not allow duplication of sales order.
3. Client is having BOM material but system should not display the components in sales order.
4. Each sales order should consists of same division products.
5. System should not allow the user to change payment and Inco terms in sales document.
6. My user is confusing between two documents types instead of one document type he is creating sales order with another document. How to give solution?
7. Client Requirement is after creating sales order by user, the order will be sent to authorize person to release. Then only system should allow creating delivery and invoice.
8. Client requirement is they want to configure automatic credit check.
9. While creating sales order if order is incomplete then system should not allow saving the sales order.
10. While creating sales order without reference to QT system should check whether if any quotation (open) is existing for same customer or not?
11. While creating sales order system should determine immediate shipping point and delivery should created automatically.
12. The selling price of product should be totally depended on the product cost.
13. Client requirement is for some orders, they promise delivery dates and for some orders they won't promise delivery dates. How to configure this



## **Item Categories Controls**

Item category controls the line item data of sales document.

The T-code to define item categories is [VOV7].

Path **S**PRO S&D Sales sales document sales document item define item categories select standard and click on copy create new item categories.

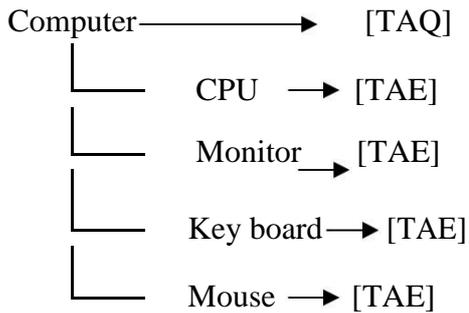


S.NO	Transaction	Doc Types (VOV8)	Doc Type Controls	Item Category (VOV7)	Item Cat Group	Schedule Line Cat (VOV6)	Delivery Type (OVLV/OVLP)	Billing Type (VOFA)
1	Inquiry	IN	A	AFN	NORM	AN or AT	-	-
2	Quotation	QT	B	AGN	NORM	BN or BT	-	F5
3	Order	OR	C	TAN	NORM	CP or CN	LF	F2
4	Rush Order	RO	C	TAN	NORM	CP or CN	LF	F2
5	Cash Sales	CS	C	BVN	NORM	DN	BV	BV
6	Return Order	RE	H	REN	NORM	-	LR	RE
7	Credit Memo Req	CR	K	G2N	NORM	-	-	G2
8	Debit Memo Req	DR	L	L2N	NORM	-	-	L2
9	Invoice Correction Req	RK	K	G2N	NORM	-	-	G2
10	Free Of Charge	FD	I	KLN	NORM	CP or CN	LF	F8
11	Subsequent Del Free Of Charge	SDF	I	KLN	NORM	CP or CN	LF	F8
12	Consignment Fill Up	CF	C	KBN	NORM	E1	LF	F8
13	Consignment Issue	CI	C	KEN	NORM	C1	LF	F2
14	Consignment Returns	CONR	H	KRN	NORM	D0	LR	RE
15	Consignment Pick Up	CP	H	KAN	NORM	F1	LR	-
16	Quality Contract	QC	G	KMN	NORM	-	-	-
17	Value Contract General	WK1	G	WKN	NORM	-	-	-
18	Value Contract Material Specific	WK2	G	WKN	NORM	-	-	-
19	Scheduling Agreement	DS	E	LPN	NORM	CP or CN	LF	F2
20	Free Goods	-	-	TANN	NORM	CP or CN	-	-
21	STO	-	-	NLN	-	NN	NL	F2
22	STO Returns	-	-	NLRN	-	NR	NLR	RE
23	Inter Com. STO	-	-	NLC	-	NC	NLCC	IV
24	Inter Com. STO Returns	-	-	NCRN	-	NS	NCR	IV
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26	BOM Header Pric Sub Item	-	-	TAE	NORM	CT	-	-
27	BOM Item Pric Main Item	-	-	TAP	LUMF	CT	-	-
28	BOM Item Pric Sub Item	-	-	TAN	NORM	CP or CN	-	-
29	Material Det Header Pric Main	-	-	TAX	PSHP	CX	-	-
30	Material Det Header Pric Sub	-	-	TAPS	PSEL	PP	-	-
31	Material Det Item Pric Main	-	-	TAPA	PSA1	CD	-	-
32	Material Det Item Pric Sub	-	-	TAN	PSA2	CP or CN	-	-
33	Third Party Process	-	-	TAS	BANS	CS	-	-
34	IPO Process	-	-	TAB	BANC	CB	-	-
35	MTO Process	-	-	TAK	0001	CP or CN	-	-
36	Variant	-	-	TAC	0002	CP or CN	-	-
37	Third Party Returns	-	-	TASG	BANS	CS	-	-
38	Text Item	-	-	TATX	-	-	-	-
39	Value Item	-	-	TAW	-	-	-	-
40	Service Item Cat	-	-	TAD	-	-	-	-
41	Cross Selling	-	-	-	-	-	-	-



## Scenarios

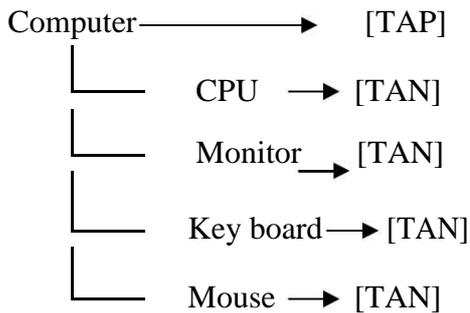
### BOM header pricing



Here Computer is a main item and other is component.

Main item means computer has pricing i.e. Rs. 16000/- but component has no pricing i.e. Rs. 0/-

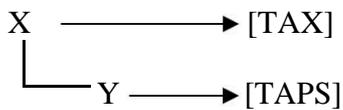
### BOM Item pricing



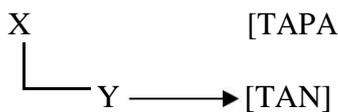
Here Computer is a main item and other is component.

Main item means computer has no pricing i.e. Rs. 0/- but component has pricing i.e. CPU Rs. 8000/-

### Material determination header pricing



### Material determination item pricing





### Item category Controls screen

#### Change View "Maintain Item Categories": Details

**New Entries**

Item category: TAN    Standard Item

---

**Business Data**

Item Type	<input type="checkbox"/>	<input checked="" type="checkbox"/> Business Item
Completion Rule	<input type="checkbox"/>	<input checked="" type="checkbox"/> Sched.Line Allowed
Special Stock	<input type="checkbox"/>	<input type="checkbox"/> Item Relev.for Div
Billing Relevance	A	<input type="checkbox"/> Returns
Billing Plan Type	<input type="checkbox"/>	<input checked="" type="checkbox"/> WghtVol.Relevant
Billing Block	<input type="checkbox"/>	<input checked="" type="checkbox"/> Credit active
Pricing	X	<input checked="" type="checkbox"/> Determine Cost
Statistical value	<input type="checkbox"/>	
Revenue Recognition	<input type="checkbox"/>	
Delimit. Start Date	<input type="checkbox"/>	

---

**General Control**

Autom.batch determ.     Rounding permitted     Order qty = 1

---

**Transaction Flow**

Incompletion Proc.	20	Standard Item	Screen Seq.Grp	N
PartnerDetermProc.	N	Standard Item	Status Profile	
TextDetermProcedure	01	Sales item	<input type="checkbox"/> Create PO Automatic.	
Item Cat.Stats.Group	1	Order, debit memo		

---

**Bill of Material/Configuration**

Config. Strategy	<input type="checkbox"/>	<input type="checkbox"/> Variant Matching
Mat. Variant Action	<input type="checkbox"/>	<input type="checkbox"/> Create Delivery Group
ATP material variant	<input type="checkbox"/>	<input type="checkbox"/> Manual Alternative
Structure scope	<input type="checkbox"/>	<input checked="" type="checkbox"/> Param. effectivities
Application		

---

**Value Contract**

Value contract matl:

Contract Release Ctrl:

---

**Service Management**

Repair proced.:

---

**Control of Resource-related Billing and Creation of Quotations**

Billing form:     DIP Prof.:



**Item type:** - This field specifies the functioning of the line item. i.e. whether the item is normal item (standard item) or Text item or value item or packing item.

**Standard or Normal item:** - It is the item which is sold to customers.

**Text item:** - It is the item which consists of some information and which we deliver to customers along with the main product and which we never sell to customer. Ex. - User manual, catalogue, booklet etc.

**Value item:** - It is an item which consists of certain value and which is delivered to customers and which we never sell to customer. Ex. – Gift voucher etc.

**Package item:** - It is the item which is used to pack the main item. Ex. – cold drink bottle, Gas cylinder, etc.

**Business Item:** - This field controls whether to change the business data at item level or not. If we check this then system will allow changing the business data at item level. If we uncheck this system will not allow to change the business data at item level. The business data at item level will be disabled

**Business data** is the data, which copies into sales order from sales, shipping, billing Tab's of customer master.

The table for business data is [VBKD].

**Completion rule:** - This field controls when the status of line item should be completed.

- ✚ For inquiry “AFN” completion rule is “A” (item is completed with the first reference).
- ✚ For quotation “AGN” completion rule is “B” (item is completed after full quantity has been referenced).
- ✚ For quantity contract “KMN” completion is “C” (item is completed after the target quantity is fully referenced)
- ✚ For value contract “WKN” completion rule is “E” (item is completed after full target value is referenced).

**\* Completion rule is applicable only between sales document to sales document and completion rule is not applicable between sales documents to delivery document. That is the reason TAN does not have completion rule.**

**Schedule line allowed:** - This field controls whether to determine schedule line tab into sales document line item or not.

If we check this then only schedule line tab will be determine into sales document line item.

If we uncheck this then schedule line tab will not be determined.

**The below item categories will have schedule line allowed uncheck:-**

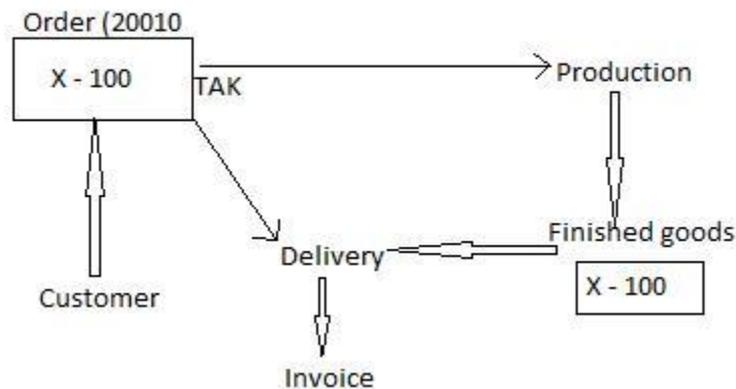
**G2N, L2N, KMN, WKN, TATX**



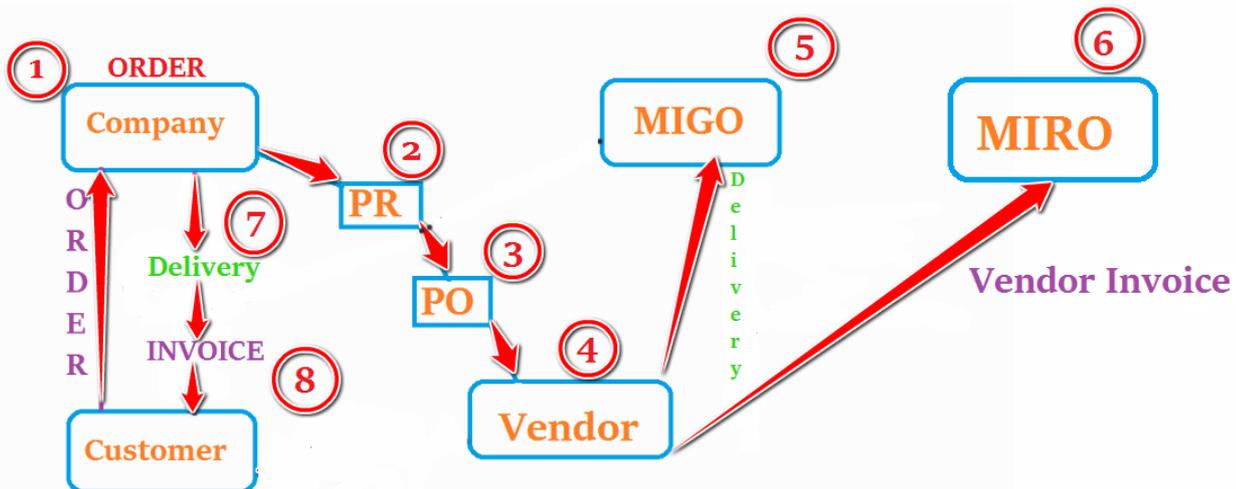
**Special stock:** - We have two types of special stocks:

- i) Consignment stock “W” (indicator)
- ii) Make to order stock “E” (indicator)

TAK item category will have special stock indicator “E”. This controls while creating sales order, system will consider only sales order stock, and system will not consider unrestricted stock.



TAB item category (IPO process) will also have special stock indicator as “E”



## Individual Purchase Order(IPO) Business Process

In IPO process when we receive the stock from vendor the stock will be reserved to particular sales order number. Special stock indicator “E” controls that while doing delivery in IPO process, system will consider sales order stock; system will not consider unrestricted stock.

Consignment issue	KEN	} “W” indicator (Consignment Stock)
Consignment Return	KRN	



**KEN – “W”:** - This field control that while doing delivery in consignment issue the stock will be reduced from consignment stock.

**KRN “W”:** - This field controls that while doing return delivery in consignment return the stock will be added to consignment stock.

**Item relevant for delivery:** - This field is only applicable for text item or value item. This field is not applicable for standard item. If text item and value item is relevant for delivery then check this field.

**Billing relevance:** - This field controls whether item is relevant for billing or not and it also controls whether item is order related billing or delivery related billing.

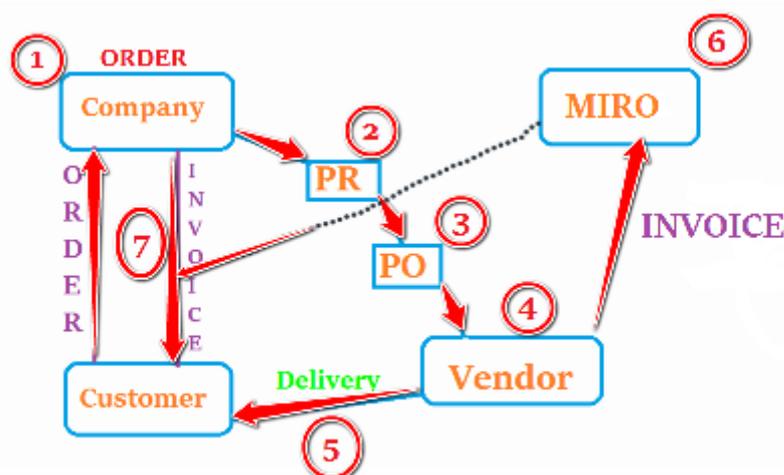
- ✚ The below item categories are not relevant for billing:-
  - [AFN, AGN, WKN, KMN, TATX, KLN, KBN, KAN]
- ✚ The below item categories are delivery related billing: -
  - [TAN – ‘A’, KEN – ‘A’, TAB – ‘A’, TAK – ‘A’, TAQ – ‘A’, TAX – ‘A’]
- ✚ The below item categories are order related billing: -
  - [REN – ‘B’, KRN – ‘B’, BVN – ‘B’, G2N – ‘C’ (order related billing status according to target quantity), L2N – ‘C’]

**Q. Why G2N and L2N billing relevance is “C”.**

**Ans. Because for G2N and L2N schedule line allowed is uncheck, if schedule line allowed is uncheck then system consider quantity as target quantity.**

**Third party process**

- The billing relevance for TAS is “F” (order related billing status according to invoice quantity).(MIRO)



**Third Party Business Process - With Out Shipping Notification**



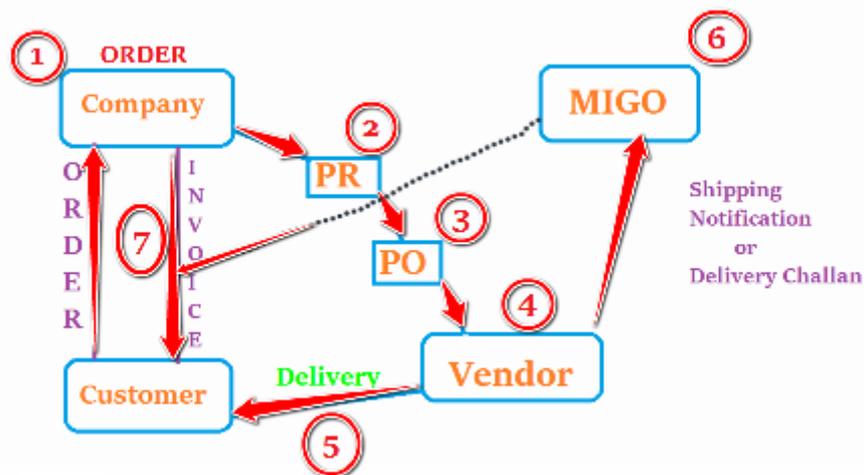
- Billing relevance “F” controls that while creating invoice to customer in third party process system checks whether MIRO is created or not. If MIRO is created then only system will allow creating invoice to customer.
- Billing relevance “D” (relevant for Proforma invoice)

In free of charge delivery and consignment fill up even though the process is not relevant for billing, in India scenario we have to raise proforma invoice while delivering goods to customer. For Proforma invoice billing relevance is “D”.

- Billing relevance “K” (delivery – raised invoice for partial quantity)

We use billing relevance “K” if we want to create partial invoice to single delivery.

**In third party process we can also use “G” (with shipping notification).(MIGO)**



**Third Party Business Process - With Shipping Notification**

Billing relevance “G” controls that while creating invoice to customer in third party process system checks whether MIGO has been created or not. If MIGO is created then only system will allow creating invoice to customer.

**Returns:** - This field controls

- ✚ Whether item is delivering to customer or coming back from customer.
- ✚ it controls the accounting entry at the time of invoice.

If we check this then system will treat as return item and while creating invoice the accounting entry is

Revenue Account Debit

TO

Customer Account Credit



The below item categories will have return check

REN, KRN, G2N and KAN

Any document types if document categories are “H” or “K” for those item categories we have to check return.

**Billing plan type:** - If we maintain billing plan type for item category then it will be applicable to particular line item in the sales document. If we maintain billing plan type in document types then it will be applicable to total document.

**Weight / volume relevant:** - If we check this system will calculate the weight and determine it into sales document line item.

**Billing block:** - If we maintain billing block here then it will be applicable to particular line item in the sales document.

**Credit active:** - This field controls whether to update the line item value into credit management or not. If we check this then only the item value will be update in credit management.

The below items will have credit active uncheck.

AFN REN KMN KBN TAPS AGN KRN KLN KAN TAP BVN WKN

G2N TAE TATX

The below item categories will have credit active check.

TAN TAS TAX TAK TAB L2N TAQ

Q. Client Requirement is any customer if he purchase slow moving item system should not update the value in credit management. How to configure this?

Ans. Copy TAN to YTAN & Maintain Item Category determination. For YTAN uncheck the credit active. whenever slow moving item is entered into sales document, system will determine item category YTAN instead of TAN.

**Pricing:** - This field controls whether item is relevant for pricing or not. It also controls whether item is relevant for normal pricing or free goods pricing (100% discount)

- ✚ If the item is not relevant for pricing then maintain ‘Blank’
- ✚ If the item is relevant for pricing then maintain ‘X’
- ✚ If the item is relevant for 100% discount then maintain ‘B’

**Not relevant for pricing (Blank):** TATX, KLN, KBN, KAN, TAE, TAP, TAPS, TAPA

**Relevant for pricing (X):** AFN, AGN, TAN, BVN, REN, G2N, L2N, KRN, KEN, WKN, KMN, LPN, TAQ, TAX, TAK, TAB, TAS

**Relevant for free goods (B):** TANN



**Statistical value:** - If we maintain this field then the line item value will not have any effect on net value. The line item value will become inactive.

Ex. – In BOM header pricing system will not determine pricing for components, Because TAE is not relevant for pricing. If management is asking report on component sales then we have to go to item category TAE and maintain pricing “X” and also statistical value “X” then system will determine pricing for component but it does not have any effect on total document value.

**Determine cost:** - This field is a prerequisite to determine cost into sales document. If we check this then only cost will be determine into sales document i.e. ‘VPRS’ condition type will be determined into sales document.

**Automatic batch determination:** - If we check this the batch number will be automatically determine into sales document in line item.

**Rounding Permitted:** - If we check this, and if order quantity is in decimals then system will round off the decimal quantities to the nearest number.

**Order quantity = 1:** - If we check this system will restrict each line item quantity to 1.

**Status profile:** - If we maintain status profile in document types then it will be applicable to total document. If we maintain status profile in item category then it will be applicable to particular line item in sales document. (Generally we will not maintain status profile in line item in real time).

**Create PO automatic:** - In third party process and IPO process while creating sales order system automatically generates “PR”, but if we check this system automatically generates purchase order “PO” (If we want automatic PO in third party process along with ALE data for purchase order we have to check this).

**Value contract material:** - This field will be maintained only for WKN item category. In this we maintain some dummy material which will be determined into value contract general document; because value contract general is not specific to 1 material and without material we cannot create a line item.

**Contract relevance control:** - This field controls how system should response if the release order value exceed contract value i.e. to give warning message or error message or no message.

**Structure scope:** - This field controls whether to explode BOM or not and it also controls whether to explode single level BOM or multi level BOM.

- ✚ If we want to explode single level BOM then maintain “A”
- ✚ If we want to explode multi level BOM then maintain “B”.



These are main item category fields which will help to differentiate between two item categories: -

- \*Item type, \*Completion rule, \*Billing relevance, \*Credit active, \*Pricing, \*Structure scope, \*Special stock, \*Schedule line allowed, \*Returns

**Difference Between Item categories and Sales Document Types**

	TAQ	TAP
Price Billing	X	
	A	

	KLN	TAP
Structure Scope		A

	L2N	TAN
Billing relevance	C	A
Schedule line allowed		✓

	TAN	TAQ
Structure Scope		A

	TAB	TAS
Special stock	E	
Billing relevance	A	F

	KEN	TAB
Special Stock	W	E

	G2N	REN
Billing relevance	C	

	REN	KRN
Special stock		W



	BVN	TAN
<i>Credit Check</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Billing relevance</i>	B	A

	AFN	AGN
<i>Completion rule</i>	A	B

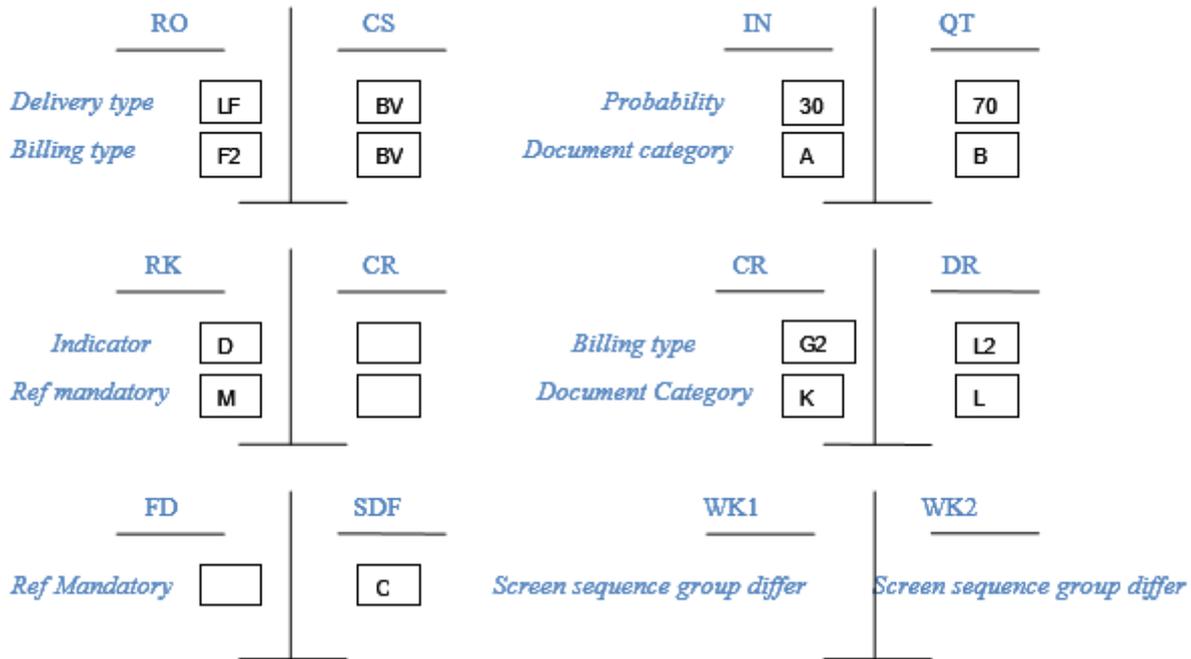
	REN	KAN
<i>Pricing</i>	X	<input type="checkbox"/>
<i>Billing relevance</i>	B	<input type="checkbox"/>

	REN	G2N
<i>Scheduling allowed</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Billing relevance</i>	B	C

	G2N	L2N
<i>Credit Active</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Return</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



### Difference Between Sales Document Types



### Real Time Scenarios (Client Requirements) for Item Categories

1. The client's requirement is system should allow referring quotation only once.
2. System should not allow changing the customer data in sales document item level.
3. System should display the price of BOM components in BOM header pricing.
4. For slow moving items system should not update the values into credit management.
5. There are some high value materials for which system should not display the cost.
6. While creating return invoice system is generating account entry ie.

Customer Account Debit  
TO

Revenue Account Credit

which is wrong. Where is the problem?

7. In third party process client wants to generate PO automatically.
8. While doing free of charge process system should allow to create Performa invoice.
9. Client wants to do third party process with shipping notification.
10. Client wants to determine immediate shipping point in cash sale process.



## Item categories determination

It will help to determine item categories in sales document. Without item category system will not allow to create sales document.

T – code for item categories determination is [VOV4].

Path SPRO S&D Sales sales document sales document item assign item categories

Item categories determine based on below combination:

- 1. Sales document type
- 2. Item category group
- 3. Item usages
- 4. Higher level item categories

**1. Sales document type:** - It is one of the parameter to determine item category in sales document.  
Ex.- IN – AFG, QT – AGN, OR – TAN.....

**2. Item category group:** - We have this field in material master sales org 2 view.

- + The standard item category group is “NORM”.
- + Third party item category group is “BANS”.
- + IPO item category group is “BANC”.
- + Make to order item category group is “0001”
- + BOM (Bill of material) – Header Pricing **ERLA**
- + BOM – Item pricing – **LUMF**

We use item category group if we want to determine different item category for the same document type (Material wise).

Material wise if we want differentiate item category then we use the field item category group.

Document Type	OR	OR	OR	OR	OR	OR
Item categories group	NORM	BANS	BANC	0001	ERLA	LUMF
Item usage						
Higher level item categories						
Item categories	TAN	TAS	TAB	TAK	TAQ	TAP



## **Real Time Scenario**

Client requirement is any customer if he purchases slow moving item system should not update the value into credit management. How to configure this?

### **Solution**

1<sup>st</sup> step Copy TAN to YTAN and in YTAN make credit active uncheck

2<sup>nd</sup> step Define new item category group SPRO S&D sales sales document sales document item define item category group go to new entries and create own item category group (ZORM)

3<sup>rd</sup> step Then go to slow moving item material master and item category group as ZORM

4<sup>th</sup> Step Go to item category determination (VOV4) and assign item category YTAN to the combination of OR and ZORM.

Now create one order and mention normal item and slow item.

**3. Item usage:** - System considers item usage for the below scenarios: -

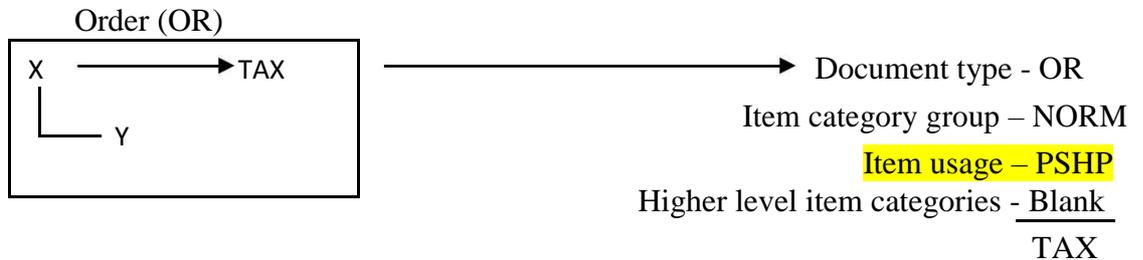
i) Whenever sub item is automatically determining into sales document other than BOM. Ex. - Free goods, material determination, cross selling and Batch split.

- ✚ Free goods usage is “FREE”
- ✚ Material determination usage is “PSHP” – for header
- ✚ item Material determination usage is “PSEL” – for sub item
- ✚ Material determination usage is “PSA1” – for item pricing
- ✚ Material determination usage is “PSA2” – for sub item
- ✚ Cross selling usage is “CSEL”
- ✚ Batch split usage is “CHSP”

ii) System considers item usage if we want to determine different item category for the same combination of document type + item category group



Ex.- Material determination header pricing

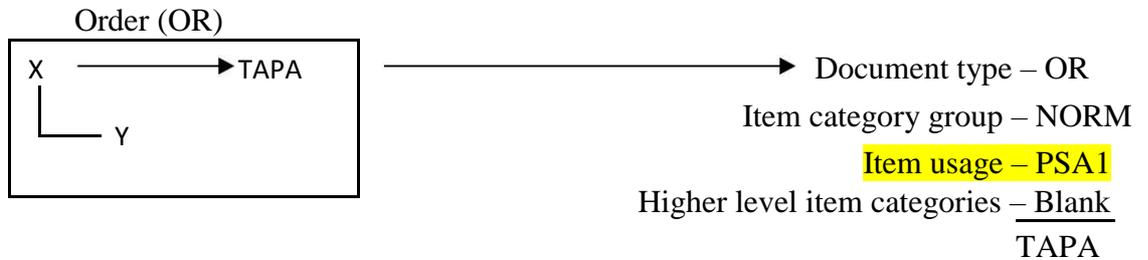


In normal order =

Document type - OR  
Item category group - NORM  
Item usage - Blank  
Higher level item categories - Blank  
TAN

In this scenario for both normal order and material determination header pricing order, we use same combination of document type (OR) and item category (NORM) but system triggers different item category because of using item usage (PSHP) for material determination header pricing. That's the reason we get item category TAX for material determination header pricing and TAN for normal order.

Ex.- Material determination item pricing



In normal order =

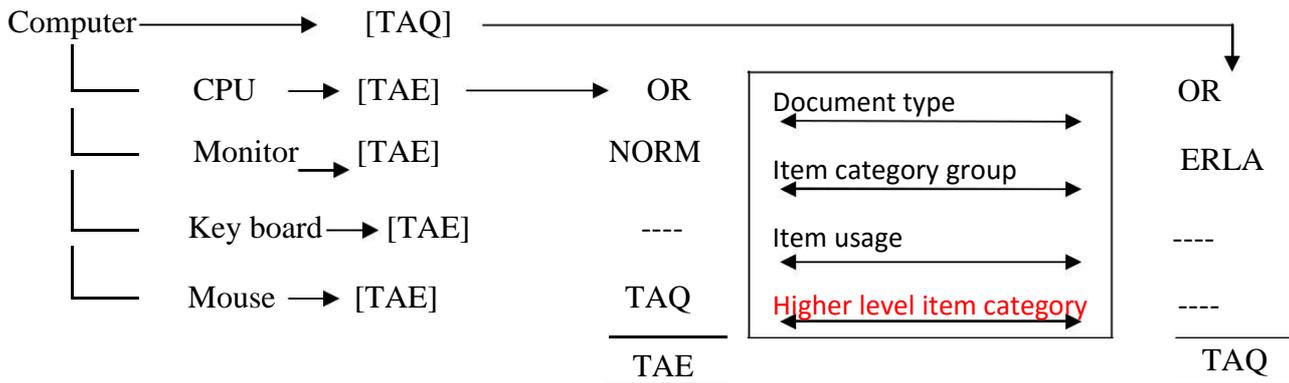
Document type - OR  
Item category group - NORM  
Item usage - Blank  
Higher level item categories - Blank  
TAN



**4. Higher level item category:** - System consider higher level item category to determine item category for sub item.

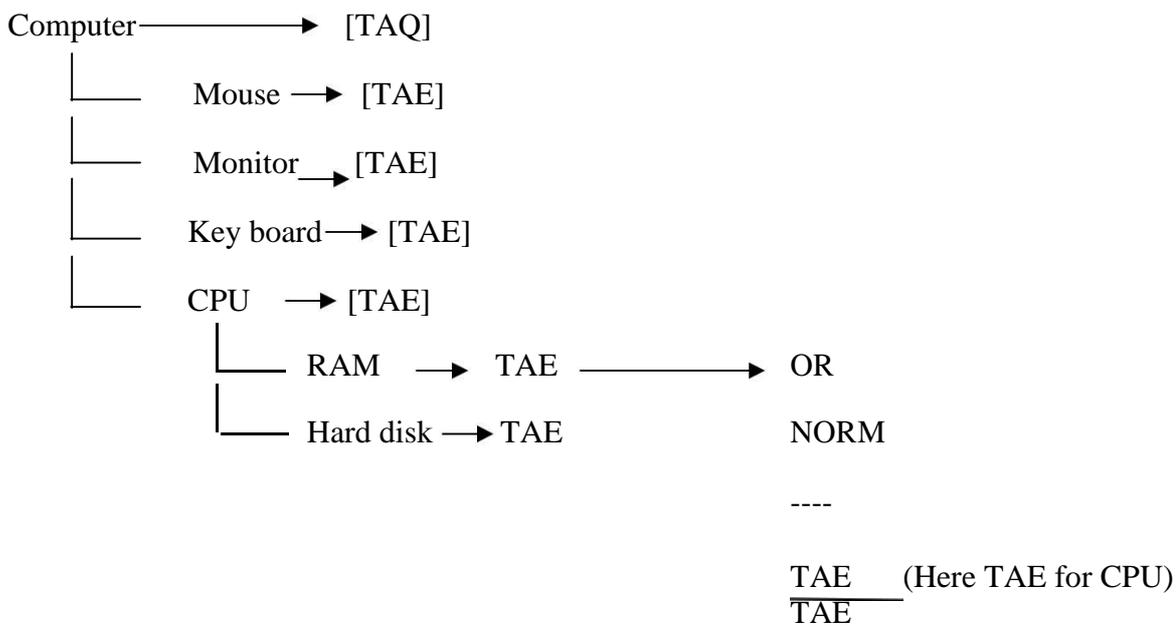
Ex. – BOM, Free Goods, Material determination, cross selling.

BOM header pricing



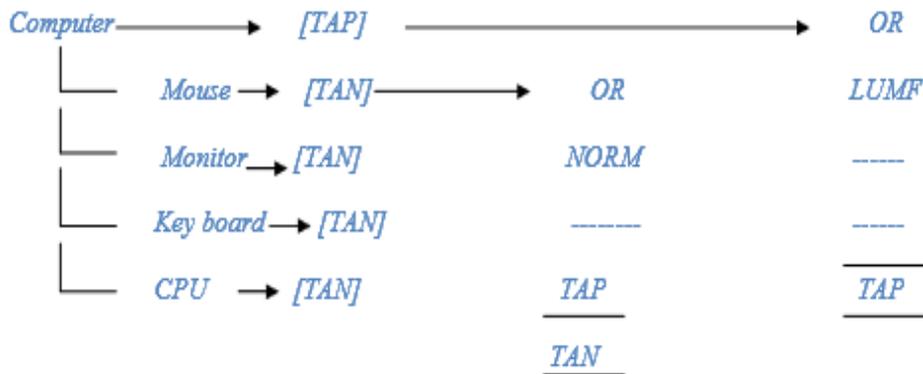
Here higher level item for sub item is computer so for TAE we mention TAQ as higher level item category and for TAQ no higher level item.

**Multi level BOM header pricing**

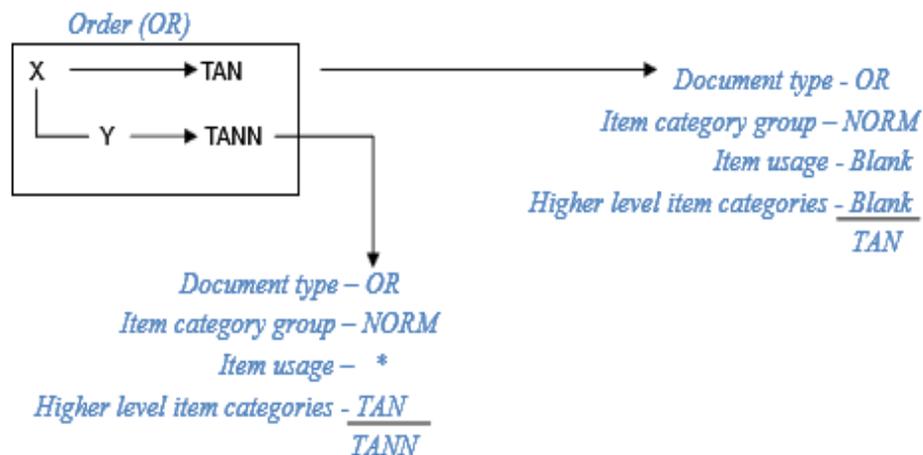




BOM Item pricing



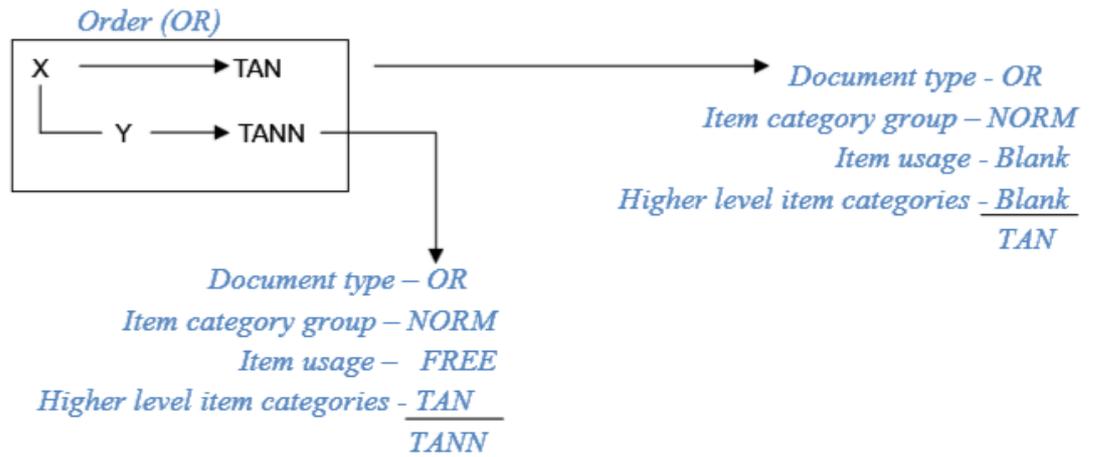
Manual Free Goods: -



\* For manual free goods system will not consider item usage

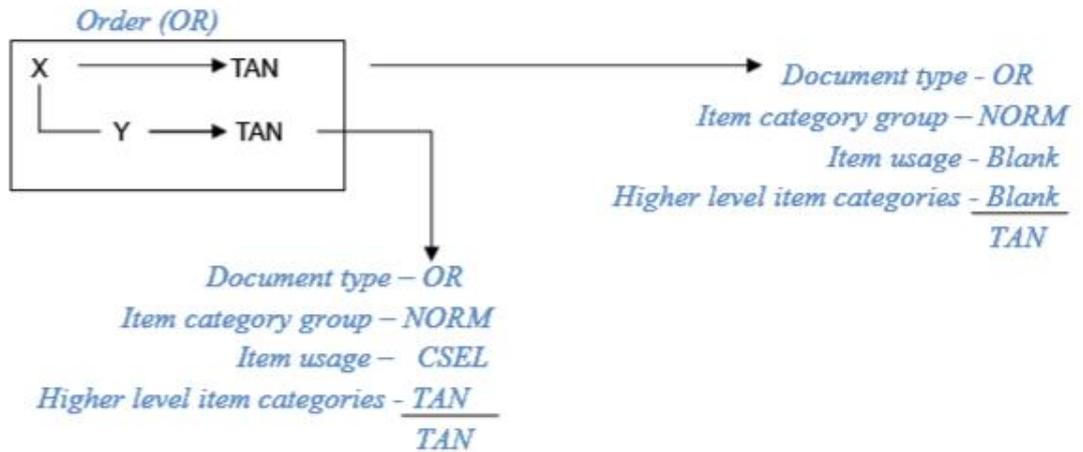


Automatic Free Goods: -

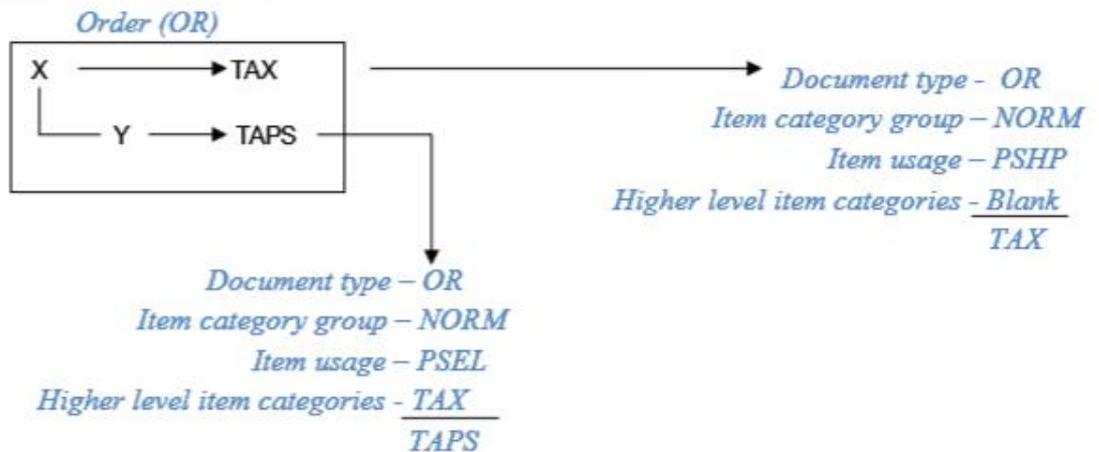




Cross selling: -

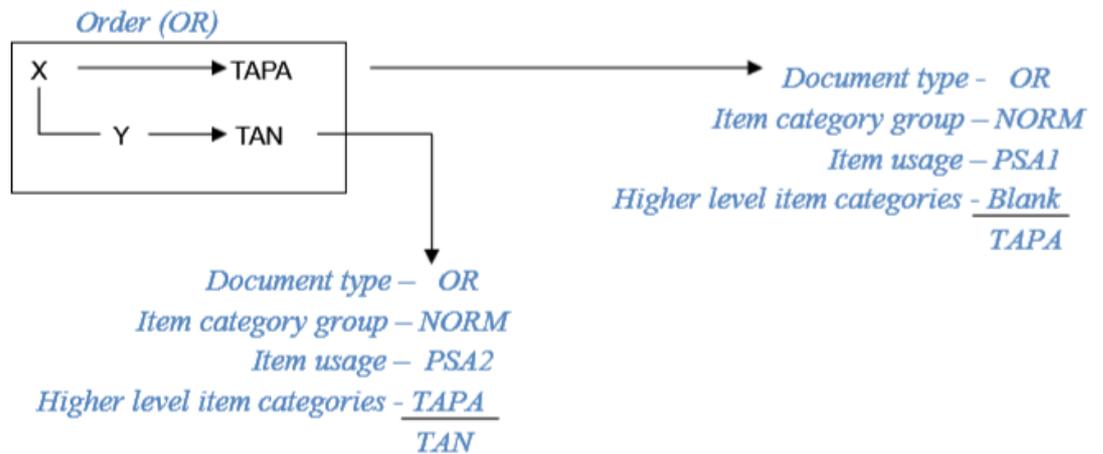


*Ex.- Material determination header pricing*





*Ex.- Material determination Item pricing*



In item category determination we have 11 manual item categories. The manual item category will help to change the item category manually in sales document.

Item category determination scenario

**1<sup>st</sup> Scenario**

**Item category determination based on document types**

Document type	IN	QT	OR	CS	RO	RE	CR	DR	RK	FD
Item category group	NORM									
Item usage										
Higher level item categories										
Default item category	AFN	AGN	TAN	BVN	TAN	REN	G2N	L2N	G2N	KLN



Document type	SDF	QC	WK1	WK2	DS	CF	C1	CONR	CP
Item category group	NORM								
Item usage									
Higher level item categories									
Default item category	KLN	KMN	WKN	WKN	LPN	KBN	KEN	KRN	KAN

## 2<sup>ND</sup> Scenario

Item category determination only based on item category group

	Standard	Third party	IPO	Make to Order	BOM header	BOMitem
Document type	OR	OR	OR	OR	OR	OR
Item category group	NORM	BANS	BANC	0001	ERLA	LUMF
Item usage						
Higher level item categories						
Default item category	TAN	TAS	TAB	TAK	TAQ	TAP



Item category group will help to determine different item category, material wise for the same document type.

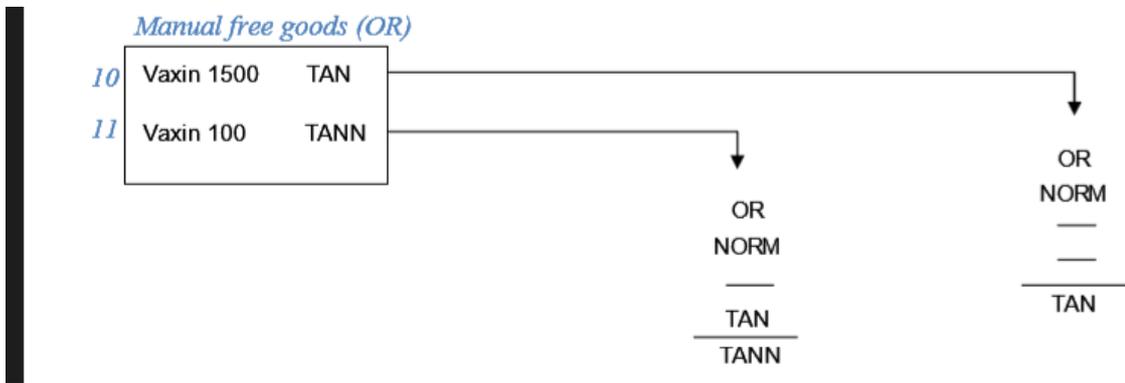
### 3<sup>rd</sup> Scenario

Item category determine based on higher level item

category i) Manual free goods (Sub scenario)

System consider higher level item. Whenever system is determining item category for sub item.

Manual free goods (OR)

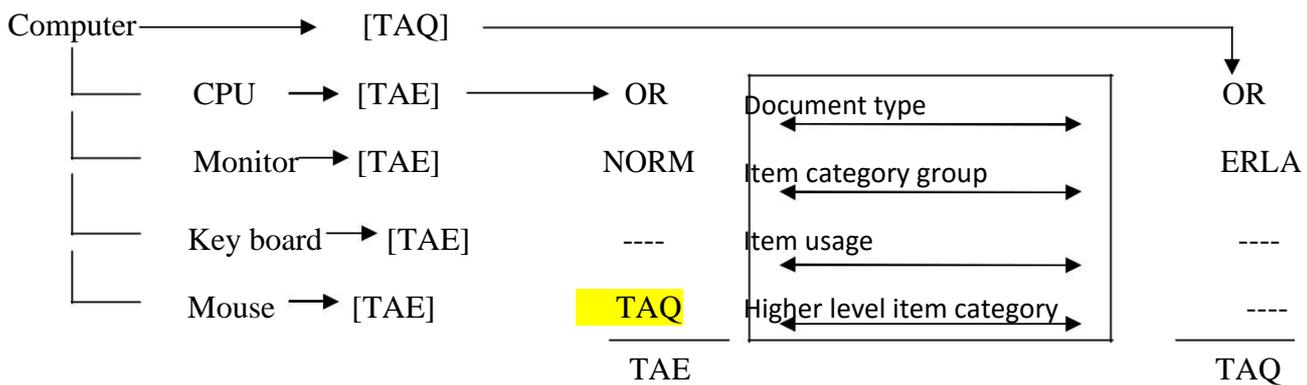


Q. How systems determine item categories for manual free goods item?

Ans. OR + NORM + no usage + TAN = TANN

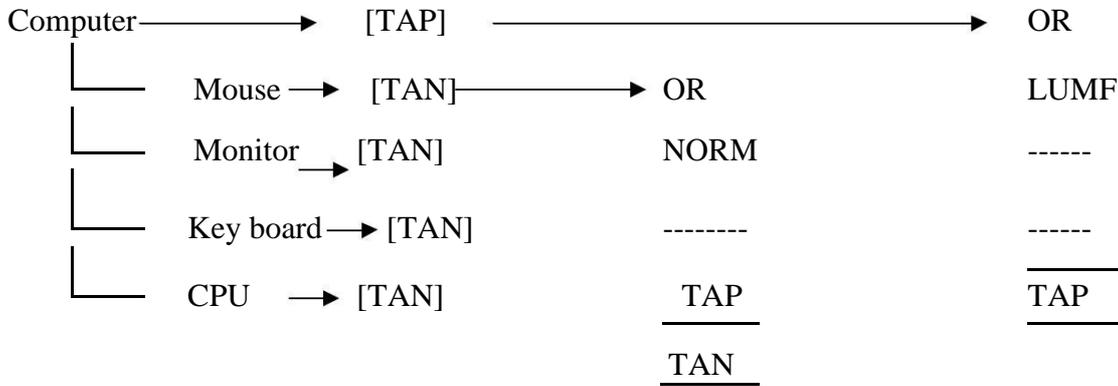
Q. Clients requirement is system should not allow the users to enter free goods manually into sales document. Ans. Delete the combination of OR + NORM + Blank + TAN = TANN.

ii) **BOM header pricing (sub scenario)**

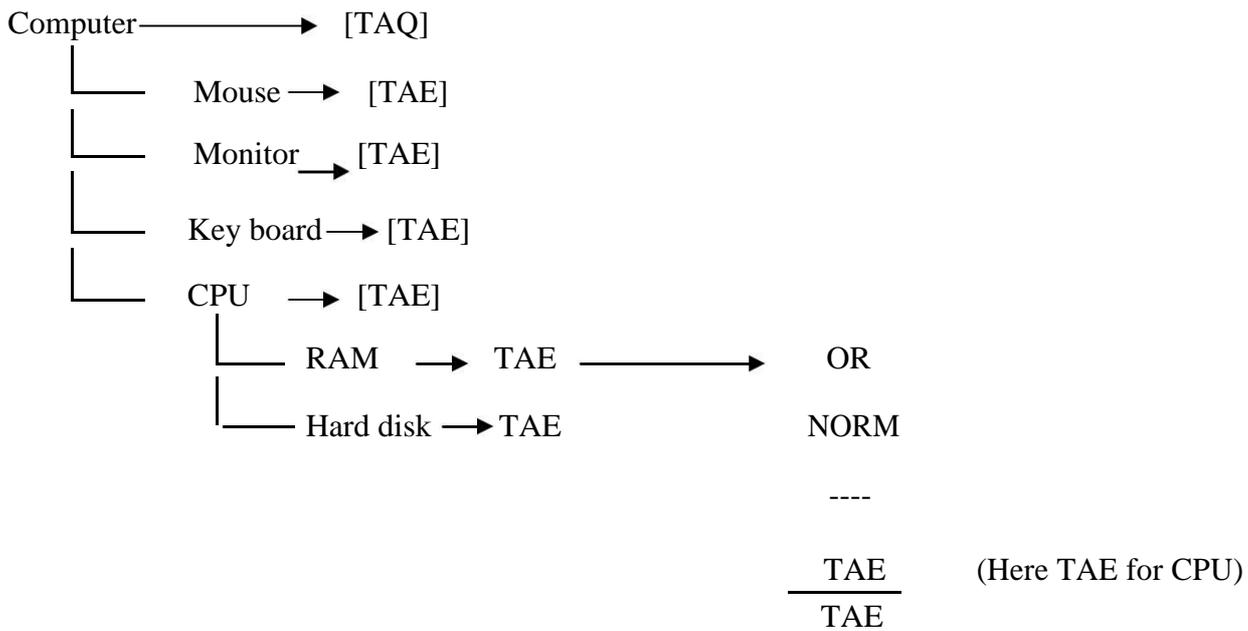




iii) **BOM Item pricing (sub scenario)**

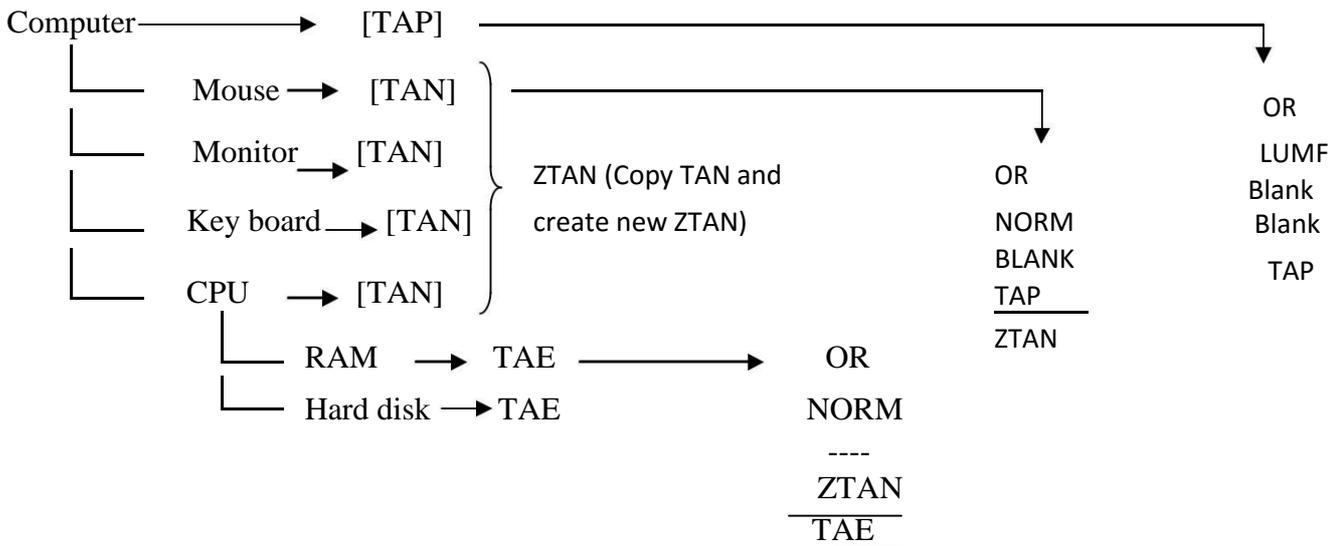


v) **Multi level BOM header pricing**





v) **Multi level BOM item pricing**



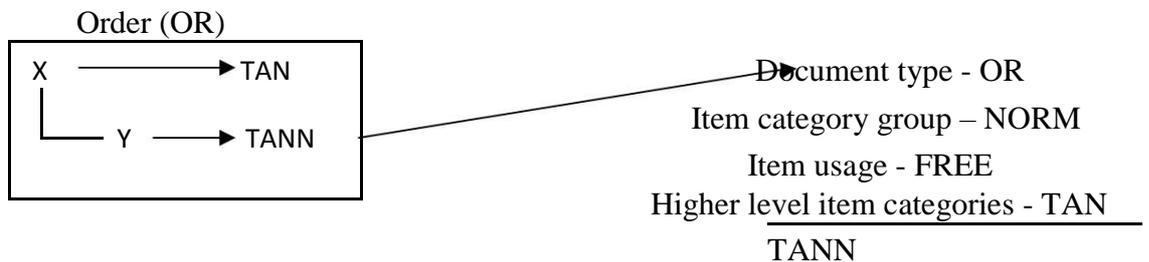
4<sup>th</sup> scenario

**Item category determination based on item usage**

i) System considers item usage whenever sub item is automatically determining into sales document other than BOM.

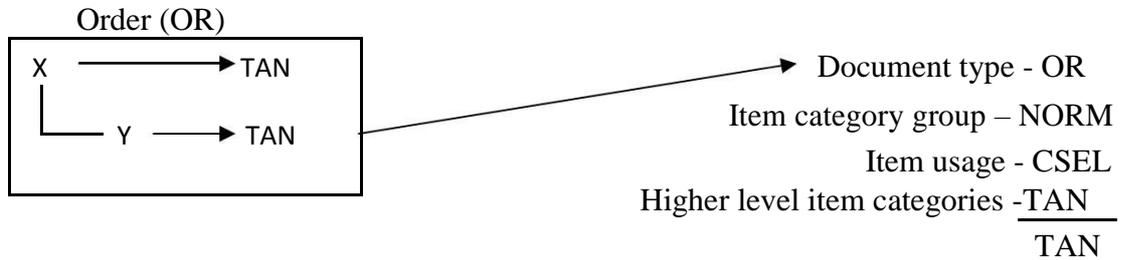
Ex. Free goods (usage – FREE), cross selling (CSEL), material determination header item (PSHP) Sub item (PSEL), material determination item pricing header (PSA1) sub item (PSA2), Batch split (CHSP).

Ex for item usage is : **Automatic free goods**

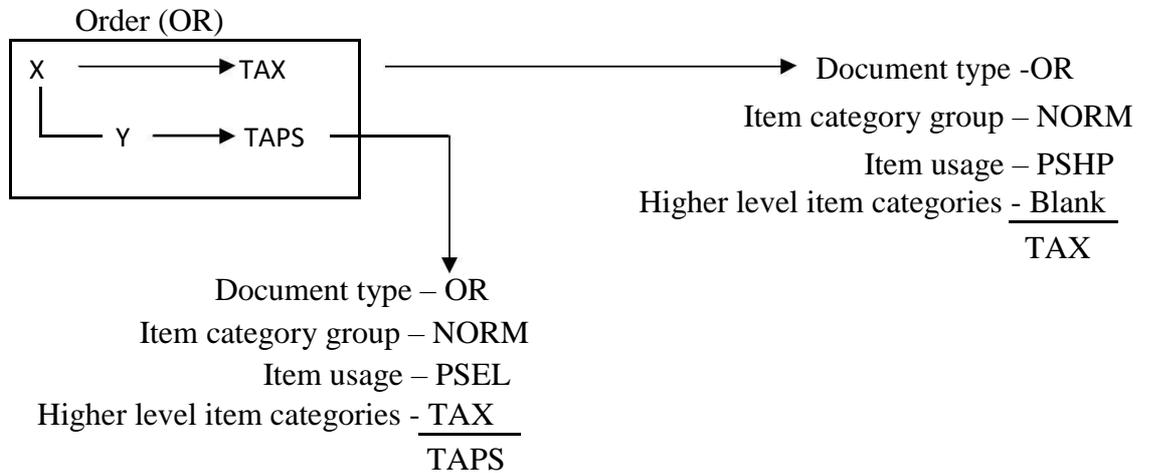




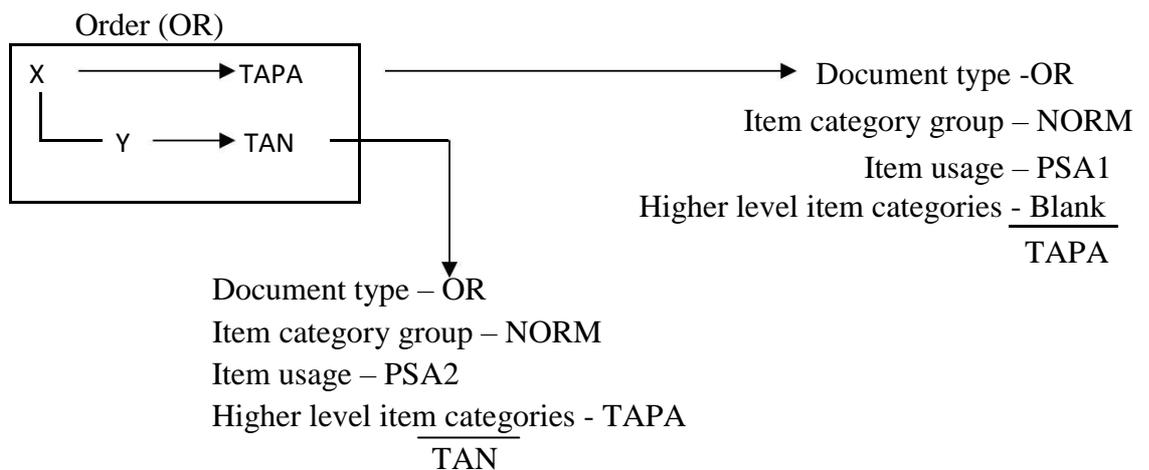
Ex for **Cross selling**: -



Ex.- **Material determination header pricing**



Ex.- **Material determination Item pricing**



\* Item usage will be considered automatically by the system, but one place we can control item usage manually i.e. CMIR.

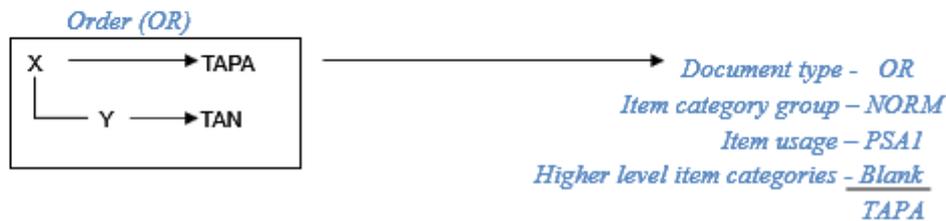


ii) System considers item usage whenever it determine different item category for the same combination of document type and item category group.

Ex while determining TAX (Material determination header pricing –header item)



Ex - TAPA (material determination item pricing – header item)



### Client requirement

If some customers purchase slow moving item, system should not update the value into credit management.

### Solution:-

Step 1 copy TAN to YTAN and uncheck credit active in YTAN.

Step 2 Create new item usage, Path SPRO S&D sales sales document sales document item define item category usage go to new entry and create own item usage (Q111) save it.

Step 3 Maintain CMIR for those customer & materials,

Path go to VD51 maintain new item usage put customer no. i.e. 711 or 712 maintain material QVAL1, QVAL2, QVAL3 put material no. i.e. Q1, Q2, Q3 enter Q111

Step 4 Item category determinations, path VOV4 go to new entries OR NORM Q111 no higher level YTAN save it



## **Schedule line Categories**

- The table for schedule line data is [VBEP].
- Schedule line data consists of delivery dates and confirmed quantities.
- Schedule line data will be controlled by schedule line categories.

The T-code to define schedule line category is [VOV6]

Path for defining schedule line categories:

SPRO S& D sales document sales line define schedule line categories



S.NO	Transaction	Doc Types (VOV8)	Doc Type Controls	Item Category (VOV7)	Item Cat Group	Schedule Line Cat (VOV6)	Delivery Type (OVLV/OVLP)	Billing Type (VOFA)
1	Inquiry	IN	A	AFN	NORM	AN or AT	-	-
2	Quotation	QT	B	AGN	NORM	BN or BT	-	F5
3	Order	OR	C	TAN	NORM	CP or CN	LF	F2
4	Rush Order	RO	C	TAN	NORM	CP or CN	LF	F2
5	Cash Sales	CS	C	BVN	NORM	DN	BV	BV
6	Return Order	RE	H	REN	NORM	-	LR	RE
7	Credit Memo Req	CR	K	G2N	NORM	-	-	G2
8	Debit Memo Req	DR	L	L2N	NORM	-	-	L2
9	Invoice Correction Req	RK	K	G2N	NORM	-	-	G2
10	Free Of Charge	FD	I	KLN	NORM	CP or CN	LF	F8
11	Subsequent Del Free Of Charge	SDF	I	KLN	NORM	CP or CN	LF	F8
12	Consignment Fill Up	CF	C	KBN	NORM	E1	LF	F8
13	Consignment Issue	CI	C	KEN	NORM	C1	LF	F2
14	Consignment Returns	CONR	H	KRN	NORM	D0	LR	RE
15	Consignment Pick Up	CP	H	KAN	NORM	F1	LR	-
16	Quality Contract	QC	G	KMN	NORM	-	-	-
17	Value Contract General	WK1	G	WKN	NORM	-	-	-
18	Value Contract Material Specific	WK2	G	WKN	NORM	-	-	-
19	Scheduling Agreement	DS	E	LPN	NORM	CP or CN	LF	F2
20	Free Goods	-	-	TANN	NORM	CP or CN	-	-
21	STO	-	-	NLN	-	NN	NL	F2
22	STO Returns	-	-	NLRN	-	NR	NLR	RE
23	Inter Com. STO	-	-	NLC	-	NC	NLCC	IV
24	Inter Com. STO Returns	-	-	NCRN	-	NS	NCR	IV
25	BOM Header Pric Main Item	-	-	TAQ	ERLA	CP or CN	-	-
26	BOM Header Pric Sub Item	-	-	TAE	NORM	CT	-	-
27	BOM Item Pric Main Item	-	-	TAP	LUMF	CT	-	-
28	BOM Item Pric Sub Item	-	-	TAN	NORM	CP or CN	-	-
29	Material Det Header Pric Main	-	-	TAX	PSHP	CX	-	-
30	Material Det Header Pric Sub	-	-	TAPS	PSEL	PP	-	-
31	Material Det Item Pric Main	-	-	TAPA	PSA1	CD	-	-
32	Material Det Item Pric Sub	-	-	TAN	PSA2	CP or CN	-	-
33	Third Party Process	-	-	TAS	BANS	CS	-	-
34	IPO Process	-	-	TAB	BANC	CB	-	-
35	MTO Process	-	-	TAK	0001	CP or CN	-	-
36	Variant	-	-	TAC	0002	CP or CN	-	-
37	Third Party Returns	-	-	TASG	BANS	CS	-	-
38	Text Item	-	-	TATX	-	-	-	-
39	Value Item	-	-	TAW	-	-	-	-
40	Service Item Cat	-	-	TAD	-	-	-	-
41	Cross Selling	-	-	-	-	-	-	-



\* In material master if we maintain MRP type as [PD] then system determines schedule line category as "CP".

\* If we maintain MRP type as [ND] then system determines schedule line category as "CN".

**Delivery Block:** - If we maintain delivery block in document types then it will be applicable for all data. if we maintain here then this block will be applicable to particular schedule line in sales document line item.

**Movement Type:** - Every physical movement of goods, requires movement type information.

Movement type will have two effects: -

- + It specifies from where goods are moving to where (stock updating).
- + It controls whether to generate inventory accounting document or not.

System considers movement type at the time of PGI. Whenever we do PGI system updates the stocks and inventory accounting document generates. These two activities happen with the help of movement type.

### Movement Types & Effects

#### Post Goods Issue:-

<b>Scheduling line category</b>	<b>Movement Type</b>
CP	601

- Effect:
1. Stock will be reduced from unrestricted stock
  2. Inventory accounting document generates.

{	Cost of goods sold A/c _ Dr. To, Inventory A/c..... Cr.	}
---	------------------------------------------------------------	---

#### Returns:-

<b>Scheduling line category</b>	<b>Movement Type</b>
(In case of damage stock) DN	651 (adding the stock to return stock)

- Effect:
1. Stock will be added to return stock.
  2. Inventory accounting document will not be generates



**Returns-Over Delivery:-**

Scheduling line category	Movement Type
--------------------------	---------------

(In case of dumping stock)      DN      653      (adding to unrestricted stock)

Effect: 1. Stock will be added to unrestricted stock.

2. Inventory accounting document generates.

[ Inventory A/c .....Dr.  
 To, COGS A/c .....Cr. ]

**Returns-Quality Inspection :-**

Scheduling line category	Movement Type
--------------------------	---------------

(In case of defect stock)      DN      655      (adding stock to quality stock)

Effect: 1. Stock will be added to quality inventory stock.

2. Inventory accounting document will be generates.

[ Inventory A/c .....Dr.  
 To, COGS A/c.....Cr. ]



**Returns-Blocked Stock:-**

Scheduling line category	Movement Type
--------------------------	---------------

(In case of expiry stock)      DN      657      (adding stock to block stock)

Effect: 1. Stock will be added to blocked stock.

2. Inventory accounting document will be generates.

Inventory A/c .....	Dr.
To, COGS A/c.....	Cr.

**Movement type for reserve PGI – [602]**

Effect: 1. Stock will be added to unrestricted stock.

2. Inventory accounting document will be generated.

Inventory A/c .....	Dr.
To, COGS A/c.....	Cr.

\* The T- code for reverse PGI is [**VL09**]

**Schedule line category for consignment fill up (E1)**

Scheduling line category	Movement Type
--------------------------	---------------

E1      631

Effect: 1. Stock will be reduced from unrestricted stock and it will add the stock to consignment stock.

2. Inventory accounting document will not generate.



**Schedule line category for consignment issue (C1)**

Scheduling line category	Movement Type
C1	633

Effect: 1. Stock will be reduced from consignment stock.

2. Inventory accounting document will be generate.

[ COGS A/c.....Dr.  
 To, Inventory A/c.....Cr. ]

**Schedule line category for consignment return (D0)**

Scheduling line category	Movement Type
D0	634

Effect: 1. Stock will be added to consignment stock.

2. Inventory accounting document will be generate.

[ Inventory A/c .....Dr.  
 To, COGS A/c .....Cr. ]

**Schedule line category for consignment Pick up (F1)**

Scheduling line category	Movement Type
F1	632

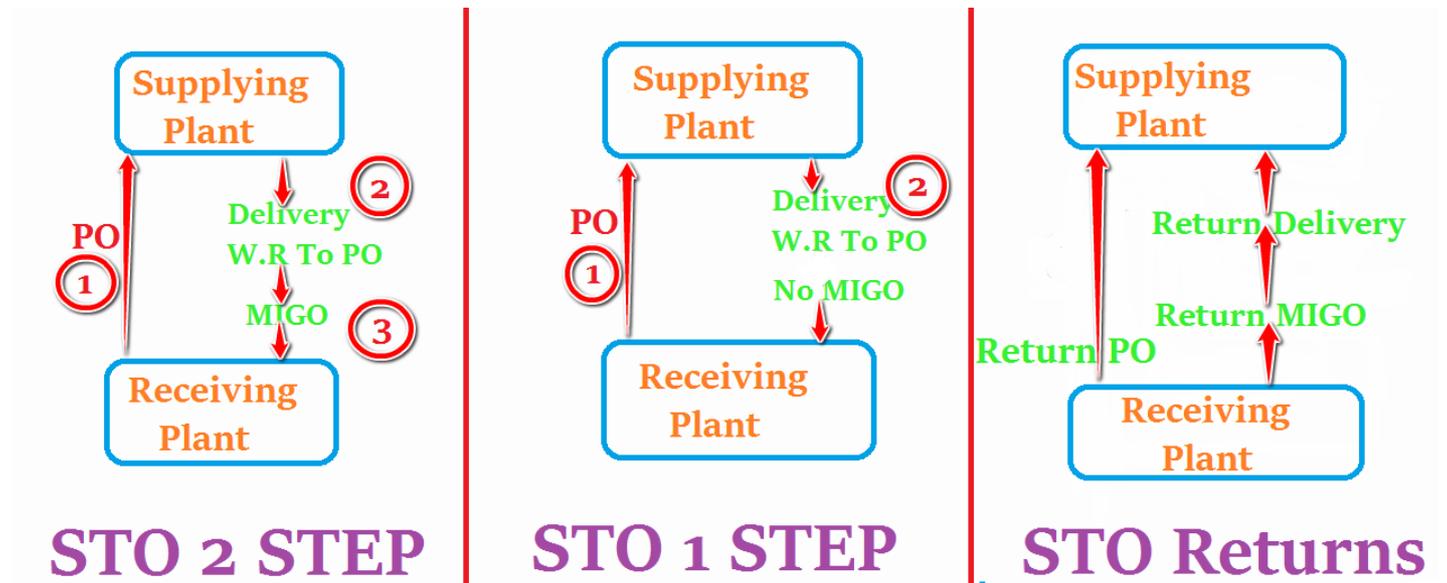
Effect: 1. Stock will be reduced from consignment stock and stock will be added back to unrestricted stock.

2. Inventory accounting document will not be generated.



## STO (Stock transfer order)

- “Transferring the stock from one plant to another plant.”



### In STO we have two types:

- STO 2 step
  - STO 1 step
- In Indian scenario we never use STO 1 step.

### Process of STO 2 step:-

**1<sup>st</sup> step** Receiving plant raises PO of X –Material | 200-Quantity to supplying plant

**2<sup>nd</sup> step** when we do delivery in supplying plant, then stock will be reduced from supplying plant and stock will be displayed as stock in transit in receiving plant.

**3<sup>rd</sup> step** when the goods actual reached at receiving plant, then we do MIGO. Then stock in transit will be converted into actual stock.

### STO one step Process:-

### Schedule line category for STO is (NN)

Scheduling line category	Movement Type
NN	641 Two step

**Effect:** 1. Stock will be reduced from supplying plant and stock will displayed in transit at receiving plant.

2. Inventory accounting document will generate.



Stock inward movement A/c Dr.  
 To, stock outward A/c.....Cr.

**Schedule line category for STO is (NN)**

Scheduling line category	Movement Type
NN	647 One step

- Effect:** 1. Stock will be reduced from supplying plant and stock will be added in receiving plant.  
 2. Inventory accounting document will generate.

Stock inward movement A/c Dr.  
 To, stock outward A/c.....Cr.

**STO return:-**

**Schedule line category for STO return is (NR)**

Scheduling line category	Movement Type
NR	Two step 671 677 One Step

**Intercompany STO:-**

**Schedule line category for intercompany STO is (NC)**

Scheduling line category	Movement Type
NC	Two step 643 645 One Step

**Intercompany STO return:-**

**Schedule line category for intercompany STO return is (NS)**

Scheduling line category	Movement Type
NS	Two step 673 675 One Step



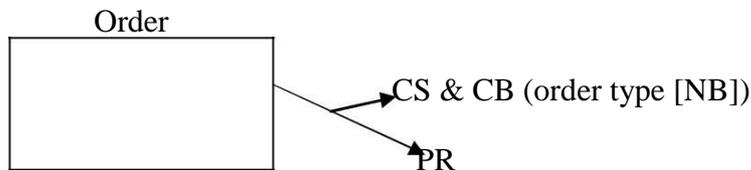
**Item relevant for delivery:** - This field controls whether item is relevant for delivery or not. If we check then item is relevant for delivery.

“CT” schedule line category will have item relevant for delivery and CT schedule line category doesn't have movement type i.e. this item will be determined into delivery document as a dummy item and stock will not be reduced.

**Order Type:** - We use this field only for “CS” and “CB” i.e. for Third party and IPO.

We maintain (order type [NB]) in this field.

Order type “NB” will help to generate purchase requisition automatically in the back ground, while creating sales order in third party process and IPO process.



**Item category:** - Item category will be used only for “CS” (third party) and “CB” (IPO).

The purpose of item category in schedule line category is, like sales document, MM documents also require item category.

While creating PR manually user will maintain item category manually in purchases requisition.

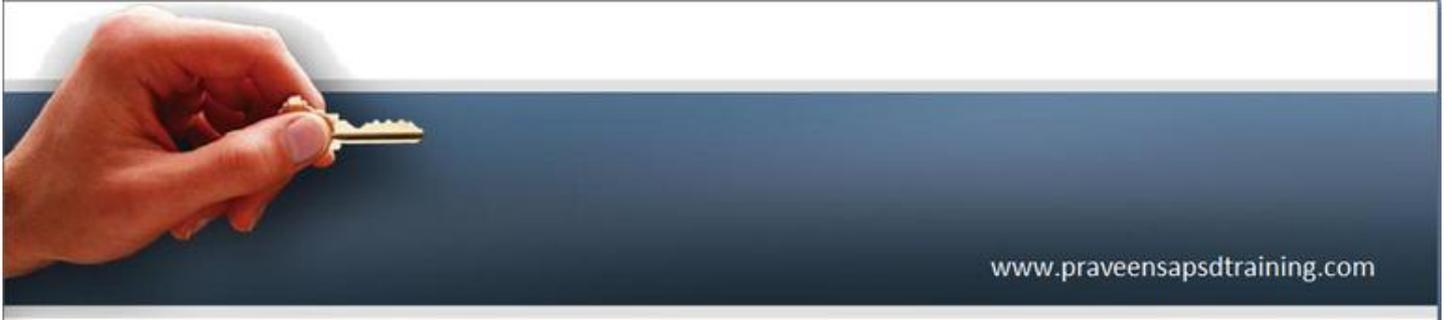
But in Third party process and IPO process, PR will be automatically generated in the background. So we are sending item category information from schedule line category to purchases requisition.

➤ For third party “CS” we maintain item category as [5].

Item category [5] controls that even we do MIGO in third party process with shipping notification, system will treat it as dummy MIGO and stock will not be updated.

➤ For IPO “CB” we maintain item category as [0].

Item category “0” controls that if we do MIGO in IPO process, system will treat it as actual MIGO and stocks will be updated.



<u>CS</u>	<u>CB</u>
Movement type [ ]	
Order type [NB]	[NB]
Item category [5]	[0]
Account assignment category [1]	[E]
Purchase requisition delivery schedule [ ]	<input checked="" type="checkbox"/>
Item relevant delivery [ ]	<input checked="" type="checkbox"/>

**Account assignment category:** - This field controls whether to generate inventory accounting document at the time of MIGO or PGI.

**Purchases requisition delivery schedule:** - We check this only for CB schedule line category. If we check this then the delivery dates and confirmed quantities information will be copied from sales order to PR.

**Requirement assembly:** - This field is one of the prerequisite to transfer the sales order requirement to MRP. If we check this then only sales order quantity will be update in MRP (MD04).

**Availability:** - This field is one of the prerequisite to perform availability check in sales order. If we check this then only system will perform availability check in sales order

CP (MRP)(PD)	CN (w/o MRP) (ND)
Requirement assembly	<input type="checkbox"/> Requirement assembly
Availability	<input type="checkbox"/> Availability

**Product allocation:** - If we want to reserve the stock to customer or customer groups to meet future requirement then we have to check it.

CP	CI
Movement type [601]	No movement type



## Schedule line category determination

The T-code is “VOV5”

Schedule line category determination is based on item category + MRP type = Default schedule line category

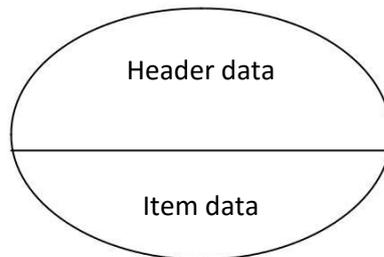
Item category	TAN	TAN	AFN	TAE
MRP	<u>PD</u>	<u>ND</u>	<u>PD</u>	<u>PD</u>
Schedule line category	<u>CP</u>	<u>CN</u>	<u>AN</u>	<u>CT</u>

While determining schedule line category in sales document, system will give first preference to item category + MRP type combination. if that combination is not maintained then system will give 2<sup>nd</sup> preference to only item category.



## DELIVERY TYPES

Structure of delivery documents:-



Header data :- will be controlled by delivery types.

Item data :-

- ✚ will be controlled by delivery item category.
- ✚ The table for header data is “LIKP”.
- ✚ The table for item data is “LIPS”.
- ✚ The T-code to defining delivery types is [0VLK] or [OVLK].

### The path for defining delivery types:-

SPRO logistic execution shipping delivery define delivery types.



S.NO	Transaction	Doc Types (VOV8)	Doc Type Controls	Item Category (VOV7)	Item Cat Group	Schedule Line Cat (VOV6)	Delivery Type (OVLP/OVLP)	Billing Type (VOFA)
1	Inquiry	IN	A	AFN	NORM	AN or AT	-	-
2	Quotation	QT	B	AGN	NORM	BN or BT	-	F5
3	Order	OR	C	TAN	NORM	CP or CN	LF	F2
4	Rush Order	RO	C	TAN	NORM	CP or CN	LF	F2
5	Cash Sales	CS	C	BVN	NORM	DN	BV	BV
6	Return Order	RE	H	REN	NORM	-	LR	RE
7	Credit Memo Req	CR	K	G2N	NORM	-	-	G2
8	Debit Memo Req	DR	L	L2N	NORM	-	-	L2
9	Invoice Correction Req	RK	K	G2N	NORM	-	-	G2
10	Free Of Charge	FD	I	KLN	NORM	CP or CN	LF	F8
11	Subsequent Del Free Of Charge	SDF	I	KLN	NORM	CP or CN	LF	F8
12	Consignment Fill Up	CF	C	KBN	NORM	E1	LF	F8
13	Consignment Issue	CI	C	KEN	NORM	C1	LF	F2
14	Consignment Returns	CONR	H	KRN	NORM	D0	LR	RE
15	Consignment Pick Up	CP	H	KAN	NORM	F1	LR	-
16	Quality Contract	QC	G	KMN	NORM	-	-	-
17	Value Contract General	WK1	G	WKN	NORM	-	-	-
18	Value Contract Material Specific	WK2	G	WKN	NORM	-	-	-
19	Scheduling Agreement	DS	E	LPN	NORM	CP or CN	LF	F2
20	Free Goods	-	-	TANN	NORM	CP or CN	-	-
21	STO	-	-	NLN	-	NN	NL	F2
22	STO Returns	-	-	NLRN	-	NR	NLR	RE
23	Inter Com. STO	-	-	NLC	-	NC	NLCC	IV
24	Inter Com. STO Returns	-	-	NCRN	-	NS	NCR	IV
25	BOM Header Pric Main Item	-	-	TAQ	ERLA	CP or CN	-	-
26	BOM Header Pric Sub Item	-	-	TAE	NORM	CT	-	-
27	BOM Item Pric Main Item	-	-	TAP	LUMF	CT	-	-
28	BOM Item Pric Sub Item	-	-	TAN	NORM	CP or CN	-	-
29	Material Det Header Pric Main	-	-	TAX	PSHP	CX	-	-
30	Material Det Header Pric Sub	-	-	TAPS	PSEL	PP	-	-
31	Material Det Item Pric Main	-	-	TAPA	PSA1	CD	-	-
32	Material Det Item Pric Sub	-	-	TAN	PSA2	CP or CN	-	-
33	Third Party Process	-	-	TAS	BANS	CS	-	-
34	IPO Process	-	-	TAB	BANC	CB	-	-
35	MTO Process	-	-	TAK	0001	CP or CN	-	-
36	Variant	-	-	TAC	0002	CP or CN	-	-
37	Third Party Returns	-	-	TASG	BANS	CS	-	-
38	Text Item	-	-	TATX	-	-	-	-
39	Value Item	-	-	TAW	-	-	-	-
40	Service Item Cat	-	-	TAD	-	-	-	-
41	Cross Selling	-	-	-	-	-	-	-



If we create new delivery types then assign it with sales order type.

### Delivery Document Types Controls

**Document category:** - This field controls the functioning of the delivery document.

For Standard delivery type the document category is “J”.

Return delivery type the document category is “T”.

If document category is “J” then while creating delivery system proposes post goods issue (PGI).

If document category is “T” then while creating delivery system proposes post goods receive (PGR).

**Q. While doing return delivery system will propose PGR. Where is the control?**

**Ans:- Document category T**

**Number system:** - In delivery document also we have option of both external number and internal number.

**Item number increment:** - This field controls how the line item number should be incremented in the delivery document.

**Order required:** - This field controls whether any preceding document is required or not to create a delivery document.

For “LF” order required, is sales order required.

For “LO” order required, is No preceding document required.

For “NL – NLR – NLCC – NCR” order required is, purchases order required.

System considers default order type ‘DL’, whenever order required field is “No sales order required” i.e. for LO and NL.

System consider default order type “DL” to determine movement type while doing PGI.

**Q. While creating delivery W/O order reference, how system is determining movement type information?**

**Ans. Default Order Type DL**

**Item Requirement:** - This field controls whether to add new line item in delivery document or not. If we want to add new line item in delivery document then maintain item requirement as [202].

If we don’t want to add new line item in delivery document then maintain item requirement as [201].



**Storage location rule:** - This field will help to determine storage location automatically into delivery document. We have three types of storage location rules: -

- i) MALA :- MALA rule specifies, storage location should be determined into delivery document based on shipping point + plant + storage condition.
- ii) RETA :- RETA rule specifies, that storage location should be determined based on shipping point + Situation + storage condition.
- iii) MARE :- MARE rule specifies that first check MALA rule, if MALA rule is not maintained then check RETA rule.

### **Delivery item category**

The T-code for defining delivery item category is [0VLP].

Path is same as delivery types.

In real time we don't create new delivery item categories. Whatever the item category we create in sales documents that will be automatically reflected in delivery item categories

**Material number 0 allowed:** - This field controls whether to allow creating delivery document without any material code or not. We create delivery without material code in case of text item.

**Item category statics group:** - This field controls whether to update delivery data into LIS or not.

**Check quantity 0:** - This field controls how system should respond, if the quantity of material in the delivery document is zero i.e. whether to give warning message or error message or no message.

**Check minimum quantity:** - This field controls how system should respond, if the quantity in the delivery document is less than minimum delivery quantity maintained in material master i.e. whether to give warning message or error message or no message.

**Check over delivery:** - This fields control how system should respond, if user is increasing the quantity in delivery document more than order quantity i.e. whether to give warning or error or no message.

**Q. My user is increasing the quantities in delivery document more than order quantity, i want to restrict that. Where is the control?**

**Ans. - Check over delivery – maintain “B”, but also check over delivery tolerance or unlimited tolerance in customer shipping point.**

**Check over delivery concept will not work if we check unlimited tolerance in customer master.**



**Relevant for picking:** - This field controls whether item is relevant for picking or not. If we uncheck relevant for picking then the pick quantity field in delivery document will be disabled and system will allow doing PGI without picking.

In standard BVN, REN, KRN, KAN will have relevant for picking.

**Determine storage location:** - If we check this then system will try to determine storage location automatically into delivery document basing on storage location rule.

**Automatic batch determination:** - If we check this the batch number will be automatically determined into delivery document.



## Billing Document Types

The T-code for billing type is “VOFA”.

SPRO S&D billing billing document define billing types



S.NO	Transaction	Doc Types (VOV8)	Doc Type Controls	Item Category (VOV7)	Item Cat Group	Schedule Line Cat (VOV6)	Delivery Type (OVL/0VLP)	Billing Type (VOFA)
1	Inquiry	IN	A	AFN	NORM	AN or AT	-	-
2	Quotation	QT	B	AGN	NORM	BN or BT	-	F5
3	Order	OR	C	TAN	NORM	CP or CN	LF	F2
4	Rush Order	RO	C	TAN	NORM	CP or CN	LF	F2
5	Cash Sales	CS	C	BVN	NORM	DN	BV	BV
6	Return Order	RE	H	REN	NORM	-	LR	RE
7	Credit Memo Req	CR	K	G2N	NORM	-	-	G2
8	Debit Memo Req	DR	L	L2N	NORM	-	-	L2
9	Invoice Correction Req	RK	K	G2N	NORM	-	-	G2
10	Free Of Charge	FD	I	KLN	NORM	CP or CN	LF	F8
11	Subsequent Del Free Of Charge	SDF	I	KLN	NORM	CP or CN	LF	F8
12	Consignment Fill Up	CF	C	KBN	NORM	E1	LF	F8
13	Consignment Issue	CI	C	KEN	NORM	C1	LF	F2
14	Consignment Returns	CONR	H	KRN	NORM	D0	LR	RE
15	Consignment Pick Up	CP	H	KAN	NORM	F1	LR	-
16	Quality Contract	QC	G	KMN	NORM	-	-	-
17	Value Contract General	WK1	G	WKN	NORM	-	-	-
18	Value Contract Material Specific	WK2	G	WKN	NORM	-	-	-
19	Scheduling Agreement	DS	E	LPN	NORM	CP or CN	LF	F2
20	Free Goods	-	-	TANN	NORM	CP or CN	-	-
21	STO	-	-	NLN	-	NN	NL	F2
22	STO Returns	-	-	NLRN	-	NR	NLR	RE
23	Inter Com. STO	-	-	NLC	-	NC	NLCC	IV
24	Inter Com. STO Returns	-	-	NCRN	-	NS	NCR	IV
25	BOM Header Pric Main Item	-	-	TAQ	ERLA	CP or CN	-	-
26	BOM Header Pric Sub Item	-	-	TAE	NORM	CT	-	-
27	BOM Item Pric Main Item	-	-	TAP	LUMF	CT	-	-
28	BOM Item Pric Sub Item	-	-	TAN	NORM	CP or CN	-	-
29	Material Det Header Pric Main	-	-	TAX	PSHP	CX	-	-
30	Material Det Header Pric Sub	-	-	TAPS	PSEL	PP	-	-
31	Material Det Item Pric Main	-	-	TAPA	PSA1	CD	-	-
32	Material Det Item Pric Sub	-	-	TAN	PSA2	CP or CN	-	-
33	Third Party Process	-	-	TAS	BANS	CS	-	-
34	IPO Process	-	-	TAB	BANC	CB	-	-
35	MTO Process	-	-	TAK	0001	CP or CN	-	-
36	Variant	-	-	TAC	0002	CP or CN	-	-
37	Third Party Returns	-	-	TASG	BANS	CS	-	-
38	Text Item	-	-	TATX	-	-	-	-
39	Value Item	-	-	TAW	-	-	-	-
40	Service Item Cat	-	-	TAD	-	-	-	-
41	Cross Selling	-	-	-	-	-	-	-



Performa Invoice is a dummy invoice which will not generate accounting entry.

We do Performa invoice when the process is not relevant for invoice.

**\* For billing document there is no provision of external number because its legal requirement that billing document number should be always in sequence.**

**SD document categories:** - This field controls the functioning of the billing document and also controls accounting entry while creating invoice.

Billing Type	Document Categories	Account Entries
F2	M	Customer A/c.....Dr. To, Revenue A/c.....Cr.
RE & G2	O	Revenue A/c.....Dr. To, Customer A/c....Cr.
F5 & F8	U	No accounting entry

Q. Where is the control, when we create return invoice the accounting entry is Revenue A/c.....Dr.

Ans.- SD Document category – “O”

To, Customer A/c....Cr.

Q. Where is the control that when we create proforma invoice system will not generate accounting entry?

Ans. SD document category – “U”

**Posting block:** - If we check this accounting document will not generate automatically while creating invoice the user has to post it manual

To post the invoice into accounting manually go to change mode of invoice and click on release (Flag symbol).

The T-code to post collective billing document into accounting is [VFX3].

**Statistics:** - This field controls whether to update billing document data into LIS or not.

**Document type:** - The document type for accounting document is “RV”.

**Negative posting:** - This field controls if the billing document values is in negative whether to generate accounting document or not.



**Invoice list type:** - The standard invoice list type is “LR” and T-code for invoice list is [VF21] or [VF24].

**Relevant for rebate:** - This field is one of the prerequisite to process rebate.

The total prerequisite to process rebates:

1<sup>st</sup> Sales org – Rebate proactive check.

2<sup>nd</sup> Customer master – Rebate check

3<sup>rd</sup> Billing type – Relevant for rebate check

**Cancellation billing type:** - Standard cancellation invoice billing type is “S1”

Return and credit memo cancellation billing type is “S2”

**Account determination procedure:** - This procedure will help to determine revenue G/L account, while posting invoice values into accounting.

When we create invoice system generate accounting document and the accounting entry is

Customer A/c.....Dr

To, Revenue A/c.....Cr.

For the customer account, system determines G/L account from reconciliation account.

For the revenue account, system determines G/L account based on account determination procedure (Revenue account determination).

The standard account determination procedure is [KOFI00].

**Document pricing procedure:** - This field is one of the parameter to determine pricing procedure in billing document.

Normally pricing will be copied from sales order to invoice, but in some scenarios if we don't have sales order then we determine pricing procedure in invoice with the help of this field.

**Account determination reconciliation A/c:** - Normally when we create invoice for the customer account, system determine reconciliation account from customer master. But the client requirement is reconciliation account should not be determine from customer master, it should be determine based on some combination like (Plant + Division) then we use account determination reconciliation account.

**Account determination cash settlement:** - We use this field only for cash sales billing type “BV” when we create invoice in cash sales process the accounting entry is

[Cash settlement A/c..... Dr.

To, RevenueA/c..... Cr]for cash settlement account system determine G/L account from account determination cash settlement.



## **Some important points**

### **Split criteria for deliveries**

1. Ship to party should be same
2. Shipping point
3. Incoterms
4. Delivery date
5. Route

### **Standard split criteria for billing**

1. Payment terms
2. Payer
3. Billing date

### **The activity system perform when we do PGI**

1. Inventory account document generates
2. Stock updates
3. It updates in document flow [VBFA]
4. It updates in credit management
5. It updates in billing due list
6. It updates in LIS

### **The activity system perform when we create invoice**

1. Accounting document generate
2. It generates profitability analysis document
3. It generates cost centre document
4. It updates in document flow
5. It updates in credit management
6. It updates in LIS

### **The activity system perform when we create sales order**

- |                           |                        |                       |                             |
|---------------------------|------------------------|-----------------------|-----------------------------|
| 1. Partner determination  | 4. Free goods          | 7. Pricing            | 10. Output determination    |
| 2. Listing exclusion      | 5. Delivery schedule   | 8. Credit management  | 11. Transfer of requirement |
| 3. Material determination | 6. Availability checks | 9. Text determination |                             |



\* The T-code to combine multiple orders into single delivery [**VL10A**] or [**VL10C**] (it is called collecting processing of deliveries).

First create two different orders then go to VL10A for combine multiple into single delivery mention shipping point mention ship to party click on background click on log select the line and click on documents system will display delivery number select the delivery number and click on display document click on change mode and do PGI

\* Combining multiple deliveries into single invoice the **T-code [VF04]** – (it also called collective processing of billing document).

Billing date    sold to party    select all deliveries    click on collective billing document

\* The T-code to cancel invoice [**VF11**].

\* The T-code to do reverse PGI [**VL09**]

### **Restricting number of line item in invoice**

SPRO S&D billing billing document country specific feature maintain maximum number of billing item go to our sales organisation and mention number of items save it

\* The T-code for collecting processing of picking [**VL06P**].

\* The T-code for collecting processing of PGI [**VL06G**].

\* The T-code for delivery monitors [**VL06O**].



## **Interview Questions-Sales Documents, Item Category,Delivery,Billing**

1. What is the structure of sales document?
2. What is the table for header data?
3. What is the table for item data?
4. What is the table for schedule data?
5. What is the purpose of pricing field?
6. What is the purpose of billing relevance?
7. What is billing relevance in third party?
8. What is the purpose of statistical value?
9. What is the purpose of structured scope?
10. What is the purpose of value contract material?
11. What is the purpose of contract release control?
12. What is the purpose of create po automatic check?
13. What are the total prerequisites to create po automatic?
14. List out the movement types? And its usage?
15. What is item relevant for delivery?
16. When we use one step?
17. What is the diff b/w one step and two step in stock transfer?
18. Mention schedule line cat & movement type for below information? CF,CI,CONR,CP,STO,STO RETURNS,INTER COMP STO,INTER COM STO RETURNS,THIRD PARTY,IPO,RETURNS?
19. What is the purpose of order type in schedule line category?
20. What is the purpose of item category in schedule line category?
21. What item category 5 controls in third party?
22. What is the purpose of acct assignment cat in schedule line cat?
23. What is the purpose of requirement assembly check & availability check in schedule line category?
24. List of delivery types?
25. How you get PGR when you're doing return delivery?
26. What is split criteria for deliveries?



27. What is split criteria for invoice?
28. Can i create delivery without order reference?
29. If yes what is delivery type?
30. If am creating delivery without order reference how system is determining below information?  
MOVEMENT TYPE, ITEM RELAVENT FOR BILLING OR NOT, ITEM RELAVENT FOR DELIVERY OR NOT, DEFAULT BILLING TYPE, PRICING PROCEDURE.
31. Can i enter new line item in delivery?
32. But i want to restrict that where is the control?
33. What is the purpose of storage location rule?
34. Can i increase quantities in delivery?
35. But i want to restrict that where is the control?
36. What scenarios we perform availability check in deliveries?
37. What is determining storage location check in delivery item category?
38. How many maximum deliveries we can make for order?
39. What are the activities systems performs when you do PGI?
40. Prerequisite to combine multiple orders into single delivery?
41. Collective processing of deliveries tcode?
42. Delivery due list tcode?
43. Reverse PGI tcode?
44. What is the movement type for reverse PGI?
45. Collective processing of billing documents tcode?
46. Invoice cancellation tcode?
47. Invoice duelist tcode? What are the activities systems performs when you create invoice?
48. Tcode to post invoice values into accounting manually?
49. What are the prerequisites to process rebates?
50. What are the activities systems performs when you create PGI?
51. What happens if you check posting block in billing types?
52. Diff b/w pro forma invoice and normal invoice?
53. What is the purpose of revenue acct determination procedure?
54. What is the purpose of cash settlement acct determination procedure?



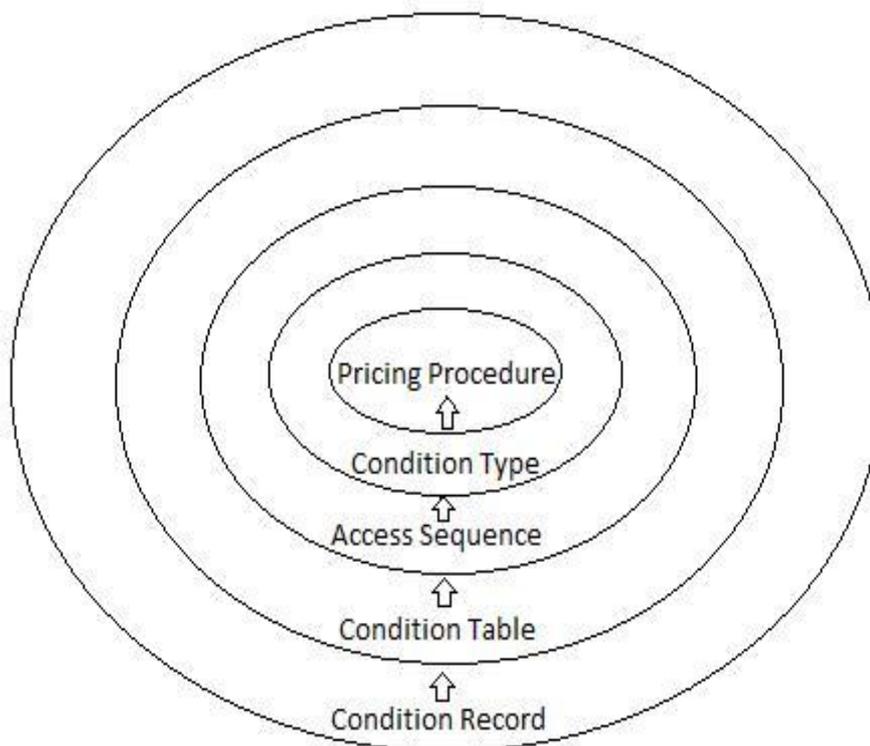
55. What is the purpose of reconciliation acct determination procedure?
56. Accounting entry when you create cash sale invoice?
57. Where is the control that system will not generate accounting document for pro forma invoice?
58. Can i create invoice without PGI?
59. Can i create pro forma invoice without PGI?
60. Can i cancel pro forma invoice?
61. Can i restrict no' of line items in invoice? Where is the control?
62. Can i create partial invoices to single delivery? Where is the control?
63. What are the fields i can change in invoice before accounting document generates?
64. What are the fields i can change in invoice after accounting document generates?



## PRICING

Pricing is based on condition technique. Condition technique is a process of determining condition records into sales document.

- + Condition technique consists of condition records.
- + Condition records will be stored in condition table.
- + Condition table will be placed in access sequence from most specific to most general.
- + Access sequence will be assigned to condition type.
- + Condition type will be placed in pricing procedure.



**Condition records:** - Condition record is the master data for pricing. We also call it as “pricing master”.

The T-code to create condition record is [VK11].

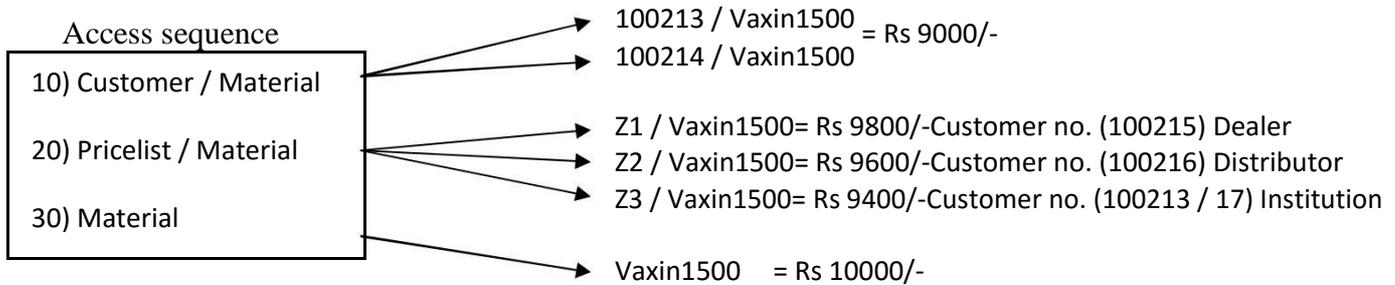
**Condition Table:** - Condition table is the combination of field which will help to maintain the condition record.

- Combination: - 1) Customer / Material  
2) Pricelist / Material  
3) Material



The T-code to create condition table is [V/03].

**Access sequence:** - It is a search strategy which will search for the valid condition record from the most specific to most general.



**Exclusive:** - Exclusive is one field in access sequence. If we check exclusive in access sequence then if system finds valid condition record at any of the combination then system will immediately come out of the search strategy and determine the price into sales document.

If we uncheck exclusive in access sequence even if system find valid condition record system will not come out of the search strategy. It will continue search in other combinations, if system find valid condition record in other combination then it will determine all the condition records into sales document.

If it is a base price, it activate the last one and deactivate previous one .

If it is discount then it will activate all.

The T-code to create access sequence is [V/07].

**Condition type:** - It controls the type of the price components i.e. whether it is a base price or discount or surcharge.

The T-code to create condition type [V/06]

Ex: -Base price	XXX
Discount	- <u>XXX</u>
Gross	XXX
Surcharge	<u>XXX</u>
Net value	XXX
Excise	<u>XXX</u>
Net + Excise	XXX
Tax	<u>XXX</u>
Total	<u>XXX</u>



**Pricing procedure:** - It is a procedure which consists of all the relevant condition types, which are placed in a sequence.

The T-code to create pricing procedure [V/08]

\* **The common T-code for total pricing is [VOK0].**

**Configuration of Base price**

1<sup>st</sup> step - **Defining condition table:** - [V/03]

SPRO → S&D → basic function → pricing control → defining condition table → double click on → create condition table → mention the table number above 500 (Up to 500 the condition table are standard , the user define condition table should be above 500) 505 enter

**Field catalogue:** - “Field catalogue consists of allowed fields to create condition table”, while creating condition table we need to select the fields from field catalogue.

go to field catalogue put the crusher here and select (customer / material) (price list / material) (material) one by one by using page up and page down select and double click on technical and medium to move to selected fields after selecting click on generate → ❌ Icon.

**We can save condition table in local object or package.**

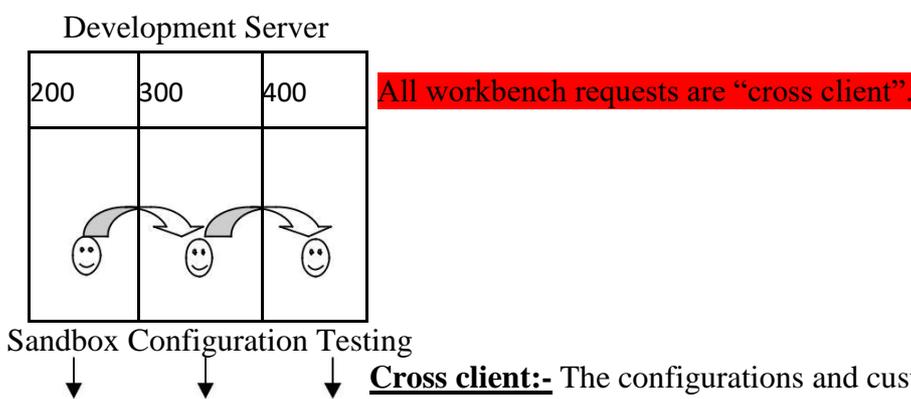
If we save condition table in local object, then system will not generate transport request number. and without transport request number we cannot transfer the condition table from one server to another server.

If we save condition table in package then system generate request number then we can transport to other server.

Basis consultant will provider package (go to F4 and put Z \* enter and search manually ZSDO) and save it.

Condition table will be stored in workbench request.

**In sales and distribution condition table and access sequence will be stored in workbench request, remaining all configurations will be stored in customizing request.**



**Cross client is also called as “Client independent”.**



**Q. Any condition table if we save it in local object then how to get it back into Transportation request?**

**Ans. Go to change mode of condition table [V/04] click on go to -object directly entry mention the package number save it.**

**Allowed fields in condition table:** - Allowed fields will be used to add the fields in field catalogue.

**2<sup>nd</sup> step - Define access sequence:** - In access sequence we place the condition tables from most specific to most general. Access Sequence configuration is also cross client.

[V/07] **Path** SPRO → S&D → Basic function → pricing → pricing control → define access sequence → double click on → maintain access sequence → go to new entries → to create new access sequence In AS (access sequence) mention [ZPR0] [New Access sequence for base price] select new access sequence and double click on access go to new entries mention some number [10] and mention the table number which we created in condition table [505-customer/material] check exclusive **Enter**.

select the condition table and double click on fields ,system will prompt some message Press Enter.

Go back and place another table & mention some number [20] and mention the table number which we created in condition table [509-pricelist/material] check exclusive **ENTER**.

select the condition table and double click on fields ,system will prompt some message Press Enter.

Go back and place another table mention some number [30] and mention the table number which we created in condition table [512-material] check exclusive **ENTER**.

select the condition table and double click on fields ,system will prompt some message Press Enter & SAVE.

**3<sup>rd</sup> step – Define condition types:** - [V/06] SPRO → S&D → Basic function → pricing → pricing control → define condition types → double click on maintain condition type → **Position** → go to PR00 → {The standard condition type for base price is PR00} select the condition type and click on copy create own [YPR0] [Base price] maintain access sequence [ZPR0] which we assigned in access sequence **ENTER & SAVE**.

**4<sup>th</sup> step – Define pricing procedure:** - [V/08] Path SPRO → S&D → Basic function → pricing → pricing control → define & assign pricing procedure → double click on → maintain pricing procedure → {The standard pricing procedure is “RVAA01”} go to **new entries** to define new pricing procedure [ZVAA01] [new pricing procedure] select the pricing procedure double click on **control data** go to **new entries** step(10), CType (YPR0), Reqt (2), Acckey (ERL) save it.



**5<sup>th</sup> step – Assign pricing procedure or pricing procedure determination:** - [OVKK] we assign pricing procedure to combination of **sales area / document pricing procedure / customer pricing procedure = Pricing procedure.** (We have document pricing procedure in sales document types and customer pricing procedure in sales Tab in customer master).

(Document wise if we want to differentiate the pricing procedure then we use the field document pricing procedure. Customer wise if we want to differentiate the pricing procedure then we maintain customer pricing procedure.)

OVKK → Position → Sales area / A / 1 → change customer pricing procedure (ZVAA01) and → condition type (YPR0) save it.

**Q. Why we assign condition type in “OVKK”?**

**Ans. To display condition type amount and condition type value in sales document line item overview.**

**6<sup>th</sup> step – Maintain condition records:** - The T-code is [VK11]

Before Maintaining VK11.

first create five customers with numbers (100213 / 14 / 15 / 16 / 17 / 19) and also create one material (Vaxin1500).

VK11 → Condition type YPR0 → Select → customer/material mention customer number 100213 Mention the Material (Vaxin1500) mention the amount (Rs.9000/-) and Unit (INR) enter save it.

Again go to VK11 and maintain condition record for customer 100214

VK11 Condition type YPR0 Select customer/material mention customer number 100214 Mention the Material (Vaxin1500) mention the amount (Rs.9000/-) and Unit (INR) enter save it.

**7<sup>th</sup> step – Define price list:** -

SPRO → S&D → basic function → pricing → maintain price relevant master data field → define price list categories for customer → new entries → Wholesaler / dealer / Institution → save it

Go to customer master XD02 and assign the pricelist 100215 – Retailer, 100216 – wholesaler, 100217 – Institution save it

Go to condition record VK11 Condition type (YPR0) select pricelist / Material enter Mention price list (Retailer) Material (Vaxin1500) Rs.9800 INR Enter save it

Mention Price list (Wholesaler)    Material (Vaxin1500)    Rs. 9600    INR    Enter    save it

Mention Price list (Institution)    Material (Vaxin1500)    Rs. 9400    INR    Enter    save it



Again go to VK11 YPR0 Select Material (Vaxin1500) Rs.10000 INR Enter save it.

### Discount: -

A discount is deduction which we offer to customer and this discount will be deducted from Base price.

- ✚ The Standard Condition Type for material discount is [K004].
- ✚ The Standard Condition Type for customer / material discount is [K005].
- ✚ The Standard Condition Type for customer discount is [K007].

For K004 we have only one condition table i.e. Material

For K005 we have only one condition table is i.e. Customer / Material

For K007 we have only one condition table is i.e. Customer

### Configuration for Discount price

**1<sup>st</sup> step - Defining discount condition table:** - [V/03] here we need to create condition table only for “K007” i.e. only for Customer because we already created Material and Customer / material combination earlier in base price configuration.

Path SPRO → S&D → basic function → pricing → pricing control → defining condition table → double click on → create condition table → mention the table number above 500 (Up to 500 the condition table are Standard , the user define condition table should be above 500) (513) enter

[Field catalogue: - “Field catalogue consists of allowed fields to create condition table”, while creating condition table we need to select the fields from field catalogue].

Go to field catalogue put the cursor here and select (customer) one by one by using page up and page down select and double click on technical and medium to move to selected fields after selecting click on generate →



We can save condition table in local object or package.

If we save condition table in local object then system will not generate transport request number and without transport request number we cannot transfer the condition table from one server to another server.

If we save condition table in package then system generate request number then we can transport to other server.

Basis consultant will provider package (go to F4 and put Z \* enter and search manually ZSDO) and save it.



**2<sup>nd</sup> step - Define discount access sequence:** - Create access sequence for “Material” K004 (512)

[V/07] Path **SPRO** → **S&D** → **Basic function** → **pricing** → **pricing control** → **define access sequence** → double click on **maintain access sequence** → go to position and put K004 select and go to new entries to create new access sequence In AS (access sequence) mention our [Z004] [New Access sequence for Material discount price] select new access sequence and double click on access go to new entries mention some number [10] and mention the table number [512-material] which we created in condition table check exclusive enter select the condition table and double click on fields, we will get some message **enter** save it

Go to new entries Z005 (New access sequence for customer / material discount price) select new access sequence and double click on access go to new entries mention some number [10] and mention the table number [505- Customer / material] which we made in condition table check exclusive enter select the condition table and double click on fields we will get some message enter save it

Go to new entries Y007 (New access sequence for customer discount price) select new access sequence and double click on access go to new entries mention some number [10] and mention the table number [513-Customer] which we made in condition table check exclusive enter select the condition table and double click on fields we will get some message enter save it.

**3<sup>rd</sup> step – Define discount condition types:** - [V/06] Path **SPRO** → **S&D** → **Basic function** → **pricing** → **pricing control** → **define condition types** → double click on **maintain condition type** Position go to K004 select the condition type and click on copy create own [Z004] [Material discount] maintain access sequence [Z004] which we assigned in discount access sequence enter save it.

Position go to K005 select the condition type and click on copy create own [Z005] [Customer / Material discount] maintain access sequence [Z005] which we assigned in discount access sequence enter save it.

Position go to K007 select the condition type and click on copy create own [Y007] [Customer discount] maintain access sequence [Y007] which we assigned in discount access sequence enter save it.

**4<sup>th</sup> step – Placed the discount condition type in pricing procedure:** - [V/08] → go to → position and place our pricing procedure [ZVAA01] → select and click on → control data → go to new entries

Step	Cond Type	Description	From	To	Statistic	Requirement	Account key
20		Base value	10				
30	Y007	Cust Disc	20			2	ERS
40	Z005	Cust/Mat disc	20			2	ERS
50	Z004	Mater Disc	20			2	ERS
60		Gross value	20	50			
70		Total Dis val	30	50			



### 5<sup>th</sup> step – Maintain condition records for discount condition types: -

The T-code is [**VK11**]

**VK11** Condition type Z004 Mention the Material (Vaxin1500) mention the discount amount (Rs.1500/-) and Unit (INR) enter save it.

**VK11** Condition type Z005 mention customer 100215 Mention the Material (Vaxin1500) mention the discount amount (Rs.1800/-) and Unit (INR) enter save it.

Mention customer number 100216 Mention the Material (Vaxin1500) mention the discount amount (Rs.1900/-) and Unit (INR) enter save it.

Mention customer number 100217 Mention the Material (Vaxin1500) mention the discount amount (Rs.2000/-) and Unit (INR) enter save it.

**VK11** Condition type Y007 mention customer 100213 Mention the Material (Vaxin1500) mention the discount amount (30) and Unit (INR) and UOM (%) enter mention customer 100214 Mention the Material (Vaxin1500) mention the discount amount (30) and Unit (INR) and UOM (%) enter save it.

### Surcharge

Surcharge is additional charges which we charge to the customer. Ex – Freight charge, packing charge etc.

The standard condition type for freight is [KF00].

Freight charge will be calculated on i) Incoterms 1 & Incoterms 2, ii) Incoterms 1

Packing charge is based on Material which already created.

We need to create **condition table** for Freight

T.code:-V/03

- 1) Incoterms 1 & Incoterms 2 [Condition table no 515]
- 2) Incoterms 1 [Condition table no 516]

We need to create two **Access sequences**

1. Freight charge **V/07** position KF00 std and create new entries **YF00** select and click on access place condition table **515 & 516** select click on fields one by one and save it.
2. Packing charge V/07 there is no standard access sequence for packing so creates new one **YPAC** select and click on access place condition table **512** select click on field and save it.



### Condition Types

V/06 for freight charges select standard KF00 and copy it as **YF00** place access sequence YF00 and save it.

V/06 for packing charge selects K007 and copy it as **YPAC** place access sequence YPAC plus / minus [A] save it.

Place the freight and packing condition types in **Pricing Procedure**

V/08 position procedure (ZVAA01) select and click on control go to new entries

Step	Cond Type	Description	From	To	Statistic	Requirement	Account key
71		Copy Gross value	60				
75	YF00		60			2	ERF
80	YPAC		60			2	ERF
90		Net value	71	80			

Maintain **condition records** for freight & packing

VK11 → condition type [YF00] → select incoterm1&2 CIF inco2 (freight) → amount (5) → INR → enter → save it

Select Incoterms IN (CIF) amount INR save it.

VK11 condition type [YPAC] material (vaxin1500) amount (2) % INR save it

### Common discount concept

Go to **V/07** → new entries → ZDIS New common discount → enter → select → click on Access 10 – 512, 20 – 505, 30 – 513 enter → select → click on field → save it.

Go to **V/06** → position → K007 → copy condition copy (ZDIS) → Access sequence (ZDIS) → enter → save it.



Go to **V/08** → position → ZVAA01 → select → click on control → go to → new entries

Step	Co	CTyp	Description	Fro	To	Ma	R	Stat	P	SuTot	Reqt	CaITy	BasTy	Acck
55	0	ZDIS	MON Discount	20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERS
60	0		Gross value	20	55	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						
70	0		Total discount	30	55	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						
71	0		COPY OF GROSS	60		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						
75	0	YF00	Freight Surcharge	60		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERF
80	0	YPAC	Packing Surcharge	60		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERF
90	0		NET VALUE	71	80	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						

**VK11** → condition type (ZDIS) → select → key combination one by one and place some % here and save it.

### TAX Condition Configuration

**V/03** → table [517] → select country → departure → generate →  → save it

**V/07** → new entries → ZWST → [MWST standard condition type for tax – not for Indian company] enter → select → click on access → new entries 10 – 517 enter → select → and click on field → save it.

**V/06** → position → MWST → click on copy condition type [ZWST] → access sequence [ZWST] → save it.

**V/08** → position → ZVAA01 → select → click on control → go to → new entries

Step	Co	CTyp	Description	Fro	To	Ma	R	Stat	P	SuTot	Reqt	CaITy	BasTy	Acck
95	0	ZWST	Output Tax	90		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			MWS
100	0		COPY OF NET VALUE	90	95	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						

**VK11** → condition type (ZWST) → country (IN) → PI (IN) amount (4%) tax (Y5) → enter → save it.

For Y5

T-code FTXP → IN → IN → Tax code (Y5) output tax (4%) → save it.



### Final Pricing procedure

Step	Co	CType	Description	Fro	To	Ma	R	Stat	P	SuTot	Reqd	CaTy	BasTy	AccK
10	0	YPR0	Base price			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERL
20	0		Base value	10		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						
30	0	Y007	Customer Discount	20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERS
40	0	Z005	Customer/Mate discou	20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERS
50	0	Z004	Material discount	20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERS
55	0	ZDIS	COMON Discount	20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERS
60	0		Gross value	20	55	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						
70	0		Total discount	30	55	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						
71	0		COPY OF GROSS	60		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						
75	0	YF00	Freight Surcharge	60		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERF
80	0	YPAC	Packing Surcharge	60		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERF
90	0		NET VALUE	71	80	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						
95	0	ZWST	New Output Tax	90		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			MWS
100	0		COPY OF NET VALUE	90	95	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						

VA01 → create an order and check whether all the condition types determined or not.

Sales Document Item: 10    Item category: TAN    Standard Item

Material: VAXIN1500    Vaxin 1500

Navigation: Sales A | Sales B | Shipping | Billing Document | **Conditions** | Account assignment | Schedule lines | Partners | Texts | Order Data | Status

Qty: 1 EA    Net: 3,983.00 INR    Tax: 159.32

N	CnTy	Name	Amount	Crcy	per	U	Condition value	Curr.	Status	NumC	OUn	CCon	Un	Condition value	CdCur
10		Base price	9,000.00	INR		1 EA	9,000.00	INR		1 EA	1 EA			0.00	
20		Base value	9,000.00	INR		1 EA	9,000.00	INR		1 EA	1 EA			0.00	
30		Customer Discount	30.000-%				2,700.00-	INR		0	0			0.00	
40		Material discount	1,500.00-	INR		1 EA	1,500.00-	INR		1 EA	1 EA			0.00	
55		COMON Discount	10.000-%				900.00-	INR		0	0			0.00	
60		Gross value	3,900.00	INR		1 EA	3,900.00	INR		1 EA	1 EA			0.00	
70		Total discount	5,100.00-	INR		1 EA	5,100.00-	INR		1 EA	1 EA			0.00	
71		COPY OF GROSS	3,900.00	INR		1 EA	3,900.00	INR		1 EA	1 EA			0.00	
75		Freight Surcharge	5.00	INR		1 KG	5.00	INR		1 KG	1 KG			0.00	
80		Packing Surcharge	2.000 %				78.00	INR		0	0			0.00	
90		NET VALUE	3,983.00	INR		1 EA	3,983.00	INR		1 EA	1 EA			0.00	
95		New Output Tax	4.000 %				159.32	INR		0	0			0.00	
100		COPY OF NET VALUE	4,142.32	INR		1 EA	4,142.32	INR		1 EA	1 EA			0.00	



**Header condition**

Header condition is the condition which is applicable to all the line items in the sales document.

**The standard header condition**

- + HA00 Header discount %
- + HB00 Header discount fixed amount
- + HD00 Header freight
- + HM00 Order value

**Placed the Header discount in pricing procedure**

V/08 → ZVAA01 → go to control data → go to new entries →

Step	Co	CTyp	Description	Fro	To	Ma	R	Stat	P	SuTot	Reqt	CalTy	BasTy	AccK	Accru
56	0	HA00	Percentage Discount	20		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERS	
57	0	HB00	Discount (Value)	20		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERS	

Enter → save it

Change

Step	Co	CTyp	Description	Fro	To	Ma	R	Stat	P	SuTot	Reqt	CalTy	BasTy	AccK	Accru
60	0		Gross value	20	57	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
70	0		Total discount	30	57	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							

1. Header condition is the condition which applies to all the line items into sales document.
2. Header condition should be always processed manually.
3. Header condition doesn't have access sequence.
4. It is always placed between base value and gross value.
5. To checking header condition discount result, we should have 2 or more materials in sales order.

Now go to VA01 go to header data condition tab put HA00 10% select the header condition type and click on activate.

Again do for HB00, go to VA01 go to header data condition tab put HB00 Rs 10000/- select the header condition type and click on activate.

**Group condition:** - If we check this then header condition amount will be distributed among all the line items in proportionate to value of the line item.

- If we uncheck this then header condition amount will be proposed to all the line item in sales document.



- ✚ HA00 it is a group condition as well as header condition.
- ✚ HB00 it is a group condition as well as header condition.
- ✚ HD00 it is only header condition.
- ✚ HM00 it is a group condition as well as header condition.

**Header freight:** - Freight condition type should be always placed between gross value and net value.

It is only applicable for header condition.

Step	Co	CType	Description	Fro	To	Ma	R	Stat	P	SuTot	Reqt	CalTy	BasTy	AccK	Accru
81	0	HD00	Freight	60		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERF	

**Order value:** - We use HM00 if we want to change total order value manually in sales document.

Step	Co	CType	Description	Fro	To	Ma	R	Stat	P	SuTot	Reqt	CalTy	BasTy	AccK	Accru
120	0	HM00	Order Value	60	95	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERF	

**Statistical Condition Types:-**

Any condition type if it statistical then it will have two effects.

- i) The value of condition type will not have any effect on net value.
- ii) The value of condition type will not be posted into accounting.

**1<sup>st</sup> Condition “VPRS”:** - The cost of the product which we maintain in material master, Accounting 1 View will be determined into sales document with the help of “VPRS” condition type.

Statistical condition types are always placed in the last.

Step	Co	CType	Description	Fro	To	Ma	R	Stat	P	SuTot	Reqt	CalTy	BasTy	AccK	Accru
130	0	VPRS	Cost			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	B		4				

**2<sup>nd</sup> condition “SKTO” (Cash discount):** - we maintain cash discount % in define payment terms, that cash discount % will be determine into sales document with the help of “SKTO” condition type.

Step	Co	CType	Description	Fro	To	Ma	R	Stat	P	SuTot	Reqt	CalTy	BasTy	AccK	Accru
140	0	SKTO	Cash Discount			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			4		11		

**3<sup>rd</sup> Condition “KUMU” (Cumulating condition)**

It will be used only in BOM concept, KUMU condition type will help to cumulate the value of components and display the value in main item.



### Rebate condition

- i) Group rebate: - Condition type “BO01”
- ii) Material rebate: - Condition type “BO02”
- iii) Customer rebate: - Condition type “BO03”
- iv) Independent of sales volume: - Condition type “BO06”

### Intercompany condition type

- ✚ PI01 Intercompany price (amount) condition types determine in intercompany sales order.
- ✚ PI02 Intercompany percentage
- ✚ IV01 Intercompany price condition type determine in intercompany invoice
- ✚ IV02 Intercompany percentage

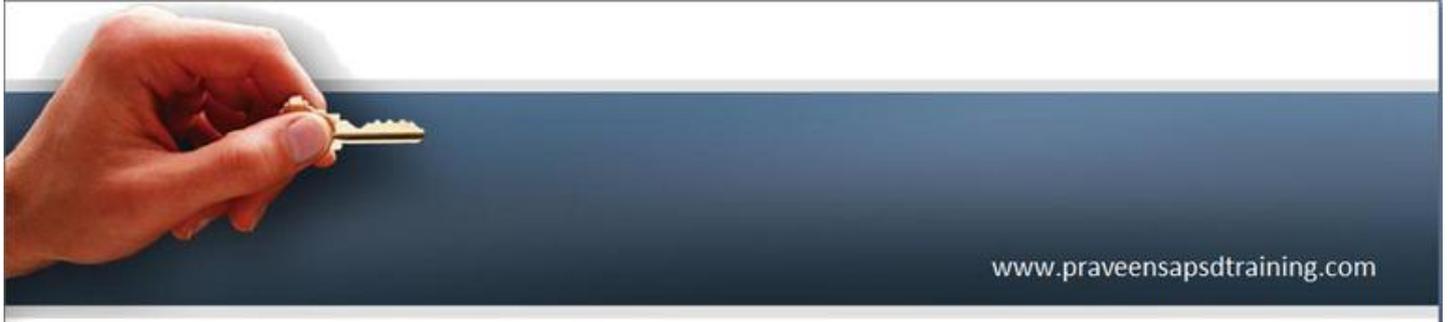
### Some more condition types

- ✚ EDI1 Customer expected price
- ✚ EDI2 Customer expected value

EDI means electronic data interchange. EDI will be used to transfer the data from Non-SAP system to SAP system.

- ✚ AMIW Minimum sales order value
- ✚ AMIZ Minimum value surcharge

Total order value 500000/- AMIW 490000/- AMIZ 10000/-
-------------------------------------------------------------



✚ DIFF This condition type will help to round off the total document value.

If we want to do rounding in pricing go to SPRO → SAP net waver → general setting → currency → define rounding rules for currency → mention the condition of company code and currency → go to new entries → ZALK → INR → 10 → enter → save it.

## Condition type Controls

### Change View "Conditions: Condition Types": Details

New Entries
Print
Refresh
Back
Forward
Help

Condit. type	<input type="text" value="PR00"/> Price	Access seq.	<input type="text" value="PR02"/> Price with Release St
Records for access			

#### Control data 1

Cond. class	<input type="text" value="B"/> Prices	Plus/minus	<input type="checkbox"/> positive a
Calculat.type	<input type="text" value="C"/> Quantity		
Cond.category	<input type="checkbox"/>		
Rounding rule	<input type="checkbox"/> Commercial		
StrucCond.	<input type="checkbox"/>		

#### Group condition

<input type="checkbox"/> Group cond.	GrpCond.routine <input type="checkbox"/>
<input type="checkbox"/> RoundDiffComp	

#### Changes which can be made

Manual entries	<input type="text" value="C"/> Manual entry has priority
<input type="checkbox"/> Header condit.	<input checked="" type="checkbox"/> Amount/percent <input type="checkbox"/> Qty relation
<input checked="" type="checkbox"/> Item condition	<input type="checkbox"/> Delete <input type="checkbox"/> Value

#### Master data

valid from <input type="checkbox"/> Today's date	PricingProc <input type="text" value="PR0000"/>
Valid to <input type="checkbox"/> 31.12.9999	delete fr. DB <input type="text" value="Do not delete (set the deletion )"/>
RefConType <input type="text"/>	<input type="checkbox"/> Condition index
RefApplicatio <input type="text"/>	<input checked="" type="checkbox"/> Condit.update

#### Scales

Scale basis <input type="text" value="C"/> Quantity scale	Scale formula <input type="text"/>
Check value <input type="text" value="A"/> Descending	Unit of meas. <input type="text"/>
Scale type <input type="checkbox"/> can be maintained in con	

#### Control data 2

<input type="checkbox"/> Currency conv.	Exclusion <input type="checkbox"/>
<input type="checkbox"/> Accruals <input type="checkbox"/> Variant cond.	Pricing date <input type="checkbox"/> Standard (KOMK-PRSDT; ta
<input type="checkbox"/> Inv.list cond. <input checked="" type="checkbox"/> Qty conversion	
<input type="checkbox"/> Int-comBillCond	Rel.Acc.Assig <input type="checkbox"/> Relevant for account ass
<input type="checkbox"/> ServiceChgeSe	



**The T-code is V/06**

**Condition class:** - It controls the type of the pricing component i.e. Base price, Discount, Surcharge, Tax, Rebate.

**Pricing Component:**-Base price, Discount, Surcharge, Tax, Rebates

**Condition Class:-** [B] [A] [A] [D] [C]

**Q. Can i have two base price condition types active in a single sales document? Where is the control?**

**Ans. No – condition class [B].**

**Plus / Minus:** -

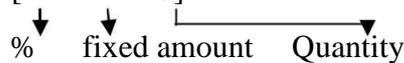
- + This field is applicable if condition class is “A” (Discount & Surcharge)
- + If the condition type is discount then we maintain here [X] (Negative).
- + If the condition type is surcharge then we maintain here [A] (Positive).
- + This field controls whether to deduct the amount or add the amount.

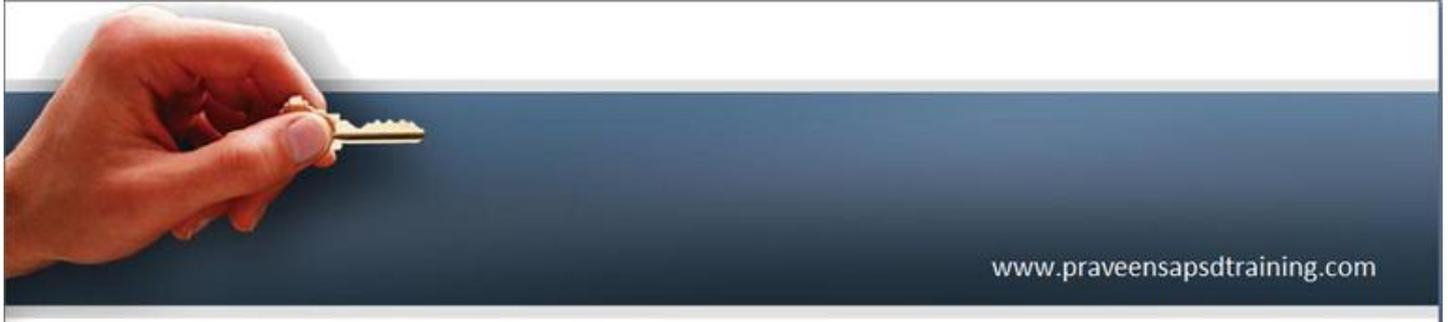
**Calculation Type:** -

Calculation type converts the condition amount to condition type value.

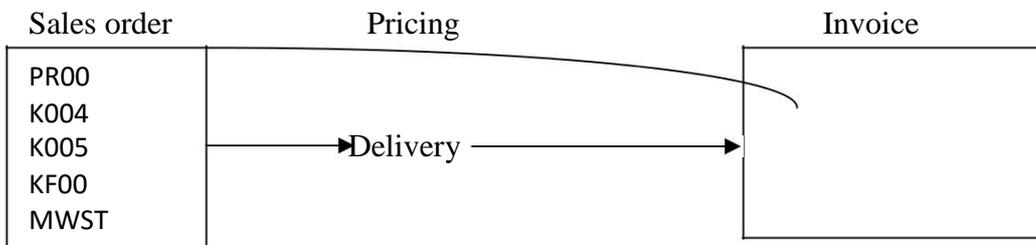
For base price calculation type is “C” (quantity).

For discount calculation type is [A or B or C]





**Condition category:** - It is a sub classification of condition class. This field will have relationship with pricing type field in copy controls.



The pricing type field in copy controls control, how the pricing should be copied from sales order to invoice i.e.

- + whether to re-determine the pricing in invoice,
  - + whether to copy the price as it is from sales order to invoice,
  - + whether to copy pricing as it is and re-determine only taxes,
  - + Whether to copy pricing as it is and re-determine only freight.
- + “B” Pricing re-determining
  - + “D” Copy as it is
  - + “G” Copy pricing as it is and re-determining only taxes.
  - + “H” Copy pricing as it is and re-determining only freight

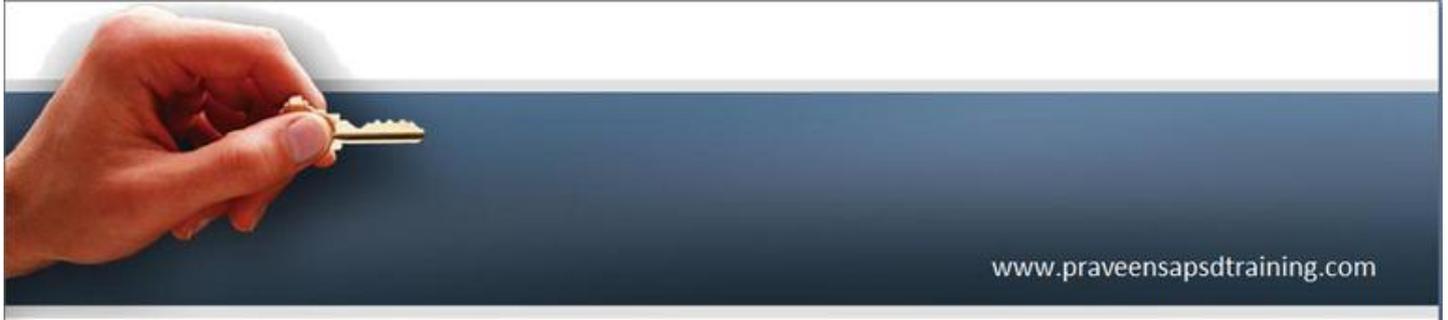
**The below condition type have condition categories:-**

- + MWST “D”
- + KF00 “F”
- + VPRS “G”
- + EK01 “Q”
- + EK02 “Q”

**Rounding Rule:** - This field controls whether to perform commercial rounding or round up or round down. This is quantity rounding.

**Structure condition:** - We use this field for ‘KUMU’ condition type.

- + KUMU condition type will be used in BOM concept.
- + KUMU condition type will help to cumulate the value of components and display it in main item.
- + For KUMU we maintain structure condition as “B”.



### Group condition: -

- ✚ If the client requirement is to consider the total document value or group of material value to propose the discount, then we need to check group condition.
- ✚ If we check group condition then group condition amount will be distributed among all the line items in proportion to the value of line item.

### Group condition routine: -

- ✚ This field controls whether to consider total document value or group of materials value.
- ✚ If we want to consider total document value then maintain group condition routine as “1”.
- ✚ If we want to consider group of materials value then maintain group condition routine as “3”.

### Rounding difference comparison:

If we check this while distributing group condition amount among all the line items, if there is any left out amount, then left out amount will be added to the highest value item

### Configuration for group condition total document value

#### Scenario-Client's Requirement

The clients' requirement is any order if the total document value reaches to 10,00,000/- then they want to propose 20,000/- discount.

#### Solution:-

For group condition total document value, we need to create a condition table with the field only sales organisation. (In this condition material will not be taken).

1<sup>st</sup> step – Create new condition table with sales organisation field

2<sup>nd</sup> step – Create access sequence and placed the condition table (ZGRP). Go to → V/07 go to new entries →

Create [ZGRP] [group condition] → go to new entries → no [10] [350] → exclusive check → save it

3<sup>rd</sup> step – Create new group condition type

Copy K004 condition type → ZGRP → Access sequence (ZGRP) → change the calculation type [B]

→ Check group condition → maintain group condition routine [1] → check rounding difference

Comparison → scroll down and go to scale basis as [B-value scale] → save it.

4<sup>th</sup> step – Placed the condition type in pricing procedure in discount placed. If want then create new one with ZVAA02 otherwise entered in old one. For new one V/08 → new entries → ZVAA02 (new pricing Procedure) → select → click on control → new entries →

Step	Co	CTyp	Description	Fro	To	Ma	R	Stat	PISuTot	Reqt	CaTy	BasTy	AccK
10	0	YPR0	Base price			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2			ERL
20	0		Base value	10		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
30	0	ZGRP	group condition	20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2			ERS

→ Save it.

5<sup>th</sup> step – Go to OVKK → Put sales area → change pricing procedure (ZVAA02) → save it

SOrg.	DChl	Dv	DoPr	Cu	PriPr.	Pricing procedure	CTyp	Condition type
ZDOM	Z1	Z1	A	1	ZVAA02	Pricing Proce for grp	YPR0	Base price

6<sup>th</sup> step – Maintain condition type records for group condition go to VK11 → ZGRP → ZDOM → 20000/- → Select this then go to scale and click on → scale value 1000000/- → save it.

➤ Now go to VA01 → create a new order with some material and if total document value will be more than 10 L then 20K will be given discount and distribute among all the line item in propionates to the value of line item.

Sales Document Item	20	Item category	TAN	Standard Item
Material	REVI2040050B0T	REVITAL 20 TO 40 YRS 50MG BOTTLE		

Net 2,385,628.74 INR

N	CnTy	Name	Amount	Crcy	per	U	Condition value	Curr.	Status	NumC	OUn	CCon	Un	Condition value
0	YPR0	Base price	1,000.00	INR		1 EA	2,400,000.00	INR			1 EA		1 EA	0.00
		Base value	1,000.00	INR		1 EA	2,400,000.00	INR			1 EA		1 EA	0.00
0	ZGRP	group condition	20,000.00	INR			14,371.26	INR			0		0	0.00

For Material Vaxin1500 – Net Value is [934371.26]

N	CnTy	Name	Amount	Crcy	per	U	Condition value	Curr.	Status	NumC	OUn	CCon	Un	Condition value
0	YPR0	Base price	9,400.00	INR		1 EA	940,000.00	INR			1 EA		1 EA	0.00
		Base value	9,400.00	INR		1 EA	940,000.00	INR			1 EA		1 EA	0.00
0	ZGRP	group condition	20,000.00	INR			5,628.74	INR			0		0	0.00



**Group condition concept for group of materials:-**

we use the field material pricing group from (material master – sales organisation 2 view).

**Scenario-Client's Requirement**

Clients requirement is they have 3 materials X, Y and Z. While creating sales order if these three materials value reaches to 10 L then they want to offer 20K discount.

**Solution:-**

**1<sup>st</sup> step –**

Create new condition table → select the field as material pricing group. Go to V/03 → select material Pricing group → generate → save it

**2<sup>nd</sup> step –**

Create new access sequence and place the condition table. (ZGR1 → Group condition material group)

Go to V/07 → go to new entries → crate [ZGR1] → select it and click on access → go to new entries

No.	Tab	Description	Requiremnt	Exclusive
10	29	Material Pricing Group		<input checked="" type="checkbox"/>

**3<sup>rd</sup> step –**

Create new condition type → copy of K004 → ZGR1 → pricing group discount → ZGR1 → access Sequence → Calculation Type **B** → group condition CHECK → group condition routine **3** → rounding difference comparison CHECK → scale basis **B** → save it

**4<sup>th</sup> step –**

Place condition type in pricing procedure, go to our pricing procedure. go to v/08 → select (ZVAA02)

Go to control → maintain new condition type in new entries

Step	Co	CType	Description	Fro	To	Ma	R	Stat	P	SuTot	Reqt	CalTy	BasTy	AccK	Accru
10	0	YPRO	Use price			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERL	
20	0		Base value	10		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
30	0	ZGR1	Pricing Mat grp disc	20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERS	



**5<sup>th</sup> Step –**

maintain condition record for group condition group of materials.

Go vk11 → ZGR1 → M-[01] → 20000/- → INR → select it → SCALE → scale value → 10L → save it.

Go to group of material in material master sales org 2 view and maintain pricing procedure as [01]. Create 3 materials [X, Y, Z] and maintain material pricing procedure as [01].

Go to VK11 → ZPRO → maintain the price as [X → 10000, Y- 10000 and Z – 10000] → save it.

Now go to VA01 → create an order with materials [X,Y,Z] → which total value will go more than 10L then will get discount 20000/- and distribute among all the line item in propionates to the value of line item.

**For material ‘X’, Net value [993333]**

N	CnTy	Name	Amount	Crcy	per	U	Condition value	Curr.	Status	NumC	OUn	CCon	Un	Condition value
■	YPR0	Base price	10,000.00	INR		1 EA	1,000,000.00	INR			1 EA		1 EA	0.00
		Base value	10,000.00	INR		1 EA	1,000,000.00	INR			1 EA		1 EA	0.00
■	ZGR1	Pricing Mat grp disc	20,000.00-	INR			6,666.66-	INR			0		0	0.00

**For material ‘Y’, Net value [993333]**

N	CnTy	Name	Amount	Crcy	per	U	Condition value	Curr.	Status	NumC	OUn	CCon	Un	Condition value
■	YPR0	Base price	10,000.00	INR		1 EA	1,000,000.00	INR			1 EA		1 EA	0.00
		Base value	10,000.00	INR		1 EA	1,000,000.00	INR			1 EA		1 EA	0.00
■	ZGR1	Pricing Mat grp disc	20,000.00-	INR			6,666.67-	INR			0		0	0.00

**Manual entries: -**

This field controls whether to change condition type amount or value in sales document pricing.

- ✚ If we want to change the price of condition type then maintain manual entry as [Blank]
- Or [C]
- ✚ If we don't want to change the price then maintain manual entry as [D].

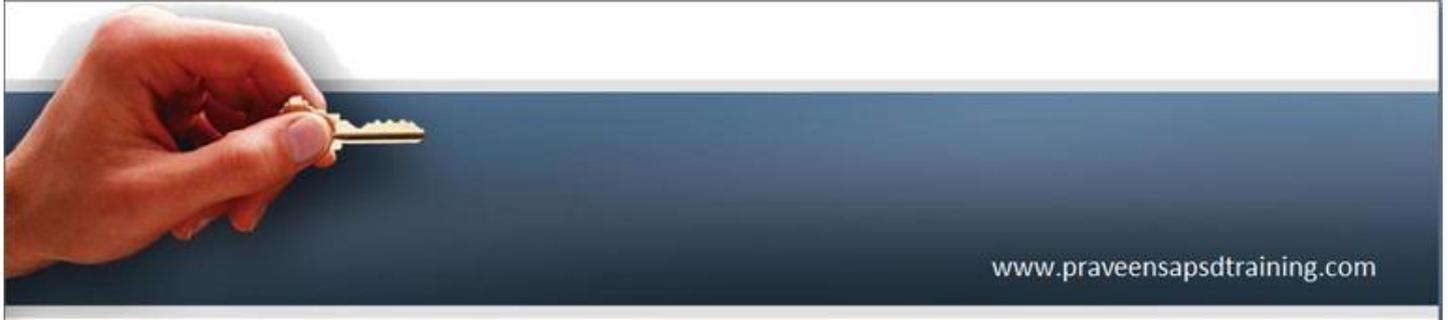
[ ] Amount / percent

[ ] Quantity relation

[ ] Delete

[ ] Value

[ ] Calculation type



- ✚ If manual entry is [Blank] or [C] then further we have control whether to change amount or value or delete.
- ✚ If we want to change amount or value then check these.
- ✚ If we don't want to change then uncheck these.

Q.Client requirement is, there is a condition type which is manual which user enters manually into sales document but after entering condition type. System should not allow to change the amount or value. Where is the control?

Ans. [ ] amount and [ ] value in particular condition type.

**Header condition:** -

- ✚ Header condition is the condition which applies to all the line items into sales document.
- ✚ Header condition should be always process manually.
- ✚ Header condition doesn't have access sequence.

**The standard header condition**

- ✚ HA00Header discount %
- ✚ HB00 Header discount fixed amount
- ✚ HD00 Header freight
- ✚ HM00Order value

**Item condition:** - It is a condition which applies to particular line item in the sales document.

- ✚ It can be processed automatically.
- ✚ It will have access sequence.

**Master Data (sub screen)** this is related to condition record (VK11).

**Valid from and valid To:** - It will help to determine the default validity period while creating condition record.



**Pricing procedure: -**

- ✦ The pricing procedure field in condition type will be used for condition supplement concept.
- ✦ Condition supplement is a concept of adding one condition record to another condition record.
- ✦ If the main condition record determine then only supplement condition record will be determine.

**We use this condition supplement for the below client requirements:-**

**Scenario-Clients Requirement:-**

The client requirement is any customer if he is getting maximum price then client wants to offer 3% extra discount.

**Solution:-**

In this scenario, we go to the condition record maximum price (material combination) and we add supplement condition record.

**Configuration for condition supplement**

**1<sup>st</sup> step** – Create new condition type

Go to V/06 → Copy of K007 → ZSUP (Condition supplement) → save it

**2<sup>nd</sup> step** – Place the condition type in ZVAA01 pricing procedure

Go to V/08 → position → ZVAA01 → select and click on control → go to new entries

Step	Co	CTyp	Description	Fro	To	Ma	R	Stat	P	SuTot	Reqt	CaTy	BasTy	AccK
45	0	ZSUP	Condition supplement	20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERS

**3<sup>rd</sup> step** – Create new supplement pricing procedure

Go to V/08 → new entries → ZSUP01 → Supplement pricing procedure → select and click on control → go to new entry

Step	Co	CTyp	Description	Fro	To	Ma	R	Stat	P	SuTot	Reqt	CaTy	BasTy	AccK
10	0	YPR0	use price			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
20	0	ZSUP	Condition supplement	10		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						

**4<sup>th</sup> step** – go to the main condition type [YPR0] and again supplement pricing procedure [ZSUP01] in pricing Procedure. Go to V/06 → position → YPR0 → and maintain ZSUP01 (supplement condition) in Pricing procedure field in V/06.



**5<sup>th</sup> step** – Maintain condition record → VK12 → YPR0 → material → select the condition record and click on Supplement  → add ZSUP → 3% → enter and save it.

➔ Go to VA01 create order and check

Pricing Elements														
N	CnTy	Name	Amount	Crcy	per	U	Condition value	Curr.	Status	NumC	OUn	CCon	Un	Condition value
YPR0		Base price	10,000.00	INR		1 EA	10,000.00	INR			1 EA		1 EA	0.00
		Base value	10,000.00	INR		1 EA	10,000.00	INR			1 EA		1 EA	0.00
ZSUP		Condition supplement	3.000-%				300.00-	INR			0		0	0.00
Z004		Material discount	1,500.00-	INR		1 EA	1,500.00-	INR			1 EA		1 EA	0.00
ZDIS		COMON Discount	10.000-%				1,000.00-	INR			0		0	0.00
ZGRP		group condition		INR			0.00	INR			0		0	0.00
		Gross value	7,200.00	INR		1 EA	7,200.00	INR			1 EA		1 EA	0.00
		Total discount	2,800.00-	INR		1 EA	2,800.00-	INR			1 EA		1 EA	0.00
		COPY OF GROSS	7,200.00	INR		1 EA	7,200.00	INR			1 EA		1 EA	0.00
YF00		Freight Surcharge	5.00	INR		1 KG	5.00	INR			1 KG		1 KG	0.00
YPAC		Packing Surcharge	2.000%				144.00	INR			0		0	0.00
		NET VALUE	7,349.00	INR		1 EA	7,349.00	INR			1 EA		1 EA	0.00
ZWST		New Output Tax	4.000%				293.96	INR			0		0	0.00
		COPY OF NET VALUE	7,642.96	INR		1 EA	7,642.96	INR			1 EA		1 EA	0.00

**Delete from database:** - This field controls whether to delete the condition record permanently from the data base or not.

**Condition Index:** - It will help to display or change all the combinations of prices in a single window.

If management requirement is to change the prices of all combination with immediate effect then by using condition index concept, we change all the combination of prices in single window.

**Configuration for condition index**

Check condition index in condition type go to path

SPRO → S&D → basic function → pricing → maintain condition index → double click on maintain condition table for index

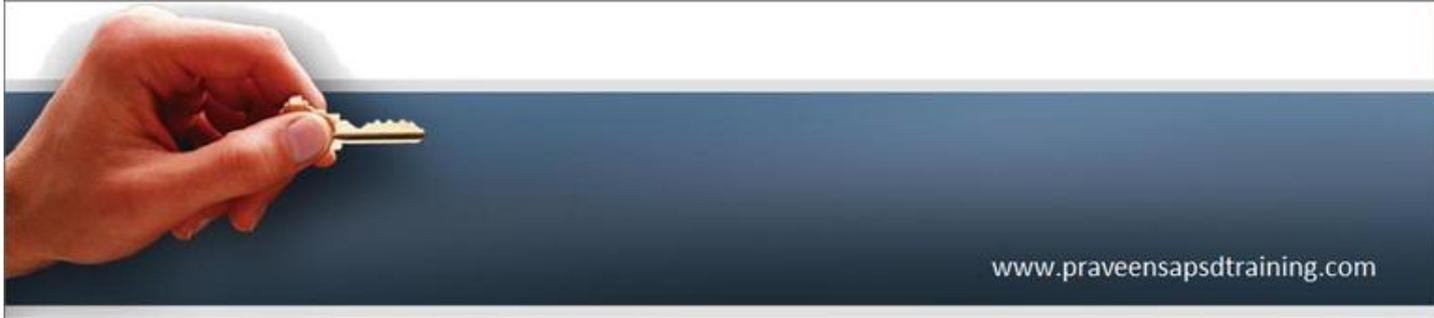
When we double click on maintain table for index then change mode screen will be displayed so go to condition and click on create mode.

Create one condition table in which combination we want to display the condition records in condition index

502 → material → generate → save it

Double click on activation on condition index

Go to our condition table and check the (601)



**Path for executing condition index**

Go to easy access → logistic → S&D → master data → condition → select using index → V/I5 – change, V/I6 – display → material → execute

**Condition update: -**

Restricting the condition record up to particular quantity or value or number of orders. It is called as condition update.

**Scenario-Client Requirement**

The clients requirement is whenever they launch new product they want to offer 6000/- discount to the 1<sup>st</sup> 10 Lakh quantity.

**In condition update concept SAP restrict the number of orders to 3(This is a GAP)**

**Configuration for condition update**

**1<sup>st</sup> step –**

Create new discount condition type, a copy of K004 → ZUPP and check condition update → save it.

**2<sup>nd</sup> step –**

Place the condition type in pricing procedure [ZVAA01] or [ZVAA02] and place ZUPP → save it.

When pricing procedure [ZVAA01]

Step	Co	CTyp	Description	Fro	To	Ma	R	Stat	P	SuTot	Reqt	CalTy	BasTy	AccK
46	0	ZUPP	Condition update	20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERS

When pricing procedure [ZVAA02]

Step	Co	CTyp	Description	Fro	To	Ma	R	Stat	P	SuTot	Reqt	CalTy	BasTy	AccK
10	0	YPR0	Base price			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERL
20	0		Base value	10		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						
30	0	ZUPP	Condition update	20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERS



### 3<sup>rd</sup> step –

Maintain condition record

Condition type [ZUPP] → ZDOM → Z1 → vaxin1500 → 6000/- → INR → select the condition record and

go to additional data (If any condition type if we check condition update then we get extra 3 fields in condition record that we call is as limit for pricing)

- + Maximum condition value [ ]
- + Maximum no. of order [ ] **(GAP IN SAP)**
- + Maximum condition base value [1000] → enter → save it.

### 4<sup>th</sup> step –

go to OVKK and check pricing procedure i.e. [ZVAA01] or [ZVAA02] [YPR0] it should be.

Go to VA01 and create an order and check condition update when pricing procedure is [ZVAA01]

N	CnTy	Name	Amount	Crcy	per	U...	Condition value	Curr.	Status	NumC	OUn	CCon	Un	Condition value	CdCur
YPR0		Base price	10,000.00	INR		1 EA	10,000.00	INR			1 EA		1 EA	0.00	
		Base value	10,000.00	INR		1 EA	10,000.00	INR			1 EA		1 EA	0.00	
ZSUP		Condition supplement	3.000	%			300.00	INR			0		0	0.00	
ZUPP		Condition update	6,000.00	INR		1 EA	6,000.00	INR			1 EA		1 EA	6,000.00	INR
Z004		Material discount	1,500.00	INR		1 EA	1,500.00	INR			1 EA		1 EA	0.00	
ZDIS		COMON Discount	10.000	%			1,000.00	INR			0		0	0.00	
ZGRP		group condition					0.00	INR			0		0	0.00	
		Gross value	1,200.00	INR		1 EA	1,200.00	INR			1 EA		1 EA	0.00	
		Total discount	8,800.00	INR		1 EA	8,800.00	INR			1 EA		1 EA	0.00	
		COPY OF GROSS	1,200.00	INR		1 EA	1,200.00	INR			1 EA		1 EA	0.00	
YF00		Freight Surcharge	5.00	INR		1 KG	5.00	INR			1 KG		1 KG	0.00	
YPAC		Packing Surcharge	2.000	%			24.00	INR			0		0	0.00	
		NET VALUE	1,229.00	INR		1 EA	1,229.00	INR			1 EA		1 EA	0.00	
ZWST		New Output Tax	4.000	%			49.16	INR			0		0	0.00	

Go to VA01 and create an order and check condition update when pricing procedure is [ZVAA02]

N	CnTy	Name	Amount	Crcy	per	U...	Condition value	Curr.	Status	NumC	OUn	CCon	Un	Condition value	CdCur
YPR0		Base price	10,000.00	INR		1 EA	10,000.00	INR			1 EA		1 EA	0.00	
		Base value	10,000.00	INR		1 EA	10,000.00	INR			1 EA		1 EA	0.00	
ZUPP		Condition update	6,000.00	INR		1 EA	6,000.00	INR			1 EA		1 EA	6,000.00	INR



**Reference condition type: -**

For Any condition type if we maintain reference condition type, then whatever condition record we maintain for reference condition type that will be applicable to main condition type.

✚ We use this concept for intercompany condition type.

IV01 and PI01 is intercompany condition types.

└─▶ is Reference condition type for [PI01]

In intercompany sale, we maintain condition record for PI01 and that will be applicable to IV01 condition type.

Any condition type if we have reference condition type then go to pricing procedure in which main condition type exist. [ICAA01] and check transaction specific

**SCALE:-** Scale means maintaining the price in slab system i.e. Normal scale or Graduated scale.

Go to VK11 → PR00 →  
 Lexi material amount →  
 go to scale and maintain  
 normal scale.  
  
 Remember pricing  
 procedure should be there  
 with PR00 with sales area.

Quantity	Price
If customer's order 1	10000
If customer's order 100	9900
If customer's order 200	9800
If customer's order 300	9600
If customer's order 500<	9500

If customer is placing 99 QTY order the material price will be Rs. 10000 \* 99, if customer placing 250 Qty then Rs. 9800 \* 250, If customer giving 550 Qty order then material Rs. 9500 \* 550.

**This is called Normal scale**



**Scale basis:** -This field controls on what basis we want to maintain the slab price i.e. based on quantity or value.

**Check Value:** - This field controls whether the slab price should be decrease or increase.

**Scale type:** - This field controls whether to go for normal scale or graduated scale.

**Normal scale:** - It is based on order quantity and system directly considers that slab price.

**Graduated scale:** - System considers each slab price that particular order quantity.

Go to V/06 → PR00  
scale type [D] save it  
  
go to VK11 PR00  
Material amount select  
and click on scale and  
maintain graduated scale  
save it.

Quantity	Price
If customer's order 100	10000
If customer's order 200	9900
If customer's order 300	9800
If customer's order 400	9600
If customer's order 500	9500

If customer is giving 350 Qty order:-  
1<sup>st</sup> 100 Qty is Rs. 10000 \* 100 =  
2<sup>nd</sup> 100 Qty is Rs. 9900 \* 100 =  
3<sup>rd</sup> 100 Qty is Rs. 9800 \* 100 =  
Last 50 Qty is Rs. 9600 \* 50 =  
**This is called Graduated scale**



Create an order with 350 Qty

N	CnTy	Name	Amount	Crcy	per	U	Condition value	Curr.	Status	NumC	OUn	CCon	Un	Condition value
PR00	Price		10,000.00	INR		1 CAR	1,000,000.00	INR			100 BT		1 CAR	0.00
PR00	Price		9,900.00	INR		1 CAR	990,000.00	INR			100 BT		1 CAR	0.00
PR00	Price		9,800.00	INR		1 CAR	980,000.00	INR			100 BT		1 CAR	0.00
PR00	Price		9,600.00	INR		1 CAR	480,000.00	INR			100 BT		1 CAR	0.00

**Exclusion:** - Any condition type if we maintain exclusion[X], if that condition type determine into sales document then it eliminates all the below condition types for which we have same requirement [Pricing procedure – Reqt (2)].

Exclusion can be maintained at two levels.

- ✚ Condition type level
- ✚ Condition record (VK11 → details → exclusion)

Maintain exclusion [X] in condition type “Y007”, and create one order with customer 100213 and it eliminates all the below condition types Z004, ZDIS. Just see the below conditions in order

N	CnTy	Name	Amount	Crcy	per	U	Condition value	Curr.
YPR0		Base price	9,000.00	INR		1 EA	900,000.00	INR
		Base value	9,000.00	INR		1 EA	900,000.00	INR
Y007		Customer Discount	30.000-%				270,000.00-	INR
		Gross value	6,300.00	INR		1 EA	630,000.00	INR
		Total discount	2,700.00-	INR		1 EA	270,000.00-	INR
		COPY OF GROSS	6,300.00	INR		1 EA	630,000.00	INR
		NET VALUE	6,300.00	INR		1 EA	630,000.00	INR
		COPY OF NET VALUE	6,300.00	INR		1 EA	630,000.00	INR
VPRS		Cost	100.00	INR		1 EA	10,000.00	INR
SKT0		Cash Discount	3.000-%				18,900.00-	INR

**Exclusion group:** - Grouping of multiple condition types into one and allow the system to propose best discount or the least discount.



**Configuration for exclusion group**

SPRO → S&D → basic function → pricing condition exclusion → condition exclusion for groups of condition → define condition exclusion group → go to new entries → Z001 – New own group → save it

Go back

Assign condition types to the exclusion group → go to new entries →

ExGr	Cond.exclusion group	CType	Condition Type
Z001	New own group1	Y007	Customer Discount
Z001	New own group1	Z004	Material discount
Z001	New own group1	Z005	Customer/Mate discou
Z001	New own group1	ZDIS	COMON Discount

→ Save it

Go back

Maintain condition exclusion for pricing procedure → select our pricing procedure [ZVAA01] and double click on exclusion → go to new entries →

Sno	Cpr	Procedure	ExGr1	Group 1	ExGr2
10	A	Best condition betwe	Z001	New own group1	

→ Save it

Now create an order when condition exclusion procedure is “A”

ConditExclusionProc.	Short text
A	Best condition between condition types

Here order with customer 100219 which applicable for Material discount (Z004) and Common discount (ZDIS) due to A condition exclusion procedure only best discount which is Z004 is active and ZDIS Inactive.

N	CnTy	Name	Amount	Crcy	per	U...	Condition value	Curr.
YPR0		Use price	9,500.00	INR		1 EA	9,500,000.00	INR
		Base value	9,500.00	INR		1 EA	9,500,000.00	INR
ZUPP		Condition update	6,000.00-	INR		1 EA	6,000,000.00-	INR
Z004		Material discount	1,500.00-	INR		1 EA	1,500,000.00-	INR
ZDIS		COMON Discount	10.000-%				950,000.00-	INR
ZGRP		group condition	20,000.00-	INR			5,671.64-	INR
		Gross value	1,994.33	INR		1 EA	1,994,328.36	INR
		Total discount	7,505.67-	INR		1 EA	7,505,671.64-	INR
		COPY OF GROSS	1,994.33	INR		1 EA	1,994,328.36	INR
YF00		Freight Surcharge	5.00	INR		1 KG	5,000.00	INR
YPAC		Packing Surcharge	2.000%				39,886.57	INR
		NET VALUE	2,039.21	INR		1 EA	2,039,214.93	INR
ZWST		New Output Tax	4.000%				81,568.60	INR
		COPY OF NET VALUE	2,120.78	INR		1 EA	2,120,783.53	INR



Now create an order when condition exclusion procedure is “L”

ConditExclusionProc.	Short text
L	Least favorable between conditions types

Here again order with customer 100219 which applicable for Material discount (Z004) and Common discount (ZDIS) due to “L” condition exclusion procedure only least discount which is ZDIS is active and Z004 Inactive.

N	CnTy	Name	Amount	Crcy	per	U...	Condition value	Curr.
YPR0		Base price	9,500.00	INR		1 EA	9,500,000.00	INR
		Base value	9,500.00	INR		1 EA	9,500,000.00	INR
ZUPP		Condition update	6,000.00	INR		1 EA	6,000,000.00	INR
Z004		Material discount	1,500.00	INR		1 EA	1,500,000.00	INR
ZDIS		COMON Discount	10.000	%			950,000.00	INR
ZGRP		group condition	20,000.00	INR			5,671.64	INR
		Gross value	2,544.33	INR		1 EA	2,544,328.36	INR
		Total discount	6,955.67	INR		1 EA	6,955,671.64	INR
		COPY OF GROSS	2,544.33	INR		1 EA	2,544,328.36	INR
YF00		Freight Surcharge	5.00	INR		1 KG	5,000.00	INR
YPAC		Packing Surcharge	2.000	%			50,886.57	INR
		NET VALUE	2,600.21	INR		1 EA	2,600,214.93	INR
ZWST		New Output Tax	4.000	%			104,008.60	INR
		COPY OF NET VALUE	2,704.22	INR		1 EA	2,704,223.53	INR

**Exclusion group can be between two groups.**

SPRO → S&D → basic function → pricing condition exclusion → condition exclusion for groups of condition → define condition exclusion group → go to new entries → Z001 – New own group 1 → Z002 – New own group 2 → save it

Go back

Assign condition types to the exclusion group go to new entries

ExGr	Cond.exclusion group	CTyp	Condition Type
Z001	New own group1	Y007	Customer Discount
Z001	New own group1	Z004	Material discount
Z002	New own group2	Z005	Customer/Mate discou
Z002	New own group2	ZDIS	COMON Discount

Save it

Go back

Maintain condition exclusion for pricing procedure → select our pricing procedure [ZVAA01] and double click on exclusion → go to new entries →

Sno	Cpr	Procedure	ExGr1	Group 1	ExGr2	Group 2
10	C	Best condition betwe	Z001	New own group1	Z002	New own group2

→ Save it



Now create an order when condition exclusion procedure is “C”

C	Best condition between the two exclusion groups
---	-------------------------------------------------

Crate an order with customer 213 and material Vaxin1500

N	CnTy	Name	Amount	Crcy	per	U	Condition value	Curr.
YPR0		Use price	9,000.00	INR		1 EA	900,000.00	INR
		Base value	9,000.00	INR		1 EA	900,000.00	INR
Y007		Customer Discount	30.000-%				270,000.00-	INR
ZUPP		Condition update	6,000.00-	INR		1 EA	600,000.00-	INR
Z004		Material discount	1,500.00-	INR		1 EA	150,000.00-	INR
ZDIS		COMON Discount	10.000-%				90,000.00-	INR
ZGRP		group condition		INR			0.00	INR
		Gross value	1,200.00-	INR		1 EA	120,000.00-	INR
		Total discount	10,200.00-	INR		1 EA	1,020,000.00-	INR
		COPY OF GROSS	1,200.00-	INR		1 EA	120,000.00-	INR
YF00		Freight Surcharge	5.00	INR		1 KG	500.00	INR
YPAC		Packing Surcharge	2.000%				2,400.00-	INR
		NET VALUE	1,219.00-	INR		1 EA	121,900.00-	INR
ZWST		New Output Tax	4.000%				4,876.00-	INR

Create same order when condition exclusion procedure is “F”

Sno	Cpr	Procedure	ExGr1	Group 1	ExGr2	Group 2
10	F	Best condition betwe	Z001	New own group1	Z002	New own group2

F	Least favorable between the two exclusion groups
---	--------------------------------------------------

Crate an order with customer 213 and material Vaxin1500

N	CnTy	Name	Amount	Crcy	per	U	Condition value	Curr.
YPR0		Use price	9,000.00	INR		1 EA	900,000.00	INR
		Base value	9,000.00	INR		1 EA	900,000.00	INR
Y007		Customer Discount	30.000-%				270,000.00-	INR
ZUPP		Condition update	6,000.00-	INR		1 EA	600,000.00-	INR
Z004		Material discount	1,500.00-	INR		1 EA	150,000.00-	INR
ZDIS		COMON Discount	10.000-%				90,000.00-	INR
ZGRP		group condition		INR			0.00	INR
		Gross value	2,100.00	INR		1 EA	210,000.00	INR
		Total discount	6,900.00-	INR		1 EA	690,000.00-	INR
		COPY OF GROSS	2,100.00	INR		1 EA	210,000.00	INR
YF00		Freight Surcharge	5.00	INR		1 KG	500.00	INR
YPAC		Packing Surcharge	2.000%				4,200.00	INR
		NET VALUE	2,147.00	INR		1 EA	214,700.00	INR
ZWST		New Output Tax	4.000%				8,588.00	INR



Create an order with customer 215 (dealer) materials Vaxin1500

N	CnTy	Name	Amount	Crcy	per	U...	Condition value	Curr.
■	YPR0	Base price	9,800.00	INR		1 EA	980,000.00	INR
		Base value	9,800.00	INR		1 EA	980,000.00	INR
▲	Z005	Customer/Mate discou	1,800.00-	INR		1 EA	180,000.00-	INR
■	ZUPP	Condition update	6,000.00-	INR		1 EA	600,000.00-	INR
■	Z004	Material discount	1,500.00-	INR		1 EA	150,000.00-	INR
▲	ZDIS	COMON Discount	10.000-%				98,000.00-	INR
■	ZGRP	group condition		INR			0.00	INR
		Gross value	2,300.00	INR		1 EA	230,000.00	INR
		Total discount	7,500.00-	INR		1 EA	750,000.00-	INR
		COPY OF GROSS	2,300.00	INR		1 EA	230,000.00	INR

- ✚ The condition exclusion procedure “D” will be used in group condition concept.
- ✚ Supplement condition cannot be eliminated, if we have both exclusion and condition supplement then system could not able to eliminate condition supplement.





6. **To:** - To field will be used cumulate the value of multiple steps which are in a sequence.

If we leave 'From' and 'To' value fields then system will take immediate above value.

7. **Manual:** - Any condition type if we check manual, then system will not determine the condition type automatically into sale document. User has to enter it manually in sales document.

In standard all header conditions are manual.

8. **Required:** - Any condition type if we check required, then system will not allow to save the sales document if the condition type is missing.

9. **Statistical:** - Any condition type if we check statistical then it will have two effects.

✚ The value of condition type doesn't have any effect on net value.

✚ The value of condition type will not be posted into accounting.

In standard the statistical condition types are VPRS, SKTO, PI01, KUMU and all bifurcation steps are statistical condition.

10. **Print:** - This field controls whether to print the condition type into output printout or not.

✚ If we don't want to print then leave the field 'Blank'.

✚ If we want to print maintain either 'X' or 'S'.

✚ 'X' means if we want to print at item level. – maintain 'X'

✚ 'S' means if we want to print at header level – Maintain 'S'

✚ All header condition we maintain print as 'S'.

11. **Subtotal:** - It will be used to store the value of condition type in some temporary tables and fields for the purpose of further calculation.

✚ We do calculation in alternate calculation type and alternate base type.

✚ Subtotal will also be used to update the sales document value into credit management.

✚ The subtotal for credit management is "A".

✚ The subtotal will also be used to update billing document value into rebate agreement.

✚ The subtotal for rebate agreement is "7".

✚ The subtotal for VPRS condition type is "B".



## 12. Requirement: -

**Requirement** is a condition which system will check every time while determining condition type into sales document. If the condition is fulfilling then only condition type will determine into sales document.

If the condition is not fulfilling then condition type will not determine into sale document.

- The standard requirement is “2”.  
Requirement 2 checks that the **Pricing field** in item category should be maintain with “X” or “B”.
- The requirement for “VPRS” condition type is “4”.  
Requirement 4 checks that the **Determine cost** field in item category should be **checked**.
- The requirement for “SKTO” condition type is “9”.  
Requirement 9 checks that the **Cash discount** field in material master- accounting 1 view should be **checked**.
- The requirement for “R100” condition type is “55”.  
Requirement 55 checks that the **Pricing field** in item category should be only “B”.  
That is the reason R100 appears only for ‘TANN’ item category because only TANN will have pricing “B”.
- ‘NRAB’ condition type determines in free goods without item generation. Requirement is “59”.
- The requirement for **PI01** condition type is “22”.  
Requirement ‘22’ checks that the ordering company and delivery company should be different.
- For all rebate condition types the requirement is “24”.  
Requirement “24” checks that the document should be billing documents.  
That is the reason rebate condition will determine only in billing document.

**13. Alternate calculation type**: - We use alternate calculation type, if the calculation part of condition type is not standard.

- ✚ Alternate calculation type is a formula.
- ✚ If we maintain formula in alternate calculation type then system calculates and propose us total value of condition type.
- ✚ If we maintain formula in calculation type then no need to maintain condition record because system is directly proposing the condition value.



**14. Alternate base type:** - The standard base type is 'From'.

We use alternate base type when the base value of the condition type is not standard.

- + Alternate base type is also formula.
- + If we maintain formula in alternate base type then system calculate and propose us only base value.
- + If we maintain formula in base type then we have to maintain condition record to convert the base value into condition value.

**Difference between Alternate calculation type & Alternate base type**

Alternate calculation type	Alternate base type
<p><b>i). Alternate calculation type is formula.</b></p> <p><b>ii). We use it if the calculation part of condition value is not standard.</b></p> <p><b>iii). If we maintain formula in alternate calculation type then system calculate formula and propose us condition value.</b></p> <p><b>iv). If we maintain formula in alternate calculation type then no need to maintain condition record</b></p>	<p>i) Alternate base type is also formula.</p> <p>ii). We use it if the base value of the condition type is not standard.</p> <p>iii). If we maintain formula in alternate base type then system calculate formula and propose the base value.</p> <p>iv). If we maintain formula in alternate base value then we have to maintain condition record.</p>

**15. Account key:** - Account key is one of the parameter to determine revenue G/L account while posting invoice values into accounting.

Any conditions, if it is not statistical then we have to maintain account key otherwise system will not generate accounting key document.

**Q.**There is a condition type which is statistical but we assigned accounting key. What happens?

**Ans.** There will be no effect, As statistical will over right the accounting key. It will not post in to accounting.

<u>Rebate condition type</u>	<u>Accounting Key</u>	<u>Accruals</u>
BO01	ERB	ERU
BO02	ERB	ERU
BO03	ERB	ERU
BO06	ERB	ERU



15. **Accruals:** - Keeping some amount aside from each transaction into provisional account to meet the future requirement of rebate settlement.

**Q.** There is a condition type which is statistical but i want to post it into some G/L account.

**How it is possible?**

**Ans.** If any condition type condition class is "C" (rebate condition) even it is statistical we can post it into some G/L account with the help of Accruals.

### Reverse Pricing

Forward pricing					Reverse pricing							
					SBT			ACT		ABT		
10	PR00			100000	10	ZPRO		1				104000
20		Base price	10	100000	20	JVAT(4%)		2			KOMP-KZWI1*100/100+4	4000
30	JVAT(4%)		20	4000	30		Base value				(KOMP - KZWI1) - (KOMP - KZWI2)	100000
40		Total	20-30	104000	40	PR00		30			copy of base value	100000

In above example we have only total value which is Rs. 104000/- need to determine base value by using reverse pricing. So we are using formula in Alternate calculation type (ACT) and Alternate base type (ABT).

SBT = Subtotal is 1 = carry over value to KOMP-KZWI1 (Table-field) for

104000 SBT = Subtotal is 2 = carry over value to KOMP-KZWI2 (Table-

field) for 4000 KOMP-KZWI1 \* 100 /100 + 4 is 104000 \*100 / 100 + 4 =

100000

So 4% of 100000 = 4000/-

104000 – 4000 = 100000 (Base value)

For determining base price need to copy of base value which Rs.

100000 So by this example we can understand the process of

reverse pricing

And also the use of Subtotal, Alternate calculation type and Alternate base type which are most important of 16 fields in pricing procedure



Forward pricing				Reverse pricing			
				SBT	ACT	ABT	
10	PR00		100000	10	ZPR0		116854
20		Base price	10 100000	20	JVAT(4%)		4494
30	BED(12%)		20 12000	30	Base+exise		112360
40	ECS(2%)		30 240	40	Base value		100000
50	SECS(1%)		30 120	50	BED(12%)		12000
60		Base+exise	20-50 112360	60	ECS(2%)		240
70	JVAT(4%)		60 4494	70	SECS(1%)		120
80		Total	60-70 116854	80	PR00		100000

**Client's requirement:** - is any customer if we purchase slow moving item then they want to offer 20 days extra credit period.

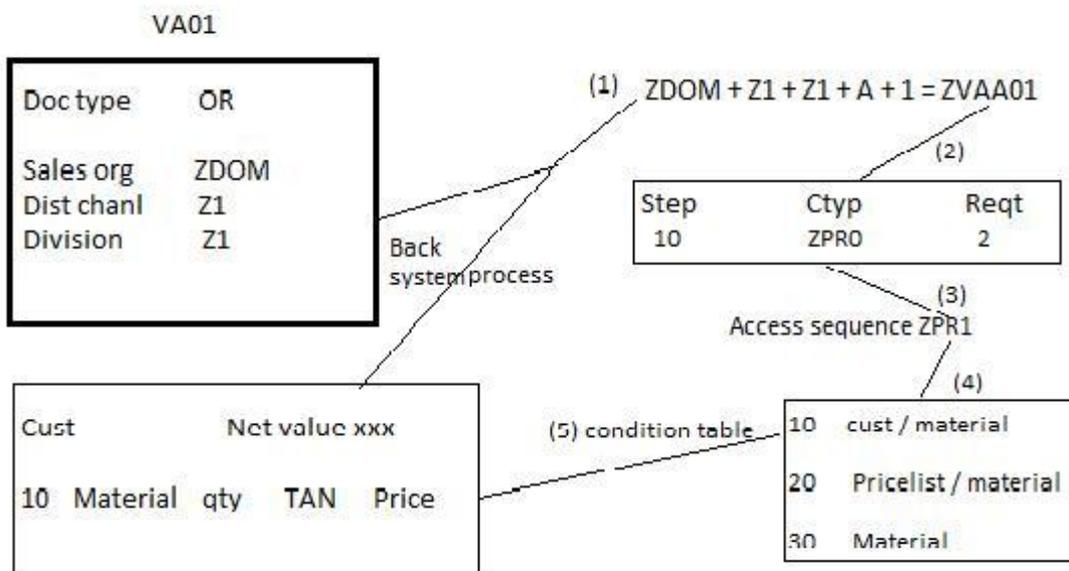
**Configuration:** - Create one new condition type a copy of KO04

Placed the condition type in pricing procedure in the last and make it statistical save it.

Maintain condition record: VK11 maintain material X, Y, Z and Rs. 1,1,1 go to additional data one by one and maintain additional value days [20] save it.

**Q. How systems determine pricing into sales document?**

**Ans.**





**1<sup>st</sup>** System will try to determine pricing procedure with the combination of sales area + Doc pr pro + Cust Pr pro = Pricing procedure.

**2<sup>nd</sup>** Then system will go inside pricing procedure and take the 1<sup>st</sup> step, condition type and check whether requirement is fulfilling or not.

**3<sup>rd</sup>** If requirement is fulfilling, system will go inside the condition type and take access sequence and take all the combination and search for valid condition record if system find valid condition record then system will determine price into sales document

**Q. What sequence system follows out of 16 fields of pricing procedure while determining the condition records into sales document?**

**Ans.**

1.	Step
2.	Counter
3.	Condition type
4.	Requirement
5.	Subtotal
6.	Alternate base type
7.	Alternate calculation type
8.	From
9.	To
10.	Manual
11.	Remaining

**Q. What is the purpose of loour limit & upper limit in condition record?**

**Ans.** It will help to decrease and increase the price in sales document pricing up to that particular limit.

**Q. How to maintain loour limit & upper limit for manual condition type.**

**Ans.** SPRO → S&D → Basic function → Pricing → Pricing control → Define upper / loour limits for condition → maintain condition and upper / loour limit → save it.

**Q.what is pricing report?**

**Ans.** Display the pricing information in a proper format.



SPRO → S&D → basic function → pricing → maintain pricing report → create pricing report → name of list [Z1] → title [new pricing report] → click on this => or enter.

The T-code for creating pricing report is [V/LA] → select the field on what basis we want the generate the report (select the field – customer, price list, material and click on “OR” → select our made Cust/material, Pricelist/material, material table → click on => → positioning → select as per our wish → select all default values and click on → save it.

The T-code to execute pricing report [V/LD] → maintain the price report name [Z1] → execute → condition type (whatever we want to see).

Q. Clients requirement is they want to introduce new discount condition type in existing pricing procedure but new discount condition type should appear while creating invoice to already create sales order.

Ans. V/06 → condition type → mention condition type and maintain “L” in condition category.

Q, client’s requirement is freight condition type should be calculated based on below requirement:

X	→ Weight	> 400 Kgf	freight = Rs. 5000/-
Y		< 400 Kgf	freight = Rs. 3000/-
Z			
A	→ Weight	> 400 Kgf	freight = Rs. 3000/-
B		< 400 Kgf	freight = Rs. 2000/-
C			

Total document weight:  
> 1000 Kg freight = Rs. 10000/-<  
200 Kg freight = Rs. 1500/-



## Interview Questions For Pricing

Q1. What is condition technique and what it consists?

Ans. Price is based on condition technique. Condition technique is a process of determining condition records into sales document.

Condition technique consists of condition records.

Condition records will be stored in condition table.

Condition table will be placed in access sequence for most specific to most general.

Access sequence will be assigned to condition type.

Condition type will be placed in pricing procedure.

Q2. What is access sequence?

Ans. It is a search strategy which will search for the valid condition record for the most specific to most general.

Q3. What happens if i uncheck exclusive in access sequence?

Ans. If we uncheck exclusive in access sequence even if system find valid condition record system will not come out of the search strategy. it will go and search and other combination if system find valid condition record in other combination then it will determine all the condition record into sales document. If it a base price it activate the last one and deactivate previous one but if it is discount then it will activate all.

Q4. What happens if i check exclusive in access sequence?

Ans. Exclusive is one field in access sequence. If we check exclusive in access sequence then if system finds valid condition record at any of the combination then system will immediately come out of the search strategy and determine the price into sales document.

Q5. What is condition table?

Ans. Condition table is the combination of fields which will help to maintain the condition record.

Q6. What happens if i save condition tale in local object?

Ans. If we save condition table in local object then system will not generate transport request number and without transport request number we cannot transfer the condition table from one server to another server.

Q7. Condition table will be store in which request?

Ans. Condition table will be stored in workbench request.

Q8. What is field catalogue?

Ans. Allowed fields will be used to add the fields in field catalogue.

Q9. What happens if the field is not available in field catalogue?

Ans. We need to add the field in field catalogue.

Q10. What is the purpose of condition index?



Ans. It will help to display or change all the combination of prices in a single window.

If management ask to change the prices of all combination with immediate effect then by using condition index concept, we change all the combination of prices in single window.

Q11. What is the purpose of condition update?

Ans. - Restricting the condition record up to particular quantity or value or number of orders. It's called as condition update.

Q12. SAP restricts the number of order to?

Ans. In condition update concept SAP restricted the number of orders to 3.

Q13. What is the info structure we use for condition update?

Ans. S071, go to the T-code 'OM01 (To see the info structure) search S071 (condition update).

Q14. What happens if i check group condition?

Ans. If we check group condition then group condition amount will be distribute among all the line item in propionates to the value of line item.

Q15. What is group condition routine and how many routine we have and what is purpose of it?

Ans. Group condition routine controls whether to consider total document value or group of materials value.

We have 2 routine. 1 and 3.

If we want to consider total document value then maintain group condition routine as "1".

If we want to consider group of materials value then maintain group condition routine as "3".

Q16. What is rounding difference comparison?

Ans. If we check this while distributing group condition amount among all the line items, if is there any left out amount then left out amount will be added to largest amount in form of value.

Q17. Why we assign condition type in OVKK?

Ans. To see the amount of condition type in line item overview or to change the amount of condition type in line item overview.

Q18. What is the purpose of exclusion indicator?

Ans. Any condition type if we maintain exclusion[X], if that condition type determine into sales document then it eliminates all the below condition types for which we have same requirement [Pricing procedure – Reqt (2)].

Q19. What is the common T-code for pricing?

Ans. The common T-code for total pricing is [VOKO].

Q20. What is condition supplement?

Ans. Condition supplement is concept of adding one condition record to another condition record. If the main condition record determine then only supplement condition record will be determine



Q21. What is cumulate condition?

Ans. Cumulate condition will be used only in BOM concept, KUMU condition type will help to cumulate the value of components and display the value in main item.

Q22. What is exclusion group?

Ans. It will be used only in BOM concept, KUMU condition type will help to cumulate the value of components and display the value in main item.

Q23. What is the difference between normal scale and graduated scale?

Ans. Normal scale: - It is based on order quantity and system directly considers that slab price.

Graduated scale: - System considers each slab price that particular order quantity.

Q24. What scenario system activates multiple base pricing in single sales document?

Ans. In graduated scale scenario system consider multiple base pricing in single sales document.

Q25. What is the purpose of subtotal?

Ans. It will be used to store the value of condition type in some temporary table and fields for the purpose of further calculation in Alternate calculation type and Alternate base type.

Q26. There is a condition type which is manual which user enters manually into scale document but entering the condition type system should not allow to change the price?

Ans. [ ] amount and [ ] value in particular condition

type. Q27. What happens if a check statistical?

Ans. Any condition type if we check statistical then it will have two effects.

i) The value of condition type doesn't have any effect on net value.

ii) The value of condition type will not be posted into accounting.

Q28. There is a condition type which statistical and if assigned accounting key for that. What happens? Ans. There is no effect, statistical over right to accounting key. It will not post to accounting.

Q29. There is a condition type which statistical but i want to post into some G/L account.

Ans. If any condition type is condition class is "C" (rebate condition) even it is statistical we can post it into some G/L account with the help of Accruals.

Q30. What is the purpose of requirement?

Ans. Requirement is a condition which system will check every time while determining condition type into sales document.



If the condition is fulfilling then only condition type will determine into sales document. If the condition is not fulfilling then condition type will not determine into sale document.

Q31. What is the difference between alter calculation type and alter base type?

Ans. Difference between Alternate calculation type & Alternate base type

Alternate calculation type	Alternate base type
<p><b>i). Alternate calculation type is formula.</b></p> <p><b>ii). We use it if the calculation part of condition value is not standard.</b></p> <p><b>iii). If we maintain formula in alternate calculation type then system calculate formula and propose us condition value.</b></p> <p><b>iv). If we maintain formula in alternate calculation type then no need to maintain condition record</b></p>	<p>i) Alternate base type is also formula.</p> <p>ii). We use it if the base value of the condition type is not standard.</p> <p>iii). If we maintain formula in alternate base type then system calculate formula and propose the base value.</p> <p>iv). If we maintain formula in alternate base value then we have to maintain condition record.</p>

Q32. What is accrual?

Ans. keeping some money aside from each transaction into provisional account to meet the future requirement of rebate settlement

Q33. Client's requirement is any customer if he purchase slow moving items then they want to offer 20 days extra credit period.

Ans. Create one new condition type a copy of KO04

Placed the condition type in pricing procedure in the last and make it statistical save it.

Maintain condition record: VK11 maintain material X, Y, Z and Rs. 1,1,1 go to additional data one by one and maintain additional value days [20] save it.

Q34. Can i have difference payment terms for different material?

Ans. No.

Q35. When we check transaction specific?

Ans. Any condition type if we have reference condition type then go to pricing procedure in which main condition type exist. [ICAA01] and check transaction specific

Q36. What is header condition?

Ans. Header condition is the condition which applies to all the line items into sales document.

Header condition should be always process manually.

Header condition doesn't have access sequence.



Q37. Without maintaining condition record how to determine pricing for a particular material?

Ans. Price reference field in material master

Q38. What is the T-code to develop new pricing requirement?

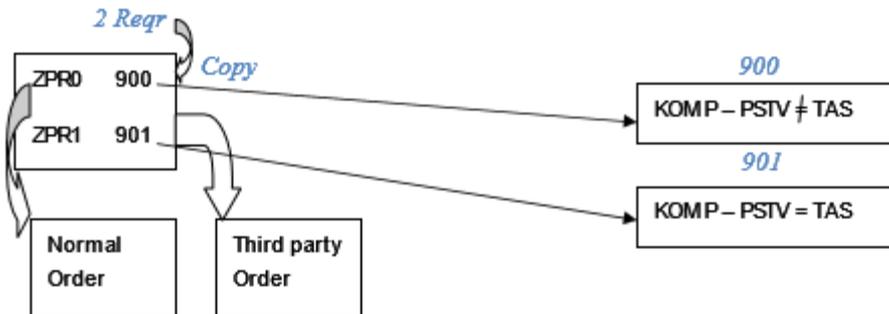
Ans. VOFM User define requirement number should be 900 and above.

Q39. Client's requirement is they have two base price condition type in single pricing procedure.

ZPR0 Normal order, ZPR0 condition type should determine for normal order process.

ZPR1 Third party order, ZPR1 condition type should determine only for Third party process.

Ans. As consultant we will give logics and ABAPer will do configuration



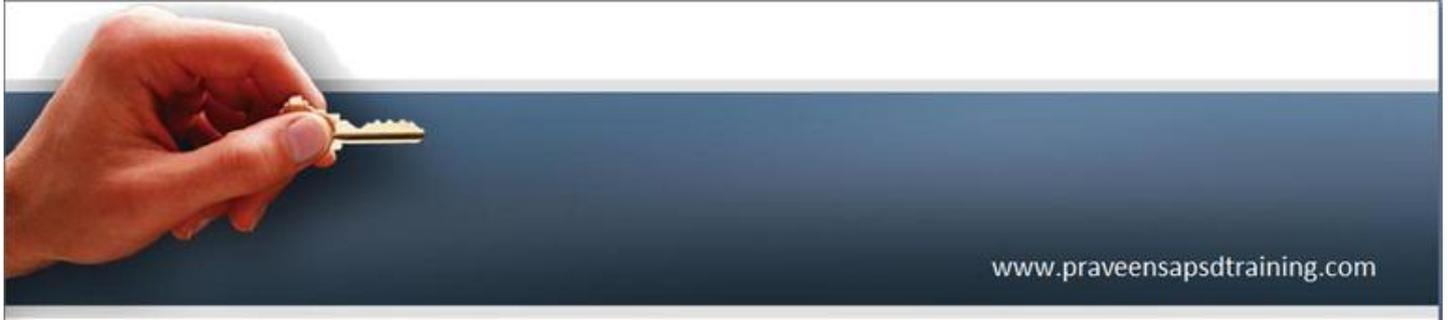
ABAPer and basis consultant are responsible to take access key.

They take access key service.sap.com website when we enter it this website system will ask for OSS id number and password.

OSS id number and password will be provided by client the number and password will be provided by client the number look like (S0000567820) put this number to access key and click on continue then put the details in website then system will propose 20 digit number and we do place the number in access key, then system will allow to change or develop the program

The activity system perform when we create sales order

- 1<sup>st</sup> Partner determination
- 2<sup>nd</sup> Listing exclusion
- 3<sup>rd</sup> Material determination
- 4<sup>th</sup> Free goods
- 5<sup>th</sup> Delivery scheduling
- 6<sup>th</sup> Availability check
- 7<sup>th</sup> Pricing
- 8<sup>th</sup> Credit management
- 9<sup>th</sup> Text determination



**10<sup>th</sup>** Output determination

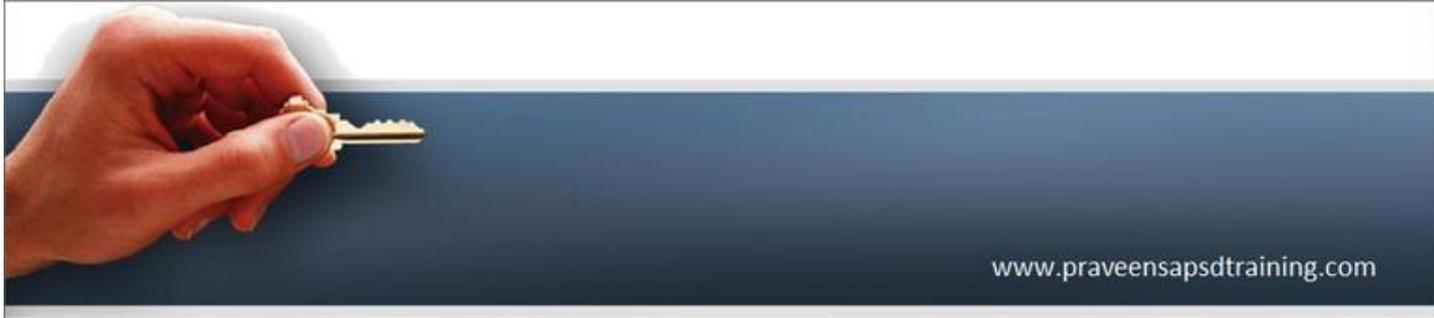
**11<sup>th</sup>** Transfer of requirement

Q. Client's requirement is bill to party should be determine from ship to party but not from sold to party while creating sales order.

Ans. First go to partner determination T-code [VOPAN] customer master go to ship to party (WE) partner function in procedure WE – BP.

Go to account group function assignment assign bill to party (BP) – (0002) save it.

Go to sales document header change select (TA) double click on Partner determination procedure go to bill to party (TA) source as (SH) ship to party sequence (1) save it.



## FREE GOODS

“Offering the goods free of cost to customer in relation to the main item”.

Ex. - Any customer if he purchases ‘X’ material of 100 quantity, he will get ‘Y’ material 20 quantity free.

free goods is two types: -

1. Inclusive
2. Exclusive

Inclusive	Exclusive
<p>i). In inclusive the free goods quantity is included with in the Ordered quantity.</p> <p>Ex. - Offer is, if customer purchases ‘X’ material of 100 qty he will get 20 qty free.</p> <p>For the above scenario, customer placed the order for 100 qty then main item qty becomes 80 &amp; free goods qty become 20.</p> <p>Order <span style="border: 1px solid black; padding: 2px;">X – 80 qty Y – 20 qty</span> Customer will Pay for 80 qty and get 100 qty delivered</p>	<p>i). In exclusive the free goods quantity is excluded from ordered quantity.</p> <p>Ex.- for the same offer if customer places order for 100 qty then main item qty remains 100 and free goods qty becomes 20</p> <p>Order <span style="border: 1px solid black; padding: 2px;">X – 100 qty Y – 20 qty</span></p> <p>Pay for 100 qty and get 120 qty delivered</p>
<p>ii). In inclusive we can offer only same material as free goods.</p>	<p>ii).In exclusive we can offer same material or different material as free goods.</p>

### Inclusive is further classified into two types:-

i) Free goods with item generation: - In inclusive with item generation the free goods item will be determined as separate line item. Here **R100 condition type** will get triggered, and make the free goods line item value as zero.

ii) Free goods without item generation: - In free goods without item generation the free goods item will not determined as separate line item. Here **NRAB condition type** will get triggered, and deducts the value of free goods item value from main item value.

Free goods is also based on condition technique



Condition technique is a process of determining condition records into sales document.

- ✚ Condition technique consists of condition records.
- ✚ Condition records will be stored in condition table.
- ✚ Condition table will be placed in access sequence for most specific to most general.
- ✚ Access sequence will be assigned to condition type.
- ✚ Condition type will be placed in pricing procedure.

Path for configuration free goods

SPRO S&D basic function free goods condition technique for free goods maintain condition table generate one condition table with sales org and material maintain access sequence (the **standard Access sequence is NA00**) ZA00 double click on access new entry 10 – table no. - save & go back

- Maintain condition type (the **standard condition type is NA00**) create new condition type ZA00 and assign access sequence ZA00 save it go back
- Maintain pricing procedure (the **standard procedure is NA0001**) create own ZA0001 select and double click on control data new entry [10 – ZA00] save it.
- Activate free goods determination (we assign free goods procedure to the combination of sales area + document pricing procedure + customer pricing procedure

SOrg.	DChl	Dv	DoPr	CuPP	Proc.
ZDOM	Z1	Z1 A		1	ZA0001

save it.

Determination of item category for free goods item

Manual Free Goods

OR  
 NORM  
 -----  
TAN  
TANN

Automatic Free Goods

OR  
 NORM  
**FREE**  
TAN  
TANN

Go to **Control Free Goods Pricing** **Control Pricing For Free Goods Item Category** (go to item category TANN and maintain pricing field as 'B').

**Maintain Condition Type For 100% Discount** (The standard condition type 100% discount is R100)

**Maintain Pricing Procedure For Pricing** (In this configuration step, we go to our pricing procedure and maintain R100 condition type).

For R100 condition type maintain net value step number in "From" field in pricing procedure.

Step	Co	CType	Description	From	To	Ma	R	Stat	P	SuTot	Reqt	CaTy	BasTy	AccK
56	0	HA00	Percentage Discount	20		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERS
57	0	HB00	Discount (Value)	20		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERS
58	0	ZGRP	group condition	20		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERS
60	0		Gross value	20	58	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						
70	0		Total discount	30	58	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						
71	0		COPY OF GROSS	60		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						
75	0	YF00	Freight Surcharge	60		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERF
80	0	YPAC	Packing Surcharge	60		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERF
81	0	HD00	Freight	60		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERF
90	0		NET VALUE	71	81	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						
92	0	NRAB	Free goods	90		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			59		29	ERS
93	0	R100	100% discount	90		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			55		28	ERS
95	0	ZWST	New Output Tax	90		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			10		16	MWS

For R100 condition type maintain requirement as '55'. The requirement 55 checks that the pricing field in item category should be only 'B'. That is the reason R100 condition type determines only for free goods line item.

For R100 maintain Alt Base type as '28'. The base type formula '28' will make the free goods item value as zero.

For R100 maintain Account key 'ERS'. Save it.

**Transfer the cost of free goods item to main item**

**Set Transfer Of Costs To Main Item**

This configuration step will help to transfer the cost of free goods item to main item.

Click on change

position (F2 – LF) select and double click on item in left menu

position (TANN) select and click on details and Check "cumulate cost" field in copy control save it.

The T-code to maintain free goods master is **[VBN1]**

ZA00 (condition type) **enter**,

- maintain the material
- **Min qty** (Minimum quantity is the quantity which customer has to place the order to get eligible for free goods, if customer is not placing the minimum quantity then system will not propose the free goods) [100]
- **From quantity** (from quantity is the base quantity to calculate the free goods quantity [30] maintain unit of measure [EA])
- **free goods qty** (It is the free goods quantity which we offer to customer in relation to from quantity) [3] [EA]
- **calculation rule**

(We have 3 calculation rules to calculate the free goods quantity: -

- i) **PRORATA**: - In prorate, system calculates the free goods quantity in proportionate to Order quantity and From quantity.

Ex - Offer is, minimum order quantity is 100 and after each 30 qty get 3 qty as free goods, so in this calculation rule if customer purchases 100 qty then he get 10 qty free i.e.

30 = 3

100 = ?

? =  $100 \times 3 / 30 = 9.3...$  ? = 10 (Rounded OFF)

ii) **Unit reference**: - In unit reference system considers From **quantity** as 1 unit and system checks the number of units in ordered quantity. Based on this system will propose free goods quantity.

Ex- if order is 110 then  $30 + 30 + 30 + 20$   
 $\downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 5      5      5      0 = 15 qty free goods

iii) **Whole Unit**: - If order quantity is exactly divisible by **From QTY** then only system will propose free goods.

Ex – If order qty is 110 which is not exactly divisible by 30 so free goods is 0.)

Calculation rule [1] (prorate)

**Free goods** (this field controls whether the free goods is inclusive or exclusive and it also controls whether the free goods is inclusive with item generation or without item generation) [1]

**Free goods delivery control** (this field controls the free goods qty should be delivered in relation to the main item qty [E] save it.

Create an order and check free goods determination



**Free goods without item generation**

In free goods without item generation, the free goods item will not be determined as separate line item, Here ‘NRAB’ condition type determines and deducts the value of free goods from main item value.

**Configuration: -**

Go to pricing procedure and place NRAB condition type above R100 in pricing procedure ZVAA01

Step	Co	CType	Description	Fro	To	Ma	R	Stat	P	SuTot	Reqt	CaTy	BasTy	AccK
56	0	HA00	Percentage Discount	20		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERS
57	0	HB00	Discount (Value)	20		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERS
58	0	ZGRP	group condition	20		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERS
60	0		Gross value	20	58	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						
70	0		Total discount	30	58	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						
71	0		COPY OF GROSS	60		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						
75	0	YF00	Freight Surcharge	60		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERF
80	0	YPAC	Packing Surcharge	60		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERF
81	0	HD00	Freight	60		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERF
90	0		NET VALUE	71	81	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						
92	0	NRAB	Free goods	90		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			59		29	ERS
93	0	R100	100% discount	90		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			55		28	ERS
95	0	ZWST	New Output Tax	90		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			10		16	MWS

Requirement 59 checks that in VBN1 the free goods category should be “3”.

Base type “29” will help to deduct the value of free goods from main item value.

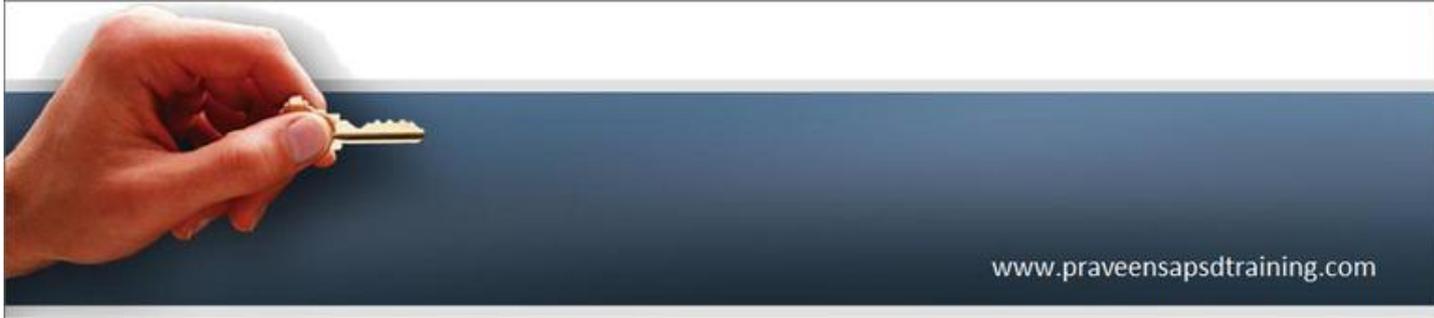
**Exclusive free goods**

Go to VBN1 ZDOM click on exclusive minimum qty (100) from qty (30) EA 3 1 free goods category (2) additional material (Revital) E

Material	Name	Min. qty	For	Unit	add. FG	Add	in %	Cal	F	Free goods	AddMat FrGd	Material Description	F
VAXIN1500	Vaxin 1500	100	30	EA	3	EA	9.091	2		Exclusive	REVI2040050B0T	REVITAL 20 TO 40 YRS 50MG BOTTLE	E

select this go to scale

Sca	Minimum qty	FreeGdsQty	Unit	AdQtyFGds	Add	in %	Cal	F	Free goods	AddMat FrGd	Description	F
From	100	30	EA	3	EA	9.091	2		Exclusive	REVI2040050B0T	REVITAL 20 TO 40 YRS 50MG BOTTLE	E
From	200	30	EA	3	CAR	0.001	2		Exclusive	LEXI3040015B0T	Lexine 30 to 40 yrs 15mg bottle	E



### Question & Answer For Free Goods

Q1. What is the difference between inclusive and exclusive?

Ans.

<b>Inclusive</b>	<b>Exclusive</b>				
<p>i). In inclusive the free goods quantity included in order quantity.</p> <p>Ex. - Offer is, if customer purchases 'X' material of 100 qty he will get 20 qty free.</p> <p>For the above scheme customer placed the order for 100 qty then main item qty becomes 80 &amp; free goods qty become 20.</p> <p>Order <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>X – 80 qty</td></tr><tr><td>Y – 20 qty</td></tr></table> Pay for 80 qty and get 100 qty</p>	X – 80 qty	Y – 20 qty	<p>i). In exclusive the free goods quantity exclude from order quantity.</p> <p>Ex.- for the same offer if customer places order for 100 qty then main item qty remains 100 and free goods qty becomes 20</p> <p>Order <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>X – 100 qty</td></tr><tr><td>Y – 20 qty</td></tr></table></p> <p>Pay for 100 qty and get 120 qty</p>	X – 100 qty	Y – 20 qty
X – 80 qty					
Y – 20 qty					
X – 100 qty					
Y – 20 qty					
<p>ii). In inclusive we can offer only same material as free goods.</p>	<p>ii). In exclusive we can offer same material or different material as free goods.</p>				

Q2. What is the difference between inclusive with item generation and without item generation?

Ans. i) Free goods with item generation: - In inclusive with item generation the free goods item determine as separate line item and here R100 comes into picture and make the free goods line item value is zero.

ii) Free goods without item generation: - In free goods without item generation the free goods item will not determine as separate line item. Here NRAB condition type determines and deducts the value of free goods from main item value.

Q3. How many calculation rule we have in free goods and explain it?

Ans. (We have 3 calculation rules to calculate the free goods quantity: -

i) PRORATA: - In prorate basis system calculate the free goods quantity proportionally based on Order quantity and From quantity.

ii) Unit reference: - In unit reference system consider From quantity as 1 unit and system checks the number of units in order quantity based on that system will propose free goods quantity.

iii) Whole Unit: - If order quantity in exactly divisible by From then only system will propose free goods.



Q4. I want to control the free goods delivery in relation to main item. Where is the control?

Ans. free goods delivery control (this field controls the free goods qty should be deliver in relation to the main item qty [E]

Q5. I want to determine different materials as free goods if quantity increases.

How? Ans. Maintain scale

Sca	Minimum qty	FreeGdsQty	Unit	AdQtyFGds	Add	in %	Cal	F	Free goods	AddMat FrGd	Description	F
From	100	30	EA	3	EA	9.09	1	2	Exclusive	REVI2040050BOT	REVITAL 20 TO 40 YRS 50MG BOTTLE	E
From	200	30	EA	3	CAR	0.00	1	2	Exclusive	LEXI3040015BOT	Lexine 30 to 40 yrs 15mg bottle	E

Q6. Can i determine multiple goods as free goods?

Ans. NO – Multiple free goods is GAP in SAP.

Q7. Can i determine free goods in quotation?

Ans. No – we can determine free goods only in order.

Q8. I want to transfer the cost of free goods item to main item. Where is the control?

Ans. In copy control check cumulate cost.

Q9. What is the requirement for R100 and what it checks?

Ans. For R100 condition type requirement as ‘55’. The requirement 55 checks that the pricing field in item category should be only ‘B’. That is the reason R100 condition type determines only for free goods line item.

Q10. What is the requirement for NRAB and what checks?

Ans. For NRAB condition type requirement is 59 checks that in VBN1 the free goods category should be “3” i.e. inclusive rebate without item generation.

Q11. What is base type formula for R100 and what it will do?

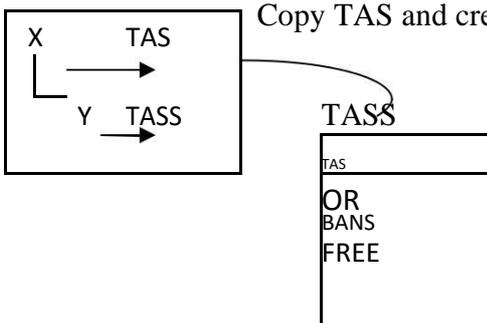
Ans. For R100 maintain Base type as ‘28’. The base type formula ‘28’ will help to deduct the total net value.

Q12. What is the base type formula for NRAB and what it will do?

Ans. Base type “29” will help to deduct the value of free goods from main item value.

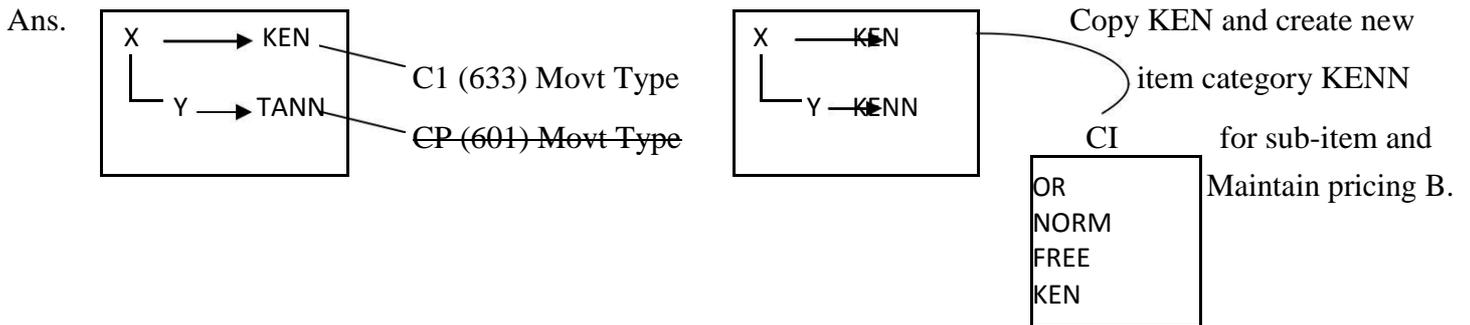
Q13. How to determine free goods in third party process?

Ans. Copy TAS and create new item category TASS for sub-item and maintain pricing 'B'





Q14. How to determine free goods in consignment issue?



Q15. Clients requirement is they have three materials [X, Y, Z] if any of these three materials determine as free goods item then system should propose only 50% discount not 100% discount. If any other material determine as free goods then system should offer 100% discount.



## **Material Determination**

It is the process of substituting one product in place of other product.

### Reason for substitution:

- i) If the product is discontinued and coming with new product.
- ii) If the product is not available.
- iii) Combo packs (promotional activity).

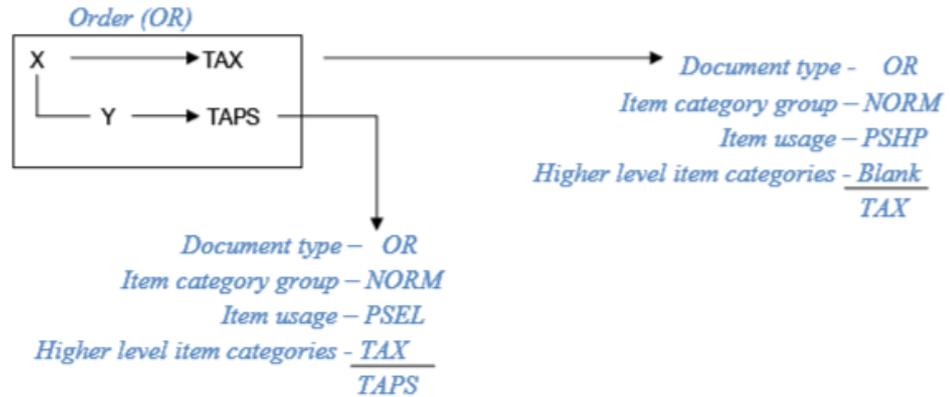
### Material determination is of two types: -

- 1.** Manual – In manual process, user will manually substitute the item .
- 2.** Automatic – In automatic process, system automatically determine the substitute item.
  - ➔ Auto replacement
  - ➔ Substituted item will be displayed as sub item.

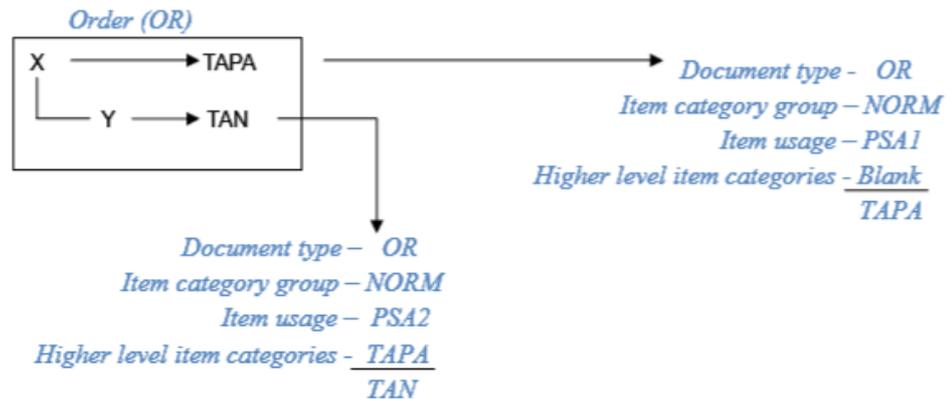
### Sub item is again classified into two types: -

- Header pricing
- Item pricing

*Material determination header pricing*



*Material determination Item pricing*



*Material determine also based on condition technique.*

**Material determination is also based on Condition Technique**

Configuration for material determination

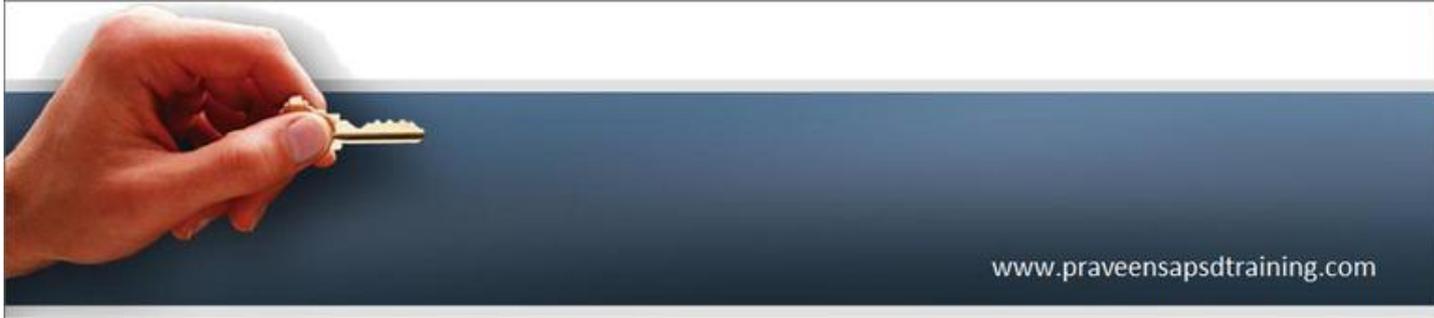
SPRO → S&D → basic function → material determination → Maintain Prerequisites for Material Determination  
 Create condition tables    Sales org + Material entered    generate    save it.

Maintain access sequences (The Material entered standard Access sequence is A001) create own Z001 and place the condition table in access sequence save it

Define condition types Go to new entries create own condition type Y001 and assign access sequence save it

Double click on Maintain procedure the **standard procedure is A00001** create own Y00001 (New procedure) click on control data

Step	Co...	CTyp	Description	Requiremnt
10	0	Y001	Condition Type Mat d	



Go back Assign Procedures To Sales Document Types position OR assign new pricing procedure

SaTy	Sales Doc. Type	MatDeterm.	Mat. determination
OR	Standard Order	Y00001	Material determination1

Save it.

Go back Define Substitution Reasons

(The substitution reason actually controls, whether to substitute the material manually or automatically and it also control whether to do auto replacement or whether to determine substitute item as sub item. It also controls whether to go for Header pricing or item pricing)

Click on new entries Y001 (New substitute reason)

**Entry** (This field controls which item should be printed into the outputs (printout) i.e. whether to print entered item or substitute item, if we check this system will print main item into the printout, if we uncheck this system will print the substituted item into the printout).

**Warning** (If we check this, before determining the substitute item system will give warning message).

**Strategy** (This field controls whether to go for manual substitution or automatic substitution) **“Blank”** means automatic and **“A”** means substitute item will be displayed as sub item.

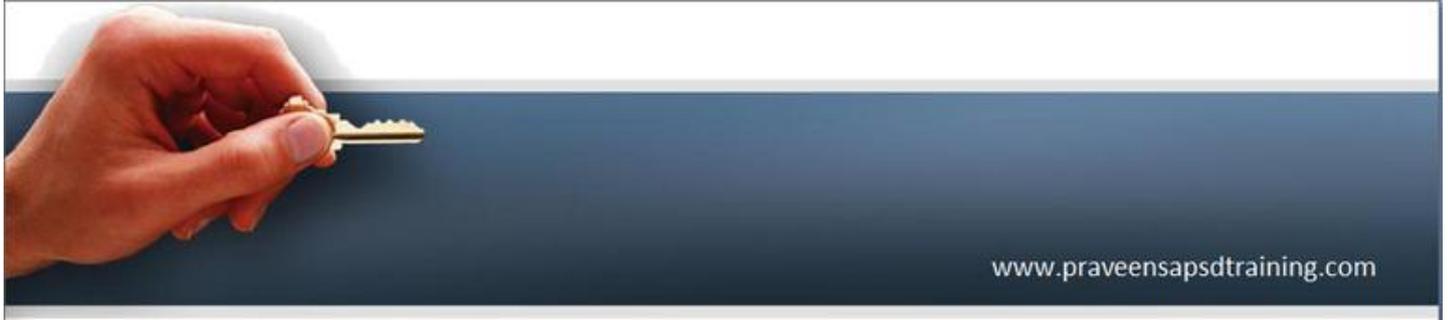
**Outcome** (This field controls whether to go for automatic replacement or whether to determine the substitute item as sub item and it also controls whether to go for header pricing or item pricing. **“Blank”** means auto replacement and **“A”** means substitute item will be displayed as sub item with header pricing. **“B”** means substitute will be displayed as sub item pricing.

- The T-code to create material determination master [VB11]
- mention condition type (Y001) ZDOM Mention substitute reason (Y001) material entered (X) Material (Y) save it.

If we want manual determination then strategy (A) and outcome (Blank)

If we want go with automatic and header pricing the maintain strategy (Blank), and outcome (A).

If we want to see the result of MRP indicator then go to T-code [OVZ9] select the combination of availability check '01' or '02' with A and go to details and [-/] check without RLT and save it.



**MRP indicator in material determination:** - If we check MRP indicator, if stock of substituted item is not available then system will try to substitute another material into sales document.

### **Interview Questions for Material determination**

Q1. What is the purpose of Entry field in substitute reason?

Ans. This field controls which item should be printed into the outputs (printout)

Q2. What is the purpose of strategy in substitute reason?

Ans. This field controls whether to go for manual substitution or automatic substitution.

Q3. What is the purpose of outcome in substitute reason?

Ans. This field controls whether to go for automatic replacement or whether to determine the substitute item as sub item and it also controls whether to go for header pricing or item pricing.

Q4. What are the items categories systems determines for header pricing?

Ans. TAX and TAPS

Q5. What is the item category system determine for item pricing?

Ans. TAPA and TAN

Q6. How item categories determine in item pricing?

Ans. OR	OR
NORM	NORM
PSA1	PSA2
<u>Blank</u>	<u>TAPA</u>
<u>TAPA</u>	<u>TAN</u>

Q7. How item categories determine in header pricing?

Ans. OR	OR
	NOR
NORM	M
PSHP	PSEL
<u>BLANK</u>	<u>TAX</u>
<u>TAX</u>	<u>TAPS</u>

Q8. What is the purpose of MRP indicator in material determination?

Ans. If we check MRP indicator and if stock of substituted item is not available then system will try to substitute another material into sales document.



## Listing / Exclusion

**Listing:** - Listing is allowing customer to buy only listed materials.

**Exclusion:** - Exclusion is restricting materials which customer is not eligible to buy.

Listing / exclusion is also based on condition technique.

### Path for Listing / Exclusion

#### Step1:-

SPRO | → S&D | → Basic functions | → listing exclusion | → maintain condition table for listing / exclusion  
 → condition | → create table number | → customer/material | → generate it

#### Step2:-

Maintain access sequence for listing / exclusion (The standard access sequence for listing is A001 and Exclusion is B001) | → go to new entries | → Z001 (Listing), Y001 (Exclusion) | → select the access sequence do the rest.

#### Step3:-

Maintain Listing / Exclusion types (The standard Listing condition type is A001 and Exclusion condition type is B001) | → Z001 – Z001, Y001 – Y001 | → save it.

CType	Name	AS	Description
Z001	Listing Condition ty	Z001	Listing own
Y001	Exclusion condition	Y001	Exclusion Own

#### Step4:-

Procedure for maintaining Listing / Exclusion (The standard procedure for listing is A00001 and Exclusion is B00001) | → new entries | → Z00001 – Listing, Y00001 – Exclusion.

Proce...	Descript.
Z00001	Listing Pricing Procedure
Y00001	Exclusion Pricing procedure

#### Step5:-

Optimize access | → go to new entry | → Z001 | → Y001 | → save it. In this configuration step we place the access from most specific to most general.

CType	Condition Type	Access sequence	Ac...	Access
Z001	Listing Condition ty	Z001	10	Customer/Material
Y001	Exclusion condition	Y001	10	Customer/Material

**Step6:-**

Activate listing / exclusion by sales document type | → go to our document type and assign Listing and Exclusion procedure (Z00001 & Y00001) → save it.

SaTy	Sales Doc. Type	Pro	Listing	Listing	Exclusion	Exclusion
OR	Standard Order		Z00001	Listing Pricing Pro	Y00001	Exclusion Pricing p

**Step7:-**

The T-code to maintain master data for Listing / Exclusion is VB01 → Customer/material → Customer number (9990000045) → material A1, B1, C1 → save it.

Customer: 9990000045

Material	Description
A1	Material A1
B1	Material B1
C1	Material C1

For exclusion VB01 | → customer | → material [X] → save it.

Material	Description
X	Material X



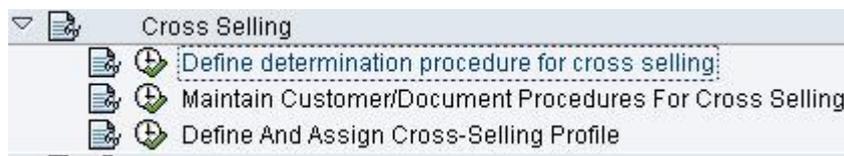
## Cross selling

“It is the process of selling additional products along with main products.”

Cross selling is a push strategy

Cross selling is also based on condition technique.

**Path** SPRO → S&D | → basic function | → cross selling



Define determination procedure for cross selling

- create condition table – 502 (If for all customers (sales org + material), if for selected customers then (customer + material) → generate it.
- Maintain access sequence (**the standard access sequence for cross selling is [ 001]** → new entry [Z001] do the rest and → save it.
- Define condition type (the standard condition type for cross selling is [CS01]) → new entry [ZS01] Access sequence Z001 → save it.

CTyp	Name	AS	Description
ZS01	New condition typ CC	Z001	New Access seq for CC

- Maintain procedure (the standard procedure for cross selling is [CS0001]) → new entry [ZS0001] → control 10 – ZS01 → save it.

Step	Co...	CTyp	Description	Requiremnt
10	0	ZS01	New condition typ CC	

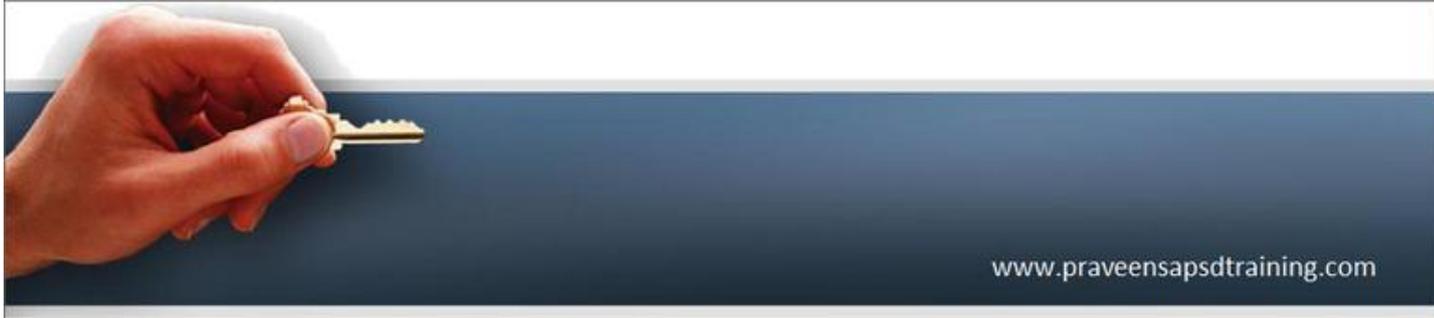
Maintain customer/Document procedure for cross selling

Define customer procedure for cross selling (if needed create new)

Define document procedure for cross selling (if needed create new)

Assign document procedure for cross selling to sales document type → Go to OR → assign PP DocProc as B → save it

SaTy	Description	PP DocProc	Description
OR	Standard Order	B	Cross selling



Go to customer master → customer no. (9990000065) and assign PP Customer procedure as 'B' → save it.

Define and assign cross selling profile → define cross selling profile → go to new entries Y0001 (new profile) → cross selling pricing procedure (ZS0001) → Save it.

Key	
Cross-selling prof.	Y00001 New profile
General control	
Product proposal proc.	
Cross-selling pricg proc.	ZS0001 New Procedure CC

Assign cross selling profile (we assign cross selling profile to the combination of sales area + CS customer procedure + CS document procedure)

SOrg.	DChl	Division	CS cust. proc.	CS doc. proced.	CS profile	Description
ZDOM	Z1	Z1	B	B	Y00001	New profile

→ Save it.

The T-code to maintain master data for cross selling [VB41] ZS01 Vaxin1500 X Material save it.

Item category determination for cross selling is: - OR + NORM + CSEL + TAN = TAN



## Incompletion Log

In this configuration we define incomplete procedure for sales documents.

Incomplete procedure consists of list of mandatory fields, which user has to enter mandatorily while creating sales document.

If any of the mandatory field is missing then either system will not allow saving the sales document or even if system allow to save, the status of document will be incomplete and incomplete documents cannot be processed further.

In document type, incomplete message check box will control whether to save incomplete document or not.

### Path for log of incompleteness

SPRO → S&D → basic functions → log of incomplete items → define incompleteness procedure → select group A and double click on procedure → go to change mode → new entries → define our own procedure → Y1 [new procedure] → select and click on fields → new entries → table [VBKD] – Field [ZTERM] – Scr.(Screen will help to take us directly to that particular field while processing incompleteness in sales document) [KDE3] → status (It controls which further transaction should be blocked if the particular field is missing in sales document) (see the configuration further).

For Incoterms:- VBKD      INCO1 KDE3

For sales district: -VBKD      BZIRK      KKAU

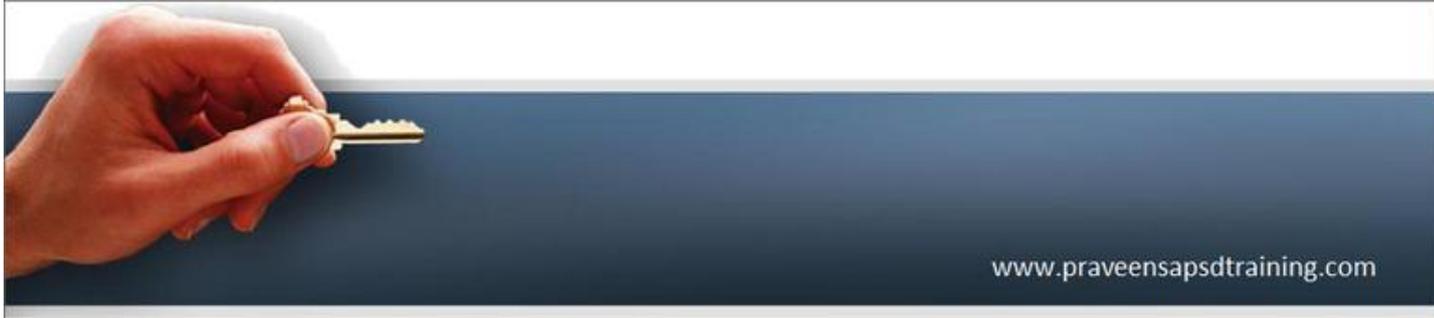
For PO number: -VBKD      BSTKD      KBES

Save it

Incompletion fields							
	Table	Fld name	Description	Scr.	Status	Warning	Seq.
	VBKD	ZTERM	Terms of Payment	KDE3		<input type="checkbox"/>	
	VBKD	INCO1	Incoterms	KDE3		<input type="checkbox"/>	
	VBKD	BZIRK	Sales district	KKAU		<input type="checkbox"/>	
	VBKD	BSTKD	PO number	KBES		<input type="checkbox"/>	

**Assign incompleteness procedure** (If it is header incomplete procedure then we assign it into document type, if it is item incomplete procedure then we assign it into item category) → Assign procedure to sales document types → go to our document 'OR' – Y1 → save it.

SaTy	Description	Proc.	Description	IC-dialog
OR	Standard Order	Y1	new procedure	<input type="checkbox"/>



**Define status group** → go to new entries → Y1 – billing, Y2 – Delivery, Y3 – for All → save it.

S	General	Delivery	Billing doc.	Price	Goods move...	Picking/putaway	Pack
Y1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Y2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Y3	<input checked="" type="checkbox"/>						

Go back to incomplete procedure and assign status Y1 – Billing, Y2 – Incoterms, Y3 – Sales district & PO number save it.

## Item Proposal

Listing of materials for which customer regularly places order, and calling the list while creating sales order.

Item Proposal will save the time of end users who is creating sales order.

The T-code to create item proposal is [VA51].

Item proposal type is [PV].

**Path** → VA51 → PV → sales areas → enter → mention description → material and quantity → enter and → save it.

Item Proposal	50000034	
Description	New Item proposal	
Valid-from date		Valid-to date

Item	Material	Target quantity	U...	Description
10	ABC	100	EA	ABC
20	XYZ	100	EA	XYZ
30	X	100	EA	Material X
40	Y	100	EA	Material Y
50	Z	100	EA	Material Z
60	A1	200	EA	Material A1
70	B1	300	EA	Material B1
80	C1	50	EA	Material C1
90	CROCINTABLET	40	CAR	crocin tablet for hedech
100	REVI2040050BOT	20	CAR	REVITAL 20 TO 40 YRS 50MG BOTTLE
110	VAXIN1500	30	EA	Vaxin 1500
120	LEXI3040015BOT	10	CAR	Lexine 30 to 40 yrs 15mg bottle

When we save, system will propose a number. Assign this number in customer master in item proposal field.

VA01 → Sales areas → enter → and click on  (Propose item)

## Revenue Account Determination (SD-FI Integration)

It is the process of determining G/L Account while posting invoice values into accounting.

While creating invoice in background system generates accounting document and the accounting entry is: -

Customer Account Debit  
TO  
Revenue Account Credit

- Ⓜ For the customer A/c system picks G/L A/c from reconciliation account.
- Ⓜ For the revenue account system determine G/L A/c from revenue A/c determination.
- Ⓜ Revenue A/c determination is integration between SD and FI.
- Ⓜ Revenue A/c determination is also based on condition technique.

### Configuration for Revenue A/c determination

SPRO → S&D → basicfunctions → Account Assignment/Costing → Revenue Account Determination

Ⓜ Check Master Data Relevant For Account Assignment

A/c assignment group of customer and A/c assignment group of material fields are one of the parameters to determine revenue G/L A/c while posting invoice values into accounting.

In this configuration step we can define new A/c assignment group of customer and A/c assignment group of material.)

Acct assignment grp	Description
Y1	New Trading Goods
Y2	New Finished Goods

Save it.

Account assignment group of customer

AcctAssgGr	Description
Y1	New Domestic
Y2	New Foreign revenue

Save it.

Ⓜ Define Dependencies Of Revenue Account Determination (Dependencies is nothing but Condition Table)

The standard combination of condition table for revenue A/c determination is

1. Sales org / A/c assignment group of customer / A/c assignment group of material / A/c Key.
2. Sales org / A/c assignment group of customer / A/c Key.
3. Sales org / A/c assignment group of material / A/c key
5. Sales org / A/c key
4. Sales org.



**Q. In standard what combination system determines revenue G/L A/c?**

**Ans. Sales org / A/c assignment group of customer / A/c assignment group of material / A/c Key.**

**Q. client requirement is revenue G/L A/c should be determined based on plant too. How to do this?**

**Ans. Define new condition table with the combination of: Sales org / Plant / A/c assignment group of customer / A/c assignment group of material / A/c Key.**

**STEP1:-**

Double click on create table →

Table no. 501 (Sales org / Plant / A/c assignment group of customer / A/c assignment group of material / A/c Key.) → generate it → save it.

Table no. 001 (Sales org / A/c assignment group of customer / A/c assignment group of material / A/c Key.) → generate it → save it.

Table no. 002 (Sales org / A/c assignment group of customer / A/c Key.) → generate it → save it.

Table no. 003 (Sales org / A/c assignment group of material / A/c key.) → generate it → save it.

Table no. 005 (Sales org / A/c key) → generate it → save it

Table no. 004 (Sales org) → generate it → save it.

**Step2:-**

Define Access Sequences And Account Determination Types

Maintain access sequences for account determination, the standard access sequence for A/c determination is

**KOFI** → create → own go to → new entry

AS	Description
YOFI	New Access seq

Select: click on access sequence → new entries → place the condition tables in access sequence.

No.	Tab	Description
10	501	les org./Plant/AcctAssgGr/AcctAsgnmt/Acct key
20	1	Cust.Grp/MaterialGrp/AcctKey
30	2	Cust.Grp/Account Key
40	3	Material Grp/Acct Key
50	5	Acct Key
60	4	General

Save it.

**Step3:-**

Define account determination types :

The standard condition type for revenue A/c determination is **KOFI (w/o CO – controlling)** **KOFK (with CO)**

➔ new entry ➔

CType	Name	AS	Description
YOFI	New cond typ w/o CO	YOFI	New Access seq
YOFK	New cond typ with CO	YOFI	New Access seq

Save it.

**Step4:-**

Define And Assign Account Determination Procedures

Double click on Define account determination procedure (The standard A/c determination procedure is

**KOFI00**) ➔ go to new entry ➔ YOFI00 ➔ select ➔ click on control data ➔ New entry and placed the condition type ➔

Step	Co...	CType	Description	Requiremnt
10	0	YOFI	New cond typ w/o CO	3
20	0	YOFK	New cond typ with CO	2

Save it.

**Requirement 3 and 2 controls whether to determine KOFI or KOFK.**

**Step5:-**

Assign Account Determination Procedure (we assign A/c determination procedure to billing type) position F2

assign YOFI00 ➔ save it.



**Step6:-**

Define And Assign Account Keys

In this configuration step we can define new A/c key and assign it to condition type in pricing procedure.

➡ Double click on define A/c key ➡ new entry ➡ YPC (Packing charges) ➡ save it.

Assign Account keys ➡ position ➡ ZVAA01

Proc.	Step	Cntr	CType	Name	ActKy	Name
ZVAA01	80	0	YPAC	Packing Surcharge	YPC	Packing charges

Save it.

**Step7:-**

Assign G/L Accounts

In standard we assign G/L A/c to the combination of

sales org | A/c assignment group of customer | A/c assignment group of material | Account key)

➡ Double click on our condition table (sales org | plant | A/c assignment group of customer | A/c assignment group of material | Account key) go to ➡ new entries

App	CndTy.	ChAc	SOrg.	Plnt	AAG	AAG	ActKy
V	YOFI	INT	ZDOM	ZMUM	Y1	Y1	ERB
V	YOFI	INT	ZDOM	ZMUM	Y1	Y1	ERF
V	YOFI	INT	ZDOM	ZMUM	Y1	Y1	ERL
V	YOFI	INT	ZDOM	ZMUM	Y1	Y1	ERS
V	YOFI	INT	ZDOM	ZMUM	Y1	Y1	ERU
V	YOFI	INT	ZDOM	ZMUM	Y1	Y1	YPC
V	YOFI	INT	ZDOM	ZMUM	Y1	Y2	ERB
V	YOFI	INT	ZDOM	ZMUM	Y1	Y2	ERF
V	YOFI	INT	ZDOM	ZMUM	Y1	Y2	ERL
V	YOFI	INT	ZDOM	ZMUM	Y1	Y2	ERS
V	YOFI	INT	ZDOM	ZMUM	Y1	Y2	ERU
V	YOFI	INT	ZDOM	ZMUM	Y1	Y2	YPC
V	YOFI	INT	ZDOM	ZMUM	Y2	Y1	ERB
V	YOFI	INT	ZDOM	ZMUM	Y2	Y1	ERF

App	CndTy.	ChAc	SOrg.	Plnt	AAG	AAG	ActKy
V	YOFI	INT	ZDOM	ZMUM	Y2	Y1	ERL
V	YOFI	INT	ZDOM	ZMUM	Y2	Y1	ERS
V	YOFI	INT	ZDOM	ZMUM	Y2	Y1	ERU
V	YOFI	INT	ZDOM	ZMUM	Y2	Y1	YPC
V	YOFI	INT	ZDOM	ZMUM	Y2	Y2	ERB
V	YOFI	INT	ZDOM	ZMUM	Y2	Y2	ERF
V	YOFI	INT	ZDOM	ZMUM	Y2	Y2	ERL
V	YOFI	INT	ZDOM	ZMUM	Y2	Y2	ERS
V	YOFI	INT	ZDOM	ZMUM	Y2	Y2	ERU
V	YOFI	INT	ZDOM	ZMUM	Y2	Y2	YPC
V	YOFI	INT	ZDOM	ZVAP	Y1	Y1	ERB
V	YOFI	INT	ZDOM	ZVAP	Y1	Y1	ERF
V	YOFI	INT	ZDOM	ZVAP	Y1	Y1	ERL
V	YOFI	INT	ZDOM	ZVAP	Y1	Y1	ERS



App	CndTy.	ChAc	SOrg.	Plnt	AAG	AAG	ActKy
V	YOFI	INT	ZDOM	ZVAP	Y1	Y1	ERU
V	YOFI	INT	ZDOM	ZVAP	Y1	Y1	YPC
V	YOFI	INT	ZDOM	ZVAP	Y1	Y2	ERB
V	YOFI	INT	ZDOM	ZVAP	Y1	Y2	ERF
V	YOFI	INT	ZDOM	ZVAP	Y1	Y2	ERL
V	YOFI	INT	ZDOM	ZVAP	Y1	Y2	ERS
V	YOFI	INT	ZDOM	ZVAP	Y1	Y2	ERU
V	YOFI	INT	ZDOM	ZVAP	Y1	Y2	YPC
V	YOFI	INT	ZDOM	ZVAP	Y2	Y1	ERB
V	YOFI	INT	ZDOM	ZVAP	Y2	Y1	ERF
V	YOFI	INT	ZDOM	ZVAP	Y2	Y1	ERL
V	YOFI	INT	ZDOM	ZVAP	Y2	Y1	ERS
V	YOFI	INT	ZDOM	ZVAP	Y2	Y1	ERU
V	YOFI	INT	ZDOM	ZVAP	Y2	Y1	YPC

App	CndTy.	ChAc	SOrg.	Plnt	AAG	AAG	ActKy
V	YOFI	INT	ZDOM	ZVAP	Y2	Y2	ERB
V	YOFI	INT	ZDOM	ZVAP	Y2	Y2	ERF
V	YOFI	INT	ZDOM	ZVAP	Y2	Y2	ERL
V	YOFI	INT	ZDOM	ZVAP	Y2	Y2	ERS
V	YOFI	INT	ZDOM	ZVAP	Y2	Y2	ERU
V	YOFI	INT	ZDOM	ZVAP	Y2	Y2	YPC

→ Save it →

click on table view and click on print and click on this  and click on spreadsheet and save it to desktop in excel sheet.

The T-code to assigning G/L A/c is [VKOA].

The T-code to create G/L A/c [FS00]. In Real Time FI consultant will create G/L Accounts. We have to create Different G/L for each Account Key.

G/L Account for Account Key ERL

Select the standard G/L A/c → go to T-code FS00 → mention our own G/L A/c 600100 → mention our company code → click on with template → mention standard G/L A/c [800000] → Mention standard company code [1000] → continue → change the short text [ ] → long text [ ] → save it.

G/L Account for Account Key ERS

G/L A/C is 600200, same process as above. need to change only standard G/L A/c [600100] [ZALK] and change short text and long text and save it.

Repeat this process for other Account keys ERF – 600300, ERB – 600400, ERU – 600500, YPC – 600600.

According to the client scenario, FI consultant will create 48 different G/L A/c and place them in excel sheet and send to SD consultant. SD consultant will place all G/L A/c in VKOA combination

**For Accrual ERU G/L A/c should be assigned with provisional G/L A/c too.**

For practice purpose we will copy all 6 G/L A/c which we created and past them to all 48.



**Q. How you integrated with FI consultant while configuring revenue account?**

**Ans. 1<sup>st</sup> we list out all the combination in VKOA and take it into excel file and send this excel file to FI consultant. FI consultant will create all the G/L A/c and place them in excel file and send this excel file to SD consultant. SD consultant will go to VKOA and assign all the G/L A/c.**

**Using MASS TOOL:-**

By using MASS Tool we can update A/c assignment group of customers to 'Y1' for all the customers.

Go to XD02 → take the field for A/c assignment group of customers [KTGRD] with the help of F1. The T-Code for MASS Change is [MASS].

MASS → for the customer select the object KNA1 and execute → select table KNVV and go to fields → select our field [KTGRD] and execute → mention our sales org → execute → mention the new value [Y1] and click on  ICON carry out a mass change → save it.

Now go to MM02 → take the field name A/c assignment group of material with the help of F1 [KTGRM].

Mass → for material master select the object as BUS1001 and execute → select the table [MVKE and go to fields → select our field [KTGRM] and execute → mention our sales org → execute → mention the new value [Y2] and click on  ICON carry out a mass change → save it.

For "MWST" [sales tax condition type] maintain G/L A/c in T-code [OB40].

In OB40 – assign G/L A/c with combination of tax code [W1].

OB40 → MWS → chart of A/c [INT] → continue → tax code [W1] → A/c [175000] → save it].

FS00 → 175000 change mode → save it or change to [W1]

Create bill go to up to invoice → go to revenue A/c analysis.

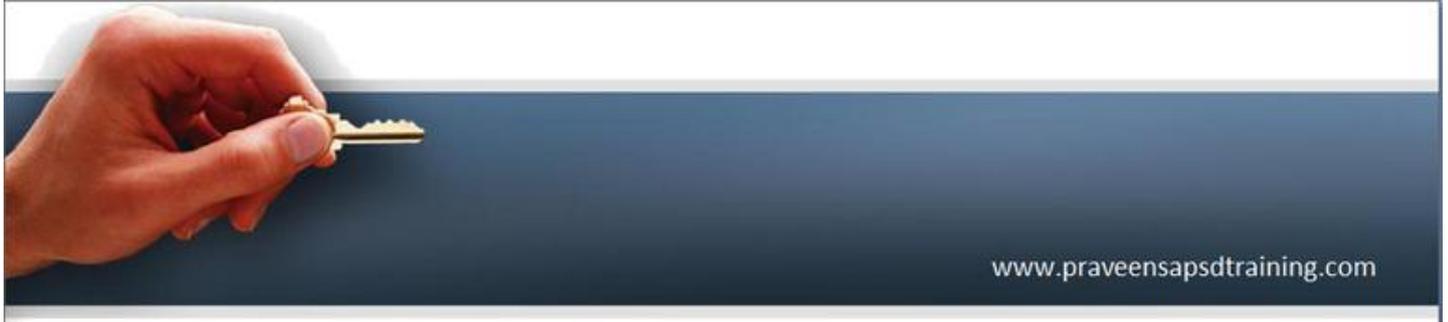
**Q. If accounting document is not generated as a consultant. What you do?**

**Ans. Go to VF02 → click on revenue A/c analysis → here we come to know the error & we will solve the error to get the A/c document.**

For manual process go to VF02 and click 'flag'

If we check posting block in billing type then system will not generate accounting document automatically while creating invoice then we have to go to change mode of invoice and click on flag to release it to accounting.

For collective processing of billing documents into account the T-code is [VFX3].



VFX3 → payer → ZDOM → select all & click on flag.

Q. what fields we can change in invoice, Before A/c document generated.

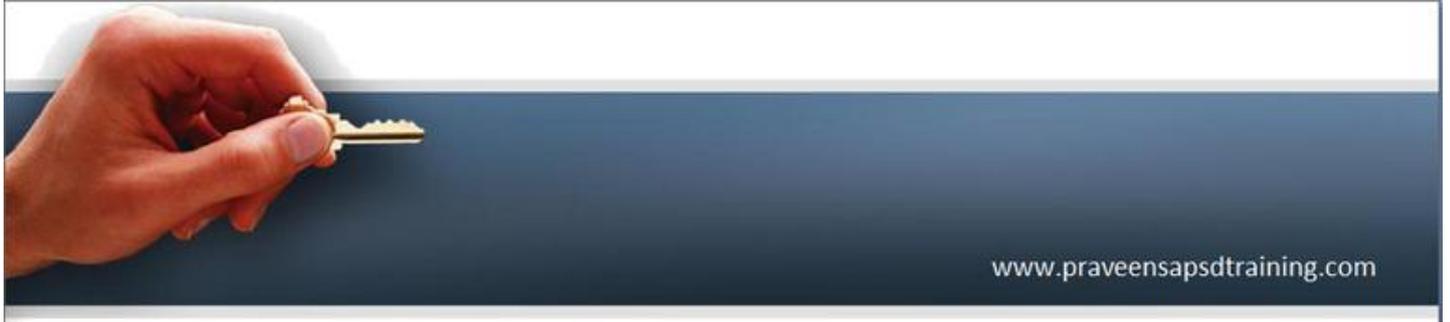
Ans. 1. Billing date, 2. Account assignment group of customer, 3. Account assignment group of material, 4. Tax classification, and 5. Pricing.

Q. What are the fields we can change in invoice after account document generate?

Ans. Nothing







Q18. How we integrated with CO consultant?

Ans. CO consultant will ask list of condition type which we created for the client. We prepare list in excel file along with the description and send the excel file to CO consultant. CO consultant will prepare “Value fields” based on condition types and value fields will help to generate profitability analysis document.



## Reconciliation account determination

It is the process of determining reconciliation A/c while posting invoice values into accounting.

Normally in standard when we create invoice, system generates accounting document and accounting entry is:

Customer Account Debit  
TO  
Revenue Account Credit

For the customer account system determines G/L A/c from customer master reconciliation account.

But if clients requirement is reconciliation account should not be determine from customer master, it should be determine based on some other combination like plant & division then we will configure reconciliation A/c determination.

### Path for reconciliation A/c determination

#### Step1:-

SPRO → S&D → Basic functions → account assignment costing → reconciliation A/c determination → maintain condition tables (maintain condition table as per client's requirement Ex. Plant / Division) → Plant / division → generate → save it.

#### Step2:-

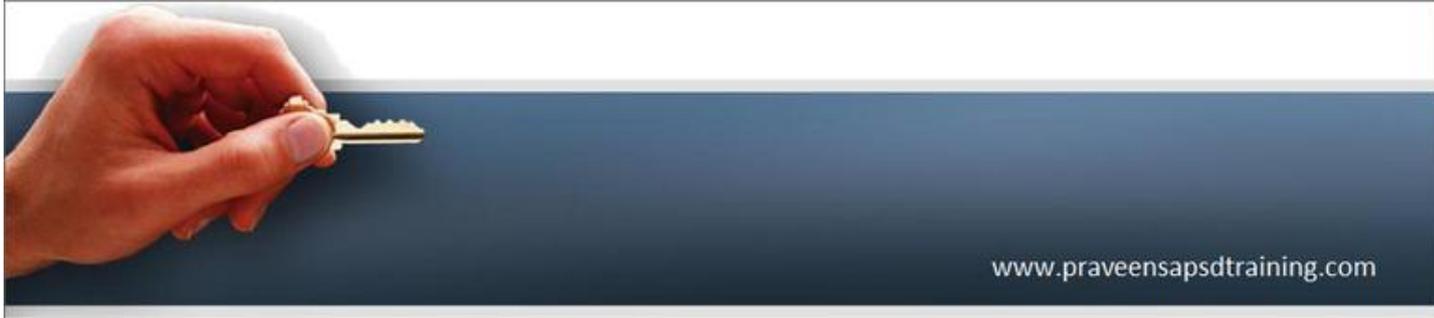
Maintain access sequence (the standard access sequence for reconciliation account determination is KOAB) → create own [ZOAB] → select → accesses → placed condition table → fields → save it.

#### Step3:-

Maintain condition types (The standard condition type for reconciliation account determination is KOAB) → create own [ZOAB] → placed access sequence [ZOAB] → save it.

#### Step4:-

Maintain A/c determination procedure (The standard A/c determination procedure for reconciliation A/c is KOFIAB) → create own [ZOFIAB] → select control → new entry → placed condition type → save it.



**Step5:-**

Assign account determination procedure → we assign reconciliation account determination to billing type → go to F2 and assign ZOFIAB new procedure → save it.

**Step6:-**

Assign G/L A/c → double click on our table (plant / Division) → new entries →

App	CndTy.	ChAc	Plnt	Dv	G/L Account
VB	ZOAB	INT	ZMUM	Z1	350000
VB	ZOAB	INT	ZMUM	Z2	351000
VB	ZOAB	INT	ZMUM	Z3	352000
VB	ZOAB	INT	ZMUM	Z4	353000
VB	ZOAB	INT	ZMUM	Z5	354000
VB	ZOAB	INT	ZMUM	Z6	355000
VB	ZOAB	INT	ZVAP	Z1	356000
VB	ZOAB	INT	ZVAP	Z2	357000
VB	ZOAB	INT	ZVAP	Z3	358000
VB	ZOAB	INT	ZVAP	Z4	359000
VB	ZOAB	INT	ZVAP	Z5	360000
VB	ZOAB	INT	ZVAP	Z6	370000

Save it.

**Step7:-**

Define alternate reconciliation account → INT → continue → go to new entries

G/L Acc	Alt. G/L
140000	350000
140000	351000
140000	352000
140000	353000
140000	354000
140000	355000
140000	356000
140000	357000
140000	358000
140000	359000
140000	360000
140000	370000

Save it.

## Cash Account determination

It is the process of determining G/L Account for cash settlement A/c while creating cash sale invoice.

We use this determination only for cash sale process.

When we create cash sale invoice, system generates accounting entry

Cash settlement Account Debit  
TO  
Revenue Account Credit

### Path



Create Condition table with sales org.

Create access sequence new or use standard access sequence.

Create condition type and assign access sequence.

Create new account determination procedure and we assign account procedure type for BV → save it.

Create new G/L account and assign G/L account

App	CndTy.	ChAc	SOrg.	G/L Account
VC	ZASH	INT	ZDOM	361000

Also maintain Revenue A/c determination procedure YOFI00 in A/c determination procedure in billing type VOFA.

Now create a Cash Sale order → PGI → and billing and check G/L account in accounting.

## Delivery Scheduling

It is the process of determining delivery dates & confirmed quantities into sales document.

System considers below parameters while performing delivery scheduling

1. **Pick pack time:** - (We maintain this in shipping point). It is the time taken to pick the material from storage location and to pack it.
2. **Loading time:** - (We maintain this in shipping point). It is the time taken to do the process of loading the goods into trucks for dispatch.
3. **RLT:** - (Replenishment lead time – we maintain this in material master MRP 3view) It is the time taken to manufacture the product. System considers RLT if stock is not available.
4. **Transit time:** - (we maintain this in route determination). It is the time taken to deliver the goods from plant to customer.
5. **Transportation lead time:** - (We maintain this in route determination.) It is the time taken to arrange the mode of transportation (Trucks) for dispatching it to customer.

### Process of delivery scheduling:-

Whenever we create a sales order, 1<sup>st</sup> system will perform '**Backward scheduling**' if backward scheduling fails then system will perform '**Forward scheduling**'.

**Q. What scenarios backward scheduling fails?**

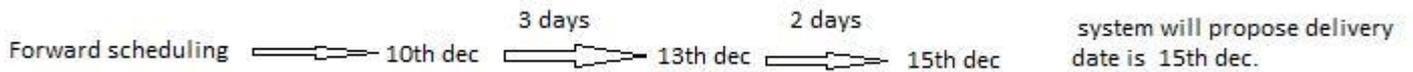
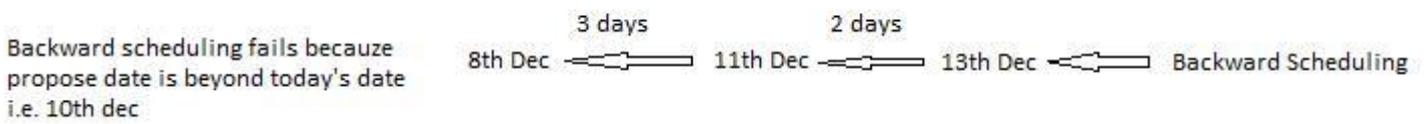
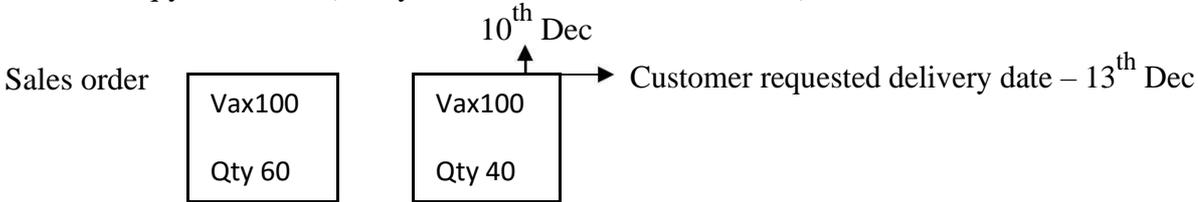
**Ans. If the proposed date is going beyond today's date.**

- ✚ Backward scheduling is always based on customer requested delivery date.
- ✚ Forward scheduling is always based on today's date.



**Scenario 1**

Pick pack time – 3 days, Loading time – 2 days, RLT – 10 days  
 Stock 100 qty – Vax100 (always see the order stock in MD04)

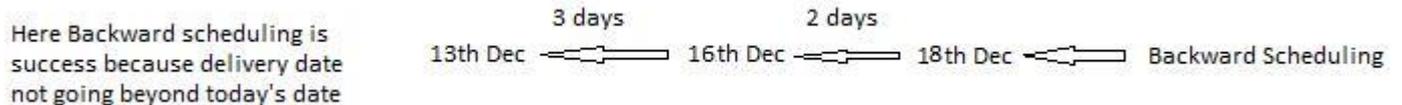
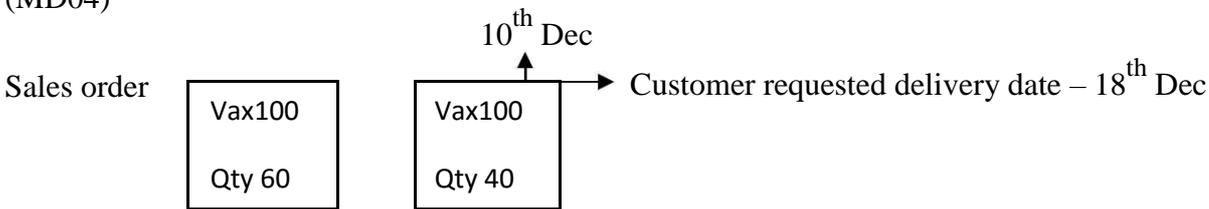


Note: - Whenever backward scheduling fails system determine two schedule lines.  
 Order made on date 11/12/2013 i.e. today's date as 11 Dec. 13

Delivery Date	Order quantity	Rounded qty	Confirmed Qty	Sa...
13.12.2013	40	40	0	EA
16.12.2013	0	0	40	EA

**Scenario 2**

Example: - Pick pack time – 3 days, Loading time – 2 days, RLT – 10 days  
 Stock 100 qty – Vax100 (MD04)



Order created on 11/12/13 so requested delivery date on 19<sup>th</sup> Dec.

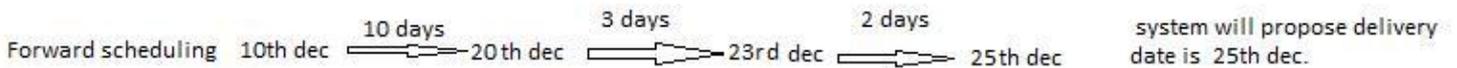
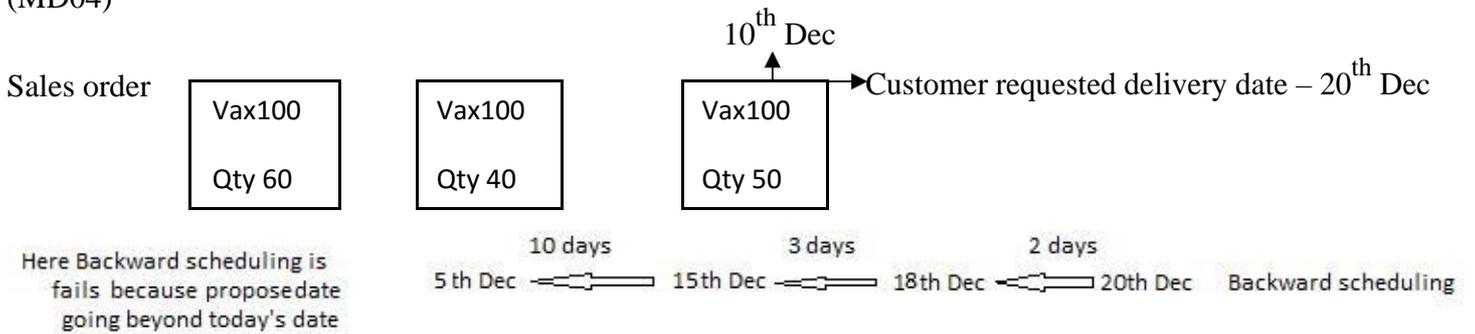
Delivery Date	Order quantity	Rounded qty	Confirmed Qty	Sa...
19.12.2013	40	40	40	EA



**Scenario 3**

Example: - Pick pack time – 3 days, Loading time – 2 days, RLT – 10 days

Stock 100 qty – Vax100  
(MD04)



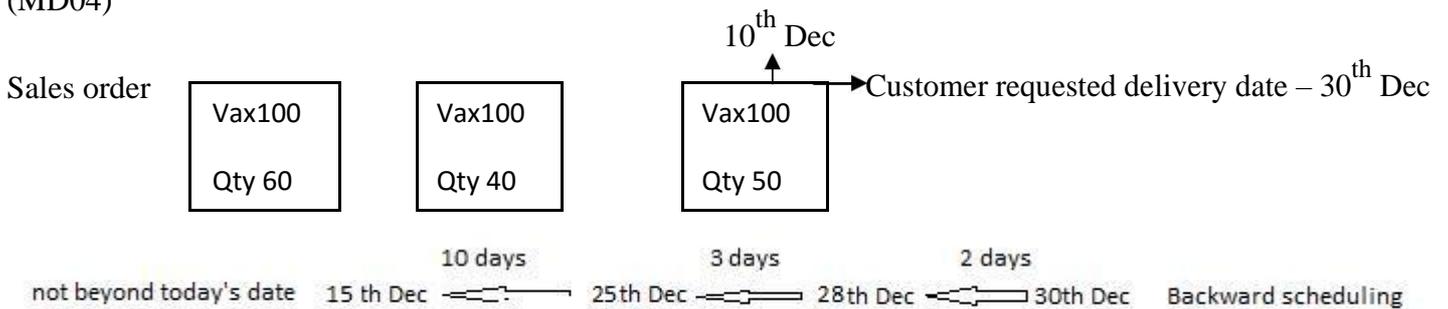
Created order on 12/12/2013 and CRDD is 22/12/2013

Delivery Date	Order quantity	Rounded qty	Confirmed Qty
22.12.2013	50	50	0
27.12.2013	0	0	50

**Scenario 4**

Example: - Pick pack time – 3 days, Loading time – 2 days, RLT – 10 days

Stock 100 qty – Vax100  
(MD04)



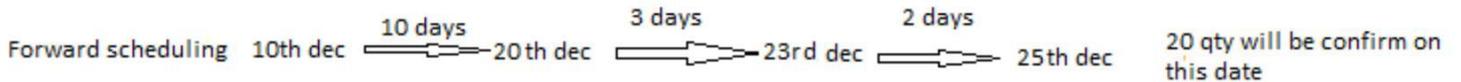
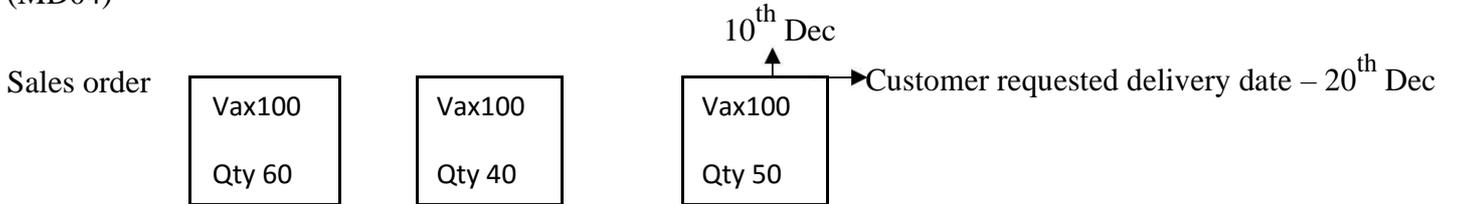
Order created on 12/12/2013 and CRDD is 31/12/2013

Delivery Date	Order quantity	Rounded qty	Confirmed Qty
31.12.2013	50	50	50



**Scenario 5**

Example: - Pick pack time – 3 days, Loading time – 2 days, RLT – 10 days  
 Stock 130 qty – Vax100  
 (MD04)

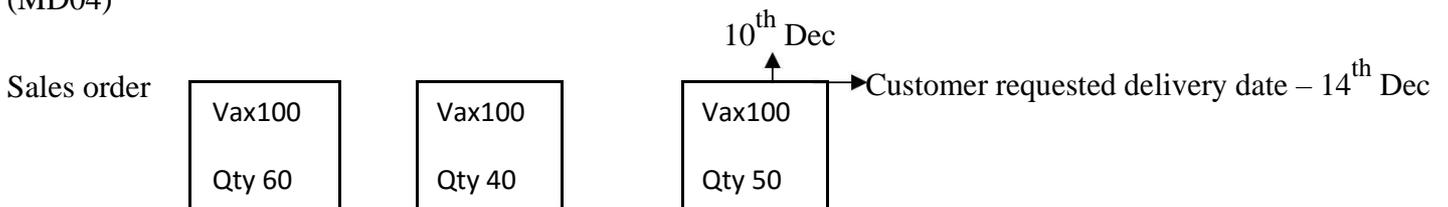


Order is created on 12/12/2013 and CRDD is 22/12/2013

Delivery Date	Order quantity	Rounded qty	Confirmed Qty	Sa...
22.12.2013	50	50	30 EA	
27.12.2013	0	0	20 EA	

**Scenario 6**

Example: - Pick pack time – 3 days, Loading time – 2 days, RLT – 10 days  
 Stock 130 qty – Vax100  
 (MD04)



Order is created on 12/12/2013 and CRDD is 16/12/2013

Delivery Date	Order quantity	Rounded qty	Confirmed Qty	Sa...
16.12.2013	50	50	0 EA	qty only
17.12.2013	0	0	30 EA	ys
27.12.2013	0	0	20 EA	25th dec

20 qty will be confirm on this date

Note:  
 If we want to create an order with 50 Qty and we need stock only 30 then check in MD04, here material quantity should be 30 in positive then actual result will come as per the scenario.



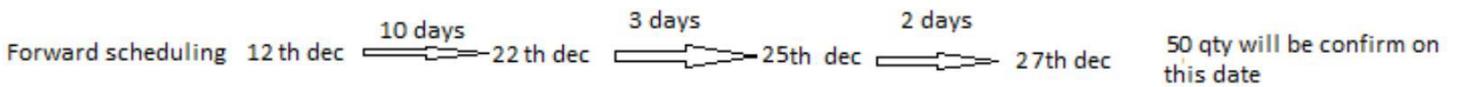
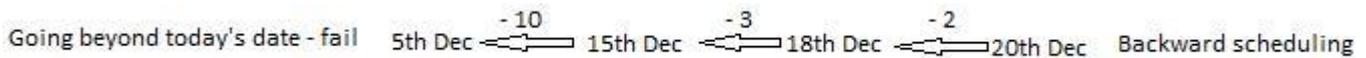
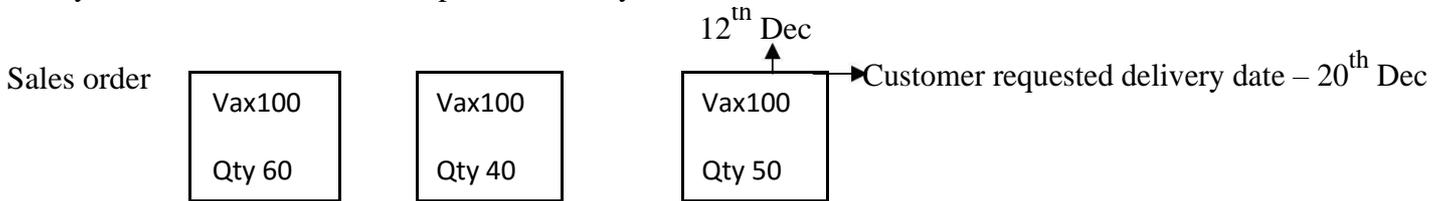
By using MB1C or maintaining stock in MB1C we can increase the stock in MD04 and for reducing stock or maintaining stock zero in MD04 we have to create order of complete balance stock.

Scenario 7

Example: - Pick pack time – 3 days, Loading time – 2 days, RLT – 10 days  
 Stock 130 qty – Vax100 (MD04)

Check complete delivery required by law in customer master

If we check complete delivery by law in customer master then system will not allow to confirm partial quantity and system also will not allow to partial delivery



Delivery Date	Order quantity	Rounded qty	Confirmed Qty	Sa...
20.12.2013	50	50	0	EA
27.12.2013	0	0	50	EA

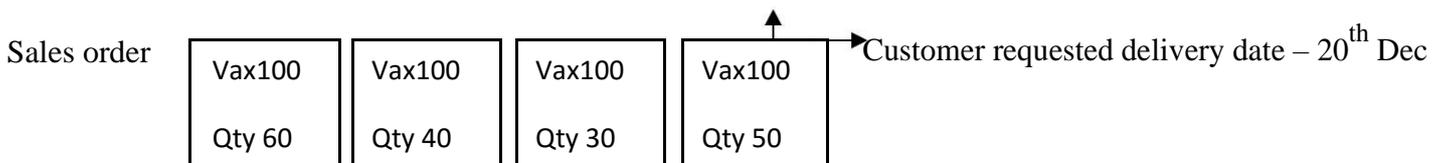
Ⓜ Scenario 8

Example: - Pick pack time – 3 days, Loading time – 2 days, RLT – 10 days  
 Stock 130 qty – Vax100 (MD04)

Go to OVZ9 and position 02 or 01 (availability check) / A details

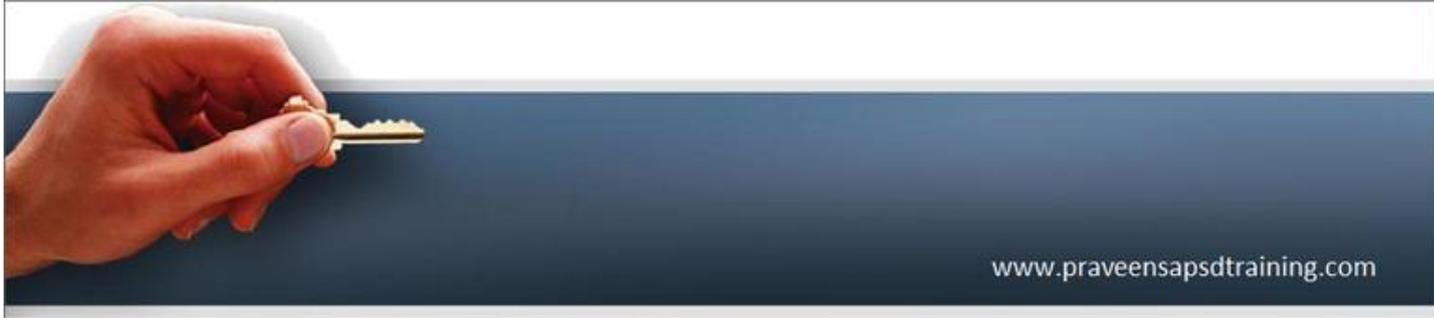
Replenishment lead time  
 Check without RLT

12<sup>th</sup> Dec



If we check without RLT and if stock is not available then system will not confirm the quantity.

P	Delivery Date	Order quantity	Rounded qty	Confirmed Qty	Sa...
D	20.12.2013	50	50	0	EA



Scenario 9

Example: - Pick pack time – 3 days, Loading time – 2 days, RLT – 10 days  
 Stock 160 qty – Vax100 (MD04)

Go to OVZ9 and position 02 or 01 (availability check) / A details  Replenishment lead time  Check without RLT 12<sup>th</sup> Dec

Sales order

Vax100	Vax100	Vax100	Vax100
Qty 60	Qty 40	Qty 30	Qty 50

Customer requested delivery date – 20<sup>th</sup> Dec  
 In this only 30 Qty will be confirmed.

**Configure for route determination**

SPRO logistic execution transportation basic transportation function routes define routes define routes & stages new entry Z10000 (Vizag route) Transit time [5 days] Transportation lead time [7 days] save it

Go to route determination define transportation zones new entries

Ctry	TranspZone	Description
IN	ZDEP000001	Departure Zone
IN	ZDES000001	Destination Zone

Save it

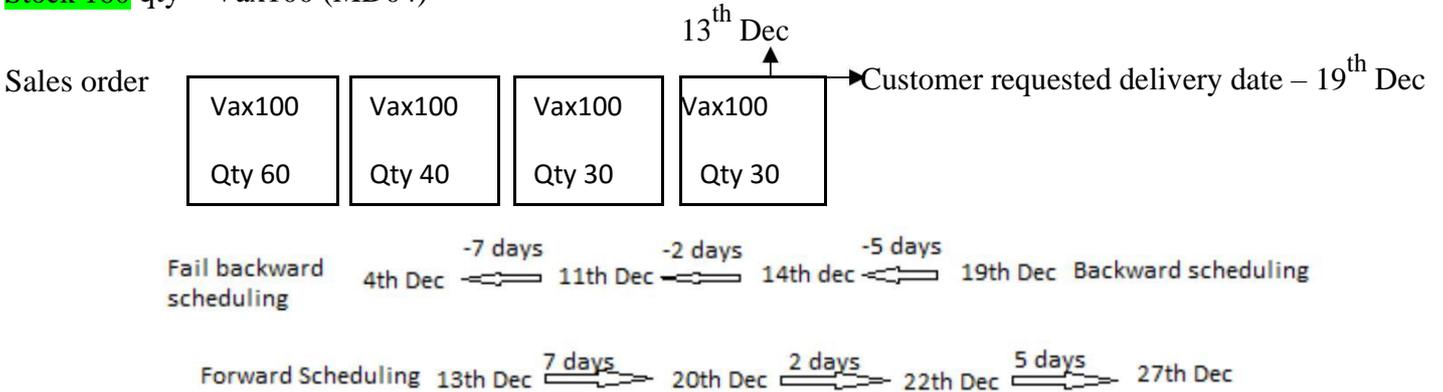
Maintain country and transportation zone for shipping point go to our shipping point assign country and departure zone save it  
 Go to customer master and assign Destination zone.

Maintain route determination go to new entries Maintain departure country & departure zone – Destination country & destination zone select click on route determination without weight group new entries shipping condition (02) Transportation group (0001) Z1000 save it.  
 {Cross check customer master and material master for shipping condition and transportation group.}

Scenario 10

Example: - Pick pack time – 3 days, Loading time – 2 days, RLT – 10 days, **Transit time** – 5 days, **Transport lead time** – 7 days.

**Stock 160** qty – Vax100 (MD04)

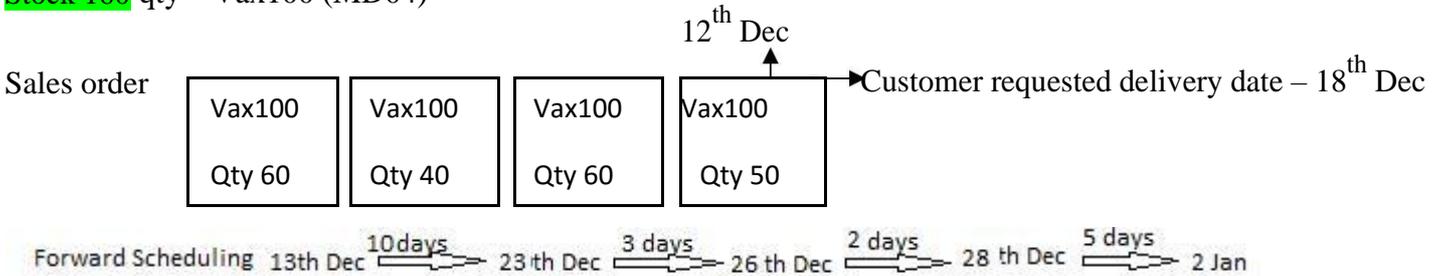


Delivery Date	Order quantity	Rounded qty	Confirmed Qty	Sa...
19.12.2013	30	30	0	EA
27.12.2013	0	0	30	EA

Scenario 11

Example: - Pick pack time – 3 days, Loading time – 2 days, RLT – 10 days, **Transit time** – 5 days, **Transport lead time** – 7 days.

**Stock 160** qty – Vax100 (MD04)



If we have and stock is not available then system consider either of (RLT + PP) or (TLT) whichever is higher.

Configuration for delivery scheduling

SPRO → S&D → basic function → delivery scheduling & transportation scheduling → define scheduling by sales document type → go to OR mention [X].

This configuration step controls whether to perform delivery scheduling or not.

Define scheduling by scheduling by shipping point (In this configuration step we can maintain loading time and pick pack time in shipping point).

\* We can maintain pick pack time and loading time other than shipping point i.e. Route dependent.



Maintain duration in maintain duration we mention loading time and pick pack time with route dependent go to pick pack time new entries ZMAN – Z1000 – 3 days save it.

### **“Delivery Scheduling Question”**

Q.1. How system perform delivery scheduling?

Ans. system will perform delivery scheduling 1<sup>st</sup> **‘Backward scheduling’** if backward scheduling fails then system will perform **‘Forward scheduling’**.

Q.2 When backward scheduling fails?

Ans. If the propose date is going beyond today’s date.

Q3. If i check without RLT what is the result in delivery scheduling?

Ans. If we check without RLT and if stock is not available then system will not confirm the quantity.

Q4. Can i maintain pick pack time and loading time other then shipping point?

Ans. Yes, In Route dependent.

Q5. What are the parameter system consider while performing delivery scheduling?

Ans. Pick pack time, Loading time, Replenishment lead time, Transit time and Transportation lead time.

Q6. What happens if i check complete delivery required by law in customer master?

Ans. If we check complete delivery by law in customer master then system will not allow to confirm partial quantity and system also will not allow to partial delivery.

Q7. If stock is available and if we have pick pack time & transportation lead time then system which one will take?

Ans. System considers either of pick packs time or TLT which one is higher.

Q8. If stock is not available and if we have transportation lead time, Pick pack time and RLT then system which one will take?

Ans. System consider either of (RLT + PP) or (TLT) whichever is higher.

Q9. When systems consider RLT?

Ans. System consider RLT if stocks is not available.



## Availability Check

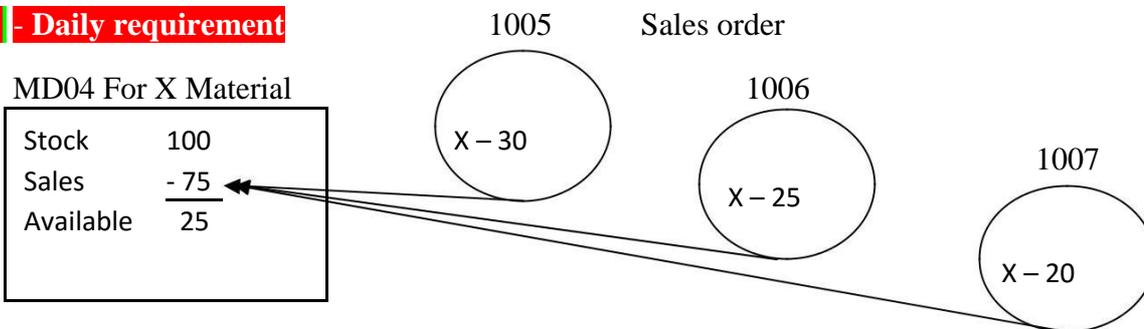
It is a process of checking the stock availability of the materials while creating sales order.

### Prerequisite to perform availability check: -

1. Availability check field in material master (General /plant data view in material master). This field is also called as checking group.

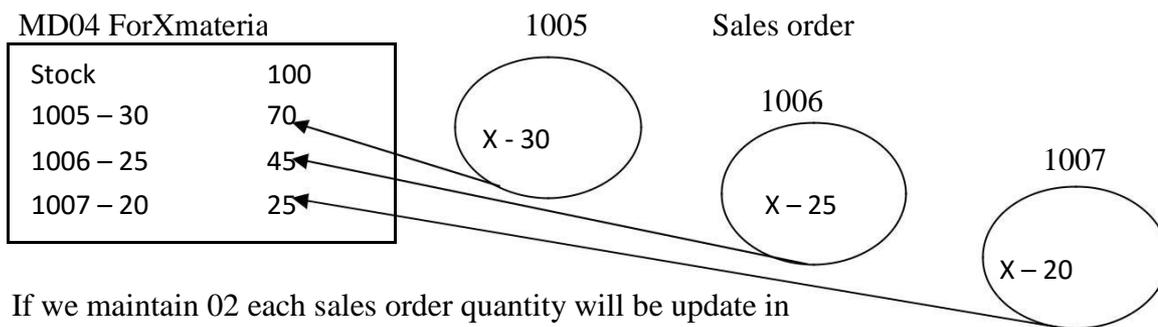
In this field we maintain either 01 or 02.

#### **01 - Daily requirement**



If we maintain 01 then system cumulates the sales order quantities on that particular date and update in single line in MD04.

#### **02 - Individual requirement**



If we maintain 02 each sales order quantity will be update in MD04 along with the sales order number.

**KP** - If we maintain KP in availability check then system will not perform availability check.

2. Schedule line category: -  Requirement  Availability

If we check requirement & assembly and availability check in schedule line category then only system will perform availability check.

3. Requirement class: -  Requirement  Availability in TOR

4. Requirement type:- Requirement type should be determined into sales document.



**The criteria to determine requirement type into sales document: -**

- i) Strategy group(MRP 3 View)
- ii) ii) MRP group (MRP 1 View)
- iii) iii) Item category + MRP Type (MRP 1 View)
- iv) iV)Item Category

**Configuration for availability check**

Availability check can be configured in three ways:-

- i) Availability check with ATP Logic(Available to promise).
- ii) Availability check with product allocation.

Rule based availability check.

**Step1:-**



In this configuration step we can create new checking groups in availability check.

**Total Sales:-**In this configuration step it actually controls whether to update Total (B)Records per day or individual(A) records)

**Q.**Where is the control that for ‘KP’ system will not perform availability check?

**Ans.** In define checking groups if we check **no check** field for ‘KP’.

**Q.** In define checking groups we have actual controls of how to update sales order quantities in MRP i.e. total records per day or single records?

**Ans.** For 01 we maintain **“B”** (total records for day).

For 02 we maintain **“A”** (single records).

New entry      Z1 – B – B  
                     Z2 – A – A    save it

**Step2:-**

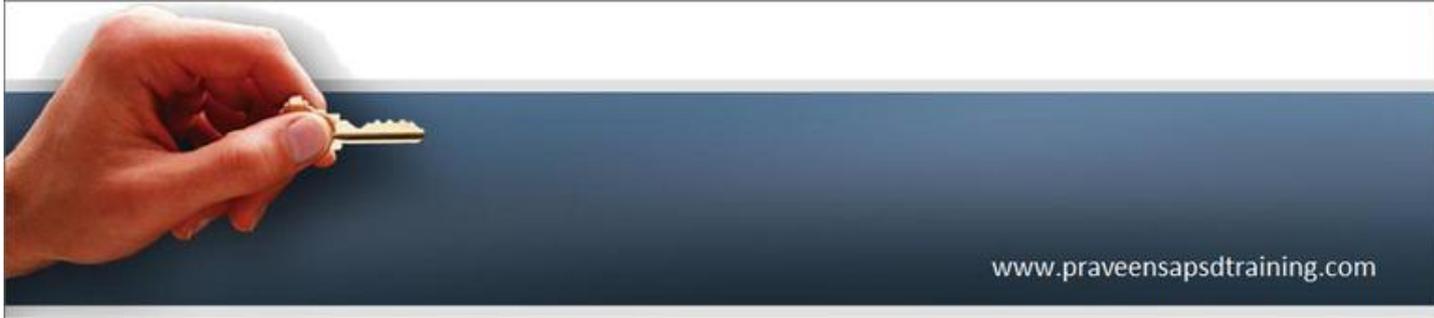
Define Material Block For Other Users

If multiple users are performing availability check, for the same material in the same plant at the same time. Then system will performs availability check for 1<sup>st</sup> user and block availability for other users.

This control is in Define material block for other users.

with the combination of availability check field and initiator “A” we have check block → go to → new entry

Initiator A=Order  
 Initiator B=Delivery



Z1 – A – check,  
 Z1 – B – check,  
 Z2 – A – check,  
 Z2 – B – check → save it.

**Step3:-**

Define Checking Groups Default Value

If we maintain checking group here then system automatically determines it while creating material master. In this configuration step we will assign Material Type with Plant and Availability Check

New entry → FERT – ZMUM / ZVAP – Z1 → save it

**Step4:-**

Carry Out Control For Availability Check T-code [OVZ9]

Scope of check is also called as Availability check control  
 Scope of check = Availability check control

we configure scope of check with the combination of (checking group + checking rule).

Checking rule specifies the transaction in which we want to configure availability check i.e. whether to configure availability check for order or delivery.

If we want to configure availability check in order then checking rule is [A].

If we want to configure availability check in delivery then checking rule is [B].

Availability check	02	Individual reqmt
Checking Rule	A	SD order

<b>Stocks</b> <input type="checkbox"/> Include safety stock <input type="checkbox"/> StockInTransfer <input type="checkbox"/> Incl.quality insp. stock <input type="checkbox"/> Incl. blocked stock	<b>In/outward movements</b> <input checked="" type="checkbox"/> Incl.purchase orders <input checked="" type="checkbox"/> Incl. purch.requisitions <input checked="" type="checkbox"/> Include sales reqmts <input checked="" type="checkbox"/> Include deliveries  Incl. planned orders <input type="checkbox"/> Incl. production orders <input type="checkbox"/>
<b>Replenishment lead time</b> <input type="checkbox"/> Check without RLT	

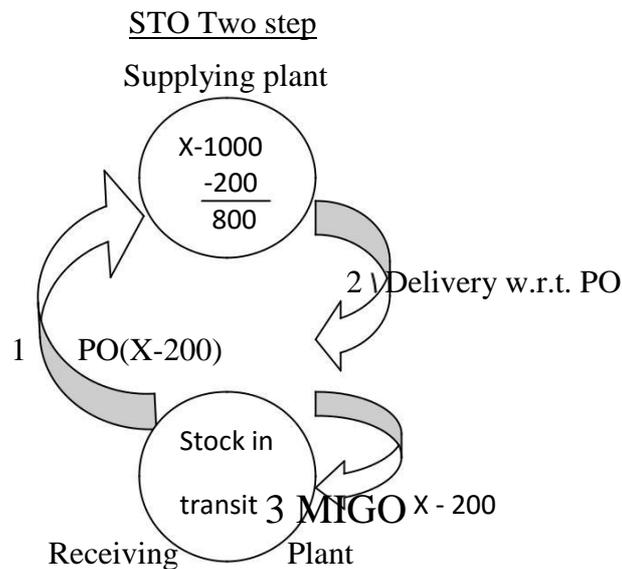


**Include safety stock:** - It is the minimum stock which company has to maintain to meet the future emergency requirements.

We have safety stock field in material master MRP – 2 view.

If we check this then system will consider safety stock also while performing availability check.

**Stock in transfer:** - If we check this system considers the stock which is in transit while performing availability check in receiving plant.



**Include quality inspection stock:** - After manufacturing the goods the stock will be kept in quality stock. After the quality check, then stock will be moved to unrestricted stock.

If we check this then system considers quality inspection stock while performing availability check.

☺ The movement type for maintaining Quality stock is [503].

**Include block stock:** - If we check this system considers the block stock also while performing availability check.

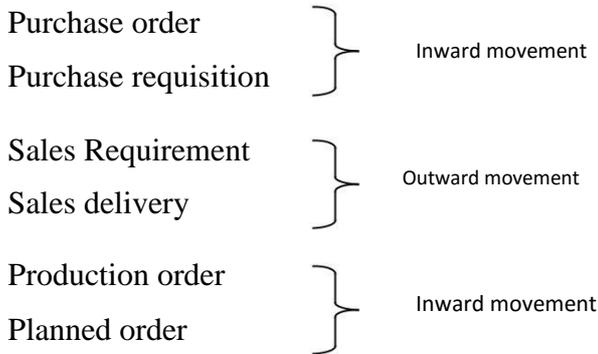
☺ The movement type for block stock is [505].

**Check without RLT:** - If we check this then system will not confirm the quantities, if stock is not available.

If we uncheck this even if stock is not available system will confirm the quantities based on RLT.



**Inward / Outward movement:** -

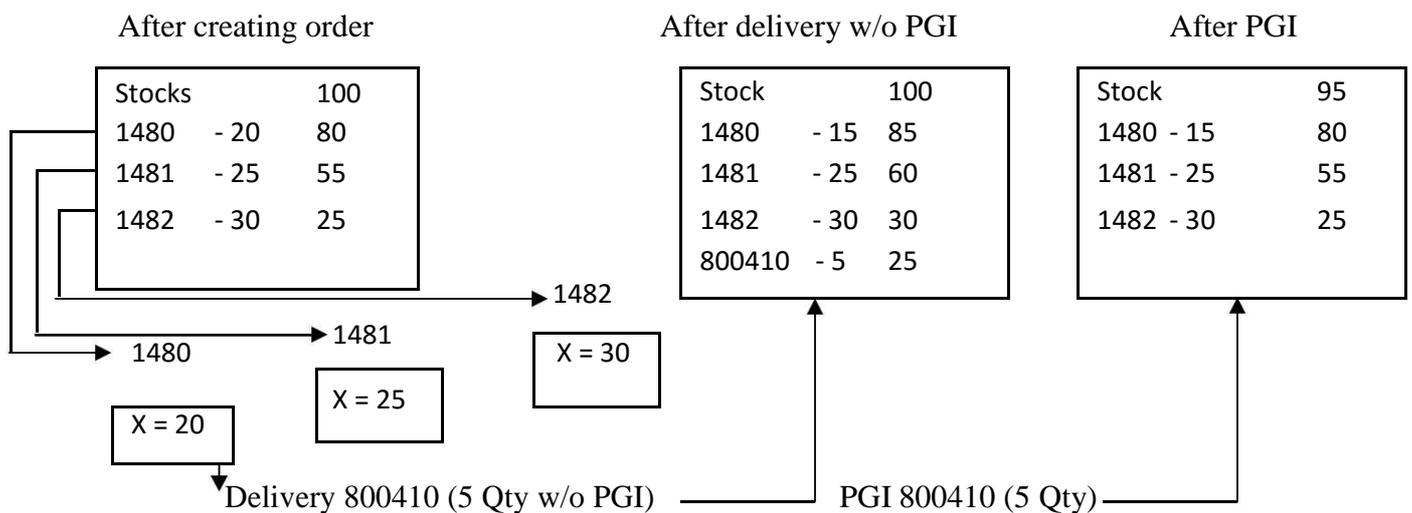


Inward movements will add the stock.  
 Outward movement will deduct the stock.

**Include purchase order:** - If we check this the purchase order quantities will be updated in MD04 as inward movement.

**Include purchase requisition:** - Generally we should not check include purchase requisition because purchase requisition is only request. It can be rejected or accepted.

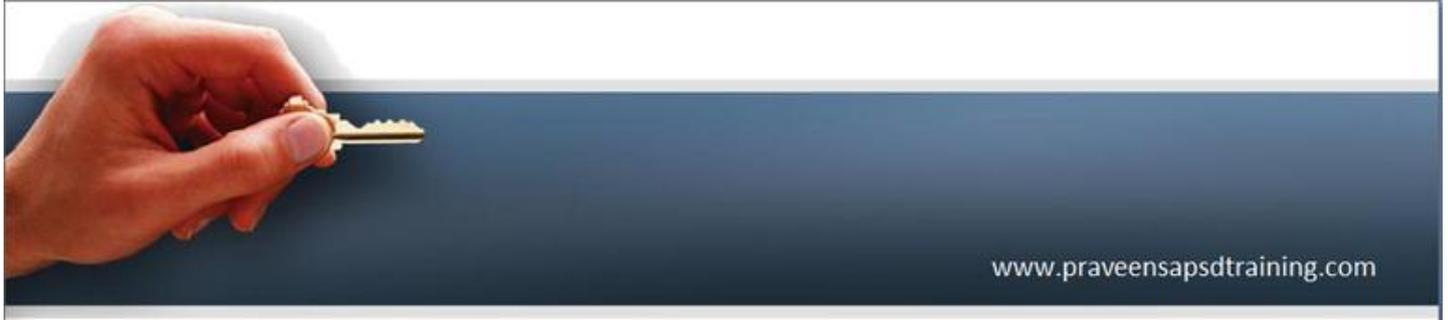
**Include sales requirement:** - [Availability quantity = Stock – (open orders + open deliveries)]



If we check sales requirement then system considers open quantities also while performing availability check.

If we uncheck sales requirement then system will not consider open order quantities while performing availability check.

**Include deliveries:** - If we check include delivery then system will consider open delivery quantity while performing availability check.



If we uncheck include delivery then system will not consider open delivery quantity while performing availability check.

### **Real Time Scenario(Clients requirement)**

Clients requirement is they have 2 plants, and they manufacture some materials in both plants. In one plant if stock is not available then system should not confirm the quantities. In other plant even if stock is not available system should confirm the quantities basing on RLT. How to configure this?

**Solution:** - Create new checking groups (Example – 02 is standard, so create new Z2) and maintain different checking group for different plants i.e. (ZMUM – 02, ZVAP – Z2) in **checking group default values**, then when we creating material master system propose checking group as 02 and for other plant Z2 then we maintain **carry out control for availability check** for 02 & A combination we check w/o RLT and for Z2 & A combination we uncheck w/o RLT.

#### **Step5:-**

 Define Procedure By Requirements Class

In this configuration step we check requirement and availability in requirement class.

This configuration step is one of the prerequisite for Availability check.

Standard requirement class is [041 / 011].

Requirement class for Make to order is [040].

Requirement class for IPO is [KEB].

Go to requirement class and check  Requirement  Availability

#### **Step6:-**

 Define Procedure For Each Schedule Line Category

In this configuration step we have to check requirement and availability in schedule line category.

Go to CP and  Requirement  Availability.

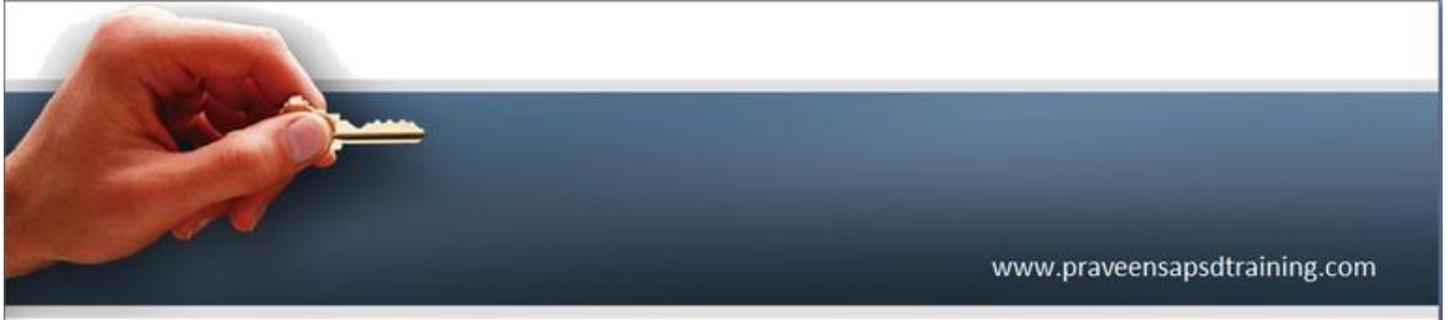
This configuration step is one of the prerequisite for Availability check.

#### **Step7:-**

 Determine Procedure For Each Delivery Item Category

This configuration step controls whether to perform availability check in delivery or not.

In The below scenarios we have to perform availability check in delivery: -



- i). When we are creating delivery w/o order reference.
- ii). Adding new line item in delivery.
- iii). Increasing the quantity in delivery.
- iV) STO Delivery

### **Step8:-**

#### **Define default Settings:-** Define Default Settings

In this configuration step if we check fixed date and quantity, then system will not allow to change the delivery dates and confirmed quantities while creating sales order

1. **Availability check rule:-** This field will help to propose POPUP in case of shortages of stock.

2. **Fixed Date&Quantity:-**

### **Step9:-**

#### Checking Rule For Updating Backorders

The configuration for backorders:

These are one of the configuration steps to process Backorders.

1. In this configuration step, go to our plant and assign checking rule as “BO” (Backorder process).

- If our plant is not displayed in checking rule for updating for backwards then we have to maintain plant parameters PP.
- T-code [OPP0] | SPRO → production → material requirement planning → plant parameters → carry out overall maintain of plant parameters
- copy from plant (1000) To plant (ZMUM / ZVAP) click on copy save it.

### **Second Method**

- SPRO → material management → inventory management → physical inventory plant parameter select the standard plant (1000) copy mention our plant save it.

2. Maintain Carry out control for Availability check with the combination of Checking Group Checking Rule



## Backorder processing

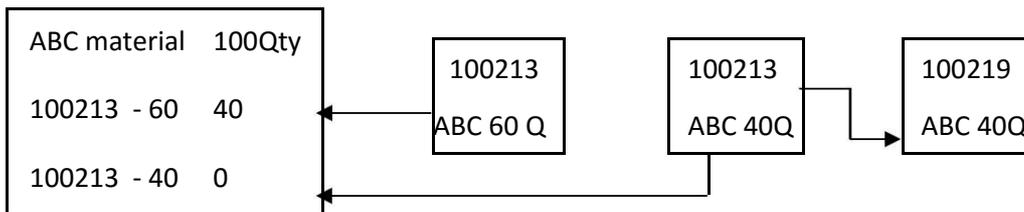
Whenever high priority delivery customer places order, if stock is not available then we go back to open orders of low priority customers and cancel the confirmation of orders and assign it to high priority delivery customers.

In The below scenarios backorder process is not possible: -

- i). If availability check field is 01 then it is not possible.
- ii). If we check fixed date and quantities in default setting.

### Client Scenario:-

Two customers, one is 100219 (High delivery priority) and 100213 (Low delivery priority). Stock is 100 qty. First create two open orders for customer 100213 with 60 and 40 Qty and then high priority customer 100219 with 40 Qty order .then we will cancel 40 Qty order for 100213 customer and assign 40 qty to 100219 customer.



The T-code for back order process is [V\_RA] → material [ABC] → plant [ZMUM] → execute.

Select both orders, which we need to cancel and which we want to assign

Material	Cust.	Docmt	Item	DivPr	Fix	1	DivDteOrder	quantity	Confirmed quantit	Open quantity	SUnit
<input type="checkbox"/> BACKORDERS	9990000065	12357	000010	03			19.12.13	60.000	60.000	60.000	EA
<input checked="" type="checkbox"/> BACKORDERS	9990000065	12358	000010	03			19.12.13	40.000	40.000	40.000	EA
<input checked="" type="checkbox"/> BACKORDERS	9990000070	12359	000010	01			19.12.13	40.000	0.000	40.000	EA

→ Click on backorder → double click on the order which we want to cancel the confirmation

Date	MRP e...	MRP element data	Reqmts/receipt	Confirmed
23.12.2013	Order	0000012358/000010/0002	0	40

→ Delete committed quantity and click on copy

Sales requirements	
Order	12358 10
Open	40
Committed	40
Mat.Av.Dt.	23.12.2013
Tot.cmmtd	40
ATP qty	40



Double click on the order which we want to confirm

Date	MRP e...	MRP element data	Reqmts/receipt	Confirmed
23.12.2013	Order	0000012359/000010/0001	40-	0

→ Committed quantity [40]

Sales requirements					
Order	12359	10	Mat.Av.Dt.	23.12.2013	
Open	40		Tot.cmmtd	0	
Committed	40		ATP qty	40	

→ Click on copy

Date	MRP e...	MRP element data	Rec./reqd qty	Confirmed
23.12.2013	Order	0000012359/000010/0001	40-	40

Save it.

	Material	Cust.	Docmt	Item	DlvPr	Fix	1 DlvDte	Order quantity	Confirmed quantit	Open quantity	SUnit
	BACKORDERS	9990000065	12357	000010	03		19.12.13	60.000	60.000	60.000	EA
<input checked="" type="checkbox"/>	BACKORDERS	9990000065	12358	000010	03		19.12.13	40.000	0.000	40.000	EA
<input checked="" type="checkbox"/>	BACKORDERS	9990000070	12359	000010	01		19.12.13	40.000	40.000	40.000	EA



## Rescheduling

The T-code for rescheduling is [V\_V2].

Rescheduling is doing backorders process automatically by the system.

Create new material Rescheduling, post some stock - 50qty, create order for low delivery priority customer with full qty 50 and save it, create order for high delivery priority customer with 50 qty and save it.

V\_V2 → material → plant → uncheck simulation → enter → yes → executec → yes (System will confirm qty for high delivery priority customer).

Material	Description	Plant	Plant name				
Customer	Name	Sales group					
Document	Item	Order quantity	UoM	Old date	prev.confirmed qty	New date	new confirmed qty
RESCHEDULING	RESCHEDULING MATERIAL	ZMUM	MUM Mfg plant	Alkem			
9990000065	Special customer 100213	insulin & antibiotic					
12363	10	100.000	EA	19.12.2013	0.000		
				02.01.2014	100.000		0.000
9990000070	100219 customer	insulin & antibiotic					
12364	10	100.000	EA	19.12.2013	0.000		
						02.01.2014	100.000



## **Interview Questions For Availability check**

Q1. What are the prerequisite for availability check?

Ans. Availability check field in material master, Check requirement and availability in schedule line category, Check requirement and availability in requirement class and Requirement type should be determined into sales document.

Q2. What is checking group and what it controls?

Ans. Checking group is nothing but availability check and it is a process of checking the stock availability of the materials while creating sales order. In define checking groups we have actual controls of how to update sales order quantities in MRP i.e. total records for day or single records? For 01 we maintain "B" (total records for day). For 02 we maintain "A" (single records).

Q3. What is the difference between availability check field in 01 and 02?

Ans. If we maintain 01 then system accumulate the sales order quantities on the particular date and update in single line in MD04. If we maintain 02 each sales order quantity will be update in MD04 along with the sales order number.

Q4. Where is the control that the checking group KP system will not perform availability check?

Ans. In define checking groups we check no check field for 'KP'.

Q5. What combination we configure scope of check?

Ans. we configure scope of check with the combination of (checking group + checking rule).

Q6. What is checking rule?

Ans. Checking rule specifies the transaction in which we want to configure availability check i.e. whether to configure availability check in order or delivery].

Q7. What happens if i check safety stock, stock in transit, quality stock and block stock?

Ans. If we check these then system will consider these stock also while performing availability check.

Q8. What happens if i check without RLT?

Ans. If we check without RLT and if stock is not available then system will not confirm the quantity.

Q9. What happens if i uncheck includes sales requirement?

Ans. If we uncheck sales requirement then system will not consider open order quantities also while performing availability check.

Q10. What happens if i uncheck includes delivery?

Ans. If we uncheck include delivery then system will not consider open delivery while performing availability check.



Q11. The clients requirement is the manufacturing some material in both the plant. In one plant if stock is not available then system should not confirm the quantities. In other plant even if stock is not available system should confirm the quantities basing on RLT. How to do this?

Ans. Create new checking groups (Example – 02 is standard, so create new Z2) and maintain different checking group for different plants i.e. (ZMUM – 02, ZVAP – Z2) in **checking group default values**, then when we creating material master system propose checking group as 02 and for other plant Z2 then we maintain **carry out control for availability check** for 02 & A combination we check w/o RLT and for Z2 & A combination.

Q12. What scenario backorder process is not work?

Ans. i). If availability check field is 01 then it is not possible.

ii). If we check fixed date and quantities in default setting.

Q13. What happens if i check fixed date & quantity?

Ans. If we check this, system will not allow changing the delivery dates and confirming quantities in sales order manually.

Q14. Where is the control that system is proposing popup in case of shortage?

Ans. Availability check rules (This field will help to propose the popup in case of shortage while creating sales order).

Q15. What is the configuration required for backorder processing?

Ans. i). Assign checking rule is 'BO' to plant.

ii). Go to carrwet control for availability check maintain the combination of "02" & "BO" save it.

Q16. What is backorder processing?

Ans. Whenever high priority delivery customer places order if stock is not available then we go back to open orders of low priority customer and cancel the confirmation of order and assign into high priority delivery customer order.

Q17. What is the T-code for backorder processing?

Ans. V\_RA.

Q18. What is rescheduling?

Ans. Rescheduling is doing backward process automatically by the system.

Q19. What is the T-code for rescheduling?

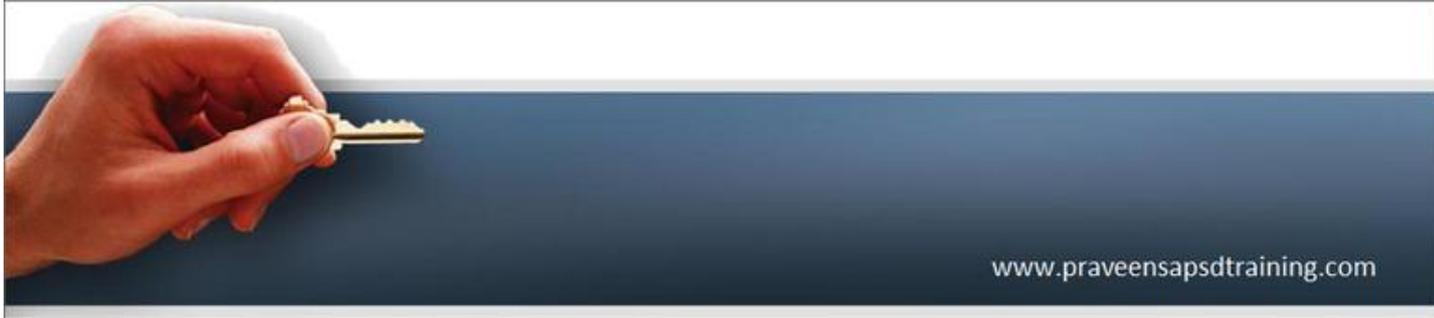
Ans. V\_V2.

Q20. How many types of availability check we have?

Ans. Availability check can be configuring in three ways: - i) Availability check with ATP (Available to promise). ii) Availability check with product allocation. iii) Rule based availability check.

Q21. What is product allocation?

Ans. It is a process of reserving the stocks to customer, customer groups, and distribution channel.

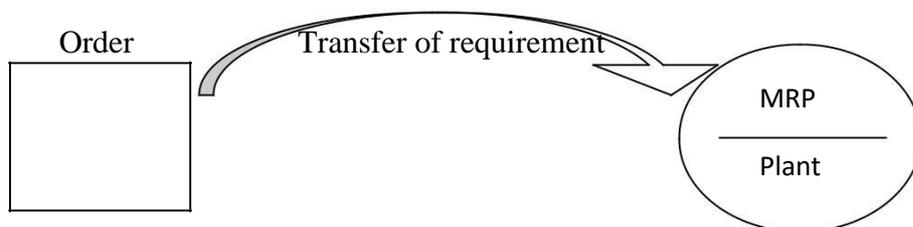


Q22. In availability check what happens if multiple user are performing availability check for the same material for same time?

Ans. if multiple users are performing check for the same material at the same time then system will perform availability check for the same material at the same time then system will perform availability check for 1<sup>st</sup> user and block availability for other users. This control is in defining material block for other users.

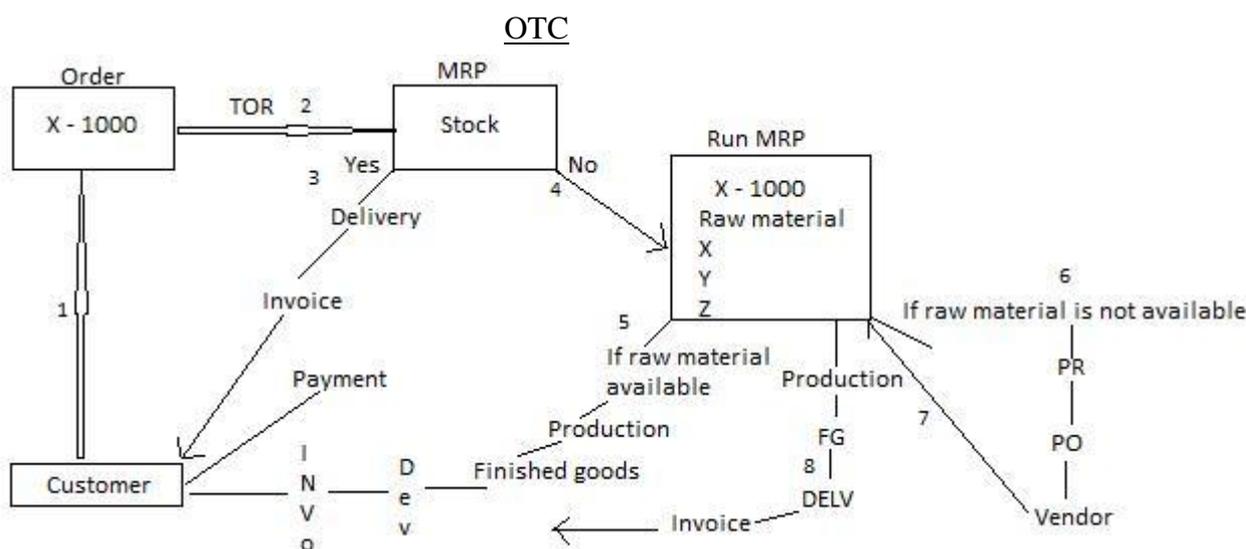
## Transfer of requirements (TOR) Integration Between SD-MM-PP-FI-CO

TOR will help to transfer the sales order requirement to MRP (Material Requirement Planning).

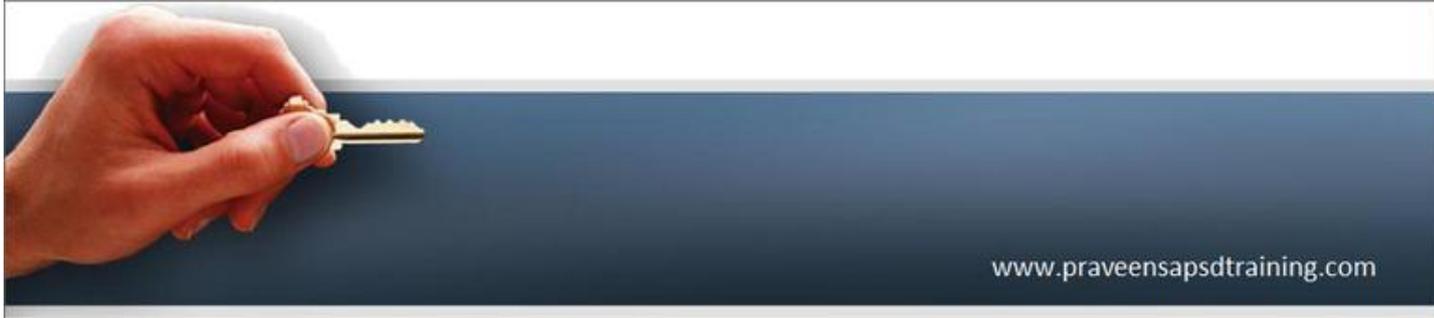


If we don't transfer the requirements, then the employees at the plant will not know the information of sales order requirement, and the result is even if stock is getting emptied they will not start the production.

If we are not transferring the requirement to MRP, system could not be able to perform availability check.



- When we create sales order, first system determines requirement type into sales document in procurement tab and requirement type will help to determine requirement class.
- Requirement Class controls how to transfer the sales order requirements to MRP



### Prerequisites For Transfer of Requirements

- i). In scheduling line category check requirement assemble & availability check.
- ii). In requirement class - Check Requirement and check Availability.
- iii). Requirement type should be determined into sales document.

The criteria for determining requirement type into sales document: -

- i) Strategy group, ii) MRP group, iii) Item category + MRP type.

Standard requirement type is [041 / 011].

Requirement type for Make to order is [KE].

Requirement type for IPO is [KEB].

Standard requirement class is [041 / 011].

Requirement class for Make to order is [040].

Requirement class for IPO is [KEB].

### Configuration for TOR



The criteria for determining requirement type into sales document is strategy group, MRP group, item category + MRP type. Requirement determines into sales document in procurement tab. The Only purpose of requirement type is to help determine requirement class). In this configuration steps we assign requirement class to requirement type. [If needed then create your own].

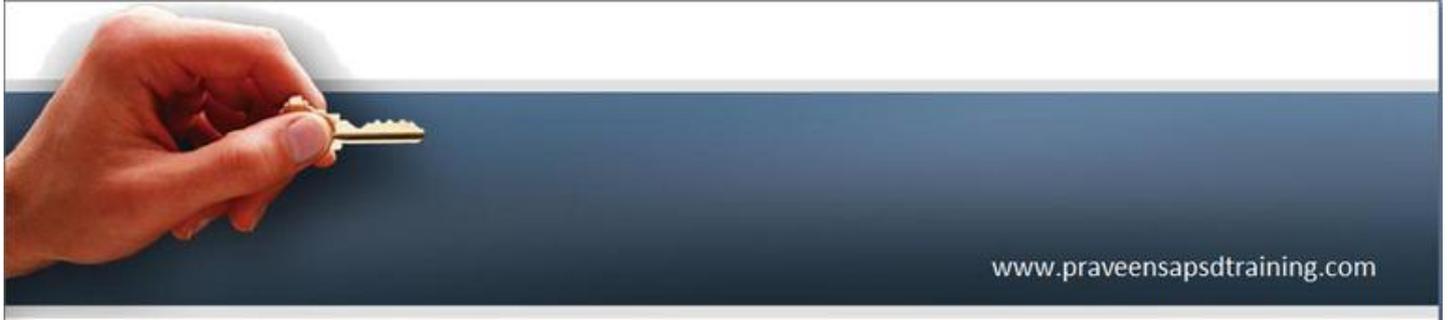
**In Real Time we'll not change Requirement Type & Requirement Class.**

Define Requirements Classes (Requirement class actually controls how the sales orders requirement should be transferd to MRP).

- For 040 requirement class we have special stock indicator [E].

The special stock indicator “E” in 040 requirement class will control that. in make to order process the sales order requirement will be transfer to MRP as special stock indicator ‘E’ (sales order stock). That is the reason whenever we manufacture finished goods the stock will be reserved to that particular sales order number.

- Requirement class KEB will also have special stock indicator “E”.



The special stock indicator E in KEB requirement class controls that ,when we do MIGO in IPO process system will reserve the stock to that particular sales order number.

In requirement class we have costing block which is an integration with CO consultant. The CO consultant has to maintain costing method; The CO consultant has to maintain costing variant, costing sheet, condition type line item.

We cannot remove E in 040 requirement class, if we need to remove it has to be done in Costing,Account Assignment.

Transfer of requirement is integration between SD + CO + MM + PP.

Availability check is integration between SD + MM + PP.

#### Determination Of Requirement Types Using Transaction

In this configuration step we assign requirement type to the combination of [item category + MRP type].

The requirement type determination based on strategy group and MRP group in PP configuration.

If we maintain item category + MRP type combination in schedule line category determination [VOV5] then only the combination will appear here.

[TAN + PD = 041] → create order and see in procurement tab → go to MM02 and remove strategy group and MRP group then check the order.

### Scenario (Client Requirement)

If system should give 1<sup>st</sup> performance to item category + MRP type while determining requirement type into sales document.

**Solution:-**

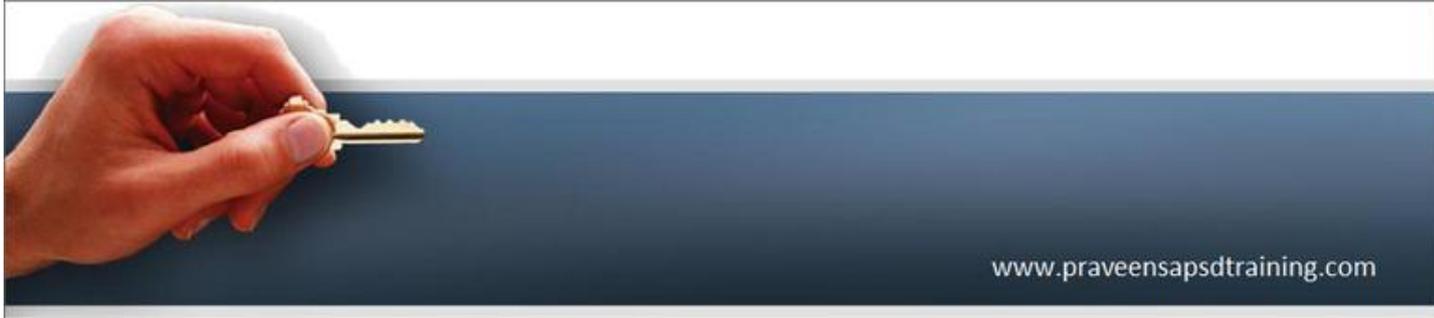
In assignment of requirement types maintain “**Origin of requirement as 1**”.

TAN | PD | 1

#### Define Procedure For Each Schedule Line Category

In this configuration steps we go to schedule line category and  Requirement & assembly and  Availability.

#### Block Quantity Confirmation In Delivery Blocks



Double click on blocking reasons criteria

In this configuration step, we check confirmation block to the delivery block reasons. If we check confirmation block then while creating sales order system will cancel the confirmed quantity.

⊕ Maintain Requirements For Transfer Of Requirements

Q. While creating sales order if order is block for credit system automatically cancels the confirmation. Where is the control?

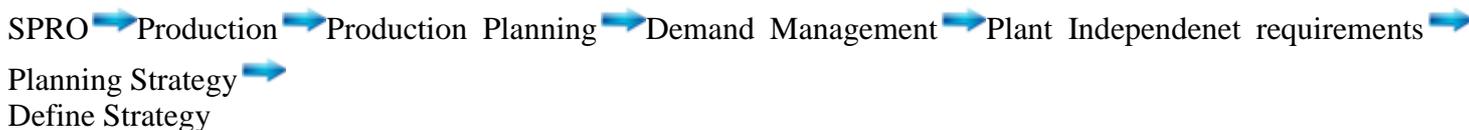
Ans. Requirement number [101] in maintain requirement for transfer of requirement.

⊕ Maintain Requirements For Purchase And Assembly Orders

Q. In third party process & IPO process if order is block for credit system will not generate PR. Where is the control?

Ans. Requirement number [102].

PP configuration for Requirement Type determination based on strategy group and MRP Group



**Availability**

Schedule line category

- Requirement
- Availability

Requirement Class

- Requirement
- Availability

**Requirement**

Scheduling line category

- Requirement
- Availability

Requirement Class

- Requirement
- Availability

- If we want to perform Availability check, the above 4 has to be checked
- If we need to just transfer the requirements ,then above 2 has to be checked.

### Interview Questions For Transfer of Requirements

Q.1. What is the criteria for determining requirement type into sales document?

Ans. i) Strategy group, ii) MRP group, iii) Item category + MRP type

Q.2. What is the purpose of requirement type?

Ans. Requirement type will help to determine to requirement class.

Q.3. I want system to give first performance to Item category + MRP type while determining requirement type into sales document. Where is the control?

Ans. "Origin of requirement 1".

Q.4. What is the requirement type for make to order and IPO?

Ans. Requirement type for Make to order is [KE] and Requirement type for IPO is [KEB].

Q.5. What is the requirement class for IPO and make to order?

Ans. Requirement class for IPO is [KEB] and Requirement class for Make to order is [040].

Q.6. What are the prerequisite for TOR?

Ans. i). In scheduling line category check requirement assemble & availability check. ii). In requirement class - Check Requirement and check Availability.  
iii). Requirement type should by determine into sales document.

Q.7. If i assign delivery block in sales order, system should cancel confirm quantity. Where is the control?

Ans. check confirmation block to the delivery block reasons.

Q.8. If order is block for credit, i don't want to confirm the quantity. Where is the control?

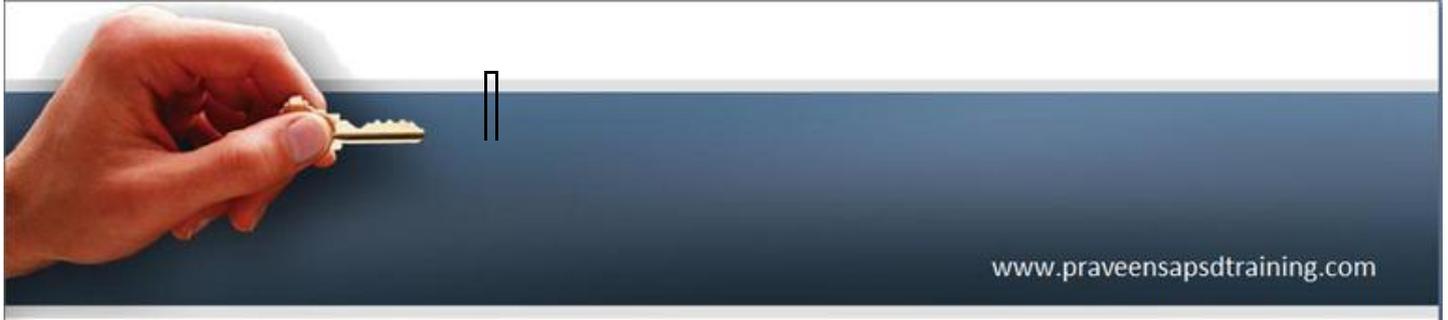
Ans. Requirement number [101] in maintain requirement for transfer of requirement.

Q.9. In third party process & IPO process if order is block for credit system will not generate PR. Where is the control?

Ans. Requirement number [102].

Q.10. TOR is integration between which modules?

Ans. Transfer of requirement is integration between SD + CO + MM + PP.



## Credit Management (SD-FI Integration)

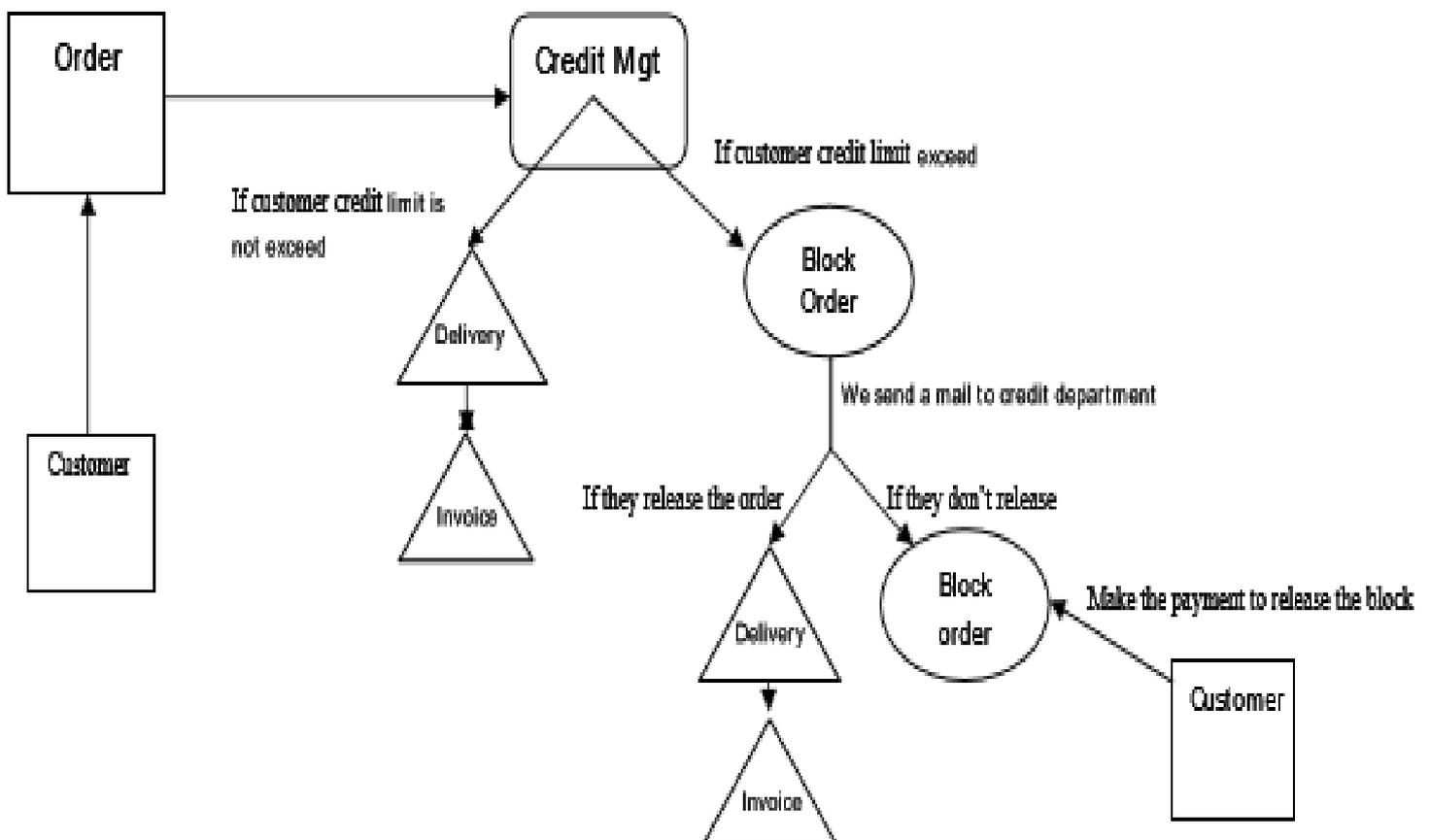
It is the process of managing credit limits of the customers.

Every company has credit management department, this credit department will manage the credit limits of the customers.

### Roles & Responsibilities of credit management department: -

1. They fix credit limit to the customer.
2. Monitoring the day to day transactions and any of the customer credit limits exceeds then they block the next transaction.
3. Classifying the customers into high risk, medium risk and low risk based on the customers past payment history.
4. Releasing the orders which are block for credit.

### Process: -





**Credit Management can be configured in 2 ways.**

- i). Simple credit check
- ii). Automatic credit check

**Difference between Simple Automatic credit check**

<b><u>Simple credit check</u></b>	<b><u>Automatic credit check</u></b>
In this if customer credit limit exceeds, we can block only at order level.	In this if customer credit limit exceeds, we can block at order level or delivery level or PGI level.
In this there is no concept of risk category.	Based on risk category of the customer i.e. High risk Customer order blocked at order level. Medium risk customer order blocked at delivery level. Low risk customer block at PGI level.
In simple credit check system considers only receivables.  While performing credit check. Receivables means open items (Open items means invoice raised but not yet paid)	In automatic credit check system considers open order value, open delivery value, open invoice value and open item value while performing credit check.

**Configuration for simple credit check**

**Step1:-**

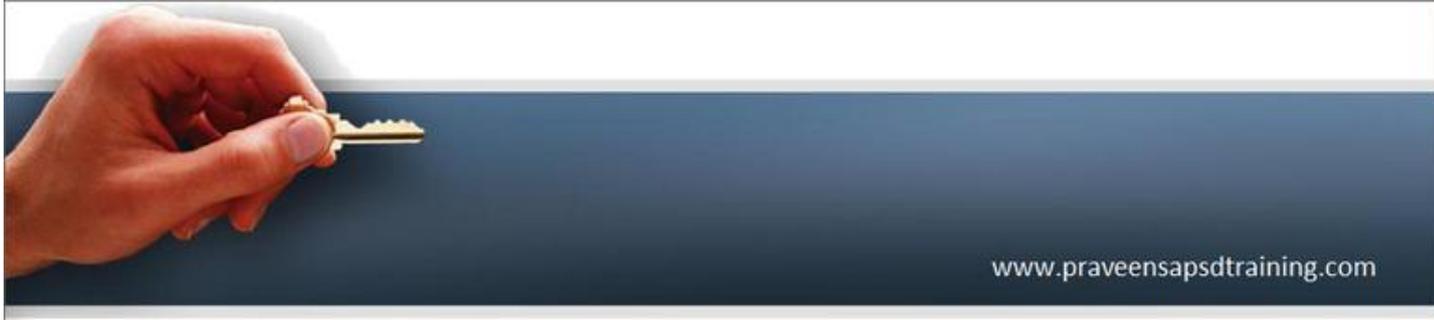
Define Credit Control Area

FI consultant is responsible to define credit control area. Credit management is integration between SD - FI.

SPRO → enterprises structure → definition → financial accounting → Define Credit Control Area (It is an organisational unit which specify group of people responsible for credit management i.e. credit department).

New entries → Z100 → INR → update [000012]

**Update group:-** Update group controls, which sales document should be updated in credit management i.e. whether to update open order value or open delivery value or open invoice vale or open item value).



☀ **We have 3 types of update groups: -**

1. **000012**: - It updates all open order values, open delivery values, open invoice values and open item values.
2. **000015**: - It updates all open delivery values, open invoice values, and open item values. (We use update group 15 for those process in which we don't have sales order i.e. delivery without order reference).
3. **000018**: - It updates all open order values, open invoice values and open item values. (We use this update group for those process in which we don't have delivery i.e. service process and Third party process).

Assign fiscal year variant [V3]      credit limit [5L]      save it.

**Q. Where we maintain credit limit for new customer?**

**Ans. Credit control area.**

**Step2:-**

Assign company code to credit control area      FI consultant will do this assignment

SPRO → enterprises structure → assignment → financial accounting → Assign company code to credit control area  
 → go to our company code → assign credit control area

Co	Company Name	City	CCAr	Overwrite CC
ZALK	ALKEM Labroetries Ltd	Mumbai	Z100	<input type="checkbox"/>

Save it.

**We have two types of credit process: -**

- 1). Centralize credit process (3 company codes and 1 credit control area for all three company code).
- 2). Decentralize credit process (3 company codes and each company code has individual credit control area).

The relationship between company code and credit control area is [one to many] i.e. one credit control area can have many company codes.

But one company code should be assigned to single credit control area.

**Step3:-**

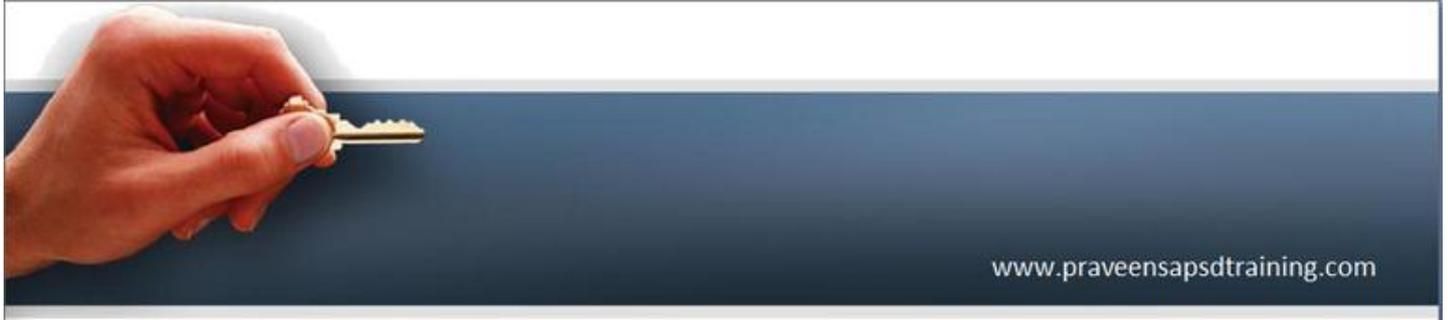
**Simple credit check configuration** (SD Consultant is responsible for this configuration)

SPRO → S&D → Basic function → credit management → Simple Credit Limit Check → go to our document type → check credit (either A or B or C). A means run simple credit check & warning message, B means run simple credit check and Error message and C means run simple credit limit check & delivery block

→ if we have credit group then remove

SaTy	Description	Check credit	Credit group
OR	Standard Order	A	

save it.



Credit Check field is in Document type controls VOV8, This field controls whether to go for simple credit check or Automatic Credit check.

**Credit Group:-**The credit Group is applicable only for Automatic Credit check. Credit group controls which transaction to block. i.e. order, delivery, PGI.

#### **Step4:-**

- Then go to our pricing procedure OVKK and assign our condition type to pricing procedure (ZVAA01 – YPR0)
- Go to V/08 → In our pricing procedure, goto Net Value step and maintain subtotal as **A**.
- Sub Total **A** will update sales documents values into credit management

#### **Step5:-**

Go To Item category & Check Credit Active.

This field controls whether to update line item values into credit management or not.

**T-code to maintain credit limit [FD32], FI end user will maintain credit limits.**

- Create a new customer (XD01) and check payment history in company code data and also maintain credit control area field in billing tab in customer master. Result: Credit limit of new customer should be updated.

**Payment History record:** - We have this field in customer master in company code data. If we check this customer payment will update credit management i.e. FD32.

FD32 customer no [9990000085] credit control area [Z100]

Customer   Credit limit customer  
 Credit control area  Amit Control area

**Overview**  
 Overview

**General data**  
 Address  
 Central data

**Credit control area data**  
 Status  
 Payment history

Enter credit limit save it.

Create an order with created customer (9990000085) and save order, do delivery, and invoice (for open invoice go to VOFA and  posting block).

After creating check open order value, open delivery value, open invoice value and open item value

Status	
Credit limit	<input type="text" value="500,000.00"/>
Credit exposure	<input type="text" value="600,000.00"/>
Cred.lim.used	<input type="text" value="120.00"/> %
Horizon	<input type="text"/>

Open sales value	
Open orders	<input type="text" value="300,000.00"/>
Open delivery	<input type="text" value="200,000.00"/>
Open bill.docu.	<input type="text" value="100,000.00"/>
Sales value	<input type="text" value="600,000.00"/>

Open order value – Order is created but not delivery.

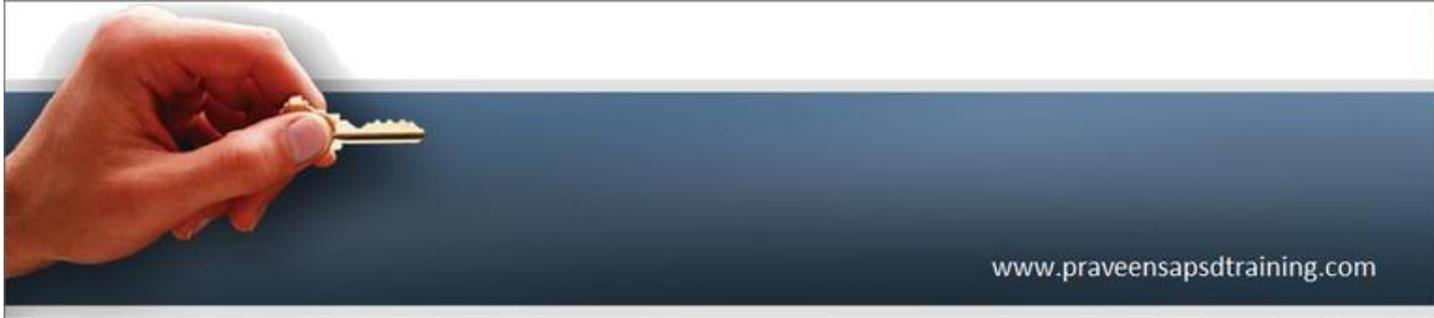
Open delivery value – Delivered the order but not billed.

Open invoice value – Order billed but accounting document not generated.

Open Item value – Invoice is raised but not yet paid.

Receivable – Receivable means open items (In simple credit system consider only receivable as credit limit).

T-code [F- 26] to receive customer payment



## **Configuration for automatic credit check**

### **Step1:-**

Define Credit Control Area    Nothing to configure anything in this step , already we defined it in simple credit check i.e. [Z100].

### **Step2:-**

Assign company code to credit control area    Nothing to configure anything in this step, already assigned it in simple credit check. FI Consultant is responsible to do this.

### **Step3:-**

Define Risk Categories    FI consultant is responsible to define risk category.

Based on past payment history of the customer, we classify the customer into high risk, medium risk and low risk categories.

SPRO → financial accounting new → account receivable & payable → credit management → credit control account → define risk categories new entries

Risk category	CCAr	Name
Z01	Z100	High risk category
Z02	Z100	Medium risk category
Z03	Z100	Low risk category

Save it.

**Go To our Credit Control Area and assign high risk for new customers.**

### **Step4:-**

Define Credit Groups    **SD consultant is responsible for this configuration.**

SPRO → S&D → basic function → credit management / risk management → credit management → define credit groups → new entries

Credit groups specifies which transaction to block, if customer credit limit exceeded i.e. whether to block at order level, delivery level or PGI level. so we define 3 credit groups

CG	Document credit grp
Z1	Block at order level
Z2	Block at delivery level
Z3	Block at PGI level

Save it.



**Step5:-**

Assign Sales Documents and Delivery Documents Tcode:- OVAK

In this configuration step, we assign credit group to order type, (Z1) and delivery type (Z2 & Z3). For document type OR assign check credit limit as “D”.

Double click on credit limit for order types go to OR check credit limit [D] and credit group [Z1] save

SaTy	Description	Check credit	Credit group
OR	Standard Order	D	Z1

Save it.

Double click on credit limit for delivery types go to LF delivery credit group [Z2] and PGI group [Z3]

DlvTy	Description	Dlv.credit group	GI credit group
LF	Delivery	Z2	Z3

Save it.

Go To Pricing Procedure V/08,Net Value step and maintain subtotal as A(Carry Over Price to KOMP-CMPRE)(credit Price)

Go To Item Category and check Credit Active.

**Step6:-**

Define Automatic Credit Control

We configure Define automatic credit control with the combination of [credit control area + risk category + credit group] → new entries →

CCA	RkC	C6	Credit control
Z100	Z01	Z1	High risk block at order level
Z100	Z02	Z2	Medium risk blk at dlv level
Z100	Z03	Z3	Low risk blk at PGI Level

→ Save it.

## Automatic Credit Mgmt Controls T-code [OVA8]

CCA RKC CG Credit control  
 Z100 Z01 Z1 High risk block at order level

Item check : - If we  this, then system will perform credit check while entering the line item in sales document

If we  this then system will perform credit check while saving the sales document.

Deviation in %  : - After releasing the order which is blocked for credit, if user is changing the value in that order then system will again block the order for credit. The control is in deviation in %.

If we want to allow increasing up to some % then maintain the % value.

[T-code "VKM3" for release credit block].

[T-code "VKM4" is for sales document & delivery document]

[T-code "VKM5" is for release delivery block]

VKM3 → order number → select the order → click on release  → save it.

Number of days  : - After releasing the order which is blocked for credit, if there is no further process within the number of days mentioned here. then system will again block the order for credit.

Credit limit seasonal factor : - This will be used to increase or decrease the credit limits to the entire customers during a particular period.

Static : - If we  static then system update all open order values, open delivery values, open invoice value, & open item values into credit check. (FD32).

Reaction  : - This field controls how system should respond, if order is blocked for credit i.e. whether to give warning message or error message or no message.

Status/Block  : - if we  this then while creating sales order if customer credit limit exceed then system will block the order for credit.

If we uncheck this even a customer credit limit exceed system will not block the order for credit.

Open orders : - If we  this then only system will perform credit check while creating order and if customer credit limit is exceed then system will block the order.

If we uncheck this then system will not perform credit check in sales order and system will not block orders.

Open deliveries : - If we  this then only system will perform credit check while creating delivery document. 🚫 The blocked order values will not be update into credit management (FD32).



**Q. If order is blocked for credit then system should cancel the order confirmation. Where is the control?**

**Ans. Requirement number [101] in TOR**

**Dynamic** : - In automatic credit check we can select either static or dynamic, but not both.

If we  **Dynamic** it updates all open order values, open delivery values, open invoice values, and open item values but any open order if the delivery creation date is exceeding horizon date that order will not be updated into credit management (FD32).

Static	Dynamic
In static it updates all open order values, open delivery values, open invoice values and open item values.	In Dynamic it updates all open order values, open Delivery values, open invoice values and open item values but any open order if the delivery creation date is exceeding horizon date then it will not update in Credit management (FD32).

**Q. Can i change horizon period from months to days or days to months?**

**Ans. Yes, go to the T-code [OMO1] double click on [S066] info structure change from month to day or from day to month click on continue save it.**

- Maintain some horizon days [10] then create order within credit limit save it. It will update in credit management. Now again create an order and requested delivery date 12/01/14 save it and check FD32, no updation.

**Document value** : - If we  this and if we maintain Max. Doc. Value. then while creating sales order if sales order value exceeds Max. Doc. Value then system will block the order for credit, the reason is document value exceeds.

**Critical fields** : - If we  this then while creating sales order, if user changes any of the critical fields then system will block the order for credit even though the customer is having enough credit balance. Critical fields are [Payment terms, fixed value date and additional value days] in credit management.

**NextReview date** : - If we  this then while creating sales order system will check order date with next review date if the sales order date exceed next review date then system will block the order for credit. The reason is review date has been passed. **We maintain next review date in FD32 status view.** The number of days field in next review date is grace days.

**Open items** : - If we  this and if we maintain Max. Open item %, then while creating sales order system will check is there any open item existing for this customer or not, if yes then it will accumulate the value of open items and system will also check is any of the open item overdue or not, if is there any overdue item then



system will do accumulate the values of overdue item and calculate the % between overdue item and open item value. If this % is exceed Max. Open item % (30%) then system will block the order for credit.

- [Rough – create new customer, credit limit: - 10L, Payment terms: - 30 days, create 5 orders  
Overdue - OR-3L, Delivery, invoice, accounting document – Open item  
Overdue - OR-1L, Delivery, invoice, accounting document – Open item  
OR-3L, Delivery, invoice, accounting document – Open item  
OR-2L, Delivery, invoice, accounting document – Open item

Again OR – 1L]

Process of changing already created billing document to overdue billing:-

- Change the billing date in while creating invoice. Or,
- Go to VF02 → click on accounting → change mode → double click on customer number → change base line date. Or,
- FBL5N → customer number → company code → execute → double click on invoice number → change mode → change billing date.

If we check open items then while creating sales order system accumulate the values of all open item and system accumulate the values of overdue items and calculate the % of overdue items. If overdue % exceed maximum open item % then system block the order for credit.

The number of days in open item is also grace days.

OldestOpenItem : - It is nothing but overdue item. if we check oldest open item then while creating sales order system checks for this customer is any one of the previous invoice is overdue or not, if yes then system will block the next transaction.

Payer : - Payer is checked, if customer have multiple payers.

Payer Check is only applicable only for open item and oldest open item.

If we check Payer ,then system considers the invoices of only that particular payer while performing open item check and oldest open item check.

If we uncheck Payer then system consider the Invoices of all the Payers who are in a group. while performing open item and oldest open item

- Create a customer with SP – SH – BP – PY and create 2 extra payers and assign both payers to SP

## Scenario - Client Requirement

### Grouping of multiple payers or customers into single credit limit

1<sup>st</sup> maintain credit limit for one payer and assign this payer as credit account for other payer in FD32. Status view edit change account maintain 1<sup>st</sup> payer maintain risk category save it.

High.dunn.level : - Dunning is the process of sending reminders to the customers, whose payment is delayed. Dunning configuration done by FI consultant.

If we check highest dunning level and if we maintain dunning level and if that dunning level is executed then system will block the next transaction.

Generally we have 3 dunning level.

User 1 /  User 2 /  User 3 : - if clients' requirement related to credit management is not fulfilling with standard configuration then we use user exits. SAP has provided 3 user exits if we are using 1<sup>st</sup> user then check user 1, if we are using 2<sup>nd</sup> user exits then check user 2 and if we are using 3<sup>rd</sup> then check user 3.

Path to find out user exist: - SPRO → S&D → system modification → user exists → user exits for credit check and risk management → click on documentation → user\_credit\_check 1, user\_credit\_check 2, and user\_credit\_check 3.

## Scenario - Client Requirement

Client want to maintain division wise credit limit. How to configure this?

**Solution:** - The above concept will work if clients are taking order division specific i.e. each order should have same division products.

Example – If we have 6 division then we have to create  $6 + 1 = 7$  credit control areas. 6 actual and 1 dummy credit control area.

1<sup>st</sup> create credit control areas, Z100 make it as dummy which we already created and create Z101 for Z1 division, Z102 for Z2, Z103 for Z3, Z104 for Z4, Z105 for Z5 and Z106 → for Z6.

Then assign dummy credit control area to company code.

Assign permitted credit control area to company code.

In this configuration steps we assign actual credit control area to company code.

Go to new entry ZALK – Z101, ZALK – Z102, ZALK – Z103, ZALK – Z104, ZALK – Z105, and ZALK – Z106 → save it.

Define risk category

New entry → Z01 – Z101, Z02 – Z101, Z03 – Z101  
 Z01 – Z102, Z02 – Z102, Z03 – Z102  
 Z01 – Z103, Z02 – Z103, Z03 – Z103  
 Z01 – Z104, Z02 – Z104, Z03 – Z104  
 Z01 – Z105, Z02 – Z105, Z03 – Z105  
 Z01 – Z106, Z02 – Z106, Z03 – Z106

Assign credit control area to sales area

SPRO → enterprises structure → assignment → S&D → assign sales area to credit control area (In this configuration step, we assign actual credit control area to sales area).

ZDOM – Z1 – Z1 = Z101	ZDOM – Z2 – Z1 = Z101
ZDOM – Z1 – Z2 = Z102	ZDOM – Z2 – Z2 = Z102
ZDOM – Z1 – Z3 = Z103	ZDOM – Z2 – Z3 = Z103
ZDOM – Z1 – Z4 = Z104	ZDOM – Z2 – Z4 = Z104
ZDOM – Z1 – Z5 = Z105	ZDOM – Z2 – Z5 = Z105
ZDOM – Z1 – Z6 = Z106	ZDOM – Z2 – Z6 = Z106.....do for Z3 & Z4 distribution channel.

Define credit Groups

SPRO → S&D → basic functions → credit management / risk management → credit management → define credit groups.

Assign sales document and delivery document

Define automatic credit control

Z101 – Z01 – Z1	Z102 – Z01 – Z1	Z103 – Z01 – Z1
Z101 – Z02 – Z2	Z102 – Z02 – Z2	Z103 – Z02 – Z2
Z101 – Z03 – Z3	Z102 – Z03 – Z3	Z103 – Z03 – Z3 .....Do for same Z104, Z105 & Z106.

Create new customer for division credit control

Extend the customer from one division to another division and assign credit control area in billing tab.

Maintain credit limits (FD32)

Customer number [xxxxxxx]

Credit control area [Z101].....[Z102].... [Z103].... [Z104] ....[Z105] ....[Z106]

Credit limit	2L	3L	4L	5L	6L	7L
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## Scenario - Client Requirement

- Requirement: - Client want for dealers**  Static  
Distributor  static,  critical field  
Institution  dynamic,  Critical field  
Direct customer  dynamic,  oldest open item. How to configure this?

**Solution: -** We can do this with the help of new risk categories. If we want 4 different controls then we need to define 12 risk categories (4\*3).

Z100 / Z01 / Z1	Z100 / Y01 / Z1	Z100 / I01 / Z1	Z100 / L01 / Z1
Z100 / Z01 / Z2	Z100 / Y01 / Z2	Z100 / I01 / Z2	Z100 / L01 / Z2
Z100 / Z01 / Z3	Z100 / Y01 / Z3	Z100 / I01 / Z3	Z100 / L01 / Z3.

### Partner function in credit management

KB – Credit representative

KM – Credit manger



## Interview Questions For Credit Management

Q.1. What is the difference between simple and automatic credit check?

Ans.

<u>Simple credit check</u>	<u>Automatic credit check</u>
In this if customer credit limit exceed we can block only at order level.	In this if customer credit limit exceed u can block it order level or delivery level or PGI level.
In this there is no concept of risk category.	Based on risk category of the customer i.e. High risk customer block at order level. Medium risk customer block at delivery level. Low risk customer block at PGI level.
In simple system considers only receivable while performing credit check. Receivable means open items (Open items means invoice raised but not yet paid)	In automatic system consider open order value, open delivery value, open invoice value and open item value while performing credit check.

Q.2. What is centralize and decentralize credit process?

Ans. In centralize many company have only one credit control area and in decentralize each company has each credit control area.

Q.3. What is update group?

Ans. Update group controls which sales document should be update in credit management i.e. whether to update open order value or open delivery value or open invoice vale or open item value.

Q.4. Explain update group of 000012, 000015, 000018?

Ans. **000012**: - It updates all open order values, open delivery values, open invoice values and open item values.

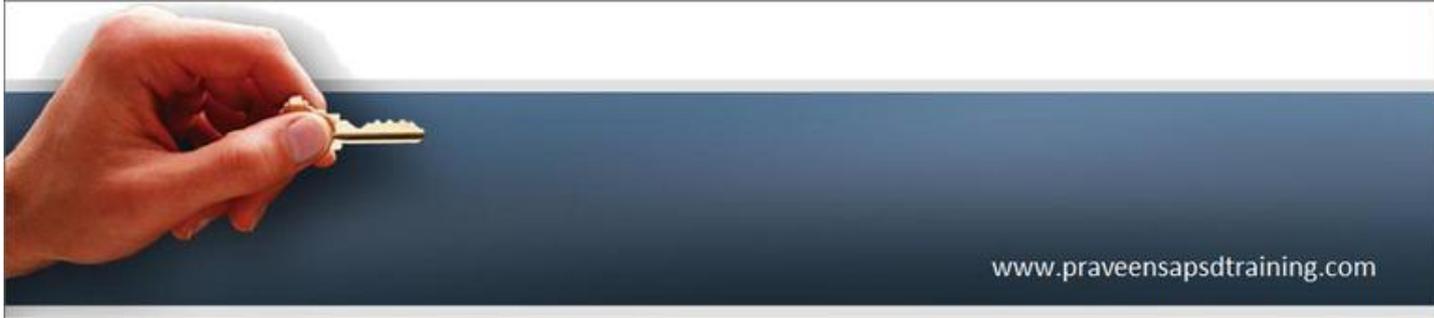
**000015**: - It updates all open delivery values, open invoice values, and open item values. (We use update group 15 for those process in which we don't have sales order i.e. delivery without order reference).

**000018**: - It updates all open order values, open invoice values and open item values. (We use this update group for those process in which we don't have delivery i.e. service process and Third party process).

Q.5. Where we maintain credit limits for new customer? Ans. Credit control area.

Q.6. What is the relationship between company code and credit control area?

Ans. One to many i.e. one credit control area can have many company code but one company code has one. Q.7. In simple credit check what is difference between A, B & C?



Ans. A means runs simple credit limit check & warning message. B means run simple credit limit check and Error message. C means run simple credit limit check & delivery block.

Q.8. Clients requirement is system should perform credit check each & every line item? Ans.  Item check.

Q.9. After releasing the order which is block for credit, if user is changing the value into sales order, systems will again the block the order for credit. Where is the control?

Ans.

Q.10. After releasing the order which is block for credit if there is no further process within two days then system should block the order again. Where is the control?

Ans.

Q.11. During a particular season i want to increase credit limits to all the customer. Where is the control? Ans.

Q.12. What is the purpose of payer check in automatic credit management? Ans. Payer check will come into picture if we have multiple payers.

If we check payer then performing open item check and oldest open item check system consider the invoice of the particular payer.

If we uncheck payer then while performing open item check and oldest open item check system consider the invoices of all the payer who are in a group.

Q.13. What is the difference between static and dynamic?

Ans.

Static	Dynamic
In static it updates all open order values, open delivery values, open invoice values and open item values.	In Dynaic it updates all open order values, open Delivery values, open invoice values and open item values but any open order if the delivery creation date is exceeding horizon date then it will not update in credit management (FD32).

Q.14. Can i change horizon period from month to day?

Ans. Yes, go to the T-code [OMO1] double click on [S066] info structure change from month to day or from day to month click on continue save it.



Q.15. What is the info structure to update the value into credit management?

Ans. S066.

Q.16. What happens if i check critical field?

Ans. If we  this then while creating sales order if user changes any of the critical fields then system will block the order for credit even though the customer has having credit balance.

Q.17. What are the critical fields?

Ans. Critical fields are [Payment terms, fixed value date and additional value days] in credit management

Q.18. What happens if i check next review dates?

Ans. If we  this then while creating sales order system will check order date with next review date if the sales order date exceed next review date then system will block the order for credit.

Q.19. What happens if i check open item?

Ans. - If we  this and if we maintain Max. Open item % then while creating sales order, system checks is there any open item existing for this customer or not, if yes then it will accumulate the value of open items and system will also check is any of the open item overdue or not, if is there any overdue item then system will do accumulate the values of overdue item and calculate the % between overdue item and open item value. If this % is exceed Max. Open item % then system will block the order for credit.

Q.20. What happens if i check oldest open item?

Ans. if check oldest open item then while creating sales order system checks for this customer is any one of the previous invoice is overdue or not, if yes then system will block the next transaction.

Q.21. What happens if i check highest dunning level?

Ans. If we check highest dunning level and if we maintain dunning level and if that dunning level is executed then system will block the next transaction.

Q.22. What is the purpose of User 1, User2, User 3?

Ans. if clients' requirement related to credit management is not fulfilling with standard configuration then we need to use user exits. SAP has provided 3 user exits if we are using 1<sup>st</sup> user then check user 1, if we are using 2<sup>nd</sup> user exits then check user 2 and if we are using 3<sup>rd</sup> then check user 3.

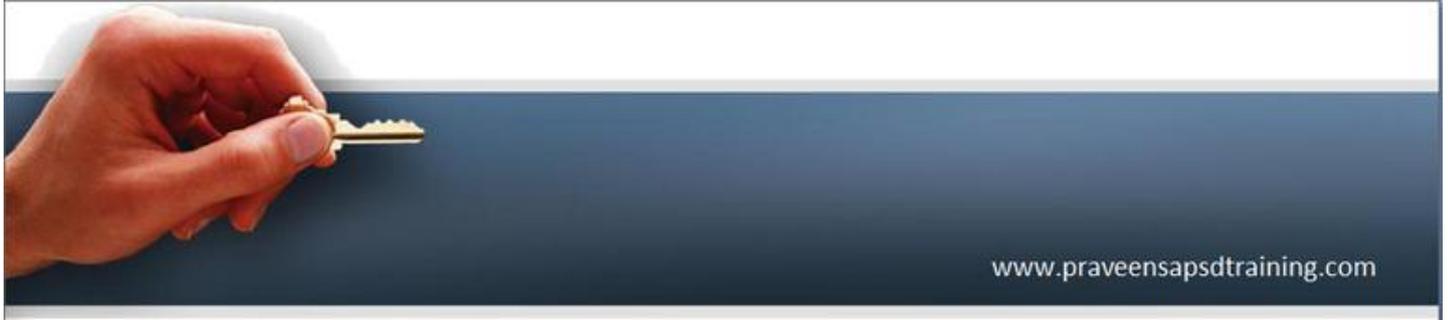
Q.23. Will return order and credit memo request updates in credit management?

Ans. No.

Q.24. If order is block for credit system should cancel the order. Where is the control?

Ans. Requirement number [101] in TOR.

Q.25. In third party process & IPO process if order is blocking for credit, system should not generate PR. Where is the control?



Ans. Requirement number [102] in TOR.

Q.26. Without configuring credit management the order is blocking for credit. What could be the reason?

Ans. Payment guarantee procedure maintain for the customer in customer master billing Tab sales area data.

Q.27. How to group the several customer into single credit limit?

Ans. 1<sup>st</sup> maintain credit limit for one customer and assign this customer as credit account for other customer in FD32. Status view edit change account maintain 1<sup>st</sup> customer maintain risk category save it.

Q.28. My clients requirement is they want to maintain division wise credit limit. How to do this? Ans. Create credit control area division wise and assign credit control area to sales area.

Q.29. My clients requirement is they want different controls for dealer, distributor, institution and direct customer. How to do this?

Ans. Define risk category distribution channel wise.

Q.30. What is the T-code to release the order which is block for credit?

Ans. VKM3

Q.31. What is the purpose of total limit & individual limit in FD32?

Ans. If single customer is doing business with multiple company codes.

Q.32. When system updates the values in receivables?

Ans. Invoice raised but not yet paid.

Q.33. What are the partner function we have in credit management?

Ans. KB – Credit representative

KM – Credit manger

Q.34. Can i see the bifurcation of open order, open delivery, open invoice, and open item?

Ans. Yes, In FD32 extra sales value.

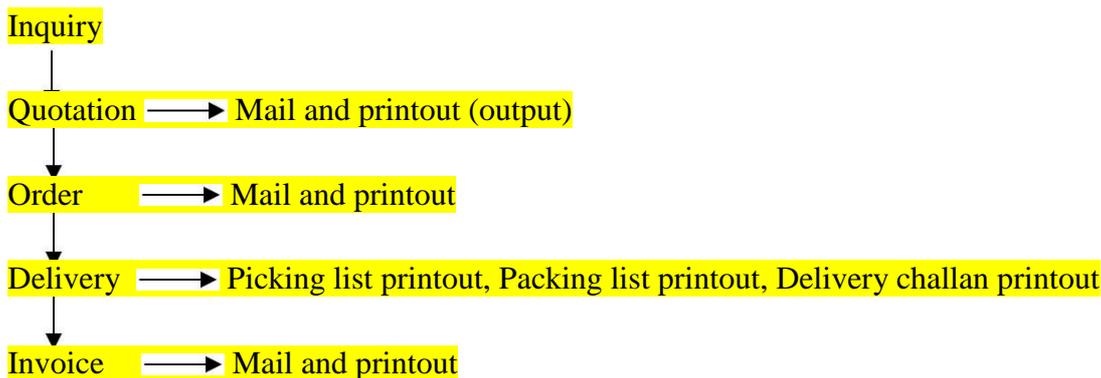
Q.35. What is subtotal we maintain to update the value into credit management?

Ans. A



## Output determination

It is the process of determining output types into sales document. Output determination is based on condition technique.



### We also have separate output Types for

- Free of charge → FD and perform invoice
- Credit Memo → CR memo and G2
- Debit Memo → DR and L2
- Returns → Return delivery and return invoice

➤ An output is the outcome of the document i.e. output can be printout or e-mail or fax.

### Output determination for **delivery documents**

SPRO → LE → shipping → basic shipping functions → output control → output determination → maintain output determination for outbound delivery

The common T-code for output determination is [NACE].

The table for output determination is [NAST].

The standard output for quotation is **AN00**.

The standard output for order is **BA00**.

The standard output for packing list is **PL00**.

The standard output delivery challan is **LD00**.

The standard output type for cash sale is **RD03**.

The standard output type for billing is **BD00**.



## Configuration of output determination for sales documents & billing documents

SPRO → S&D → basic function → output control → output determination → output determination using condition technique

▼ Maintain Output Determination for Sales Documents

### Step1:-

➔ Maintain Condition Tables

Generally we create condition table with the combination of [sales org] for output types.

➔ Double click on maintain output condition table for sales document → go to create mode → select sales org → generate → save it.

### Step2:-

➔ Maintain Access Sequences

Go to new entries → YA00 (New for order confirmation) → select → access → place the table (503) sales org → fields → save it.

### Step3:-

➔ Maintain Output Types

Standard Output Type is (BA00) → change mode → new entries YORD (order confirmation) YA00 (access sequence) → tab

➤  Access to conditions : - If we check this system will try to determine output types from condition technique, if we uncheck this system will try to determine output type from customer master with the help of DB0001 output determination procedure which we maintain in account group. We maintain output types in document tab in sales area data in customer master.

✳ If we want to create new customer output procedure then go to the T-code [V\_46].

➤  CannotBeChanged : - If we check this then system will not allow to change the output type in sales document.

➤  Multiple issuing : - If we check this system will allow to issues multiple printouts or mails to the sales document.

➤  Partner-indep.output : -

- ✚ In General the quotation output and order output will be send to sold to party.
- ✚ The delivery challan output will be send to ship to party.
- ✚ The invoice output will be send to bill to party.

If we check this field, then each output will be send to all the partner functions irrespective of the active partner function.

➤  do not write processing log : -

If we check this then system will not display the log info while issuing the outputs.

If we want to see the output into sales document then go to ➡ extras ➡ output ➡ header ➡ edit.

➤ Change output : -

We maintain change output only for output mail configuration. Whenever changes happen to the sales order, if we want to send a different format of mail.

- ✚ The standard Program for change output is [FM06AEND]
- ✚ The standard FORM routine is [CHANGE\_FLAG]

➤ Replacement of text symbols : -

This will help to send the subject and body text of a mail.

- ✚ The standard Program for replacement of text symbol is [SAPMV45A].
- ✚ The standard FORM routine for replacement of text symbol is [Text\_Symbol\_Replace].

Then go to **Default values** tab

**Dispatch time** : - This field controls when the output should be issued i.e. whether to send the output with some background jobs or with some application of transaction or send immediately while saving the transaction.

**Transmission Medium** : - This field controls the type of output i.e. mail or printout or fax.

1 Print output

2 Fax

5 External send (E-mail)

6 EDI : - (Electronic data interchange) EDI will be used to send the sales document from SAP to Non SAP System

A Distribution (ALE) : - (Application linking enabling) ALE will be used to send the sales document from one SAP system to another SAP system.

**Partner Function** : - [SP] [SH] [BP] [PY].

**Communication strategy**:- It will help to send the subject and body text of mail. We maintain communication strategy as [CS01]. **Step4:-**

Double click on  Mail title and texts texts (we maintain subject and body texts of a mail in mail title and Texts → go to new Entries → language → [EN]title[salesordernumber&VBAK\_VBELN&VBAK\_KUNNR &] → go back twice → click on text  to maintain body text →

Dear customer,

This is system generated copy; please go through the attached file. Thanks,

**Step5:-**

Double click on  Processing routines → go to new entries → Transmission medium [1]  
 → print Program [RVADOR01]  
 → form routine [Entry]  
 → form [RVAORDER01]

- ✚ Print program will help to get the data from Database tables to print in the output.
- ✚ FORM routine will help to do the calculations in output, Form Routine will help to include the logic in output.
- ✚ Form consist of layout of the output or the design of the output.

We have two types of forms, one is **Script Form** and 2<sup>nd</sup> is **Smart form**.

<b>Script Form</b>	<b>Smart Form</b>
<b>It is an old version.</b>	It is a new version
<b>It is difficult to develop.</b>	It is easy to develop.
<b>Complex design is not possible in script form.</b>	Complex design is possible in smart form.

**Q. How we integrate with Abaper to develop form?**

**Ans. We collect sample outputs from core user and we prepare FS and we attach sample output with FS and send it to Abaper, the Abaper will develop the Form and will send the firm name to consultant then we go to output type and assign them form name.**

SAP has come out with new form which is called Adobe form.



The T-code to develop script from is [SE71].

The T-code to develop Smart from is [SMARTFORMS]



This will help to take the printouts like original. Duplicate, triplicate, etc.

- ➡ Double click on partner function ➡ go to new entries ➡ medium [1] ➡ partner function [SP]
- ➡ save.

**Step6:-**



The standard output determination procedure for order is V10000 ➡ create own [Y10000] ➡

Step	Co...	CTyp	Description	Requiremnt
10	0	YORD	Order Combination	2

➡ Save it.

**Output Requirement:-** It is a condition which system will check every time while determining the output type into sales document.

If the condition fulfills then only the output type will be determined.

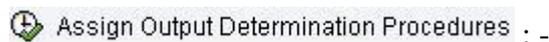
**Q. If order is blocked for credit, then system should not send mail to customer. Where is the control?**

**Ans. Output Requirement 9 ,in output determination procedure**

**Q. If order is not confirmed,then system should not send mail to customer. Where is the control? control?**

**Ans. Output Requirement 2 ,in output determination procedure**

**Step7:-**

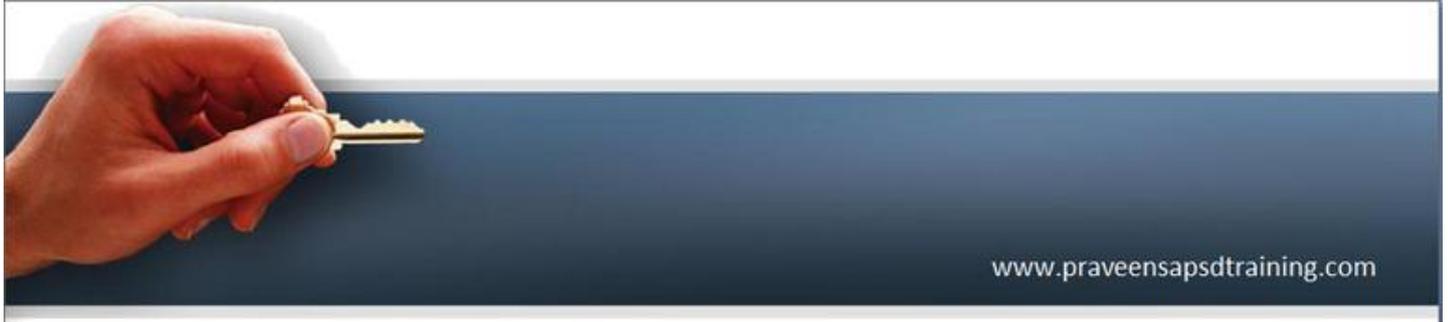


We assign output determination procedure to sales document types.

Double click on sales document header

SaTy	Description	Out.pr
OR	Standard Order	Y10000

➡ Save it.



**Step8:-**

Maintain Output Condition record : -

Sal..	Name	Funct	Partner	M..	Dat..	Lang..
ZDOM	ALKEM Domestic	SP		1	4	EN

➡ Select this

➡ Communication

output device [LP01] (output device is link between SAP system and printer

➡ save it.

## Output Mail configuration

To configure output mail 1<sup>st</sup> basis consultant has to do SCOT setting.

Whenever we need to configure mail configuration, we send a mail to basis consultant to configure SCOT setting.

Then basis consultant will send a mail to clients administrator requesting for client’s mail server IP address.

After receiving mail server IP address, basis consultant will go to SCOT setting and assign mail to server IP address in HOST name.

After BASIS Consultant settings, SD Consultant will do configuration.

The T-code for SCOT setting is [SCOT].

Go to ➡ internet and double click on SMIP ➡ assign the server number IP address in mail HOST ➡ and assign mail port as [25] ➡ click on internet set ➡ SAP script / smart Form [PDF] ➡ save it.

We maintain From mail ID in sales organisation – address tab, Communication field.

We maintain To mail ID in – customer master address tab.

The T-code to track whether to mail has been send to customer or not is [SOST].

## Spool Request

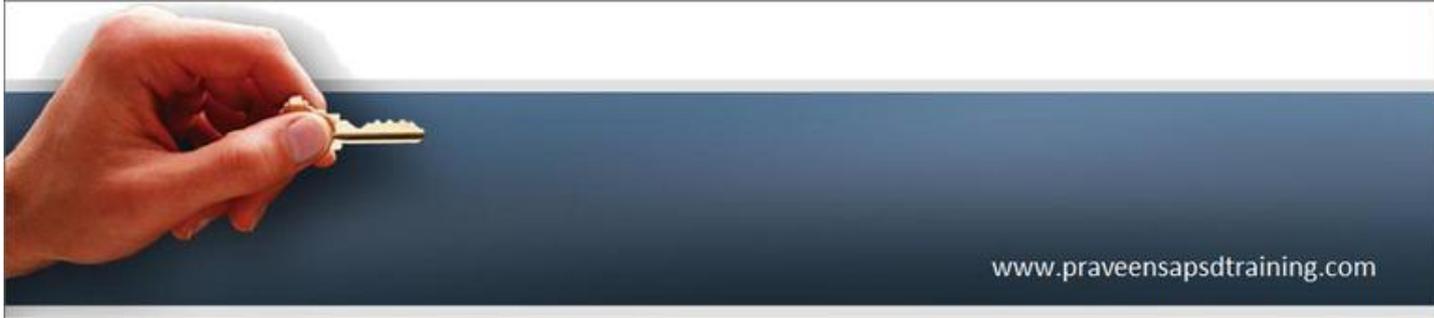
Spool Request consist of ,list of all the outputs which are issued.

T.Code : SP01 or SP02

In spool request we can take collective printouts.

**Q. Where can I take collective print outs**

**Ans. In Spool Request.**



### Interview Questions for Output determination

Q.1. What is access to condition?

Ans. Access to condition will help to determine output types from condition technique.

Q.2. I want to send a output to all the partner function? Where is the control?

Ans. Partner independent output in general tab.

Q.3. What is the purpose of change output in output type configuration?

Ans. We maintain change output only for output mail configuration. Whenever changes happened to the sales order if we want to send a different format of mail.

Q.4. What is the purpose of replacement of text symbol?

Ans. It will help to send the subject and body text of a mail.

Q.5. Where we maintain subject and body text?

Ans. Mail title and text in maintain output types.

Q.6. What is the purpose of communication strategy?

Ans. It will be used for configuring mail. It will help to send the subject and body text of a mail.

Q.7. What basis consultant will do in SCOT setting?

Ans. Whenever we need to configure mail configuration, we send a mail to basis consultant to configure SCOT setting the basis consultant will send a mail to clients administrator requesting for client's mail server IP address. After getting mail server IP address basis consultant will go to SCOT setting and assign mail to server IP address in HOST name.

Q.8. What is the medium for mail?

Ans. 5 External send (E-mail).

Q.9. What is difference between script form and smart form?

Ans.

Script Form	Smart Form
<b>It is an old version.</b>	It is a new version
<b>It is difficult to develop.</b>	It is easy to develop.
<b>Complex design is not possible in script form.</b>	Complex design is possible in smart form.



Q.10. How we integrated to ABAPer to develop form?

Ans. We collect sample output from core user and we prepare FS and we attach sample output with FS and send it to Abaper, the Abaper will develop the Form and will send the firm name to consultant then we go to output type and assign them form name.

Q.11. What is the purpose of print program?

Ans. Print program will help to determine the data which is required to print.

Q.12. What is the purpose of FORM routine?

Ans. FORM routine will help to print the data in the relevant place of output.

Q13. What is the T-code to track whether mail has been send or not?

Ans. SOST.

Q14. What is the table for output?

Ans. The table for output determination is [NAST].

Q.15. What is the common T-code for output?

Ans. The common T-code for output determination is [NACE].

Q.16. What is the purpose of processing 1, 2, 3, 4, and 5?

Ans. This will help to take the printouts like original. Duplicate, triplicate, etc.

Q.17. What is the T-code for Spool request?

Ans. SP01 – Spool request will be used to get the list of all the output issued and also be used to take collective printout.

Q.18. What is the T-code for collective processing of billing output?

Ans. VF31.

Q.19. If output is not determine into sales document. As consultant what we do?

Ans. We go to output screen and we go to determination analysis.

Q.20. If order is block for credit system should not determine output type. Where is the control?

Ans. Requirement in output determination procedure

Q.21. If order is incomplete then system should not determine output type?

Ans. Requirement.

Q.22. I want to print sales order number in subject. How we maintain?

Ans. In title field in mail title and text

## Text Determination

It is the process of determining text into sales document.

Every customer will have their own specific text information.

Ex. - Packing instructions, Payment instruction, Terms & conditions instruction etc.

These text's we maintain in customer master, from there we copy into sales order and then delivery and invoice.

We also printed in relevant outputs.

### Configuration for text determination

SPRO → S&D → basic function → text control →

Define Text Types

#### Configuration text in customer master

Customer	<input type="radio"/> Central Texts
	<input type="radio"/> Contact Person
	<input checked="" type="radio"/> Sales & Distribution

→ Select customer S&D → click on  → create new text ID →

Text	ID Description
Z100	Packing instruction
Z200	Payment instruction
Z300	Terms & Condition instruction

→ go back and click on  → then create new text procedure

TxPrc	Description	TxDetProc
Z5	New Text procedure	

Select this and click on text ID's in text procedure → go to new entry → place the text IDs →

Seq	ID	ID Description
10	Z100	Packing instruction
20	Z200	Payment instruction
30	Z300	Terms & Condition instruction

→ Save it. → then double click text procedure assignment →

go to our A/c group (0001) and assign text procedure (Z5) →

Group	Name	Text
0001	Sold-to party - 0001	Z5

→ Save it.



Then go to customer and maintain text (go to sales area data → extra → text → mention selection area [\*])

S	L	Description	1st line
*	EN	Packing instruction	Text determination test for packging
*	EN	Payment instruction	Text determination test for Payment term
*	EN	Terms & Condition instruction	Text determination test for Terms & cond

→ Save it.

### Text determination configuration for sales document

SPRO → S&D → basic function → text control → Define Text Types → select sales document

Sales Document  Header  
 Item

→ Select customer S&D → click on → create

new (In sales document we need to create new ID's) → go to new entry →

Text	ID	Description
Y100		Packing instruction
Y200		Payment instruction
Y300		Terms & Condition instruction

→ Go back and click on → go to new entries and create new procedure →

TxPrc	Description	TxtDetProc
Y5		New Text procedure

→ select the procedure and double click on text ID's in text procedure → go to new entry → place the text IDs

Seq	ID	ID Description	Refe	Text is obligat.	Acc
10	Y100		<input checked="" type="checkbox"/>	Z Text is obligatory and is c	
20	Y200		<input checked="" type="checkbox"/>	Z Text is obligatory and is c	
30	Y300		<input checked="" type="checkbox"/>	Z Text is obligatory and is c	

**Reference / Duplicate:** - If we check this system will always copy the text from reference document, if we uncheck this then system will copy the text from customer master.

**Text is Obligatory:** - This field controls whether the text is mandatory or not in sales document.

→ Double click on access sequence (for each text we need to create separate access sequence) → new entries

Acc	Description
61	Packing Instruction
62	Payement terms Instr
63	Terms & condi Instru

→ select 61 and double click on access sequence for text ID's → new entry



Seq..	Text Object	Text Object Descriptn	ID	ID Description	Partn.Funct.
10	KNVV		Z100		SP

➔ save it.

Go back and select 62 ➔ double click on access sequence for text ID's ➔ new entry ➔

Seq..	Text Object	Text Object Descrip..	ID	ID Description	Partn.Funct.
10	KNVV		Z200		SP

➔ save it.

Go back and select 63 ➔ double click on access sequence for text ID's ➔ new entry ➔

Seq..	Text Object	Text Object Descriptn	ID	ID Description	Partn.Funct.
10	KNVV		Z300		SP

➔ Save it.

Go to text procedure ➔ select our text procedure (Y5) ➔ double click on text ID's in text procedure ➔ go to Access sequence and assign access sequence ➔

Seq..	ID	ID Description	Refe..	Text is obligat.	Access..
10	Y100	Packing instruction	<input checked="" type="checkbox"/>	Z Text is obligatory and is	61
20	Y200	Payment instruction	<input checked="" type="checkbox"/>	Z Text is obligatory and is	62
30	Y300	Terms & Condition instruction	<input checked="" type="checkbox"/>	Z Text is obligatory and is	63

➔ Save it

Text procedure assignment ➔ go to document type OR and assign text determination procedure [Y5]

Sal..	Sales Doc. Type Name	TxtDe	Text in Overview Scrn
OR	Standard Order	Y5	<input checked="" type="checkbox"/>

➔ Save it.

### Tax determination for delivery document

SPRO ➔ S&D ➔ basic function ➔ text control ➔ define text type ➔ select deliver header

Delivery

Header

Item

(No need to create text id for delivery document we will use sales document id)

➔ click on  ➔ create new text procedure ➔

TxPrc	Description	TxDetProc
Y6	New Text procedure	

➔ Select

the procedure and double click on text id's in text procedure ➔ go to new entries ➔

Seq..	ID	ID Description	Refe..	Text is obligat.
10	Y100	Packing instruction	<input type="checkbox"/>	Z Text is obligatory and is

➔ Save it



Then double click on access sequence → go to → new entries → select the access sequence and double click on access sequence for text id's → go to new entries

Acc...	Description
64	Delivery Packing Ins

Seq...	Text Object	Text Object Descriptn	ID	ID Description
10	VBBK	Sales Header texts	Y100	Packing instruction

Save it.

Then go back to text ID's in text procedure & assign access sequence (64) →

Seq...	ID	ID Description	Refe...	Text is obligat.	Acc...
10	Y100	Packing instruction	<input type="checkbox"/>	Z Text is obligatory and is c	64

Then double click text procedure assignment then assign text procedure to delivery type LF to Y6 →

DivTy	TxPrc	Delivery Type Descr.
LF	Y6	livery

Save it.

- Create order and check text in header and item in text tab, but before that in material master text view have some text and then check.

### Tax determination for billing document

SPRO → S&D → basic function → text control → define text type → select billing header

Billing Doc.	<input checked="" type="radio"/> Header
	<input type="radio"/> Item

(No need to create text id for billing document we will use sales document id) →

click on Change → create new text procedure →

TxPrc	Description TxtDetProc
Y7	New Text procedure

→ Select

the procedure and double click on text id's in text procedure → go to new entries →

Seq...	ID	ID Description	Refe...
10	Y200	Payment instruction	<input type="checkbox"/>
20	Y300	Terms & Condition instruction	<input type="checkbox"/>

Save it



Then double click on access sequence → go to new entries →

65	Terms & condi Instru
66	payment terms instru

→ select the access sequence and double click on access sequence for text id's → go to new entries →

Seq...	Text Object	Text Object Descriptn	ID	ID Description
10	VBBK	Sales Header texts	Y200	Payment instruction

Seq...	Text Object	Text Object Descriptn	ID	ID Description
10	VBBK	Sales Header texts	Y300	Terms & Condition instruction

→ Save it.

Then go back to text ID's in text procedure & assign access sequence (65 & 66) →

Seq...	ID	ID Description	Refe	Acc...
10	Y200	Payment instruction	<input type="checkbox"/>	65
20	Y300	Terms & Condition instruction	<input type="checkbox"/>	66

→ Then double click text procedure assignment

then assign text procedure to billing type F2 to Y7 →

BillIT	TDPHe	TxtDetP	Billing Type Descrip.
F2	Y7	03	Invoice (F2)

→ Save it.

### Tax determination for Material Text

SPRO → S&D → basic function → text control → define text type → select sales document

Sales Document

Header

Item

→ Click on **Text types** (No need to create text id for material

text we will use standard one) → click on **Change** → create new text procedure →

Text	ID Description
Y2	New procedure

→ Select the procedure and double click on text id's in text procedure → go to new entries →

Seq...	ID	ID Description	Refe	Text is obligat.
10	0001		<input type="checkbox"/>	Z Text is obligatory and is c

→ Save it

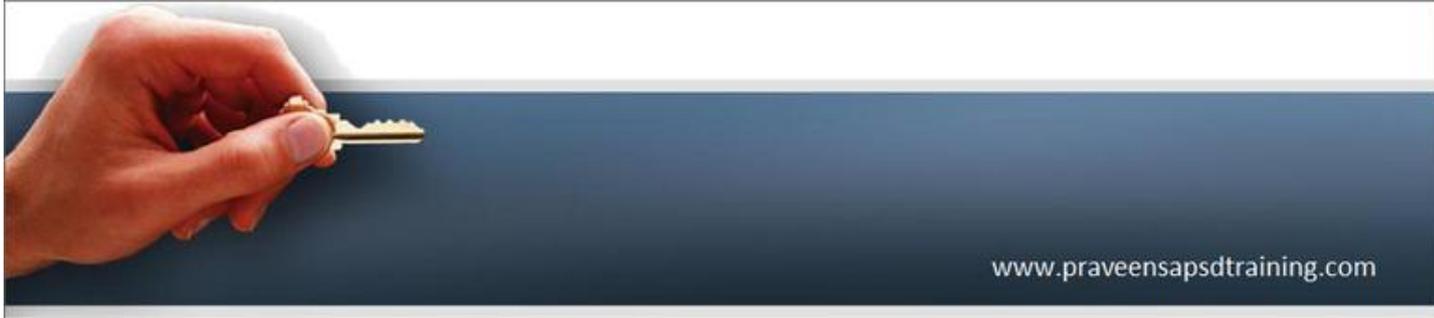
Then double click on access sequence → go to new entries →

Acc...	Description
77	Material sales text

→ select the access sequence and double click on access sequence for text id's → go to new entries →

Seq...	Text Object	Text Object Descriptn	ID	ID Description
10	MVKE	Material texts, sales	0001	Sales text

→ Save it.



Then go back to text ID's in text procedure & assign access sequence (77) →

Seq...	ID	ID Description	Refe...	Text is obligat.	Acc...
10	0001	Material sales text	<input type="checkbox"/>	Z Text is obligatory and is c	77

Then double

click text procedure assignment then assign text procedure to item category to Y2 →

Ite...	Descriptn	TxPrc
TAN	Standard Item	Y2

→ Save it.

## Copy Controls

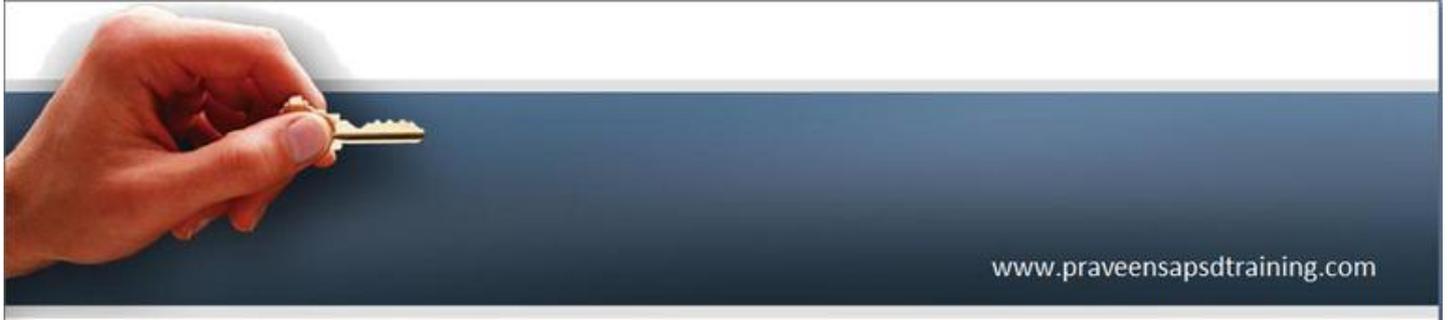
Copy controls are used when we are creating a document with reference to another document.

### Purpose of copy control

- i. It will help to copy the data from source document to target document.
- ii. It controls whether to create a document with reference to another document or not.

### We have different types of copy controls

Sales document to sales document	Sales document to delivery		Delivery to invoice
IN – QT	OR – LF	DL - LO	LF – F2
QT – OR	RE – LR	FD - LF	LF – F8
RE – SDF	CF – LF	RO - LF	LO – F8
OR – RE	CI – LF	CS – BV	
QC – OR	CP – LR	DS – LF	
WK1 - OR	CONR – LR	SDF – LF	
WK2 - OR			
Sales document to Invoice	Invoice to sales document		Invoice to Invoice
CS – BV			
RE – RE			
CR – G2			
DR – L2	F2 – RE		
OR – F2	F2 – CR		
OR – F5	F2 – RK		F2 – S1



## T-code's

<b>Sales document to sales document</b>	<b>Sales document to delivery</b>	<b>Delivery to invoice</b>
VTAA	VTLA	VTFL
<b>Sales document to Invoice</b>	<b>Invoice to sales document</b>	<b>Invoice to Invoice</b>
VTFA	VTAF	VTFF

### T-Code Logic :-

[VT] is common in T-code for sales document, delivery, and invoice.

A for SD, L for delivery, F for invoice (in T-code first comes target then source)

## Controls in copy control

Header [VTAA]

Copying requirements [001] :-

A requirement is a condition which system will check every time while creating a document with reference to another document. If the condition fulfills then only system will allow to create document with reference to other document.

If the condition is not fulfilling, then system will not allow to create document with reference to another document.

☀ The standard copy requirement is [001].

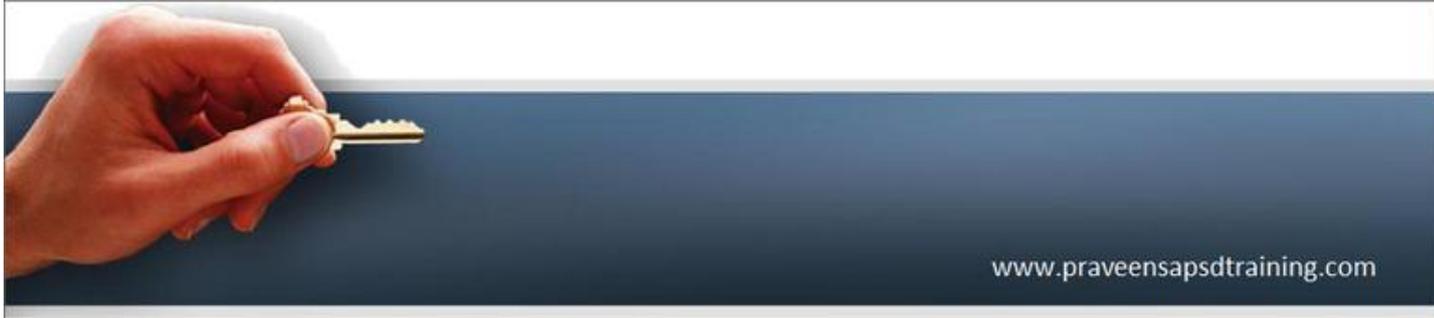
Requirement 001 checks that: -

1. Is the reference document complete or not.
2. Is the reference document fully referred or not.
3. Is the currency same in the source and target.
4. Check the validity period of reference customer.
5. Is customer same in reference and target document
6. Is the sales area same or not?

☀ If we want to change target customer to reference customer then change standard copy requirement from 001 to 002.

**data transfer Routine** :- It will help to copy the data from source document to target document.

If we want to develop new copy requirement or new data transfer routine, then the T-code [VOFM].



**Copy item number** : - If we  this line item number will be copied as it is from source document to target document.

If we uncheck this then line item number will be re-determine in target document based on item number increment.

If <input checked="" type="checkbox"/> then in QT		and in OR		If uncheck then in QT		and in OR	
Item	Material	Item	Material	Item	Material	Item	Material
10	COPY1CONNTROL	10	COPY1CONNTROL	10	COPY1CONNTROL	10	COPY1CONNTROL
11	COPY2CONNTROL	11	COPY2CONNTROL	12	COPY2CONNTROL	20	COPY2CONNTROL
12	COPY3CONNTROL	12	COPY3CONNTROL	14	COPY3CONNTROL	30	COPY3CONNTROL

**Complete reference** : - If we  this system will not allow to select or deselect the items in source document while creating target document.

If we  system will not allow to delete the items in target document.

**Item**

**Copying requirements** [301] : - The standard copy requirement for item data is [301].

The requirement 301 checks that do not copy the items which are fully referenced or rejected.

**item data transfer Routine** : - The item data transfer routine help to copy the item data from source document to target document.

**Copy schedule line** : - If we  this, delivery dates and confirmed quantity information will be copied as it is from source document to target document.

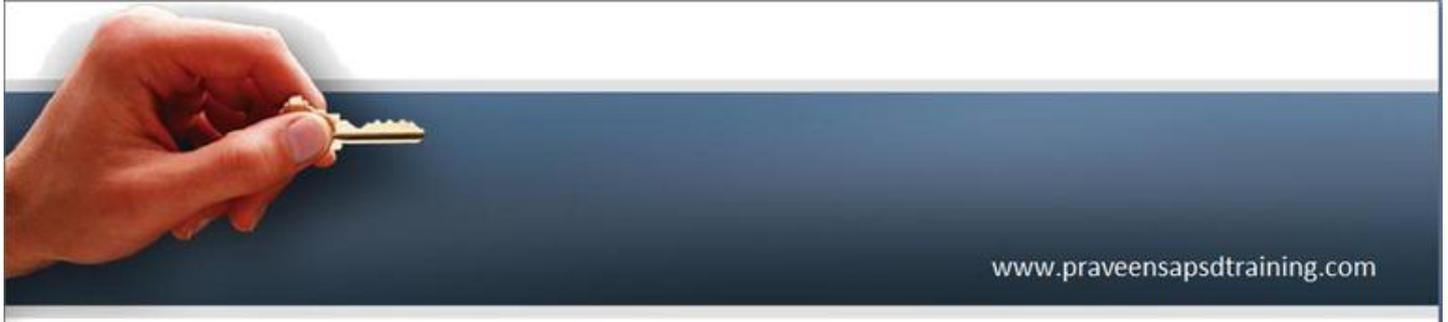
If we uncheck this, then delivery dates & confirmed quantity information will be re-determine in target document.

**Update document flow** : - If we maintain [X] in update document flow, then whenever we create a document with reference to another document . the line item information will be updated in document flow table [VBFA] and the result is status of line item will be updated. That is the reason whenever we create a document with reference to another document system will copy only open quantity into target document.

If we don't maintain [ ] update document flow, then the line item data will not be updated in table VBFA. Then the result is status of the source document line item will not be updated. It will be always open so whenever we create a document with reference to another document system will always copy the total quantity into target document.

Update document flow will have relationship with **Pos./neg. quantity** field in copy control.

**Do not copy batch** : - If we  this ,batch number will not be copied from source document to target document.



**Reexplode structure/free goods**: - Here structure means BOM. If we  check this system will determine new BOM and new free goods into sales document  
If we uncheck this then system will copy the BOM and free goods as it is from source document to target document.

**Pos./neg. quantity +**: - This field will have relationship with update document flow field in copy control and completion rule field in item category.

**+ Effect**: - i) whenever we create a document with reference to another document, the reference quantity will be deducted from the open quantity of the source document.

ii) Whenever we create a document system will copy the open quantity of the source document.

**- Effect**: - We use negative effect in between contracts and returns.

i) While creating a return order with reference to contract, the return order quantity will be added to the open quantity of the source document.

ii) While creating return order with reference to contract system copies the closed quantity of the contract.

**Copy quantity**: - This field controls how the quantity should be determined into target document.

**Pricing type**: - This field will have relationship with condition category field in condition type. This field controls how the pricing should be copied from source document to target document.

**B Carry out new pricing**: - if we maintain pricing type B system will determine new price into target document.

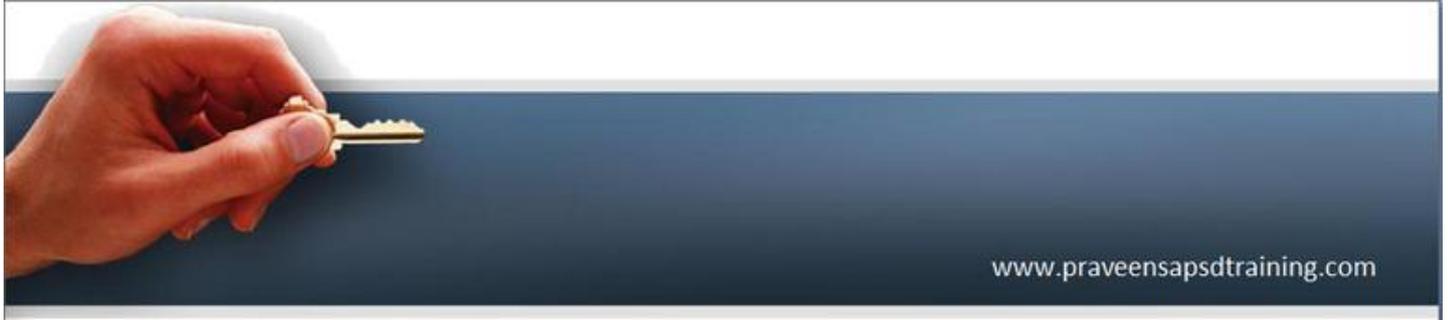
If we maintain B system will not copy the manual condition from source document to target document.

**C Copy manual pricing elements and redetermine the others**: - If we maintain C the manual condition will be copied As it is from source document to target document and other condition will be re-determine.

**D Copy pricing elements unchanged**: - If we maintain D system will copy the pricing as it is from source document to target document.

**G Copy pricing elements unchanged and redetermine taxes**: - If we maintain G system will copy the pricing As it is from source document to target document and it will re-determine only the condition.

**H Redetermine freight conditions**: - If we maintain H system will re-determine only freight condition and remaining condition as it is.



#### Schedule line

**SchdLneCatProposal**  : - The schedule line category that the system tries to copy into the respective schedule line in the target sales document.

If we leave the default schedule line category blank or if the value we enter is not allowed during processing, then the system automatically determines the schedule line category (like it does when we create a new schedule line).

### **Sales document to delivery copy control [VTLA]**

#### Header

**Order requirements** **001** : - Sales document to delivery document the standard header copy requirement is [001].

001 checks that: -

- i) The reference document should be an order.
- ii) Order should not be blocked for credit.
- iii) Status profile.

**Combination requirmt** **051** : - This helps in, if we are combining multiple orders into single delivery. The standard combination requirement is [051].

051 checks that: -

- i) Delivery type should be same for all the orders.
- ii) Billing type should be same for all the orders.
- iii) Sales organisation should be same for all the orders.

#### Item

**Order requirements** **101** : - The item copy requirement for sales document to delivery is 101.

101 checks that: -

- i) Shipping point
- ii) Delivery status
- iii) Item status profile

## Delivery to invoice copy control [VTFL]

### Header

Copying requirements [003]: - Delivery to invoice the standard header copy requirement is [003].

003 checks that: -

- i) Billing block
- ii) Billing status
- iii) PGI status
- iv) POD status
- v) Incomplete status

Q.Can i create invoice without PGI? Where is the control?

Ans. No, copy requirement 003.

Q.I want to create invoice without PGI? Where is the control?

Ans. Change the copy requirement 003 to 011.

Q.Can i create proforma invoice without PGI?

Ans. Yes, copy requirement 009.

Q.Can i create multiple invoices to single delivery?

Ans. No, Copy requirement 003.

Q.Can i create multiple proforma invoices to single delivery?

Ans. Yes, copy requirement 009.

- For intercompany process LF to IV

The standard copy requirement is 014. It allows to create invoice to customer and intercompany invoice with reference to same delivery.

Assignment Number and Reference number: - Assignment number and reference number will help to pass the sales document number to accounting document which will help FI users while generating FI reports.

Q. Even though split criteria is same but still system is splitting the invoice. What could be the reason?

Ans. Assignment number and reference number in copy control.



Item

Copying requirements : - The standard copy requirement for item is [004]

004 checks that:-

- i) Billing block
- ii) Billing status

Data VBRK/VBRP: - Standard is 007

Q. I want to restrict the number of line items in invoice. Where is the control?

Ans. SPRO → S&D → billing → billing document → country specific features → maintain maximum number of billing items → go to our sales org and assign number of items.

Then go to control VTFL and change VBRK / VBRP from 007 to 006.

Q. I want to restrict creating invoice in future date. Where is the control?

Ans. VBRK / VBRP (we have to develop new routine).

Q. I want to restrict creating invoice in post date. Where is the control?

Ans. VBRK / VBRP (we have to develop new routine).

Billing quantity : - This field controls how the quantity should be determined into billing document.

PricingExchRate type : - This field controls how the exchange rate should be determined into billing document i.e. based on sales order date or delivery date or billing date or today's date.

Cumulate cost: - This field will be used in free goods. We check this field if we want to transfer the cost of free goods items to main items.

Price source : - This field controls from which document the pricing should be copied into invoice. E – for Delivery / order.

In STO process, while creating proforma invoice we copy the pricing from purchase order to proforma invoice. In that scenario we need to maintain price source as [A].

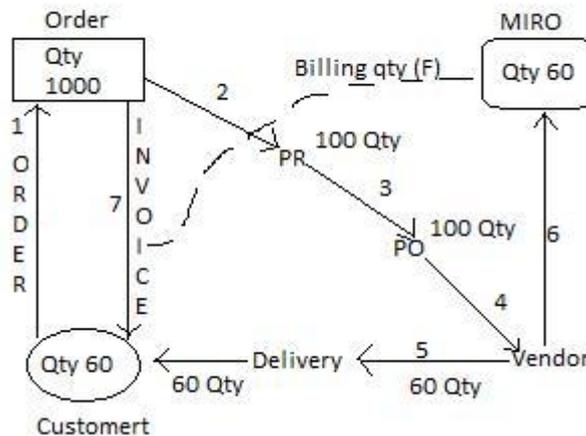
**Sales document to invoice copy control [VTFA]**

Item

Copying requirements [012]: - In order to billing the item to copy requirement is [012].

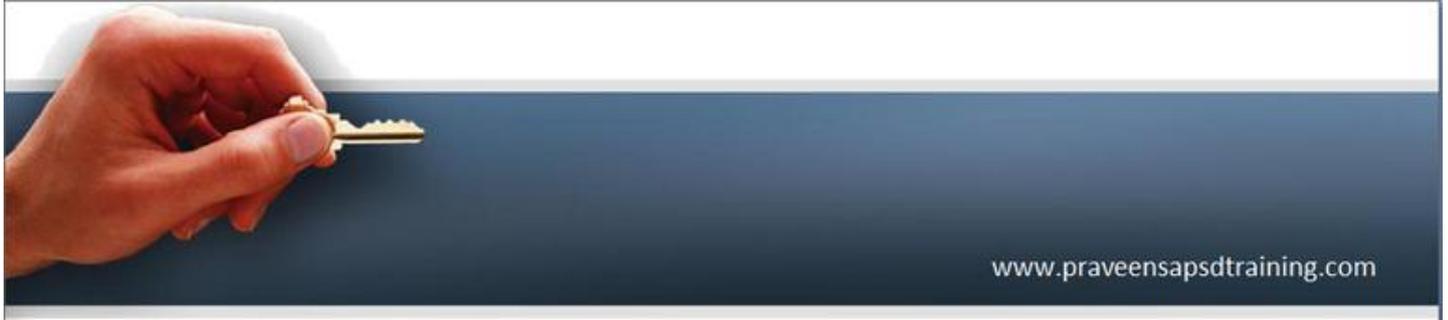
It checks that if MIRO is not created in third party process, then system will not allow to create invoice to customer.

Billing quantity [F]: - Billing quantity will help to copy the quantity from MIRO to invoice while creating invoice to customer in third party process.



Billing quantity [E]: - We maintain billing quantity [E] for third party with shipping notification.

Billing quantity [E] will help to copy the quantity from MIGO to invoice. While creating invoice to customer in third party process.



### **Scenario (Client's Requirement): -**

The invoice should be same as accounting document number.

**Solution: -** Go to billing type F2 and take the number interval → go to VN01 → go to number interval [19] take the From no. and To no. → go to FBN1 → company code → change interval → create some number interval with year → mention the same number From and To number → make it external → T-code [OBA7] → select FI document type [RV] → details → mention the number range which created in FBN1 → scroll down and check reference number field → save it.



## **Interview Questions on copy control**

Q.1. What is the purpose of copy requirement?

Ans. Create document with reference to other document

Q.2. What is the purpose of data transfer routine?

Ans. The item data transfer routine help to copy the item data from source document to target document.

Q.3. What is the T-code to develop of new requirement and routine?

Ans. T-code [VOFM].

Q.4. I want to restrict number of line item in invoice. How to configure this?

Ans. SPRO S&D billing billing document country specific features maintain maximum number of billing items go to our sales org and assign number of items.

Then go to control VTFL and change VBRK / VBRP from 007 to 006.

Q.5. I want to transfer the cost of free goods item to main item. Where is the control?

Ans. We check Cumulate cost field if we want to transfer the cost of free goods items to main items.

Q.6. What is the effect or result of positive effect?

Ans. - i) Quantity will be deducted from the open quantity of the source document.

ii) Whenever we create a document system will copy the open quantity of the source document.

Q.7. What is the effect or result of negative effect?

Ans. i) While creating a return order with reference to contract, the return order quantity will be added to the open quantity of the source document.

ii) While creating return order with reference to contract system copies the closed quantity of the contract.

Q.8. What scenario we use negative effect?

Ans. - We use negative effect in between contracts and returns.

Q.9. While creating invoice with reference to delivery even though we don't have pricing in delivery. How system is determining pricing in invoice?

Ans. Pricing source.

Q.10. I want system to determine new prices into target document. Where is the control?

Ans. if we maintain pricing type B system will determine new price into target document.

Q.11. What is the billing quantity for third party without shipping notification and what is the result of it?

Ans. "F", Billing quantity "F" will help to copy the quantity from MIRO to invoice while creating invoice to customer in third party process.



Q.12. What is the billing quantity for third party with shipping notification and what is the result of it?

Ans. We maintain billing quantity [E] for third party with shipping notification. Billing quantity [E] will help to copy the quantity from MIGO to invoice. While creating invoice to customer in third party process.

Q.13. What happens if i don't maintain update document flow?

Ans. If we don't maintain [ ] update document flow then the line item data will not be updated in table VBFA. Then the result is status of the source document line item will not be updated. It will be always open so whenever We create a document with reference to another document system will always copy the total quantity into target document.

Q.14. Where is the control that system will not allow to create invoice without PGI?

Ans. Copy requirement 003

Q.15. I want to create invoice without PGI?

Ans. Change the copy requirement 003 to 011.

Q.16. Where is the control that system will allow to create performa invoice without PGI?

Ans. Copy requirement 009

Q.17. Where is the control that system will allow to create multiple performa invoice to single document?

Ans. Copy requirement 009

Q.18. Even though the split criteria are same but still system is splitting invoice. Where is the control?

Ans. Assignment number and reference number in copy control

Q.19. I want to restrict creating invoice in future date?

Ans. VBRK / VBRP (we have to develop new routine).

Q.20. While creating order reference to quotation system is not allowing the delete the line items in order. Where is the control?

Ans. If we  Complete reference system will not allow to delete the items in target document.

Q.21. While creating an order with reference to quotation i want to change the customer in order. Where is the control?

Ans. Change the requirement number from 001 to 002.

Q.22. Where is the control that for quotation system will not allow to create delivery?

Ans. Requirement number 001.

## SAP SD Business Processes

## Standard business process

### SAP Sales Distribution (SD) Flow with Tcodes and Tables.

TCode	Flow	Tables
VA11	Inquiry	VBAK, VBAP
	↓	
VA21	Quotation	VBAK, VBAP
	↓	
ME21N	Purchase Order	EKKO, EKPO
	↓	
VA01	Sales Order	VBAK, VBAP
	↓	
VL01N	Delivery	LIKP, LIPS
	↓	
VT01	Shipping	VTTK, VTTP
	↓	
VF01	Billing	VBRK, VBRP
	↓	
VF21	Invoice	VBRK, VBRP

**Inquiry:** - Whenever customer inquires about the product, we create Inquiry document in SAP.

- ✚ Enquiry document is an internal document.
- ✚ Types of Enquiry: - Walk-in, phone, E-mail, or website, tender notice.
- ✚ Enquiry document consists of customer details, material details, quantity details, and validity periods.

**Quotation:** - After creating inquiry document in SAP, in return we create quotation document with reference to inquiry and send this quotation to customer.

- ✚ Quotation document is an external document which we submit to customer.
- ✚ Quotation document is a legal document.
- ✚ **Quotation document consists of:** - customer details, material details and specifications details, pricing, validity period, terms & conditions.



**Order:** - After creating quotation we send the quotation to customer,

- ✚ if customer is satisfied with the quotation then he will place order with reference to quotation.
- ✚ If customer is not satisfied with the quotation then we may have further negotiations.
- ✚ Finally if customer satisfies. He will place order.
- ✚ Then we create order in SAP with reference to quotation.

Order is an agreement between the company and customer, for supplying the goods to the customer.

Sales order consists of customer details, delivery details, material details, quantity details, pricing, terms and conditions. Etc.

After creating order we send order confirmation copy to customer.

**While creating sales order system will perform various activities in the background.**

1. Partner determination
2. Listing / Exclusion
3. Free goods
4. Delivery scheduling
5. Availability checks
6. Pricing
7. Credit management
8. Text determination
9. Output determination
10. Transfer of requirement

**Delivery:** - Then we do deliver with reference to order.

In delivery we have three activities.

- ✚ Picking
- ✚ Packing
- ✚ PGI (Post goods issue).

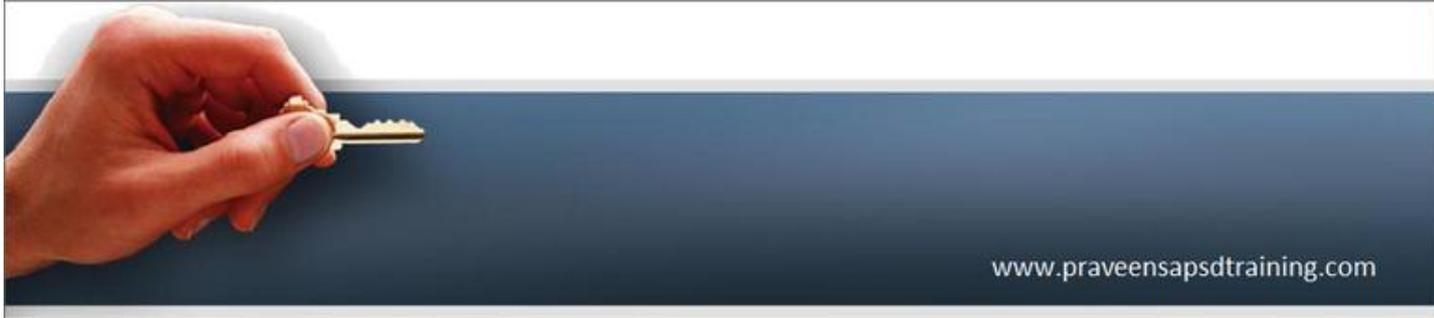
**When we do PGI system will perform various activities in the background.**

1. Stock updates
2. Inventory accounting document generates
3. It updates in document flow
4. Updates in credit management
5. It updates in LIS
6. It updates in billing due list.

**Invoice:** - After PGI, we create invoice ,and dispatch the goods to customer along with invoice copy

**When we create invoice, in the background system will perform various activities:-**

1. Accounting document generates
2. Profitability accounting document generates
3. Cost centre document generates
4. It updates in document flow
5. It updates in credit management
6. It updates in LIS.



### Business Process - Return Process:-

Customer will return the goods if the goods are damaged, expired or defective.

Whenever customer finds damaged or defective goods, he will inform to sale office, sales office people will send the employee to cross check the damage or defective goods.

After cross checking sales employee will prepare return note.

Customer No.	Invoice No.	
Material	QTY	Reason
---	---	---
---	---	---
Customer Sign	Employee Sign	

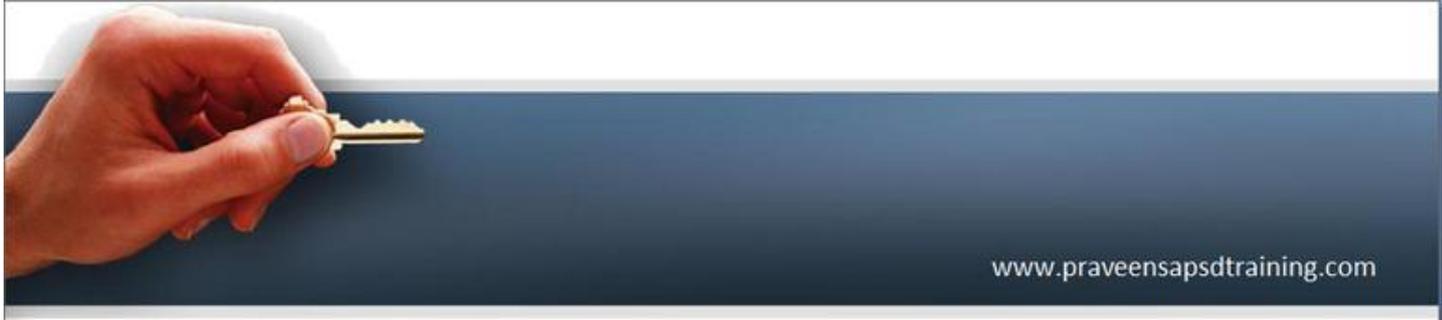
After preparing return note the employee will submit the return note to sales Office. Then SAP end user will create return order with reference to invoice and Mention the reason for returns.

When customer delivers the return goods, we Create return delivery with reference to return order.

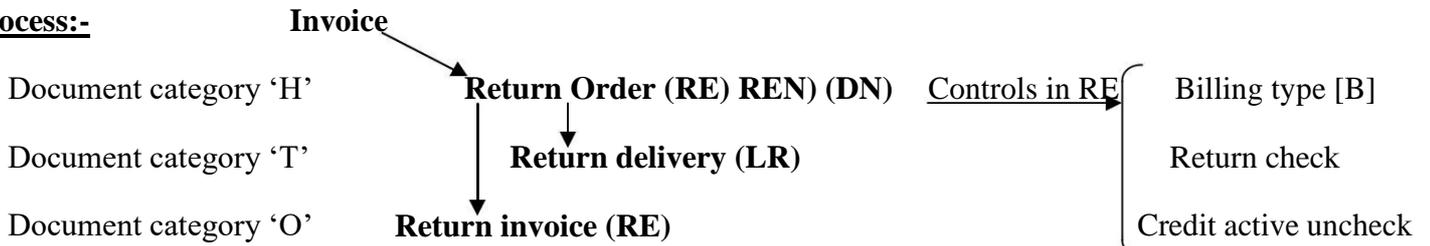
We create return invoice With reference to return order.

When we create return invoice the accounting Entry is: -

Revenue Account Debit  
TO  
Customer Account Credit



**Process:-**



Scheduling line category	Movement Type
--------------------------	---------------

(In case of damage stock)      DN      651      (adding the stock to return stock)

**Effect:** 1. Stock will be added to return stock.

2. Inventory accounting document will not be generated

Scheduling line category	Movement Type
--------------------------	---------------

(In case of dumping stock)      DN      653      (adding to unrestricted stock)

**Effect:**

1. Stock will be added to unrestricted stock.

2. Inventory accounting document generates.

[ Inventory A/c ..... Dr.  
 To, COGS A/c..... Cr. ]

Scheduling line category	Movement Type
--------------------------	---------------

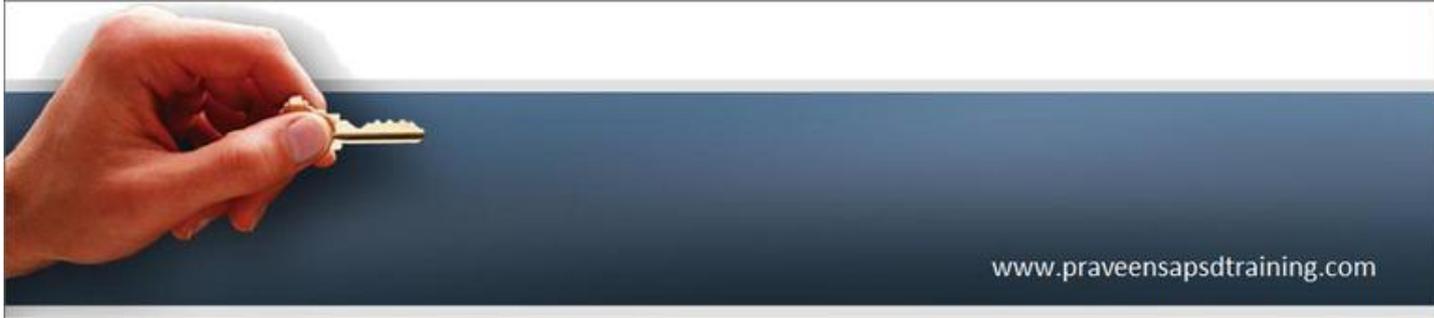
(In case of defect stock)      DN      655      (adding stock to quality stock)

**Effect:**

1. Stock will be added to quality inventory stock.

2. Inventory accounting document will be generated.

Inventory A/c ..... Dr.  
 To, COGS A/c..... Cr.



Scheduling line category	Movement Type
--------------------------	---------------

(In case of expiry stock)      DN      657      (adding stock to blocked stock)

- Effect:** 1. Stock will be added to blocked stock.  
 2. Inventory accounting document will be generate.

[ Inventory A/c .....Dr.  
 To, COGS A/c .....Cr. ]

**Interview Questions on return process**

- Q.1. Explain the return process of your client.  
 Ans. .
- Q.2. What scenario customer returns the goods in your client process?  
 Ans. If the goods are damaged or expired or defective.
- Q.3. Why SAP says return invoice should be with reference to return order but not with reference to return delivery?  
 Ans. Because we need to create return invoice for quantity damaged at customer place but not the quantity we received.
- Q.4. What scenario document value will be shown in negative?  
 Ans. In RK process if we increase the quantity then the value of document will be negative.
- Q.5. While doing return delivery how system is proposing PGR?  
 Ans. Document category 'T' in delivery type will help to propose PGR.
- Q.6. What is the schedule line category for return?  
 Ans. DN.
- Q.7. What is the standard movement type for return?  
 Ans. 651.
- Q.8. What is the effect of movement type of 651, 653, 655, and 657?  
 Ans.



Q.9. Why inventory accounting document will not generate with movement type 651?

Ans. Return stock is temporary stock and when stock will be shifted to unrestricted stock or safety stock or block stock then accounting document will be generate.

Q.10. Can i create return invoice without return delivery?

Ans. Yes.

Q.11. I want to restrict creating return invoice without return delivery?

Ans. Need to develop new requirement.

Q.12. What is accounting entry when we create return invoice?

Ans. Revenue A/c.....Dr. To. Customer A/c....Cr.

Q.13. Where is the control that for return invoice accounting entry generate?

Ans. Document category 'O' in return invoice control the accounting entry.

Q.14. Can i increase the quantity in return order more than invoice quantity?

Ans. Yes.

15. Will return order will update in credit management?

Ans. No, credit active un checks.

Q.16. Which transaction of return will update in credit management?

Ans. Return invoice.

Q.17. Can i explode free goods in return?

Ans. No, we can only copy free goods. Free goods can not be determined in return order but free goods can be copied from standard order to return order.

Q.18. In returns process i want to determine return storage location automatically into return delivery document. How to do this?

Ans.

Q.19. My clients requirement is if customer returns the goods because of damage then i want to take the stock into return stock. If customer returns the goods because of expired then i want to take stock into block stock. If customer returns the goods because of defective then i want to take the stock into quality inspection stock automatically by system. How to do this?

Ans.

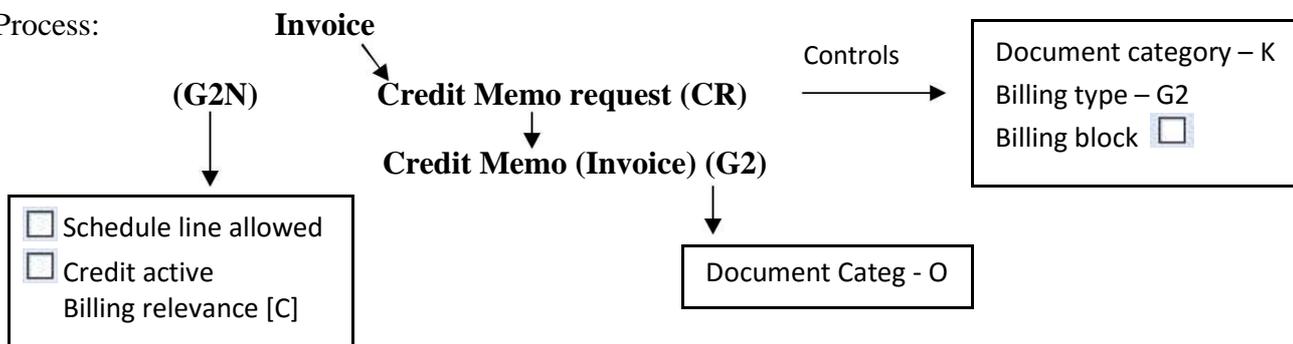
## Credit Memo request Process

we use credit memo request, if we want to deduct the amount from customer outstanding without receiving the goods back from customer.

The below scenario we do credit memo process:

1. User mistakenly over charges the previous invoice.
2. The goods are totally damage in customer place and which are not in a position to tack back

Process:



When we create credit memo the Accounting entry is:

Revenue A/c .....Dr. To, Customer A/c .....Cr.
---------------------------------------------------

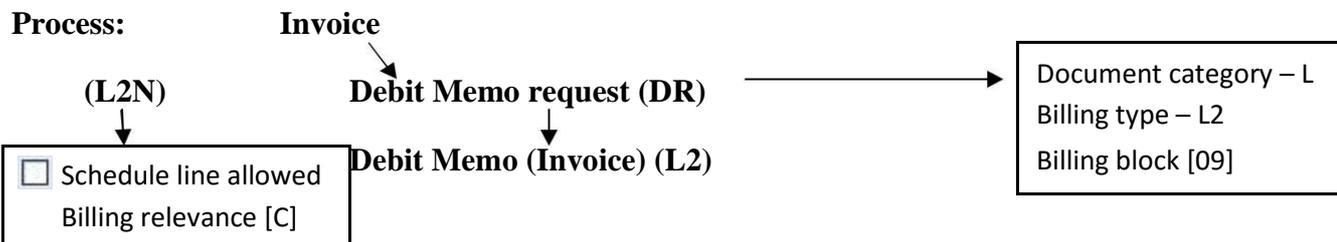


## Debit memo request

We do debit memo request, if we want to add some amount to customer outstanding without physical movement of goods”.

The Below scenarios we do debit memo process:-

1. User mistakenly under charge the previous invoice.
2. Charging interest to customer for late payment.



When we crate debit memo invoice the accounting entry is:-

[ Customer A/c .....Dr.  
To, Revenue A/c .....Cr. ]

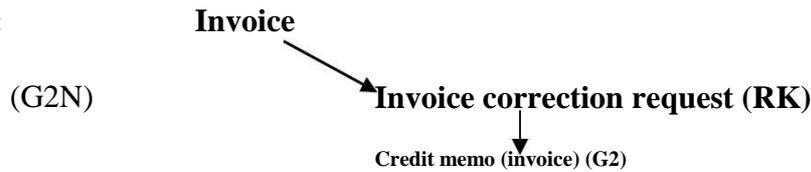


### Invoice correction request

We use this if end-user do a mistake in previous invoice, the mistake can be overcharged or undercharged.

By using invoice correction request, we can either deduct the amount from customer outstanding or add customer outstanding.

**Process:**



Document category – K
Indicator – D
Billing type – G2
Billing block <input type="checkbox"/>

Indicator ‘D’ will help each line item from invoice will be copied as two line items in invoice correction request document.

1<sup>st</sup> line is credit item (disable) +

2<sup>nd</sup> line is debit item (enabled) –

If i increase item value then the value of document will be negative.

Accounting entry is:

Customer A/c ....Dr.
To, Revenue A/c .....Cr.

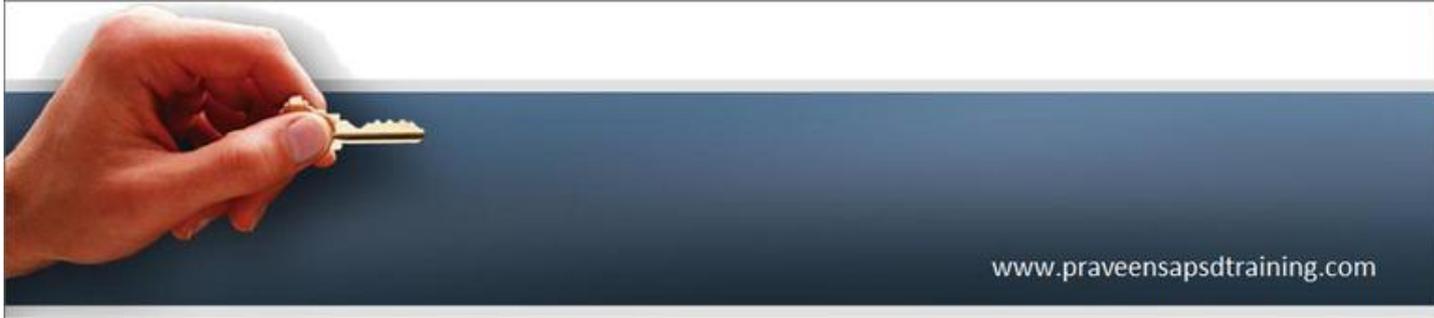
If i decrease the debit item the document value will be positive.

Accounting entry is:

Revenue A/c .....Dr.
To, Customer A/c ....Cr.

**Q.How system is determining two item categories that is G2N and L2N in invoice correction request document?**

**Ans. In item category determination in RK maintain default item category as G2N and manual item category as L2N.**



## Cash sales process

Cash sale process is also called as counter sale process i.e. The Customer will walk into outlets, pick the materials and go to the counter, pay the cash, take the bill and leave the counter.

In CS document type we have immediate delivery check, in this field we can maintain either 'X' or 'A'

[X] if we maintain **X** then if stock is available for today then only system will system will create delivery automatically in the background.

[A] if we maintain **A** then system will not check the stock availability, even if stock is not available system will create delivery automatically in the background.

We maintain shipping condition [10] in document type, which will over right the shipping condition in customer master while determining shipping point into sales document. In cash sales process when we create cash sales order, in the order itself we take invoice copy and give to customer with the help of [RD03] output type.

When we create cash sale invoice the A/c entry is:

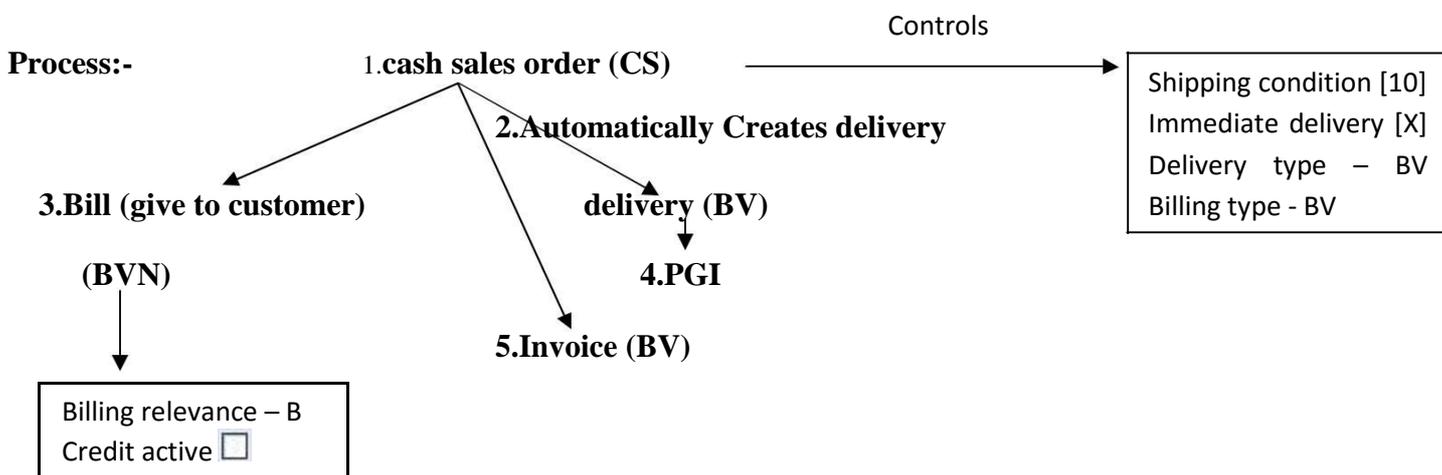
$$\left( \begin{array}{l} \text{Cash settlement A/c.....Dr.} \\ \text{To, revenue A/c.....Cr.} \end{array} \right)$$

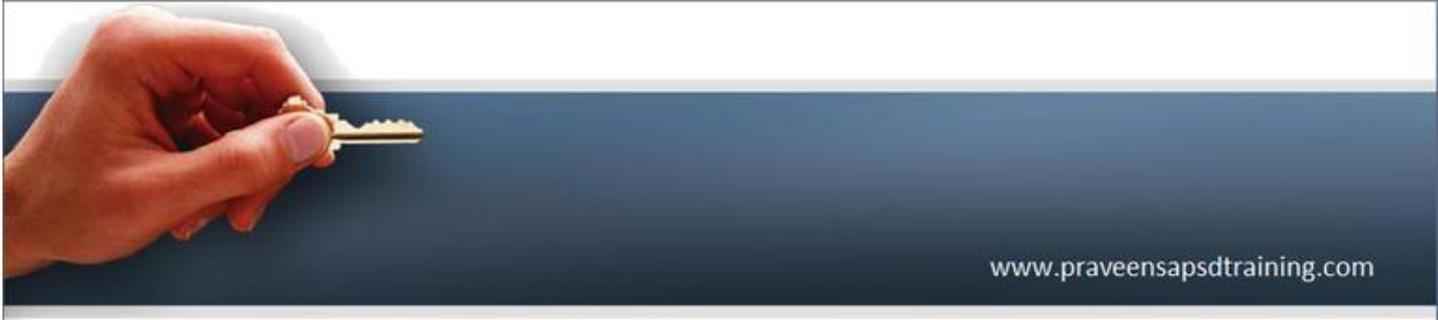
**Q.In cash sales process can i create cash sale invoice without PGI?**

**Ans. No, System will not allow.**

**Q.Why SAP says cash sale invoice is with reference to cash sale order?**

**Ans. Basing on the order we are giving invoice at the time of order, and legally that document should be cash sale invoice.**



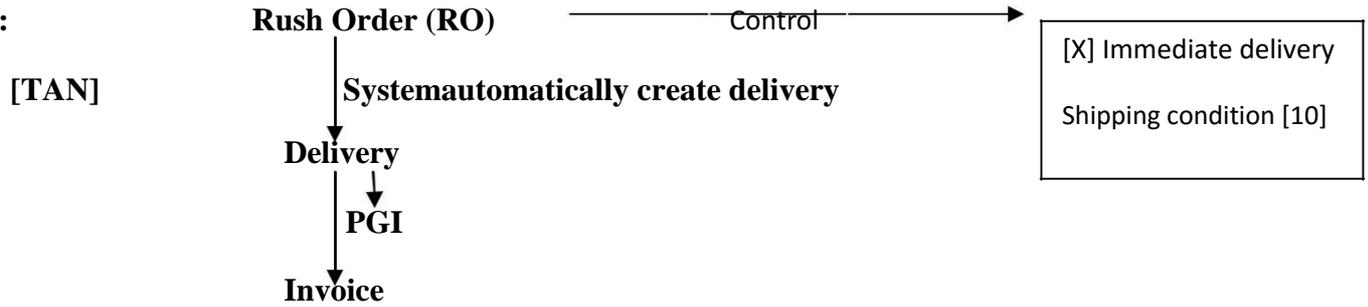


## Rush order Process

It means immediate delivery order.

If customer asks delivery immediately then we do rush order process.

**Process:**





### Free of charge process

Free of charge is also called as sample process. Whenever we are sending sample to customers without raising invoice then we do free of charge process.

#### Process:-

Billing relevance 'D'  
Pricing [X]  
Statistical [X]

[KLN]

Free of charge (FD)

Control

Document type – I  
Delivery type – LF  
Billing type – F8

Delivery  
Performa Invoice

### Subsequent delivery free of charge process:- (replacing the goods to customer)

Whenever customer returns the goods, we deduct the amount from customer outstanding. Instead of deducting the amount from customer outstanding, if we want to replace the goods to customer without charging then we do subsequent delivery free of charge.

#### Process:

Return Order

SDF  
Delivery  
Performa invoice

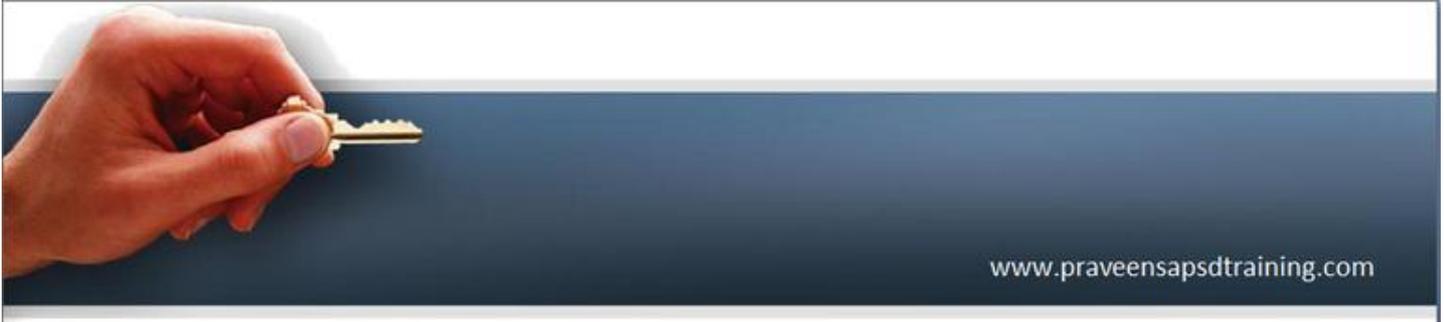
When we are Creating SDF with reference to return order system checks return order item should be rejected then only system will copy item from return order to SDF.

Q. Why SAP says return order item should be rejected to create SDF document

Ans. In return order, item is rejected and if we do SDF then in future if user is mistakenly creating return invoice then system will not allow.

Or

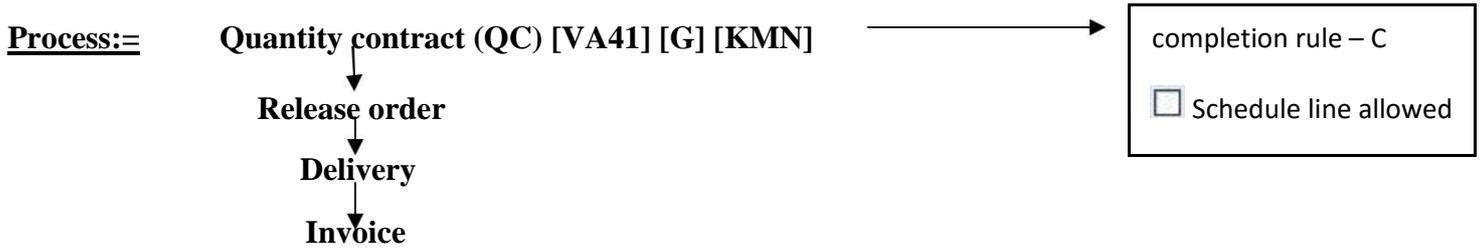
If return invoice is already created and user mistakenly trying to SDF then system will not allow



### Quantity contract process

It is an agreement between company and customer for supplying the goods for a particular quantity within a specific validity period.

In every agreement both the parties should have benefit ,here benefit to customer is less price or discount and benefit to company is assured sales.



In quantity contract, if we create return order with reference to contract the return order quantity will be added to the open quantity of the contract. The control is in copy control +/- quantity negative effect.

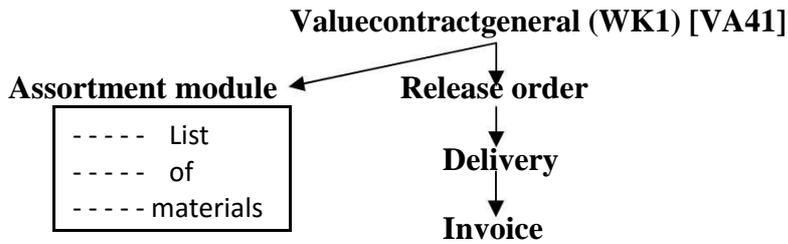
If customer fail to achieve quantity of contract then debit memo request will be raised against customer for balancing amount.



### Value contract general process

It is an agreement between company and customer for supplying the goods for a particular value within a specific validity period. Value contract is not specify to one material. It is for group of material.

**Process:-**



In value contract general we create assortment module which consists of group of materials and assign this module to value contact general.

**Create assortment module path:-** Easy access → logistics → S&D → master data → products → value contract assortment module WSV2(create) → enter → give some description → list out materials → valid from & To → save it System will generate some number → Make a note of it.

VA41 → WK1 → Sold to party → valid from – valid to → target value (30L) → Assortment module number → save it.



### **Value contract material specific**

It is an agreement between company and the customer for supplying the goods of a particular material and value within a specific validity period.

#### **Process:-**

#### **Value contract material specific (WK2)**



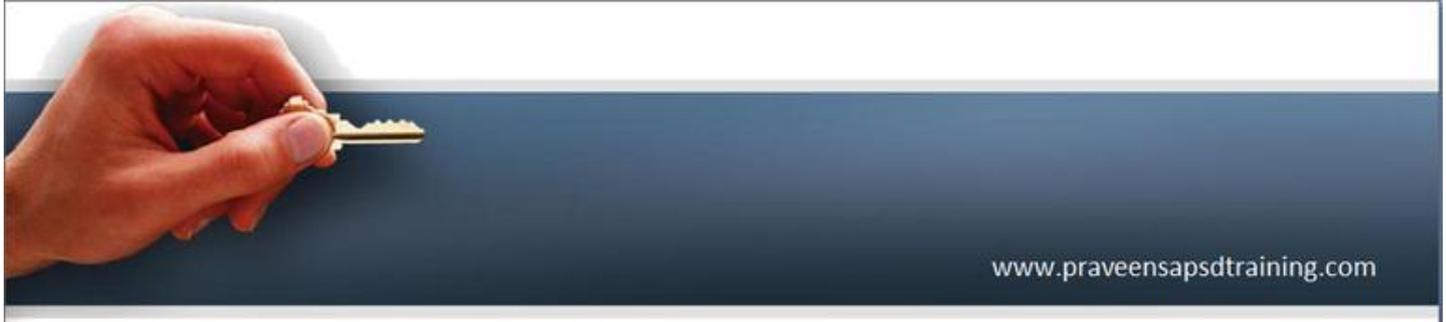
### **Scheduling agreement process**

It is an agreement between company and customer for supplying the goods of a particular quantity within a specific validity period with pre defined delivery dates.

#### **Process:-**

#### **Scheduling agreement (DS) [VA31]**





## Consignment Process

Dumping the stocks at customer (Consignment Service Agent) place and retaining ownership with the company eg.OEM i.e. delivering the goods to CSA without rising invoice. When CSA sells the goods to their customers then we raise invoice to CSA.

Generally we do consignment process for slow moving goods and newly launched products. Consignment process is one of the push strategies to push the products into the market.

When the Client's management takes a strategic decision to implement Consignment business process. The company will inform to all their customers, if customer accepts to take the stock on consignment basis, then they initiate consignment 1<sup>st</sup> process i.e.

### Consignment Fill up

(CF) Consignment fill up is just dumping the stock at CSA place without transferring ownership and without raising invoice

CF KBN E1 (631) movement type

The effect of 631 movement type is:

- i). It will reduce the stock from unrestricted stocks and stock will be added to consignment stock.
- ii). No inventory accounting document generates because CF process is not relevant for invoice.

### Consignment Issue

(CI) when CSA sell the goods to their customers then CSA will inform the same to company. Then we do consignment issue process.

CI KEN C1 (633) Movement type

The effect of KEN special stock indicator 'W' is while doing delivery system considers consignment stock only.

The effect of 633 movement type is:

- i). Stocks will be reduce from consignment stocks.
- ii). Inventory accounting document will generate and accounting entry is

$$\left( \begin{array}{l} \text{COGS A/c.....Dr.} \\ \text{To, Inventory A/c.....Cr.} \end{array} \right)$$



**Q. Why we are again doing delivery in consignment issue as we already delivered stock to customer at the time of consignment fill up.**

**Ans. To reduce the stock from consignment stock and to transfer the ownership for generating inventory accounting document.**

### Consignment returns

**(CONR)** When end customer returns the goods to CSA, then CSA will inform the same to company, then we do consignment returns.

CONR    KRN    D0 (634) movement type

The effect of special stock indicator 'W' is while doing return delivery in consignment return system will consider consignment stock.

The effect of 634 movement type is:

- i). The stock will be added back to consignment stock.
- ii). Inventory accounting document will generate and accounting entry is

$$\left( \begin{array}{l} \text{Inventory A/c.....Dr.} \\ \text{To. COGS A/c.....Cr.} \end{array} \right)$$

### Consignment Pick Up

**(CP)** if CSA request to take back the consignment stock, then we do consignment pick up. When we do return delivery in consignment pick up, the stock will be reduced from consignment stock and added back to unrestricted stock.

CP    KAN    F1 (632)

The effect of 632 movement type is:

- i). Stock will be reduced from consignment stock and added to unrestricted stock.
- ii). Inventory accounting document will not generate because CP is not relevant for invoice.

**Q. Which process of consignment is not relevant for availability check?**

**Ans. CONR (D0)**



**Example** to understand consignment process

Company: Galaxy Pharma

Vendor: Apollo

Unrestricted Stocks:	5000 Qty
Less delivery	<u>-3500 Qty</u>
Available balance	1500 Qty
Return consignment	<u>+2000 Qty</u>
Final Stocks	<u>3500 Qty</u>

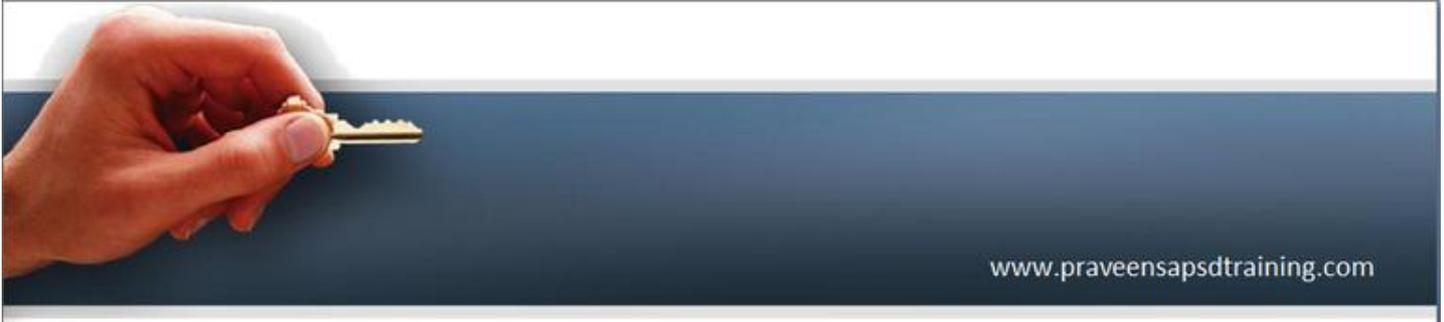
Consignment Stock:	3500 Qty
Sold to end users	<u>-2000 Qty</u>
Stock balance	1500 Qty
Return Cars	<u>+ 500 Qty</u>
Stocks	2000 Qty
Return to Company	<u>-2000 Qty</u>
Final stocks balance	<u>000 Qty</u>

Consignment Fill up (CF)	Consignment Issue (CI)	Consignment Return (CONR)	Consignment Pick Up (CP)
↓ Deliver (3500) ↓	↓ Deliver (2000) ↓	↓ Return delivery (500) ↓	↓ Return delivery (2000)
Performa Invoice	Invoice (2000)	Return Invoice (500)	



## Interview Questions for consignment

1. What scenarios client will do consignment process?
2. Explain consignment process?
3. In consignment process which process is relevant for billing?
4. What happens when you do delivery in consignment fill up?
5. Which process of consignment is relevant for availability check?
6. Which process of consignment is not relevant for availability check?
7. What is the schedule line category in CF?
8. What is the movement type in CF, and what it affects?
9. Why we are creating delivery in consignment issues as we already delivered the goods in consignment fill up?
10. What happens when u do delivery in consignment issue?
11. How system knows that in consignment issue, the stock should be reduced from special stock?
12. What is the item category for consignment issue?
13. What is the schedule line category for consignment issue?
14. What is the movement type in CI and what it affects?
15. What is the item category for consignment return?
16. What is the schedule line category for CONR?
17. How do you know that your customer sold the goods to end customer?
18. In CI to whom we raise invoice?
19. What happens when I do delivery in CONR?
20. What is the movement type for CONR and what it affects?
21. Is CONR process is relevant for billing?
22. When you do CONR?
23. When we do CI?
24. What happens when do you do CP?
25. What is schedule line category for CP?
26. What is the movement type for CP? What is its effect?
27. What are the item category for cf, ci, conr and cp?
28. Why cp is relevant for availability?
29. Which process is relevant for credit management?
30. Which process in consignment is relevant for excise tax?
31. Which process does have special indicators?
32. I want free goods in consignment process how do?
33. I want bill of material for consignment process? how
34. Why we are creating delivery in consignment issue?
35. What happens if I do delivery in consignment issue?
36. Why we are doing return delivery in consignment return, even though we are not taking the goods back?
37. Which process of consignment is relevant for credit management?
38. Which process of consignment will have special stock indicator?



### Third party process

Third party process is an integration between SD + MM

#### Scenario 1 :-

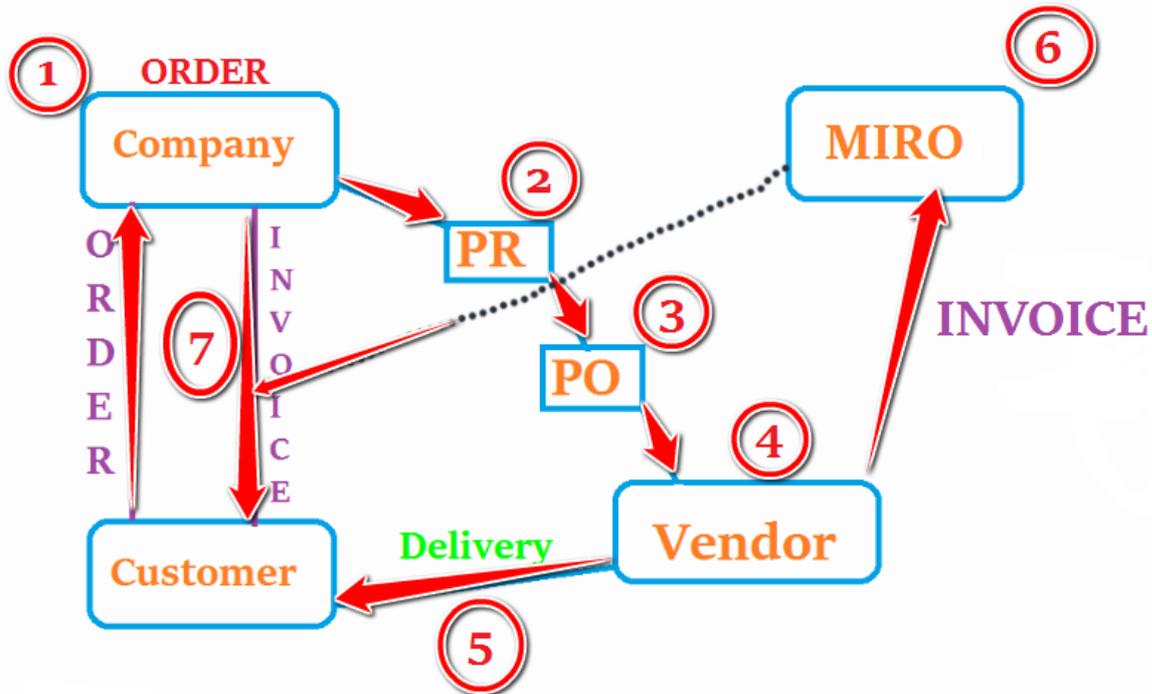
Most of the companies will not manufacture all the products which they are selling or have in their product portfolio, they will manufacture some products and for remaining products they will do third party process.

#### Scenario 2 :-

In some scenarios even though company manufacture the products and if stock is not available or if there is some problem in manufacturing unit then they go for third party process.

#### Third party process: -

when our customer place order for third party material and when we create 3<sup>rd</sup> party sales order in SAP, then system automatically generates PR and PR will converted to PO and PO will be send to vendor and vendor delivers the goods to customer and vendor will send the invoice to company and company will raise invoice to customer.



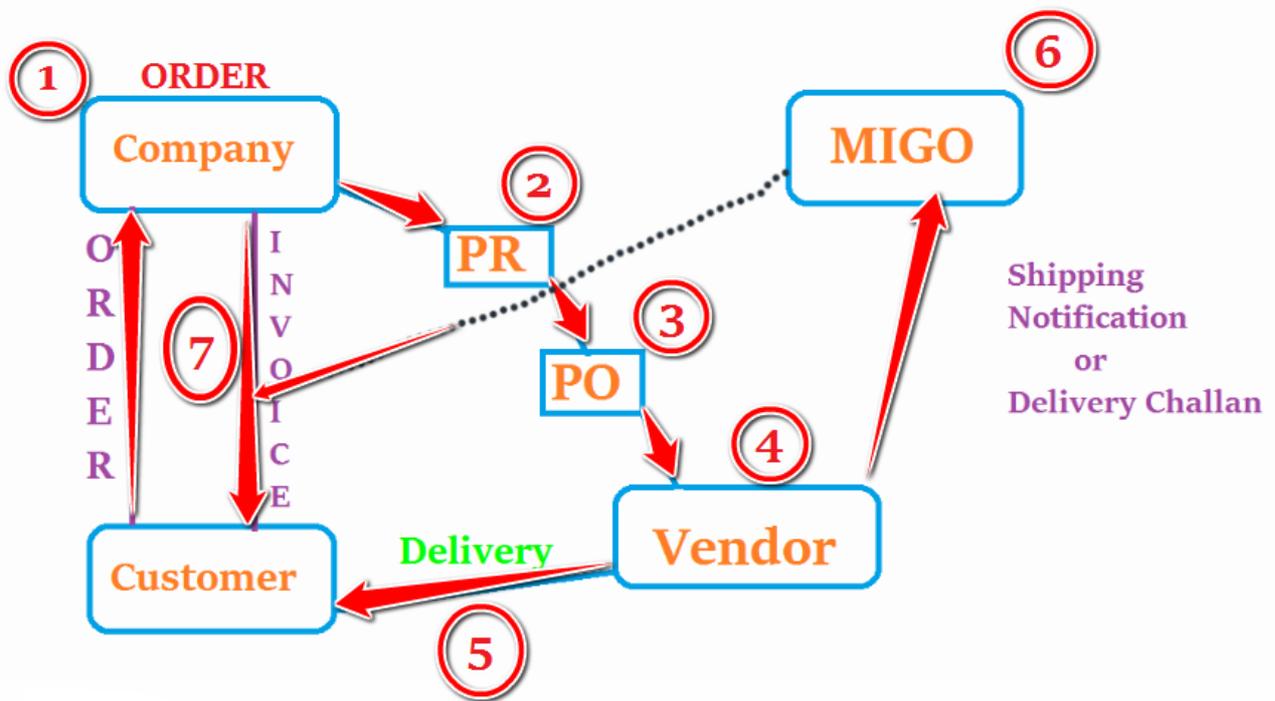
## Third Party Business Process - With Out Shipping Notification

Without shipping notification in third party process, is a standard third party process, in which vendor will send immediate invoice and based on MIRO we raise invoice to customer.



### Third party with shipping notification

We do third party with shipping notification, if vendor is not ready to send the invoice immediately, if vendor is not sending the invoice then we cannot raise invoice to customer because we don't know that how much quantity vendor has delivered to customer.

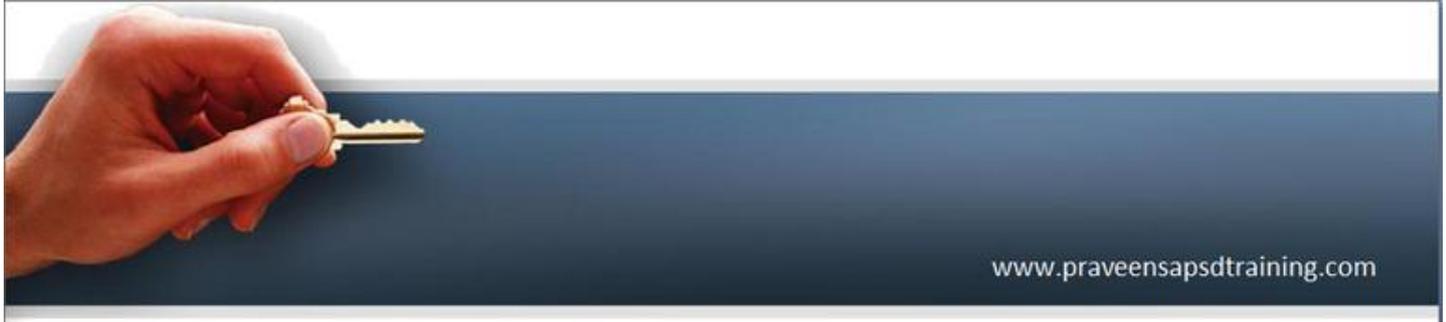


### **Third Party Business Process - With Shipping Notification**

In this situation we ask vendor to send shipping notification to the company which consists of material details and quantity details which vendor has delivered to customer. Then we can do MIGO in SAP and based on MIGO quantity we raise invoice to customer.

#### Important points in Third party process:- Item Category TAS

1. For third party material maintain "Item category group" as [BANS] and maintain material type as 'HAWA'.  
Item category group BANS will help to determine item category 'TAS' in sales document.
2. Third party item category determination OR + BANS + Blank + Blank = TAS.



3. Billing relevance 'F' standard. F means order related billing status according to MIRO.  
If we want 3<sup>rd</sup> party with shipping notification then we maintain billing relevance as 'G' and G means order related billing status according to MIGO.  
Billing relevance 'F' controls that in 3<sup>rd</sup> party w/o shipping notification if MIRO is not created then system will not allow to create invoice to customer.  
  
Billing relevance 'G' controls that in third party with shipping notification if MIGO is not created then system will not allow to create invoice to customer.
4. Create PO automatically – In standard process of 3<sup>rd</sup> party when we create sales order, system automatically generates PR but if we want system to generate direct PO automatically then check this field. Along with ALE data for purchases order in sales organisation.

### Controls in CS (Schedule line category)

5. Order type "NB" – it will help to generate purchases requisition automatically in the background while creating sales order in third party process.
6. Item category – purpose of item category in schedule line category :- like sales documents, MM documents also require item category information while creating PR manually. User will assign item category manually , but in third party process we are generating PR automatically in the background so we are passing item category information from schedule line category to PR.
7. Item category [5]: - item category [5] controls that even we do MIGO in third party with shipping notification system will treat it as dummy MIGO and stock will not be update.
8. Account assignment category [1]: - It controls that whether to generate inventory accounting document or not while doing MIGO and PGI (this field controls the cost should be assigned to any special cost object or not).This also helps to pass on customer information from order to PR....
9. In copy control between order to invoice (OR – F2) TAS has billing quantity 'F' and it will help to copy the quantity from MIRO to invoice while creating invoice to customer in third party process.

If we want third party process with shipping notification then we maintain billing quantity "E" which helps to copy the quantity from MIGO to invoice while creating invoice to customer in third party process.



## Process for creating Purchase order:-

### 1<sup>st</sup> step:-

**Maintain purchase organisation:** - To create PO we require purchase organisation, which is in MM.

SPRO → enterprises structure → definition → MM → maintain purchase organisation → new entry → ZPUR → save it.

### 2<sup>nd</sup> Step

**Assign purchase organisation to company code:** -

SPRO → enterprises structure → assignment → MM → assign purchase organisation to company code → position → ZPUR → ZALK → save it

### 3rd Step

**Assign purchase organisation to plant:** -

SPRO → enterprises structure → assignment → MM → assign purchase organisation to Plant → position → ZPUR → PLANT → save it

## Third party w/o shipping notification

We need to do few more configurations to make third party process successfully.

Go to the T-code [OBGG] for country IN assign tax procedure [TAXD] → save it.

Go to the T-code [FTXP] and maintain tax code → FTXP → IN → S1 → description (Input tax PO) → tax type [V] (input tax) → enter → input tax [10%] → save it.

## **T-code To create PO [ME21N]**

- MM01 create material (THIRD1) purchasing view should be selected maintain BANS purchasing view – purchasing group [001] save it.



**To create vendor the T-code is [XK01] :-**

XK01 → vendor [TVENDOR] → ZALK → ZPUR → Account group [0001] → name [third party vendor] → reconciliation a/c [1.6L] → cash mgmt grp [A1] → order currency [INR] → partner function [VN] → save it.

- VA01 → change mode → schedule line tab → PR → Make a note of PR number
- ME21N → mention the vendor number [TVENDOR] → purchase org [ZPUR] → Purchase group [001] ZALK → enter → go to item overview → go to right side → PR No. [XXXXXX] → enter → enter some price [5000] → go to delivery tab and uncheck good receipt → invoice tab → tax code [31] → enter → save it and make a note of PO number
- The T-code for MIRO is [MIRO] we create MIRO with reference to PO

MIRO → ZALK → Invoice date [24.01.2014] → purchase order / scheduling agreement [XXXXXXXX] → enter → base line date [24/01/2014] → enter → then go to basic data amount [5L] → enter

We can change quantity from 100 to 70 → enter.

- Then do Invoice VF01. Reference quantity will copy from order, but actual quantity will copy from MIRO.

Error: - Company code is not maintained in 169P.

Solution: - SE16N Table [T169P] enter & SAP\_edit enter → append new → mention as above save it.

Q. In third party process what happens if user increase / decrease the quantity in purchase order? Will it effect in sales order or not?

Ans. The quantities changes in purchase order will be update in sales order in confirm quantity [schedule line data].

Q. In third party process after creating sales order and purchases order will system allow to change the quantity in sales order?

Ans. System will not allow to change the quantity in order. If we want to change the quantity in order, first we have to change the Po quantity.

Q. Can i change the quantity in PR?

Ans. No



## Creating automatic PO in third party process

### 1<sup>st</sup> step:-

Maintain ALE data for purchases order

We have this in sales organisation, maintain ALE data → ZPUR → ZMUM → 001 → ZFG1 → Tvendor1 → 101 → NB → save it.

{if vendor is not fixed don't maintain the vendor name}.

### 2<sup>nd</sup> Step:-

Go to item category TAS and  create PO automatically.

### Master data changes for automatic PO

### 3<sup>rd</sup> Step:-

Go to material master → purchasing view →  Automatic PO → save it

### 4<sup>th</sup> Step:-

Go to vendor master [XK01] Create, [XK02] change → check purchasing data view → scroll down and  automatic PO → save it.

### 5<sup>th</sup> Step:-

Maintain material info record or purchasing info record. The T-code is [ME11] → material → vendor → purchase organisation → ZMUM → enter → enter → net price [5000] → max quantity [10000] → enter → save it.

### 6<sup>th</sup> step:-

Maintain source list T-code [ME01] → material → plant → validity period [ 25.01.2014] → [31.01.2014] → TVENDER1 → ZPUR → save it.

- create order, after the 1<sup>st</sup> time configuration go to ME59N (one time only) → execute → purchase group [ ] → purchase organisation [ ] → vendor → plant → execute.
- Go to VA02 → document flow → Check whether PO is generated or not?

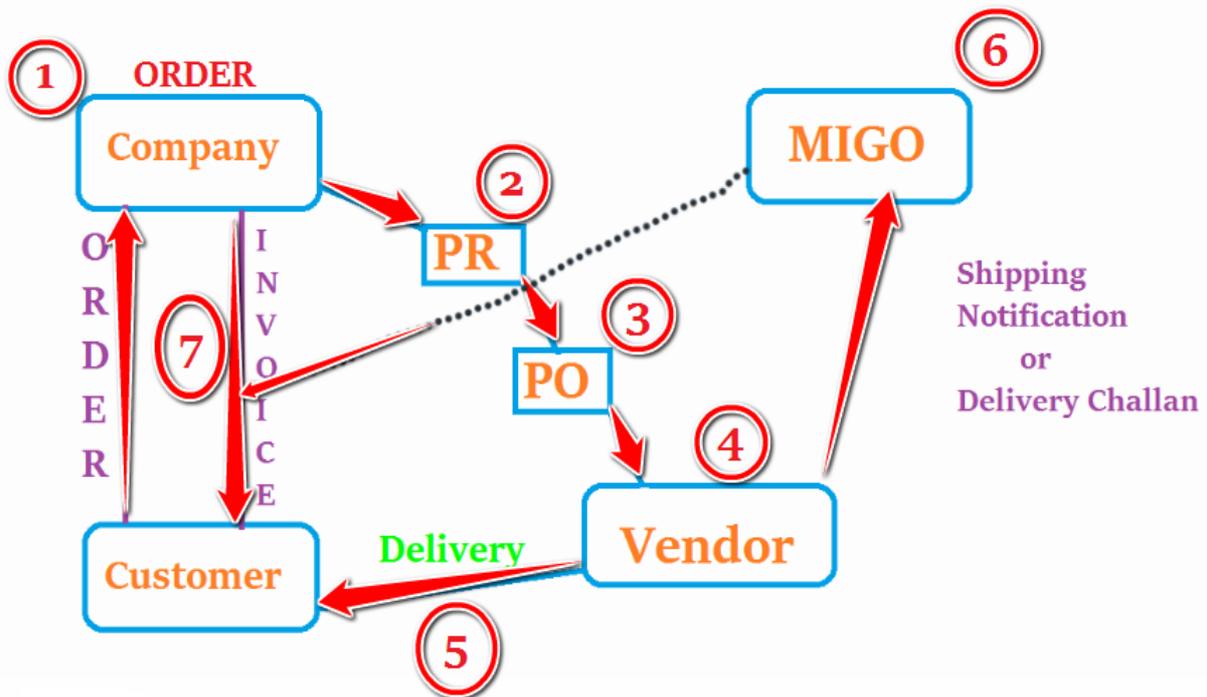


### Third party with shipping notification

We do third party with shipping notification if vendor is not sending the invoice immediately with delivering the goods to customer.

Without vendor invoice we cannot raise invoice to our customer, so in this scenario we ask vendor to send shipping notification after delivering the goods to customer.

When we receive the shipping notification then we do MIGO and basing on MIGO quantity we raise invoice to customer.



### Third Party Business Process - With Shipping Notification



### **Configuration change for third party with shipping notification**

In item category TAS, change the billing relevance from 'F' to "G".

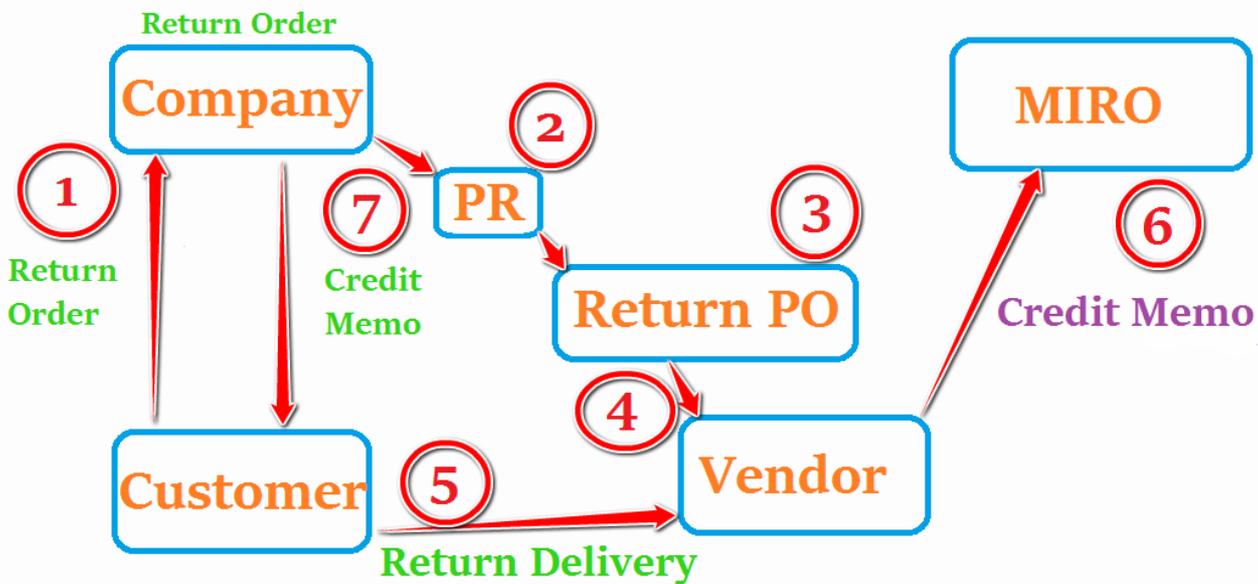
In copy control, order to billing for item category TAS change the billing quantity 'F' to "E".

- ✚ Billing relevance 'G' controls that, while creating sale order in third party process system checks whether MIGO is created or not. If MIGO is created then system will allow to create invoice to customer.
- ✚ Billing quantity 'E' will help to copy the quantity from MIGO to customer invoice.
- ✚ When we do MIGO in third party process system will treat it as dummy MIGO and stock will not be updated. The control is item category [5] in schedule line category.



### Third party Returns process

- ✚ When customer finds damage or defective goods of third party material, then customer will inform to company then company will send employee to cross check the goods.
- ✚ After cross checking employee will prepare return note and submit to company and company will create return order in SAP.
- ✚ Based on return note, then we return the goods to vendor location from customer location. Then vendor will raise credit memo to company and company will raise credit memo to customer.



### **Third Party Returns Business Process**



## **Configuration for Third Party Returns:**

### **Step 1:-**

Maintain item category determination RE + BANS + Blank + Blank = TASG

### **Step 2:-**

Go to TASG and maintain billing relevance as 'F'

### **Step 3:-**

Maintain schedule line category [CS] in VOV5

### **Step4:-**

IN copy control VTFA maintain item category [TASG] for RE – RE combination

Maintain copy requirement as [028] VBRK / VBRP = [002]

Billing quantity [F] Plus / Minus [+], Pricing type [D]



## Interview Questions For Third party Process

Q.1. In what scenario your client will do third party process?

Ans. 1<sup>ST</sup> scenario: Most of the companies they will not manufacturing all the products which they are selling to customer, they will manufacture some products and remaining products they will do third party process.

2<sup>nd</sup> Scenario: In some case even though they manufacture the products and if stock is not available or if there is some problem in manufacture unit then we go for third party process.

Q.2. Explain the third party process without shipping notification?

Ans. when our customer placed order for third party material and when we created 3<sup>rd</sup> party sales order in SAP then system automatically generates PR and PR will converted to PO and PO will be send to vendor and vendor delivers the goods to customer and vendor will send the invoice to company and company will raise invoice to customer.

Q.3. Explain the third party process with shipping notification?

Ans. We do third party with shipping notification, if vendor is not ready to send the invoice immediately, if vendor is not sending the invoice then we cannot raise invoice to customer because we don't know that how much quantity vendor has delivered to customer.

In this situation we asked vendor to send shipping notification to the company which consists of material details and quantity details which vendor has delivered to customer then we can do MIGO in SAP and based on MIGO quantity we raise invoice to customer.

Q.4. What is the difference between third party without shipping notification and with shipping notification? Ans. In 3<sup>rd</sup> party w/o shipping notification vendor will send invoice so we create MIRO but with shipping notification vendor will send shipping notification so we will create MIGO.

Q.5. In third party process can i raise invoice to customer without MIRO? Where is the control?

Ans. No, Billing relevance 'F' controls that in 3<sup>rd</sup> party w/o shipping notification if MIRO is not created then system will not allow to create invoice to customer.

Q.6. How system is creating PR automatically in background?

Ans. Order type "NB" in schedule line category – it will help to generate purchases requisition automatically in the background while creating sales order in third party process.

Q.7. What is the purpose of item category '5' in CS scheduling line category?

Ans. Item category [5]: - item category controls that even we do MIGO in third party with shipping notification system will treated as dummy MIGO and stock will not be update.

Q.8. In third party process the client requirement is while creating sales order system should create PO automatically in the background. Where is the control?

Ans. **1<sup>st</sup> step** maintain ALE data for purchases order in sales org.



**2<sup>nd</sup> Step** Go to item category TAS and  create PO automatically.

**3<sup>rd</sup> Step** Go to material master purchasing view  Automatic PO

**4<sup>th</sup> Step** Go to vendor master [XK01] Create, [XK02] change check purchasing data view scroll down and  automatic PO save it.

Q.9. Customer places order for 100 quantities but vendor delivery only 70 to the customer. When i am creating invoice to customer which quantities should determine and where is the control?

Ans. In copy control between order to invoice (OR – F2) TAS has billing quantity ‘F’ and it will help to copy the quantity from MIRO to invoice while creating invoice to customer in third party process.

If we want third party process with shipping notification then we maintain billing quantity “E” which helps to copy the quantity from MIGO to invoice while creating invoice to customer in third party process.

Q.10. What is the configuration changes required for third party with shipping notification?

Ans. In item category TAS, change the billing relevance from ‘F’ to “G”.

In copy control, order to billing for item category TAS changes the billing quantity ‘F’ to “E”.

Q.11. There is a material which we manufacturing but if stocks are not available then we want to send it to third party. How we give solution to client?

Ans. Change item category “TAN” to ‘TAS” manual in sales order.

Q.12. What is return item category for third party return process?

Ans. TASG.

Q.13. Explain third party return process?

Ans. When customer finds damages or defective goods of third party material then customer will inform to company then company will send employee to cross check the goods. After cross checking employee prepare return note and submit to company and company will create return order in SAP based on return note then we return the goods to vendor location from customer location. Then vendor will raise credit memo to company and company will raise credit memo to customer.

Q.14. In third party process user is increasing the quantity in PO. Will it update in sales order?

Ans. The quantities changes in purchase order will be update in sales order in confirm quantity [schedule line data].

Q.15. In third party process, after creating PO if user is changing the quantity in sales order. What happens? Ans. System will not allow to change the quantity in order. If we want to change the quantity in order, first we have to change the PO quantity.

Q.16. Can i change quantity in PR?

Ans. No.

Q.17. Explain third party configuration?

Ans. Notes.



Q.18. Is third party process is relevant for availability check?

Ans. No.

Q.19. Why SAP has given schedule line category in third party process even though we don't ve delivery in third party process?

Ans. passing item category information from schedule line category to PR.

Q.20. In third party process when vendor is deliver the goods to customer. What invoice he will send to customer and on the name of when will raise invoice. What prices he will mention in the invoices.

Ans.

Q.21. In third party process client want free goods.

Ans. X → TAS

    |  
    Y → TASS [OR + BANS + FREE + TAS = TASS] and in TASS [pricing – B].

Q.22. In third party process client wants to offer free goods without item generation.

Ans.

Q.23. Clients wants to explain BOM item in third party process?

Ans.

Q.24. In third party process while creating sales order system should not generate PR if order is block to credit?

Ans. Transfer of requirement 102.

Q.25. In third party process customer place the order for 100 quantities and vendor deliver 70 quantities to customer but finally receive 65 quantities. How to address this?

Ans. TAS – change billing relevance from F to A (delivery related billing)

Q.26. In third party process can i create partial invoice to customer?

Ans. Yes.

Q.27. Along with billing relevance 'F' do have any other control in third party process for not allowing to create invoice without MIRO?

Ans. Copy requirement [012].

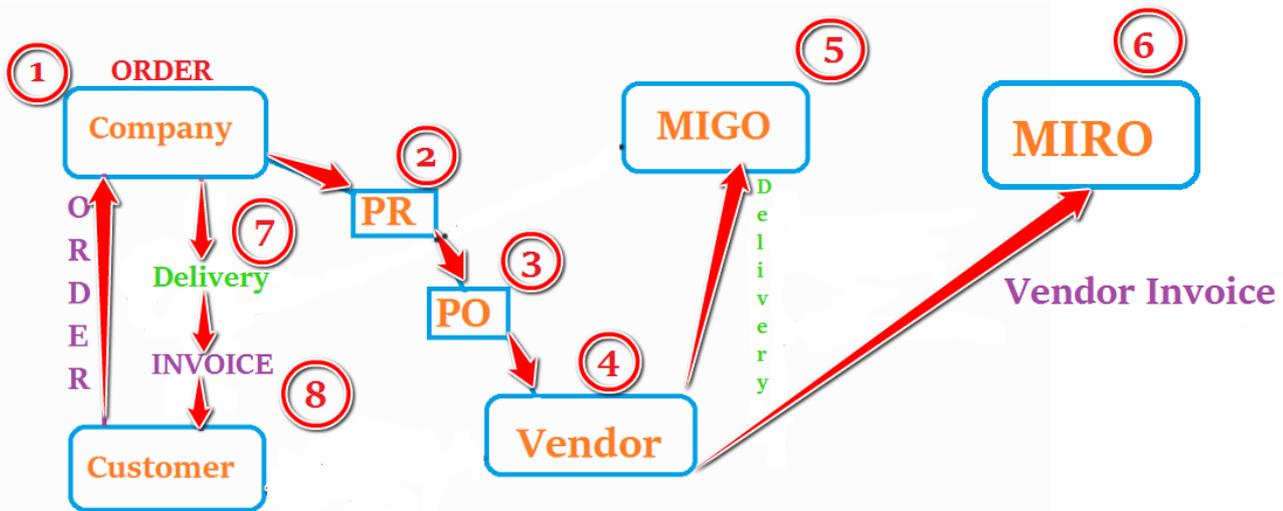
Q.28. In third party process which update group system consider in credit management?

Ans. 000018 update groups (exclude open delivery values).



## Individual purchases order process (IPO)

- ✦ We do IPO process if vendor is not ready to do our packing (vendor will deliver the goods to company and company will deliver the goods to customer after packing with the same qty which received from vendor).



## Individual Purchase Order(IPO) Business Process

- ✦ We do IPO process if we are delivering these goods to institutions and direct customer i.e. if we do third party process for these customers there is a risk involved that we may lose the customer.

Order → PR → PO → Vendor → MIGO → delivery → Invoice

- ✦ In IPO process when we do MIGO the stock will be reserved to the sales order number and the controls is in requirement class [KEB] we have special stock indicator “E”
- ✦ In IPO process when we do delivery system consider the special stock i.e. sales order stock and the control is in item category “TAB” special stock indicator “E”.



### Configuration for IPO

✚ If material is IPO material then we maintain item category group as "BANC" and we select purchasing view. [OR + BANC + Blank + Blank = TAB]

✚ For IPO material system determine item category as 'TAB' — Controls → 

Special stock indicator [E] Billing relevance [A]
------------------------------------------------------

✚ For IPO process system consider schedule line category "CB" — Controls → 

Order type [NB] Item category [0] Movement type [601] Account assig category [E] <input checked="" type="checkbox"/> Item relv. For delivery <input checked="" type="checkbox"/> Purc . req. Delivery schd
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Item category 0 controls if you do MIGO in IPO process system will treat as Actual MIGO and stock will update.

- Account assignment category "E" controls that in IPO process while doing MIGO and delivery system will not generate inventory accounting document. In IPO process the cost will assigned to the sales order cost object.
- If we check purchase requisition delivery schedule the delivery and quantity information will transfer from sales order to PR.

✚ For IPO process system determine requirement type as [KEB]

Item category [TAB] + MRP type [PD] = KEB

The purpose of requirement type is it will help to determine requirement class.

✚ System determines requirement class as 'KEB' in IPO process.

KEB [Special stock indicator – E and Account assignment category – E]

✚ In IPO process requirement class we have to check availability check and requirement transfer. This information will be passed to MRP as a special stock indicator.

✚ In IPO process system will ask to assign G/L A/c for KOFK account determination type.

- Create a material (IPO) – Item category group [BANC], Purchasing group [001]

VK11 → Order (check TAB, CS, KEB in procurement tab then → Create PO ME21N then → Create MIGO and check item ok (after this go and check the stock with order number in MMBE) → delivery (no need to do MIRO billing relevance is 'A') → Then do Invoice.



## Interview Questions For IPO Process

Q.1. What scenario we do IPO process?

Ans. If vendor will not ready to do packing and risk involved that we may lose the customer.

Q.2. Explain IPO process?

Ans. Customer will give order to company then create order in SAP and create PR and transfer to PO and send PO to vendor then vendor will deliver the goods to company then company will create MIGO and based on MIGO company will deliver the goods to customer and vendor send the invoice to company and company will raise invoice to customer.

Q.3. What is the difference between third party process and IPO process?

Ans. IN third party vendor will deliver the goods to customer with packing but in IPO vendor will deliver the goods to company and company will deliver the goods to customer.

Q.4. Can i create automatic PO in IPO process?

Ans. No.

Q.5. In IPO process without MIRO can i create invoice to customer?

Ans. No.

Q.6. Will inventory accounting document generates when we do delivery in IPO process?

Ans. No. Account assignment category “E” controls that in IPO process while doing MIGO and delivery system will not generate inventory accounting document.

Q.7. What happens if i check PR delivery schedule check box in schedule line category?

Ans. If we check purchase requisition delivery schedule the delivery and quantity information will use transfer from sales order to PR.

Q.8. What is the purpose of special stock indicator ‘E’ in TAB item category?

Ans. In IPO process when we do delivery system consider the special stock i.e. sales order stock and the control is in item category “TAB” special stock indicator “E”.

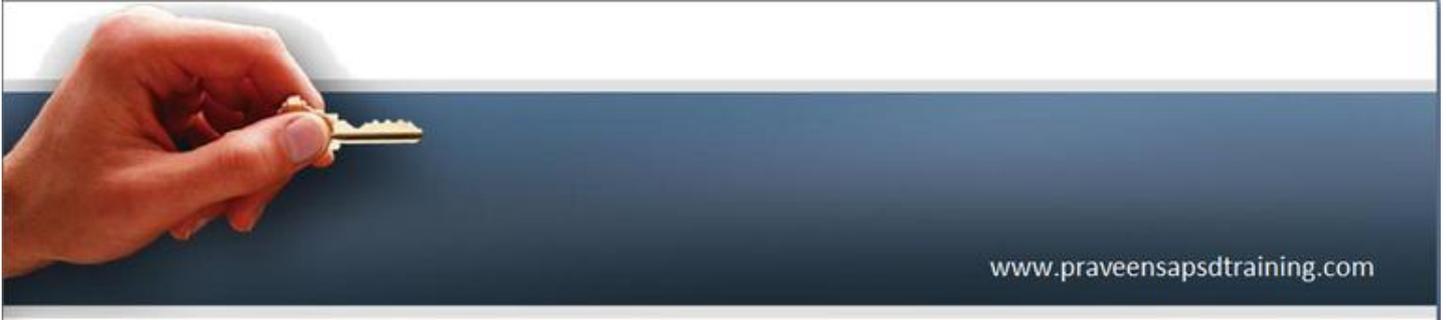
Q.9. What is requirement type system consider or determine in IPO process?

Ans. KEB.

Q.10. What is requirement class system determine in IPO process?

Ans. KEB.

Q.11. What is the purpose of special stock indicator ‘E’ in requirement class?



Ans. Special stock indicator 'E' in requirement class will help pass information to MRP as a special stock indicator.

Q.12. In IPO process if order is block for credit then system should not generate PR. Where is the control?

Ans. Transfer of requirement number [102]

Q.13. Will system perform availability check in IPO process?

Ans. Yes.



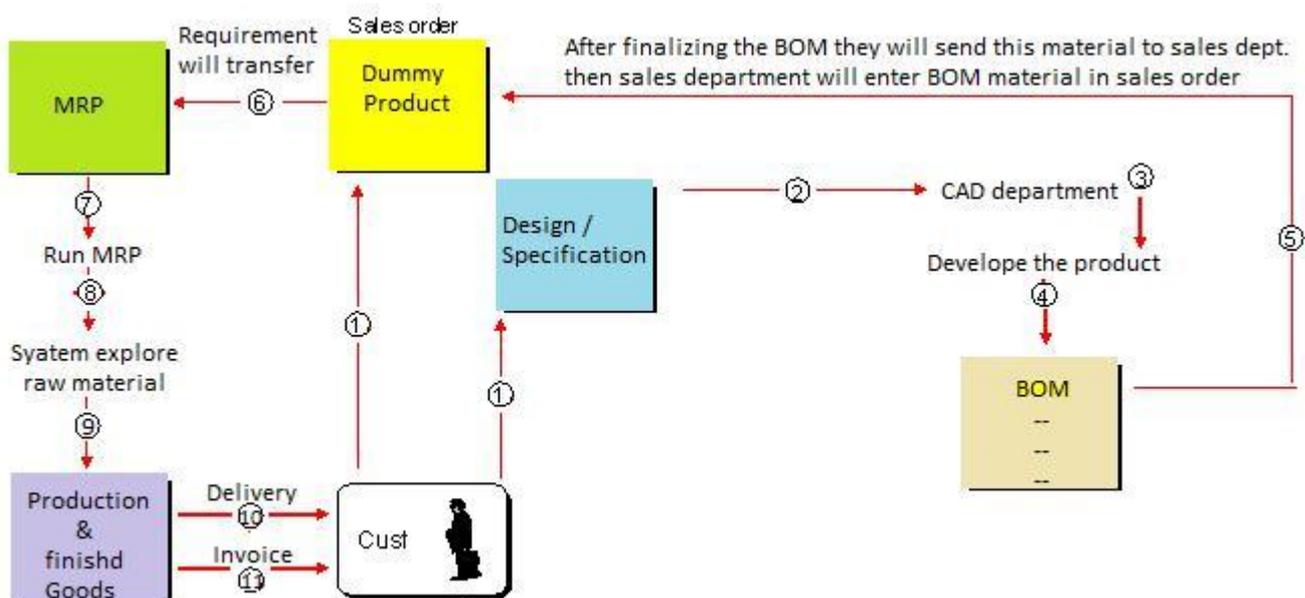
## Make to order

When customer place order, then only the company will start the process of manufacturing finished products because the specification of the product is not standard. Every customer will place order with their own specification.

Ex. – Heavy machine, Air craft's, Crain manufacturing, heavy transformer, BHEL, BEML, etc

### Process: -

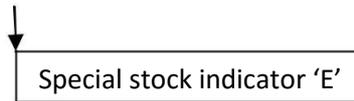
- ✚ In Make to order process customer will place order with their own material specifications or design.
- ✚ Then we create Sales order with dummy material and then will send the design or specifications to CAD department or product development department.
- ✚ Then they develop the product with list of BOM, and after finalizing the BOM they will send this material to sales department.
- ✚ Then sales department will enter BOM material in sales order and order requirement will transfer to MRP and they run MRP.
- ✚ Then system explore the raw material and also check the stock of raw material and if stock is not available then system will generate PR → PO → Vendor → raw material delivery to company → and start manufacturing.
- ✚ The manufactured stock is assigned with sales order number and lastly we do delivery and invoice the customer.





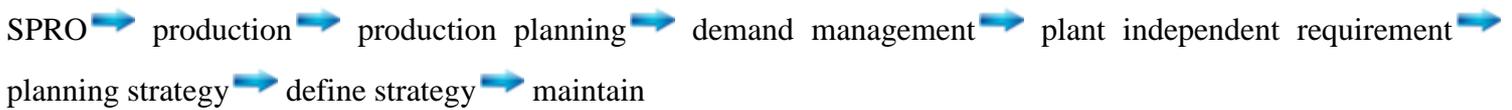
**Configuration for make to order process: -**

1. For MTO (Make to order) maintain item category group as [0001] and strategy group [20] in material master.
2. For MTO system determine item category as [TAK]. OR + 0001 + Blank + Blank = TAK

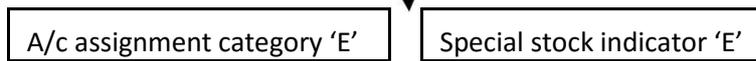


3. Schedule line category is [CP].

4. Requirement type system determines for MTO is [KE] and KE determine based on strategy group [20].



5. In MTO system determines requirement class as [040].



- Special stock indicator 'E' controls that after manufacturing the finished goods the stock will be reserved to that particular sales order number.
- The account assignment category 'E' controls when we take the finished goods in stock and we do delivery in MTO then accounting document will not generate.

6. In [VKOA] assign G/L A/C KOFK condition type.





## Interview Questions For MTO process

Q.1. Explain MTO process?

Ans. Process: - In Make to order process customer will give order with their own material specification or design then we put dummy material in sales order and then will send this design or specification to CAD department or product development department then they develop the product with list of BOM and after finalizing the BOM they will send this material to sales department then sales department will enter BOM material in sales order and order requirement will transfer to MRP and they run MRP then system explore the raw material and also check the stock of raw material and if stock is not available then system will generate PR PO Vendor raw material delivery to company and start manufacturing and stock the finished stock with sales order number in sales order stock and lastly we will do delivery and invoice to customer.

Q.2. What is the item category system determine for MTO process?

Ans. TAK.

Q.3. What is the purpose of special stock indicator 'E' in MTO item category?

Ans. The purpose of special stock indicator 'E' in MTO item category that while doing delivery in MTO system will consider sales order stock.

Q.4. What is the requirement type determine in MTO process and based on what?

Ans. Requirement type system determines for MTO is [KE] and KE determine based on strategy group [20].

Q.5. What is the requirement class system determine MTO process?

Ans. . In MTO system determines requirement class as [040].

Q.6. What is the special stock indicator 'E' in requirement class?

Ans. Special stock indicator 'E' controls that after manufacturing the finished goods the stock will be reserved to that particular sales order number.

Q.7. What is the inventory accounting entry we do at the time of PGI in make to order process?

Ans. Accounting document will not generate.

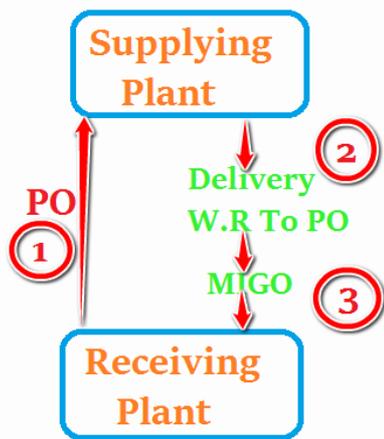
Q.8. What is the process of accounting assignment category 'E'?

Ans. The account assignment category 'E' controls when we take the finished goods in stock and we do delivery in MTO then accounting document will not generate.

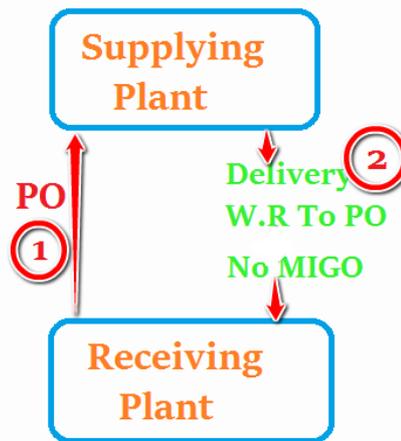


## Stock Transfer Order (STO)

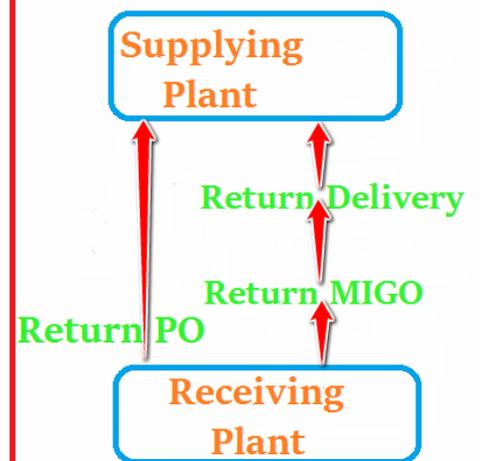
Transferring the stock from one plant to another plant within a company. It can be plant to depot or depot to depot.



**STO 2 STEP**



**STO 1 STEP**



**STO Returns**

### STO 2 Step Process

- ✚ In STO two step process 1<sup>st</sup> receiving plant will raise the PO to supplying plant, and then supplying plant will do delivery with reference to PO.
- ✚ When we do delivery in supplying plant then stock will be reduced from supplying plant and stock will be displayed as stock in transit in receiving plant.
- ✚ The control is in movement type [641]. When the goods reached at receiving plant then they do MIGO, and when they do MIGO the actual stock updates till then it shows as stock in transit.
- PO type in STO process is [UB]
- Delivery type in STO process is [NL]
- Delivery item category in STO process is [NLN]
- Delivery item category determination is NL

NORM  
 V  
 Blank  


---

 NLN



- Schedule line category for STO is (NN)

Scheduling line category	Movement Type
NN	641 Two step

**Effect:** 1. Stock will be reduced from supplying plant and stock will display as stock in transit at receiving plant.

2. Inventory accounting document will generate.

[ Stock inward movement A/c Dr. ...  
 To, stock outward A/c.....Cr. ]

**STO 1 Step Process:-**

In STO one step process when we do delivery stock will be reduced from supplying plant and stock will be added to receiving plant. The control is movement type [647] and MIGO is not required.

- Schedule line category for STO is (NN)

Scheduling line category	Movement Type
NN	647 One step

**Effect:** 1. Stock will reduced from supplying plant and stock will be added in receiving plant.

2. Inventory accounting document will be generate.

[ Stock inward movement A/c Dr. ...  
 To, stock outward A/c.....Cr. ]

**Master data configuration for STO: -**

**Step 1:-**

Create receiving plant [ZVAP] as customer in supplying sales area

In Real –Time For STO process we will have one more distribution channel i.e. STO [In intra company STO normally the sales area is same in both supplying and receiving plant].

**Q. Why we are creating receiving plant as customer in STO process?**

**Ans. To create delivery. In delivery system determines this customer as ship to party.**

**Step 2:-** Extend the material to both the plants with purchasing view



### Actual STO configuration

#### Step 1 Define Shipping Data for Plants

SPRO → MM → purchasing → PO → setup stock transport order → define shipping data for plants  
→ go to receiving plants [ZVAP] assign customer number which we created as receiving plant

Customer no. - plant	9990000140	ZVAP Plant Customer	and assign receiving sales area
SlsOrg.Int.B.	ZDOM		
DistChannellB	Z1		
Div.Int.Billing	Z1		→ save it.

Then go to supplying plant [ZMUM] and assign only same sales area.

#### Step 2 Assign Delivery Type and Checking Rule

In this configuration step we assign delivery type [NL] and checking rule [B] to the combination of purchase order type [UB] and supplying plant [ZMUM]

Ty.	DT Descr.	SPI	Name 1	DITy.	Description	CRI	Description of ...
UB	Stock transport o	ZMUM	MUM Mfg plant	NL	plenishment d	B	SD delivery

→ save it

#### Step 3 Assign Document Type, One-Step Procedure, Underdelivery Tolerance

In this configuration steps we assign purchase order type [UB] to the combination of supplying plant and receiving plant .

SPI	Plnt	Type	On	Tol...
ZMUM	ZVAP	UB	<input type="checkbox"/>	<input type="checkbox"/>

→ save it

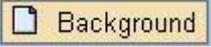
- ✚ If we check one step here, then system will treat it as 1 step process and while doing delivery stock will be reduced from supplying plant and stock will directly added to receiving plant and MIGO is not required the control is [647].
- ✚ If we uncheck one step system will treat it as two step STO process and movement type [641] controls that,MIGO is required.
- ✚ The goods receipt movement type is [101].
- ✚ **Under delivery tolerance:** - In STO process over delivery concept will not work. We have only under delivery tolerance.



**Process 1:** Create purchase order [ME21N] → PO type [UB] → supplying plant [ZMUM] → enter → Purchase organisation [ZPUR] → Purchase group [001] → company code [ZALK] → go to item overview → maintain material & quantity → receiving plant [ZVAP] → storage location [ZFG2] → enter → go to condition tab and maintain the amount if it is not coming automatically and also check the shipping tab if it is not determining then check the configuration or if it is then → save it.

**Q.** What scenario shipping tab will not be determined in STO purchase order?

**Ans.** If STO configuration is not in place and shipping point determination is not in place in delivering plant.

**Process 2:** VL10D → shipping tab [ZMU1] → execute → select the PO number and click on background  → click on log  → select the line and click on document → select delivery number and click on display document → go to change mode → do picking → storage location → quantity → PGI

- Check stock of ZVAP in MD04

**Process 3:** In STO process if we want to create proforma invoice then go to item category VOV7 → position → [NLN] and maintain billing relevance as [D].

Go to VOV8 → position → [DL] default order type → maintain document pricing procedure [A].

Go to copy control VTFL → position [F8 – NL] and go to change mode and details and maintain copy requirement [009] → save it.

Now go to VF01 → delivery number → billing type F8 → save it

**Process 4:** After proforma invoice create MIGO → goods receipt → out bond delivery → delivery number → execute → scroll down and check item ok → enter → check and post.

- Again check stock in MD04.

When we do PGI in STO process ,system will generate the inventory accounting document :

( Stock inward movement A/c.....Dr.  
To, Stock Outward movement A/c.....Cr. )



**One step process**

⚙ Assign Document Type, One-Step Procedure, Underdelivery Tolerance

SPl	Plnt	Type	On	Tol.
ZMUM	ZVAP	UB	<input checked="" type="checkbox"/>	<input type="checkbox"/>

➡ Save it and do the same process ME21N ➡ VL10D ➡ VF01 ➡ MIGO not reqd.

Q. Do we have any copy control between PO to delivery?

Or

Q. In STO process how data is copied from PO to delivery?

Ans. We have copy control [DL to NL].

Q. Clients requirement is in STO process they want to create delivery automatically while doing PO. How to do this?

Ans. Configuration for automatic delivery

SPRO ➡ MM ➡ purchasing ➡ PO ➡ setup stock transport order ➡

⚙ Activate Automatic Delivery Creation and CRM Billing

Type	SPlt	Auto Delv.
UB	ZMUM	<input checked="" type="checkbox"/>

➡ save it.

⚙ Activate Automatic Delivery Creation for PO Type and Shipping Point

Type	ShPt	Auto Delv.
UB	ZMU1	<input checked="" type="checkbox"/>

➡ save it.

**Scenario-Client Requirement**

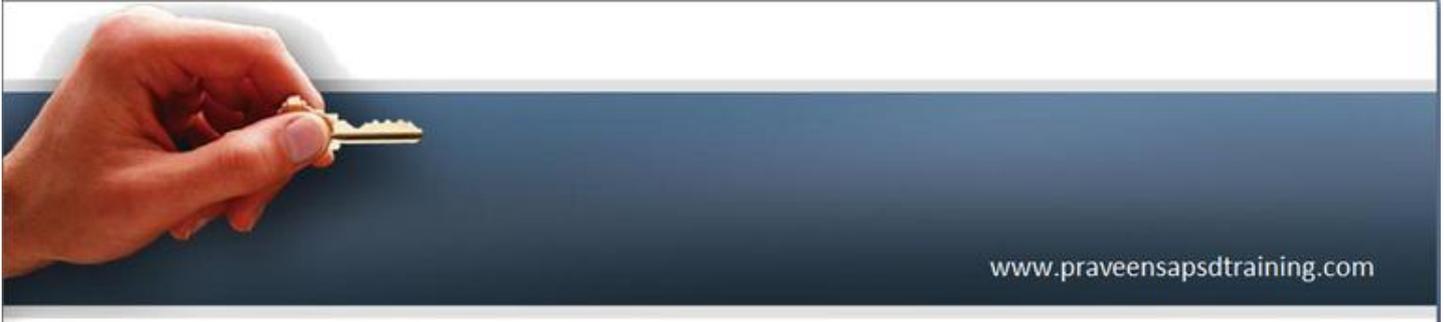
In STO process while creating proforma invoice system should copy the price from PO.

Go to M/06 ➡ check the control [PBXX / PB01 / PB02] condition type ➡ create same condition type in sales with same control ➡ create PBXX in V/06 ➡ save it.

Create pricing procedure for STO [ZSTO] and place the condition type [PBXX] in pricing procedure and make it manual.

Go to billing type VOFA [F8] and maintain document pricing procedure [T].

If we don't assign document pricing procedure F8, then system will take document pricing procedure from default order type [DL].



Go to OVKK and assign pricing procedure

SOrg.	DChl	Dv	DoPr	CuPP	PriPr.	Pricing procedure	CTyp	Condition type
ZDOM	Z1	Z1	T	1	ZST0	STO pricing procedure	PBXX	Gross price con TYp:

➔ save it.

Go to VTFL copy control [NL – F8] and maintain price source as [A].

**Assign MM pricing procedure:**

SPRO ➔ MM ➔ Purchasing ➔ condition ➔ define price determination process [The standard pricing procedure for MM purchases is RM0000]. ➔ go to define schema determination ➔ double click on determination schema for stock transfer order ➔ with the combination of document type + supplying plant + Procedure ➔ new entries ➔

Doc. Type	Suppl.Plnt	Proc.	Description
UB	ZMUM	RM0000	Purchasing Document (Big)

➔ save it.

Now do ME21N ➔ VL10D ➔ Performa invoice ➔ MIGO



## **Interview Questions for STO process**

Q.1. Explain STO process?

Ans. In STO two step process 1<sup>st</sup> receiving plant will raise the PO to supplying plant then supplying plant will do delivery with reference to PO and do proforma invoice, when we do delivery in supplying plant then stock will be reduce from supplying plant and stock will be displayed as stock in transit in receiving plant. The control is in movement type [641]. When the goods reaches to receiving plat then they do MIGO and when they do MIGO the actual stock update till then stock in transit.

Q.2. What is the difference between one step and two step process?

Ans. In two steps MIGO is done and in one step MIGO is not required.

Q.3. In STO process while creating PO i want to create delivery automatically in background. Where is the control?

Ans. With the help of configuration that activate automatic delivery creation with order type UB and plant and also activate automatic delivery creation PO type & shipping point.

Q.4. Where is the control that whether to go one step or two step?

Ans. Check one step in assign document type 1 step procedure under delivery tolerance.

Q.5. What is PO type for STO process?

Ans. UB.

Q.6. I want to copy PO price in STO performa invoice. How to do this?

Ans. Maintain price source as [A] in VTFL.

Q.7. Do we have any copy control between from PO to delivery?

Ans. Yes, we have control between [DL – NL] in copy control.

Q.8. What is delivery type of STO process?

Ans. [NL].

Q.9. What is the schedule line Category for STO process?

Ans. [NN].

Q.10. What is the movement type for one step and two steps?

Ans. 1 step – 647, 2 steps – 641.



Q.11. What is the effect of 647 movement type?

Ans. Effect: 1. Stock will be reducing from supplying plant and stock will be added in receiving plant.

2. Inventory accounting document will be generate.

Stock inward movement A/c .....Dr. To, stock outward A/c.....Cr.
---------------------------------------------------------------------

Q.12. What is the effect of 641 movement type?

Ans. Effect: 1. Stock will be reducing from supplying plant and stock will display in transit at receiving plant.

2. Inventory accounting document will be generate.

Stock inward movement A/c .....Dr. To, stock outward A/c.....Cr.
---------------------------------------------------------------------

Q.13. What is the inventory accounting document generate in STO process?

Ans. Stock inward movement A/c .....Dr.

To, stock outward A/c.....Cr.

Q.14. How delivery item category determine in STO process?

Ans. NL + NORM + V + Blank = NLN.

Q.15. What is the configuration required for STO process?

Ans. 1. Define shipping data for plants, 2. Assign delivering type & checking rule and 3. Assign document type 1 step procedure under delivery tolerance.

Q.16. Can i restrict the user to increase the quantity in delivery in STO process?

Ans. No, in STO process there is no over delivery tolerance provision, only under delivery tolerance.

Q.17. What scenario shipping data will not determine?

Ans. If STO configuration is not in place and shipping point determination is not in place in delivering plant

Q.18. How pricing procedure determine in STO perform invoice?

Ans. Based on document pricing procedure [T].

Q.19. In STO process even though we create delivery with reference to PO. How system is determining movement type information?

Ans. Default order type [DL].

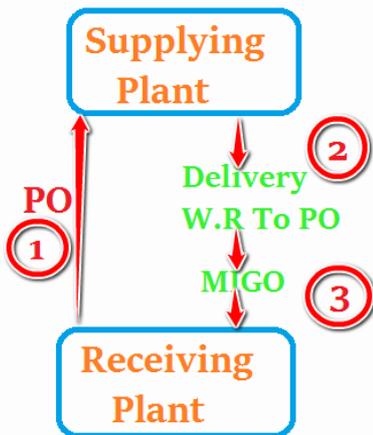
Q.20. In STO process what is the need of creating receiving plant as customer?

Ans. For ship to party address.

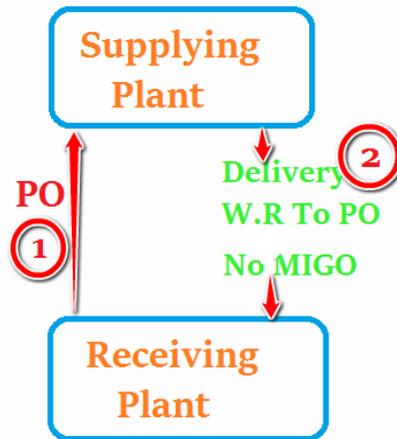


## STO Returns Process

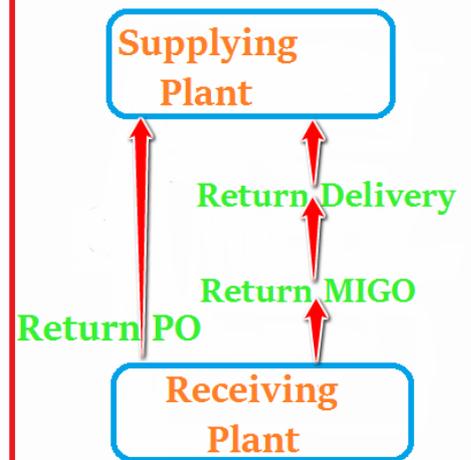
STO Two step



**STO 2 STEP**



**STO 1 STEP**



**STO Returns**

- ✚ When we do MIGO in STO Returns, stock will be reduced from receiving plant.
- ✚ When we do PGR stock will be added to supplying plant.

### Configuration for STO Returns

SPRO → MM → purchasing → PO returns order → Store Return / Return Plant to Plant → go to position →

Purchasing Doc. Type	Supplying Pl	Del. type store returns
UB	ZMUM	NLR

→ save it

Go to VOV8 → position [DLR] default order type for return STO process → maintain document pricing procedure [T] → save it.

Controls return process:-

PO type – UB

Return delivery type – NLR

Return Item category – NLRN

Schedule line category – NR

Default order type – DLR



Movement type for 2 steps – 671

Movement type for 1 step – 677

Now create ME21N [Check return in line item] → VL10D [Without PGR] → MIGO [Check Item ok] → VI02n [PGR].

### **Interview Questions For STO Return Process**

Q.1. Explain STO return process? What is the configuration required for this?

Ans. Receiving plant will raise return PO to supplying plant then supplying plant will do return delivery without PGR then receiving plant will do MIGO then at last supplying plant will do PGR for adding stock in their plant.

Assign return delivery type [NLR] to return PO type [UB] and supplying plant [ZMUM].

Q.2. In return STO process what is need to do in PO?

Ans. Check returns in item line while creating PO.

Q.3. Can i do PGR without MIGO in returns STO process?

Ans. No, because without getting stock from receiving plant we cannot add (PGR) stock in supplying plant.

Q.4. What happens when we do MIGO in return STO process?

Ans. When we do MIGO in return STO stock will be reduce from reducing plant.

Q.5. What happens when we do PGR in return STO process?

Ans. When we do PGR, stock will be added to supplying plant.

Q.6. Do we have any copy controls between PO to delivery in return STO process?

Ans. Yes, DLR to NLR.

Q.7. What is the delivery type for return STO process?

Ans. NLR.

Q.8. What is the item category for return process?

Ans. NLRN

Q.9. What is the schedule line category for return process?

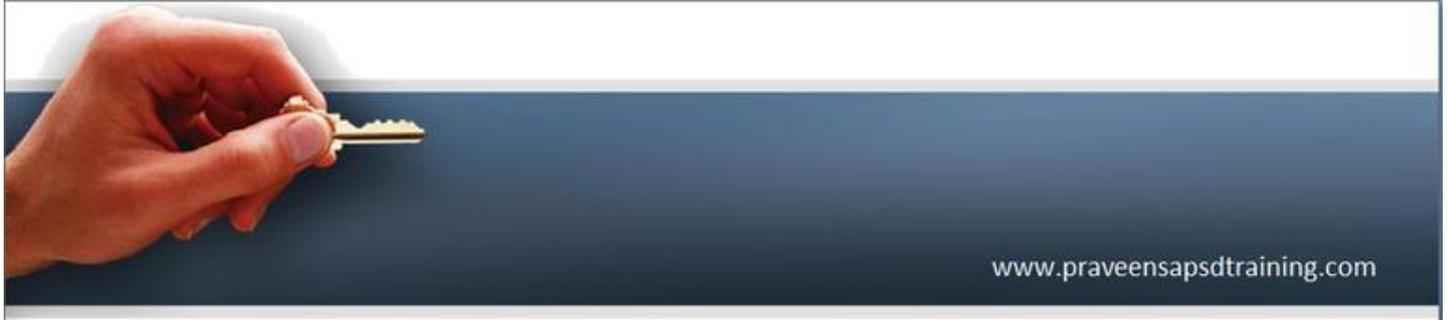
Ans. NR.

Q.10. What is two step movement type for return STO?

Ans. 671.

Q.11. What is one step movement type for return STO?

Ans. 677.



Q.12 What is the movement type when we do MIGO in return STO?

Ans. 161.

Q.13. What is the process if we check one step in return STO?

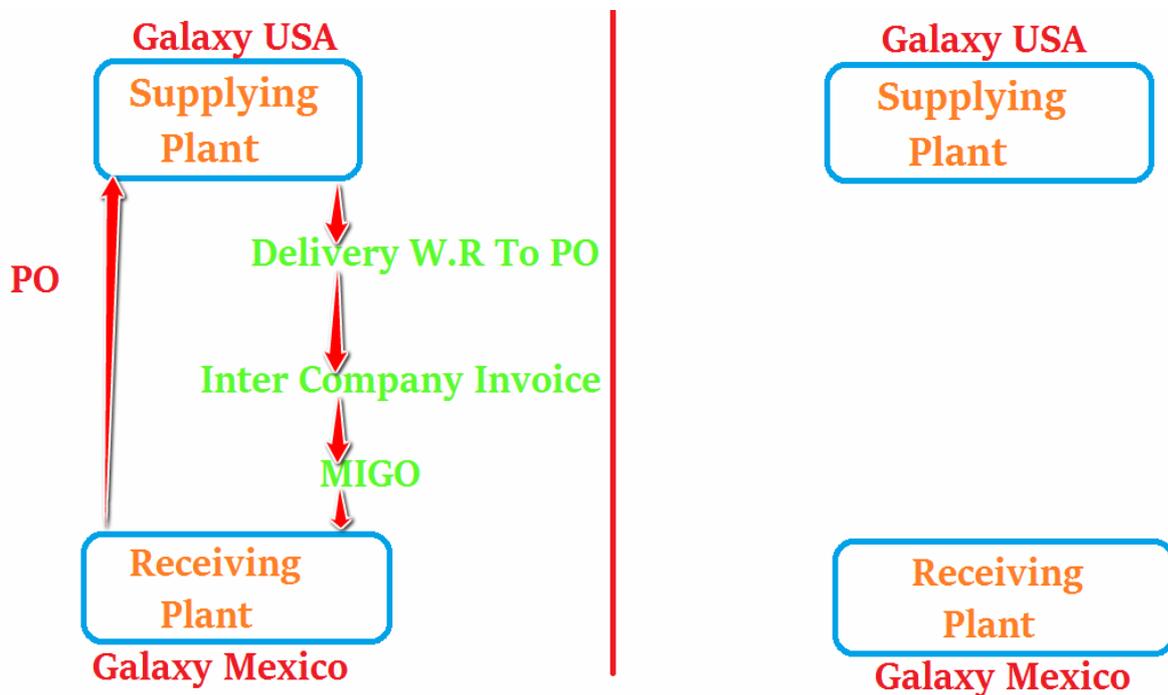
Ans.



## Intercompany STO Process

Transferring the stock between two plants which belong to two different company codes of same group company

### STO Two step



szoter.com

## Configuration for intercompany STO

### Master data configuration

1. Extend the material to both the plants.
2. Create receiving plant as customer in supplying sales area. Mention delivery plant as [HSIL].
3. Create supplying plant as vendor in receiving purchases organisation & company code.

XK01 → customer number → HSIL → ZPUR → A/c group (0007) → enter → in vendor master assign the customer number → cash management [A1] → purchasing data – extra – add purchase data – plant [HSIL] → save it.



**STO configuration:-**

**Step1:-**

**Define shipping data for plants**

SPRO → MM → purchasing → PO → setup stock transfer order → define shipping data for plants → go to receivable plant → details → assign customer number → assign receiving sales area [ZDOM + Z1 +Z1]

Go to supplying plant and assign supplying sales area [HSIL + H1 + H1] → save it.

**Step2:-**

**Assign delivery type and checking rule**

The PO type for intercompany STO is – NB	Movement type 2 steps for intercompany STO is – 643
The delivery type for intercompany STO is – NLCC	Movement type 1 step for intercompany STO is – 645
Item category for intercompany STO is – NLC	Billing type for intercompany STO is - IV
Schedule line category for intercompany STO is – NC	

- In this configuration step we assign delivery type [NLCC] and checking rule [B] to the combination of PO type [NB] and supplying plant [HSIL]

NB + HSIL + NLCC + B → save it

**Assign delivery type 1 step procedure under delivery tolerance**

We assign PO type [NB] to the combination of supplying plant and receiving plant → new entries → HSIL – ZMUM – NB → Save it.

Assign ICAA01 pricing procedure to the combination of supplying sales area + document pricing procedure + customer pricing procedure [HSIL – H1 – H1 + N + 1 = ICAA01] → save it.



**Maintain condition record for PI01 condition type**

VK11 → PI01 → HSIL → HSIL → INTERSTO → 10000/- → save it.

- ME21N → NB → Vendor → purchase org. [ZPUR] → purchase group [001] → company code [ZALK] → material → 100 → ZMUM → ZFG1 → mention the price → save it.
- VL10D → HSIL → execute → background → log → document → display document → change → picking → PGI → save it
- VF01 → Intercompany STO invoice → condition tab → IV01 condition type
- MIGO → check item ok → check → post.

**Intercompany STO one step process**

same as 2 step process but need to check one step and do the rest..

**Intercompany STO Returns**

The PO type is – NB	Movement type 2 steps is – 673
The delivery type is – NCR	Movement type 1 step is – 675
Item category is – NCRN	Billing type is - IG
Schedule line category is – NS	

**Configuration for intercompany return STO**

SPRO → MM → purchasing → PO → return order → returns to vendor → new entries → NB + HSIL + NCR → save it.

→ Store return / return plant to plant

NB + HSIL + NCR

- ME21N → VL10D → with PGR → VF01 → MIGO.

**For doing intercompany billing first go to**

VOV8 → position → DLR (Default return order for intercompany STO) → maintain document pricing procedure [N].

VOFA → position → IG (return intercompany STO billing type) → maintain document pricing procedure [N].

### **Interview Questions For Intercompany STO**

Q.1 Explain the intercompany STO process?

Ans. Receiving plant will raise PO then supplying plant will do delivery then intercompany invoice and lastly when goods reaches to receiving plant then do MIGO.

Q.2. What is the delivery type for intercompany STO process?

Ans. NLCC.

Q.3. What is the PO type for intercompany STO process?

Ans. NB.

Q.4. What is the item category for intercompany STO process?

Ans. NLC.

Q.5. What is the Schedule line category for intercompany STO process?

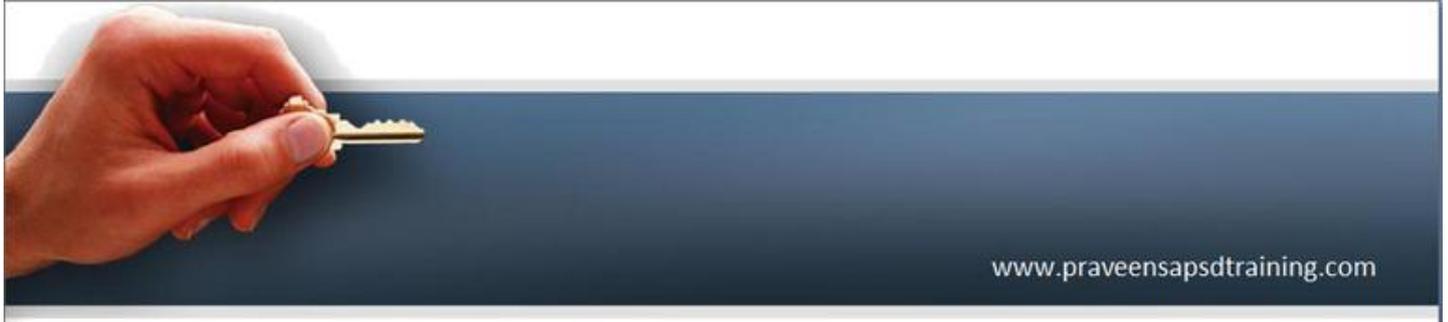
Ans. NC.

Q.6. What is the two steps movement type for intercompany STO process?

Ans. 643.

Q.7. What is the one step movement type for intercompany STO process?

Ans. 645.



## **Interview Questions For Intercompany STO Returns**

Q.1. Explain the return intercompany STO process?

Ans. When receiving find any damage goods then he will raise return PO to supplying plant then supplying plant do return delivery with PGR and then return invoice and last receiving plant do MIGO when goods reaches to their.

Q.2. What is the delivery type for return intercompany STO process?

Ans. NCR.

Q.3. What is the PO type for return intercompany STO process?

Ans. NB.

Q.4. What is the Item category for return intercompany STO process?

Ans. NCRN.

Q.5. What is the schedule line category for return intercompany STO process?

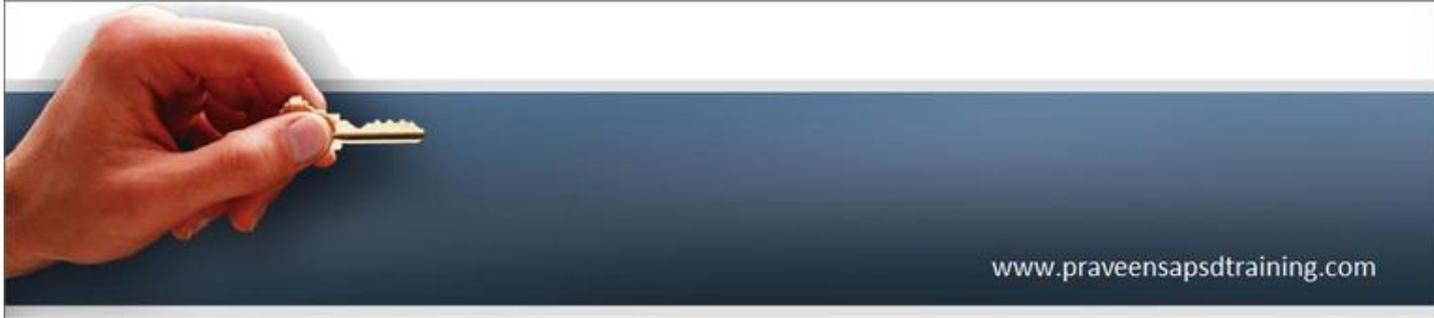
Ans. NS.

Q.6. What is the two steps movement type for return intercompany STO process?

Ans. 673.

Q.7. What is the one step movement type for return intercompany STO process?

Ans. 675.



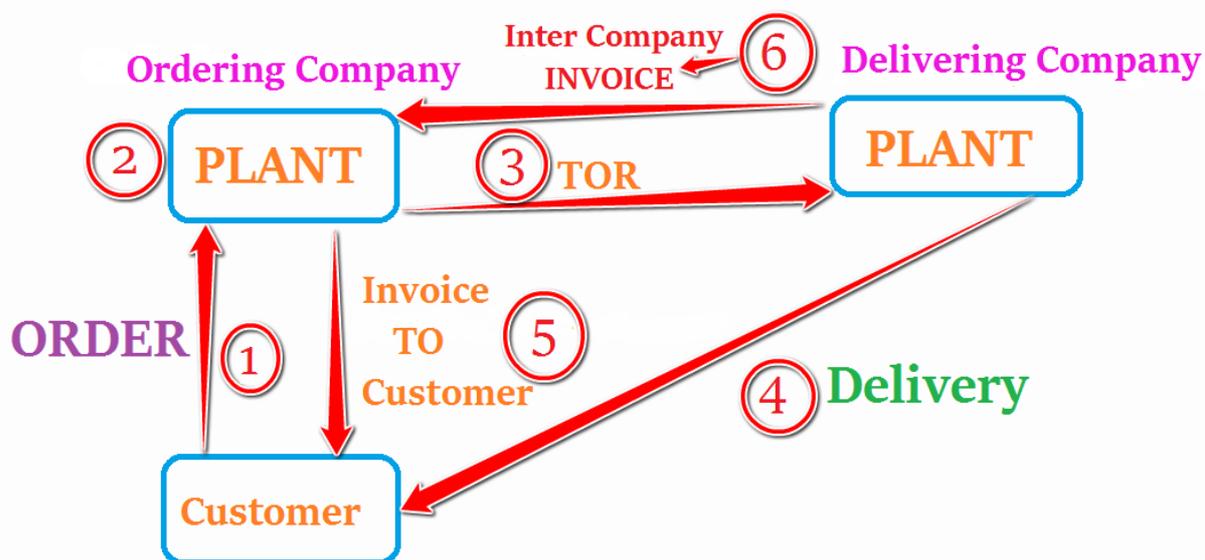
## Intercompany Sales & Billing

Sale transaction between two plants which belongs to two different company codes of same group company

Company Code	ZALK (Ordering company)	RRRR (Delivering company)
Sales org.	ZDOM	RRRR
Dist. Channel	Z1	1R
Division	Z1	1R
Plant	ZMUM	RRRR

### Master data configuration:-

1. Extend the material to both the plants
2. Create ordering company as customer [9990000150] in delivering sales area.



## Inter Company Sales & Billing



**Intercompany configuration:-**

SPRO → S&D → billing → intercompany billing

Define Order Types For Intercompany Billing → go to the order type [OR] and assign intercompany billing type [IV] → save it.

Assign Organizational Units By Plant → double click on assign organizational unit to the plant → go to our delivery plants [RRRR] and assign delivery sales area [RRRR + 1R + 1R]

Plant	Name 1	SOrg	Descriptn	DstCh	Descriptn	Div.	Descriptn
RRRR	Rakesh plant	RRRR	Rakesh sales org	1R	Dealer Rakesh	1R	SIM

→ Save it.

Define Internal Customer Number By Sales Organization → go to ordering sales org. [ZDOM] and assign the intercompany customer number [9990000150] →

Sales org.	Sales Organization	CustInterC	Cust.inter-co.bill.
ZDOM	ALKEM Domestic	9990000150	INTRACOMPANY Customer

→ Save it.

1. Place [PI01] condition type in ordering company pricing procedure [Y00001].

Step	Cou	CTyp	Description	Fro	To	Man	Re	Stat	P	SuTot	Reqt	CalType	BasTy	AccK	Accrua
10	0	PR00	Price			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2			ERL	
20	0		NET VALUE	10	10	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		A					
30	0	PI01	Intercompany Price 1			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			22				

PI01 condition type should be statistical and requirement should be 22.

Requirement 22 checks that the ordering company and delivering company should be different.

2. Go to billing type [IV] and checks the document pricing procedure [N] → save it.

3. Assign pricing procedure [ICAA01] to the combination of delivering sales area document pricing procedure [N] and customer pricing procedure and should have [IV01] condition type

SOrg.	DChl	Dv	DoPr	CuPP	PriPr.	Pricing procedure	CTyp	Condition type
RRRR	1R	1R	N	1	ICAA01	Intercompany Billing 1	IV01	Intercompany Price 1

→ save it

IV01 is not statistical and requirement is 22 and ERL in ICAA01

Step	Cou	CTyp	Description	Fro	To	Man	Re	Stat	P	SuTot	Reqt	CalType	BasTy	AccK	Accrua
910	0	IV01	Intercompany Price 1			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	9	22			ERL	



4. For IV01 condition type the reference condition type is [PI01]. So go to pricing procedure in which main condition type exist and check transaction specific. V/06 → IV01 → reference condition type is [PI01] and

Proced	Descript.	TSPP
ICAAB1	Intercompany Billing	<input checked="" type="checkbox"/>

→ save it

5. Checks the copy control between [LF- IV]

Go to [VTFL] and change mode → position → LF – IV (just check the all controls or it is there or not).

6. Maintain condition record [PI01] condition type

VK11 → PI01 → ZDOM → delivery plant [RRRR] → material → 6000/- → save it.

7. Then go to enterprise structure → assignment → S&D →

Assign sales organization - distribution channel - plant →

SOrg.	Name	DChCust/...	Name	Plnt
ZDOM:	<input checked="" type="checkbox"/> KEM Domestic	Z1	Dealer Alkem	RRRR

→ save it

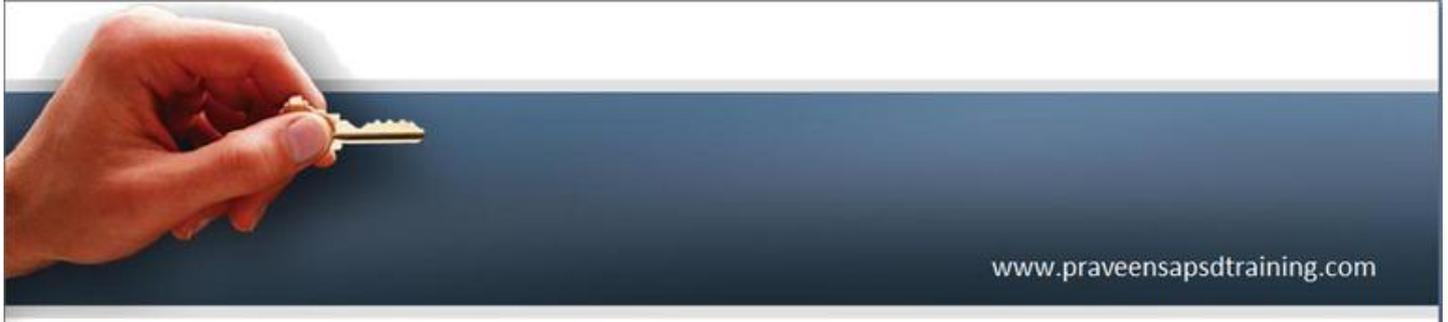
8. VK11 → PR00 → ZDOM – Z1 → Material → 10000/ → save it

➤ VA01 → OR – ZDOM - Z1 – Z1 → Normal customer number → go to sales line item and change the plant from ZMUM to RRRR → save it.

➤ VA10A → Shipping point [RRRR] → execute → background → log → document → display document → change → picking → PGI → save it.

➤ VF01 → enter → save it [This is for normal customer and price will be Rs. 10000/-]

➤ VF04 → To raise intercompany invoice → uncheck delivery related → check intercompany billing → execute.



## **Interview Questions For Intercompany Sales & Billing**

Q.1. What scenario your client will do intercompany sale?

Ans. When end customer gives order and stock is not available then customer send same requirement to other company code plant.

Q.2. Explain the intercompany sale process?

Ans. When end customer gives order to company but stock will not available in ordering company plant then we change the plant to delivering plant and send the requirement to delivering company code plant and delivering company will deliver the goods to end customer and raise the intercompany invoice then ordering company will raise the invoice to end customer.

Q.3. By seeing the sales order how we come to know that it is intercompany sale?

Ans. When we create intercompany sales order with normal customer then in condition tab we will find PI01 condition type which shows the intercompany value.

Q.4. What is configuration required for intercompany sale?

Ans.  Define Order Types For Intercompany Billing ,  Assign Organizational Units By Plant ,  
 Define Internal Customer Number By Sales Organization

Q.5. Can i create intercompany invoice w/o raising invoice to customer?

Ans. No.

Q.6. What is the reference document for intercompany invoice?

Ans. Delivery document.

Q.7. How system is allowing to create two invoice for single delivery?

Ans. Copy requirement [014].

Q.8. When we are creating intercompany invoice with reference to delivery, how system is copying the data from delivery to invoice?

Ans. Copy control [LF – IV].

Q.10. What is the requirement for PI01 & what it checks?

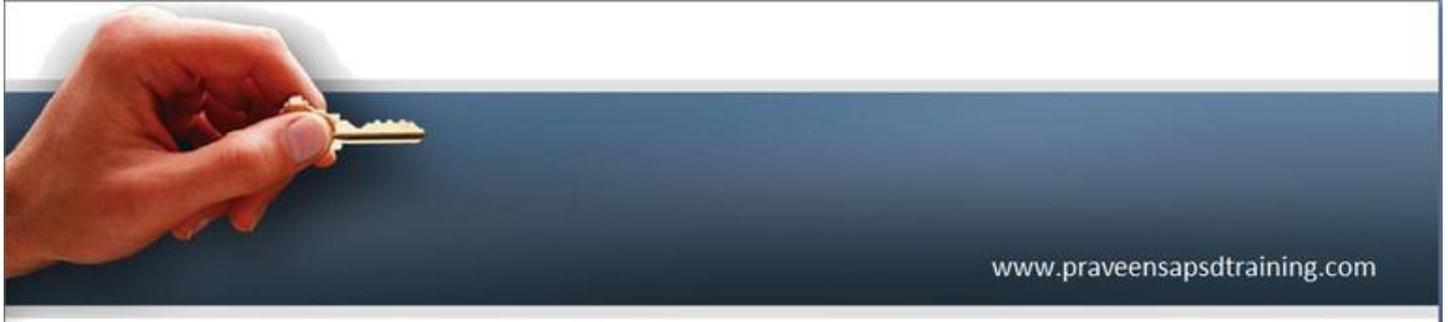
Ans. Requirement is [22] and it checks that the ordering company and delivering company should be different.

Q.11. Which condition type determine in intercompany billing?

Ans. IV01.

Q.12. Why we check transaction specific for ICAA01 pricing procedure?

Ans. Connecting IV01 condition type to reference condition type IP01.



Q.13. Which pricing procedure determining in intercompany billing?

Ans. ICAA01

Q.14. If customer places order for 100 quantities and if delivering plant delivered only 70 quantities then while creating invoice to customer how system comes to know that how much quantity delivering plant delivered to customer.

Ans. In intercompany sale with reference to same delivery we can create invoice to customer and we can create intercompany invoice. The control is copy requirement 014].