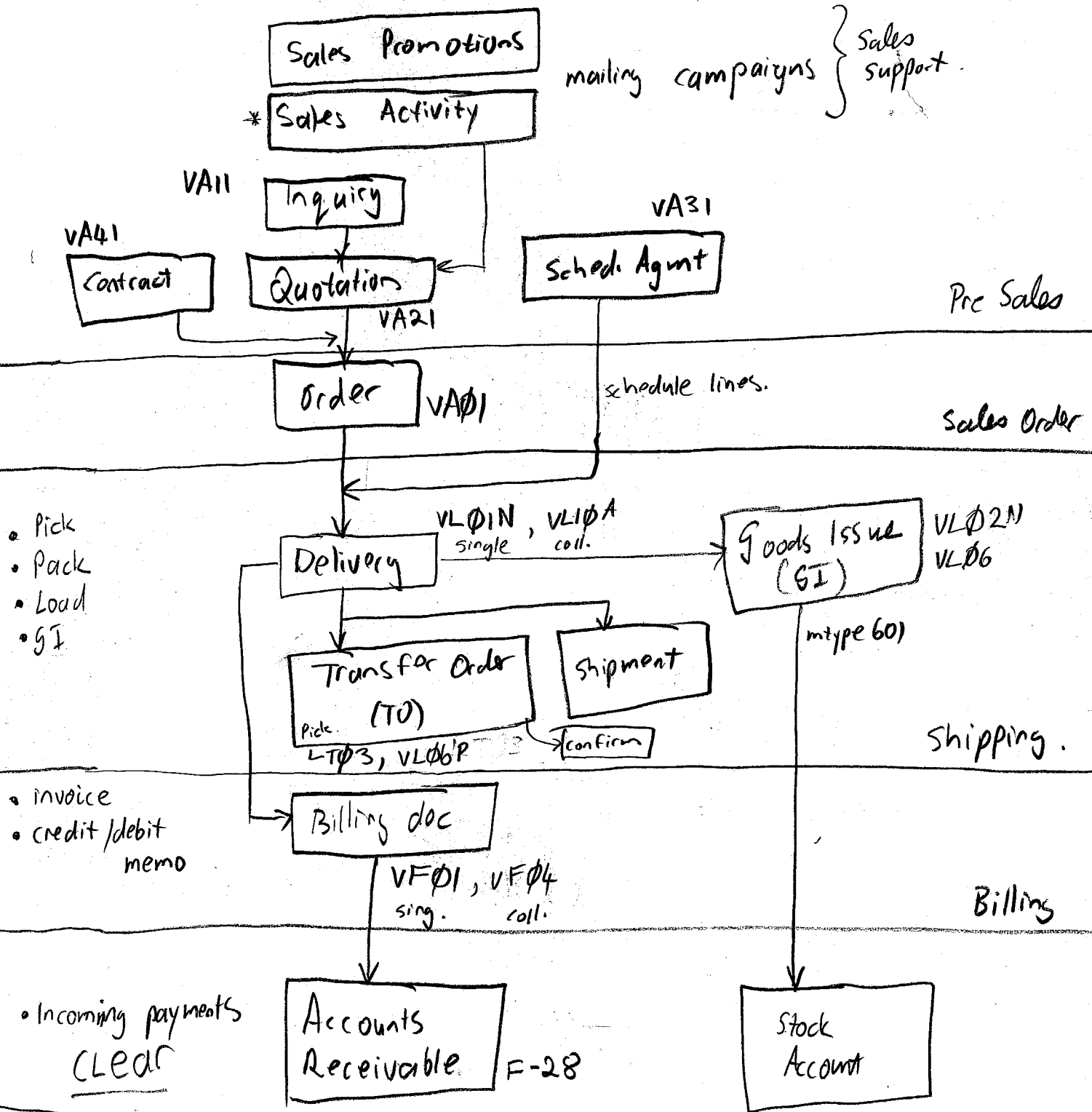
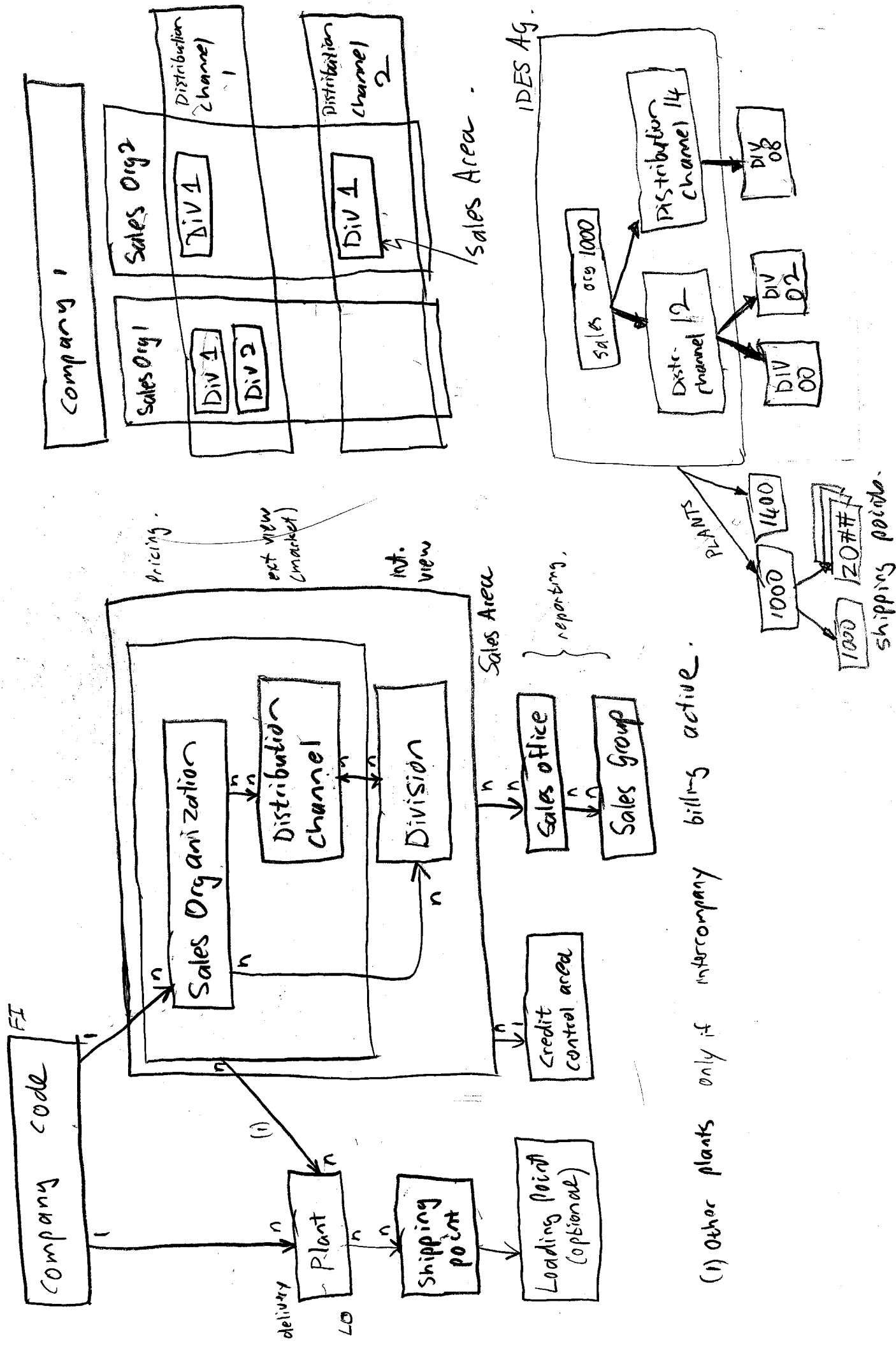


"SD Processing Cycle"



master data.
 customer xd01
 cust/mat info → vd51

Enterprise Structure - SD

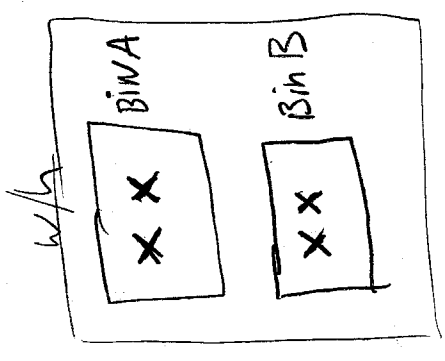


(1) other plants only if intercompany billing active.

Lean Warehouse Management (Enterprise Structure)

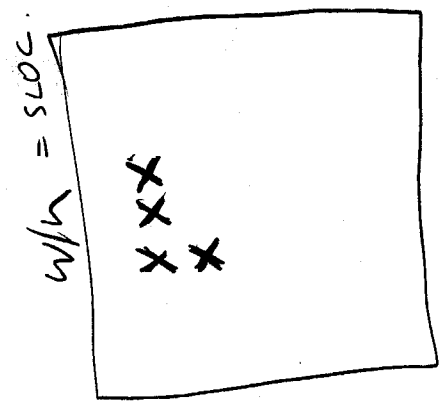
Warehouse Management

- wh doc TO, confirmation
- Stock on bin level.

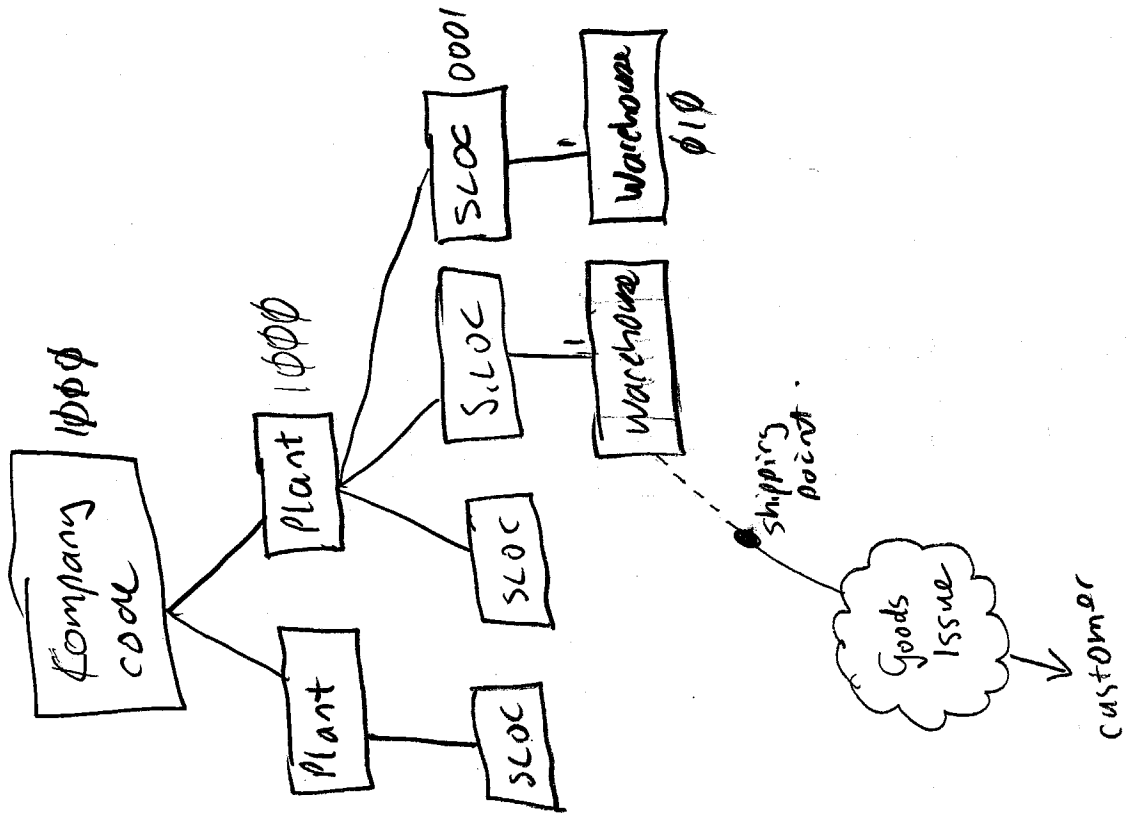


Lean Warehouse Management OK

- wh doc TO, confirmations
- Stock on warehouse level (no bins!!!)



could be



img: LE > Ship > Pick > Lean WM > Define control perms.

Document Types (tcode vov8)

Sales document type	OR Standard Order	Sales document block	<input type="checkbox"/>
SD document categ.	C		
Indicator			
Number systems			
No. range int. assgt.	01	Item no. increment	10
No. range ext. assgt.	02	Sub-item increment	

General control			
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	U1	Commitment date	<input type="checkbox"/>

Transaction flow			
Screen sequence grp.	AU Sales Order	Display criteria	UALL
Incompletion procedu	11 Sales Order	FCode for overv. scr.	UER1
Transaction group	0 Sales order	Quotation messages	B
Doc. pric. procedure	A	Outline agrmt mess.	B
Status profile		Message: Mast. contr.	
Alt. sales doc. type1		ProdAttr. messages	
Alt. sales doc. type2		<input type="checkbox"/> Incomplet messages	
Variant			

Scheduling agreement			
Corr. delivery type	<input type="checkbox"/>	Delivery block	<input type="checkbox"/>
Use	<input type="checkbox"/>		
MRP for DivSchType	<input type="checkbox"/>		

Shipping			
Delivery type	LF Delivery	Immediate delivery	<input type="checkbox"/>
Delivery block	<input type="checkbox"/>		
Shipping conditions			
ShipCostInfoProfile	STANDARD	Standard freight information	

Billing			
Dlv-rel. billing type	F2 Invoice	CndType line items	EK 02
Order-rel. bill type	F2 Invoice	Billing plan type	
Intercomp. bill type	IU Intercompany billing	Paymt guarant. proc.	01
Billing block	<input type="checkbox"/>	Paymt card plan type	03
		Checking group	01

Requested delivery date/pricing date/purchase order date			
Lead time in days	7	<input checked="" type="checkbox"/> Propose deliv. date	
Date type		<input type="checkbox"/> Propose PO date	
Prop. f. pricing date			
Prop. valid-from date			

Contract			
PricProcCondHeadr		Contract data allwd.	<input type="checkbox"/>
PricProcCondItem		FollUpActivityType	
Contract profile		Subseq order type	
Billing request	L2	Check partner auth.	A
Ref. procedure		<input type="checkbox"/> Update low. lev. cont.	

Availability check			
Business transaction	<input type="checkbox"/>		

Item category

(V0V7)

Doc Type + Item Cat Group (material) + Usage indicator (ABAP) + High level I.Cat = Item Cat

Item category

TAN

Standard Item

Business data

Item type

Completion rule

Special stock

Relev. for billing

Billing plan type

Billing block

Pricing

Statistical value

Revenue recognition

Delimit. start date

[]
[]
[]
A
[]
[]
X
[]
[]
[]

- Bus. data item
- Sched. line allowed
- Item relev. for dlv.
- Returns
- Wght/vol. relevant
- Credit active
- Determine cost

General control

Autom. batch determ.

Rounding permitted

Order qty = 1

Transaction flow

Incompletion proced.

20

Standard Item

Screen seq. grp

N

PartnerDetermProced.

N

Standard Item

TextDetermProcedure

01

Sales item

Status profile

Item cat. stats. group

1

Order, debit memo

Create PO automatic.

Bill of material/configuration

Config. strategy

Mat. variant action

ATP material variant

Structure scope

Application

[]
[]
[]
[]
[]

- Variant matching
- Create delivery group
- Manual alternative
- Param. effectivities

Value contract

Value contract matl

Contract release ctrl

[]
[]

Service management

Repair proced.

[]

Control of resource-related billing and creation of quotations

Billing form

DIP profil

[]

[]

Schedule Line Category (tcode vov6)

Item category + MRP Type = Schedule Line Category

Change View "Maintain Schedule Line Categories": Details

Table view Edit Goto Selection criteria Utilities System Help

New entries

Sched. line cat: **CU** Consumption MRP

Business data

Delivery block			
Movement type	601	GD goods issue:deluy	<input checked="" type="checkbox"/> Item rel.f.dv.
Movement type 1-step			
Order type			<input type="checkbox"/> P.req.del.sched
Item category			
Acct. assig. cat			

Transaction flow

Incompl. proced.	30	Deliv-Rel.Sched.Line
<input checked="" type="checkbox"/> Req./Assembly		
<input checked="" type="checkbox"/> Availability		
<input type="checkbox"/> Prod. allocation		

V0V6 | rwd15065 | INS | 16:20

Billing Doc types

(tcode vofa)

Billing type	F2	Invoice	Created by	
Number systems				
No.range int.assgt.	19		Item no.increment	10
General control				
SD document categ.	M	Invoice	<input type="checkbox"/> Posting block	
Transaction group	7	Billing documents	<input checked="" type="checkbox"/> Statistics	
Billing category				
Document type				
Negative posting		No negative posting		
Branch/Head office		Customer=Payer/Branch=s		
Credit memo w/ValDat		No		
Invoice list type	LR	Invoice list		
Rebate settlement			<input checked="" type="checkbox"/> Rel.for rebate	
Standard text				
Cancellation				
Cancell.billing type	S1	Invoice Cancellation		
Copying requirements				
Reference number				
Allocation number				
Account assignment/pricing				
Account determ.proc.	KOFI00	Account Determination		
Doc. pric. procedure				
Acc. det. rec. acc.				
Acc. det. cash. set.				
Acc. det. pay. cards	A00001	Standard		
Output/partners/texts				
Output determ.proc.	U10000	Billing Output	Application	U3
Item output proc.				
Output type	RD00	Invoice		
Header partners	FK	Billing Document		
Item partners	FP	Billing Item		
TextDetermProcedure	03	Billing header		
Text determ.proc.itm	03	Billing item		
<input type="checkbox"/> Delivery text				

Copy Control (tcode vtfll)

Change View "Header": Details

Table view Edit Goto Selection criteria Utilities System Help

New entries

Dialog Structure

- Header
- Item

Target billing type: F2 Invoice

From delivery type: LF Delivery

Copying requirements: 003 Header/Dlv-related

Determ. export data: []

Allocation number: C

Reference number: A

Copy item number

VTFL wdl5079 INS 0.620

Header

Change View "Item": Details

Table view Edit Goto Selection criteria Utilities System Help

New entries

Dialog Structure

- Header
- Item

Target billing type: F2 Invoice

From delivery type: LF Delivery

Item category: TAN Standard Item

Copying requirements: 004 Deliv-related item

Data VBRK/VBRP: 001 Inv. Split (sample)

Billing quantity: B

Pos./neg. quantity: +

Pricing type: G

Pricing/ExchRate type: []

Cumulate cost: []

Price source: E

VTFL wdl5079 INS 2.183

Item

Rejection Reason (item level)

Change View "Sales Documents: Rejection Reasons": Overview

Table view Edit Goto Selection criteria Utilities System Help

New entries

Ri	NRP	OLI	BIC	Stat.	Description
10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Unreasonable request
11	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Cust. to receive replacement
20	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Rejected due to credit check
40	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Backlog to competitor
41	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Cancellation up to resampling
42	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Customer usage date postponed

Position... Entry 7 of 22

SPRO | iwd#5065 | INS | 17:52

- NRP Not Relevant for Printing
- OLI Cost line item open again (to be billed later)
- BIC Not relevant for Billing
- Stat. Statistical values

Customer Master (tcode ovt0)

IMG: Log – Gen > Business Partners > Customers > Define Account Groups

The screenshot shows the SAP 'Change View Customer Account Groups: Details' interface. Key sections include:

- Account group:** 215 customer 15
- General data:** Number range 02, One-time acct checkbox.
- Field status:** General data, Company code data, Sales data.
- Text proc:** Genl Text De Proc 01, Text De Proc SD t.
- Sales and distribution data:** Cust. pric. proc. 1 (Standard), Partner det. proc. AG (Sold to Party), Output Det. Proc., and checkboxes for Competitors, Sales partner, Sales prospect, Default SP, and Consumer.

Select group dialog box for General data with options: Address, Communication, Control, Marketing, Payment transactions, Unloading points, Contact person, Foreign trade.

Select group dialog box for Company code data with options: Account management, Payment transactions, Correspondence, Insurance, Withholding tax data w/h tax Z.

Select group dialog box for Sales data with options: Sales, Shipping, Billing, Partner usage, Documents.

Field Suppress Required Optional Display

These fields can also be set per transaction (tcode ob20)

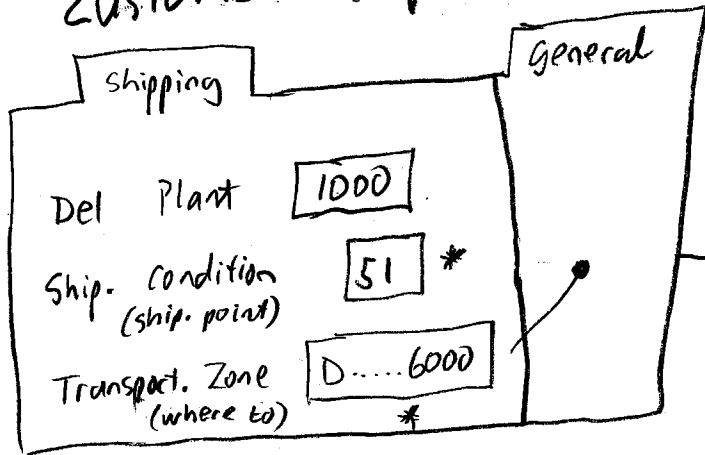
What takes preference if a field is set per "Account Group" and "Transaction"?

- | | |
|---------|-----------------|
| Highest | Suppress / Hide |
| | Display |
| | Required |
| Lowest | Optional |

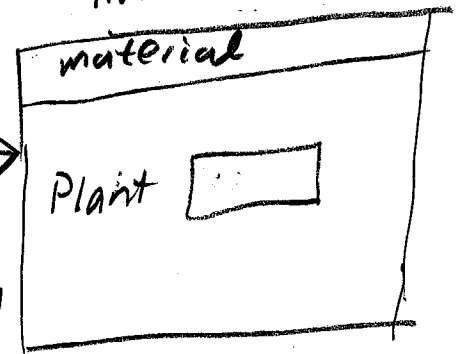
Sales Order

- Delivery Plant
- Shipping Point.

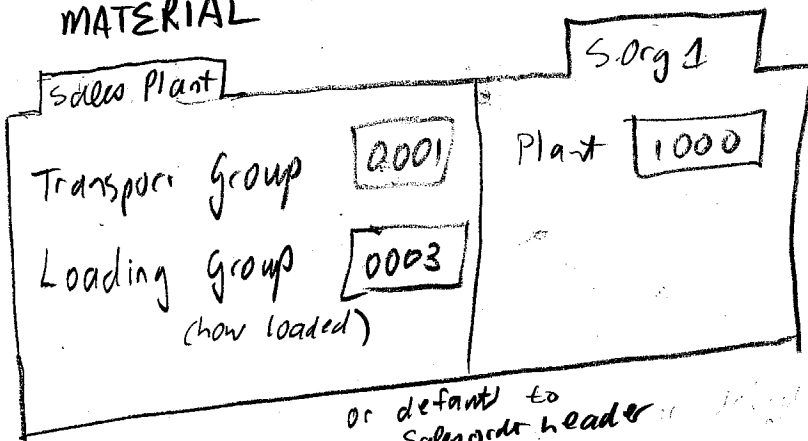
CUSTOMER (ship to)



CUSTOMER MATERIAL INFO REC



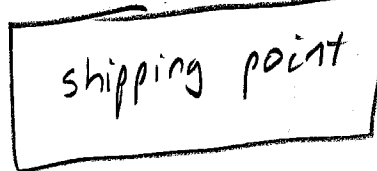
MATERIAL



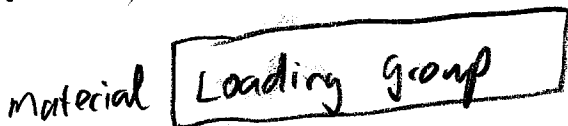
or default to sales order header

PLANT

- H (1) cust. mat inf Rec
 ↓ (2) Customer (ship to)
 ↓ (3) Material



Proposed manual options.

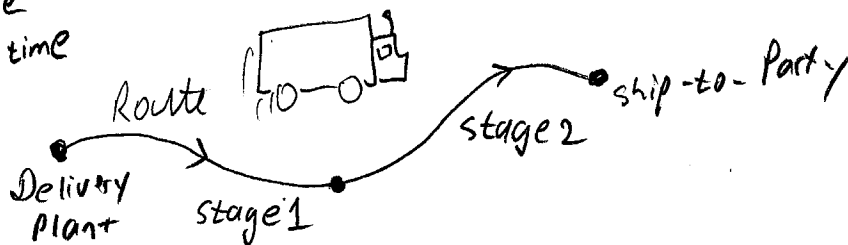
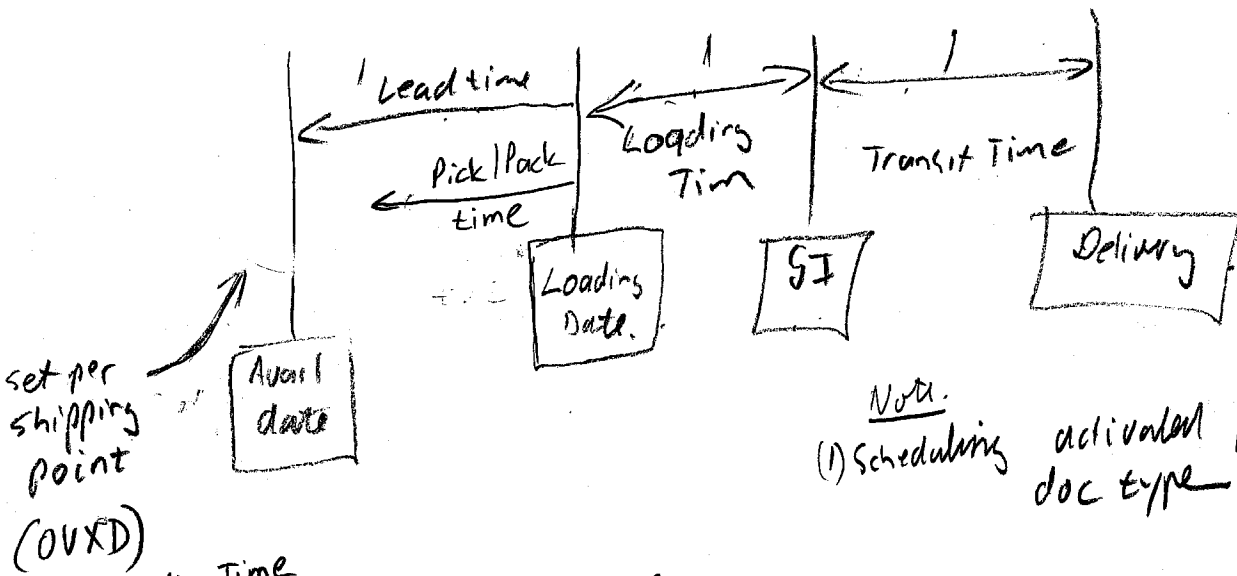
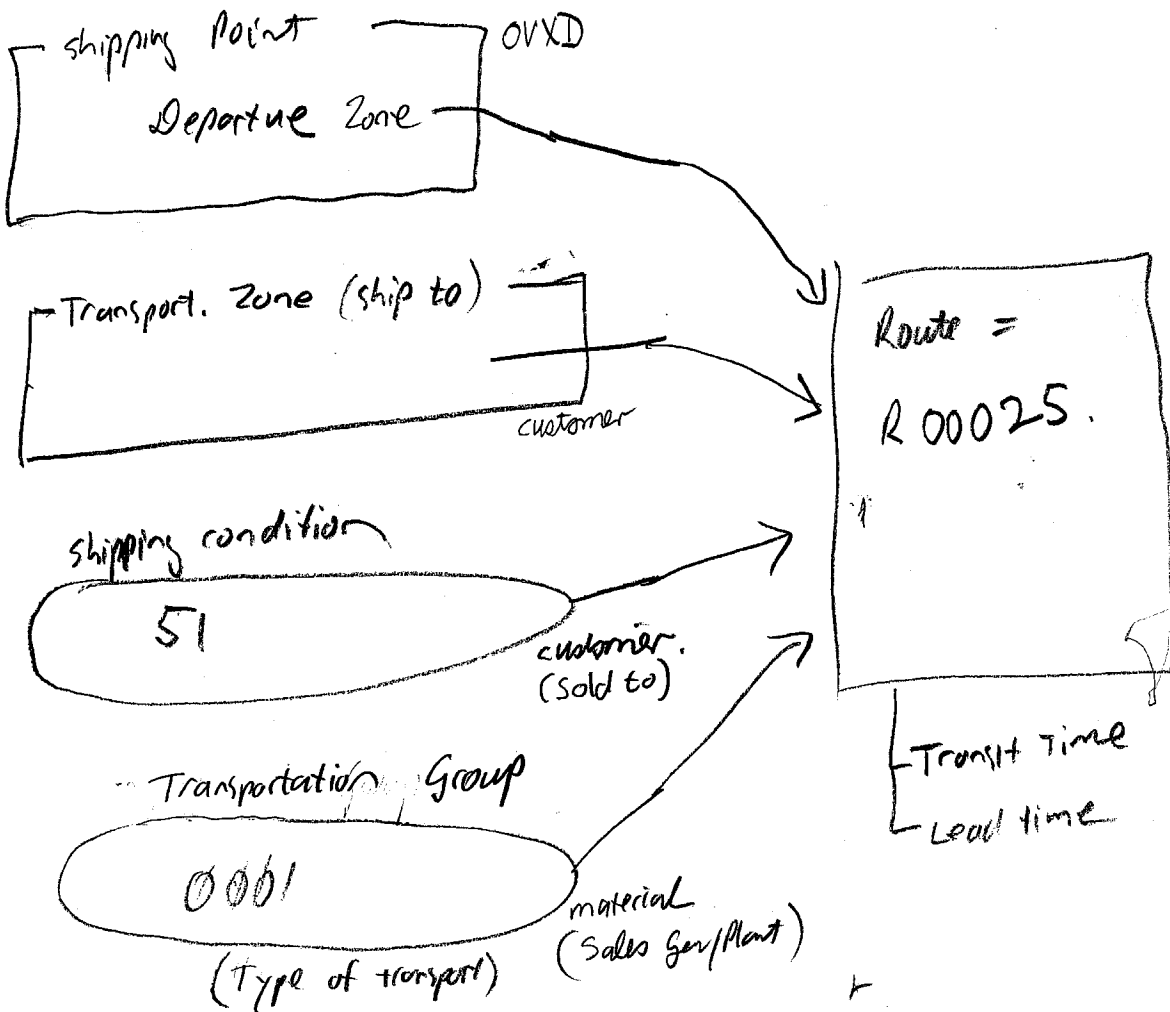


Notes

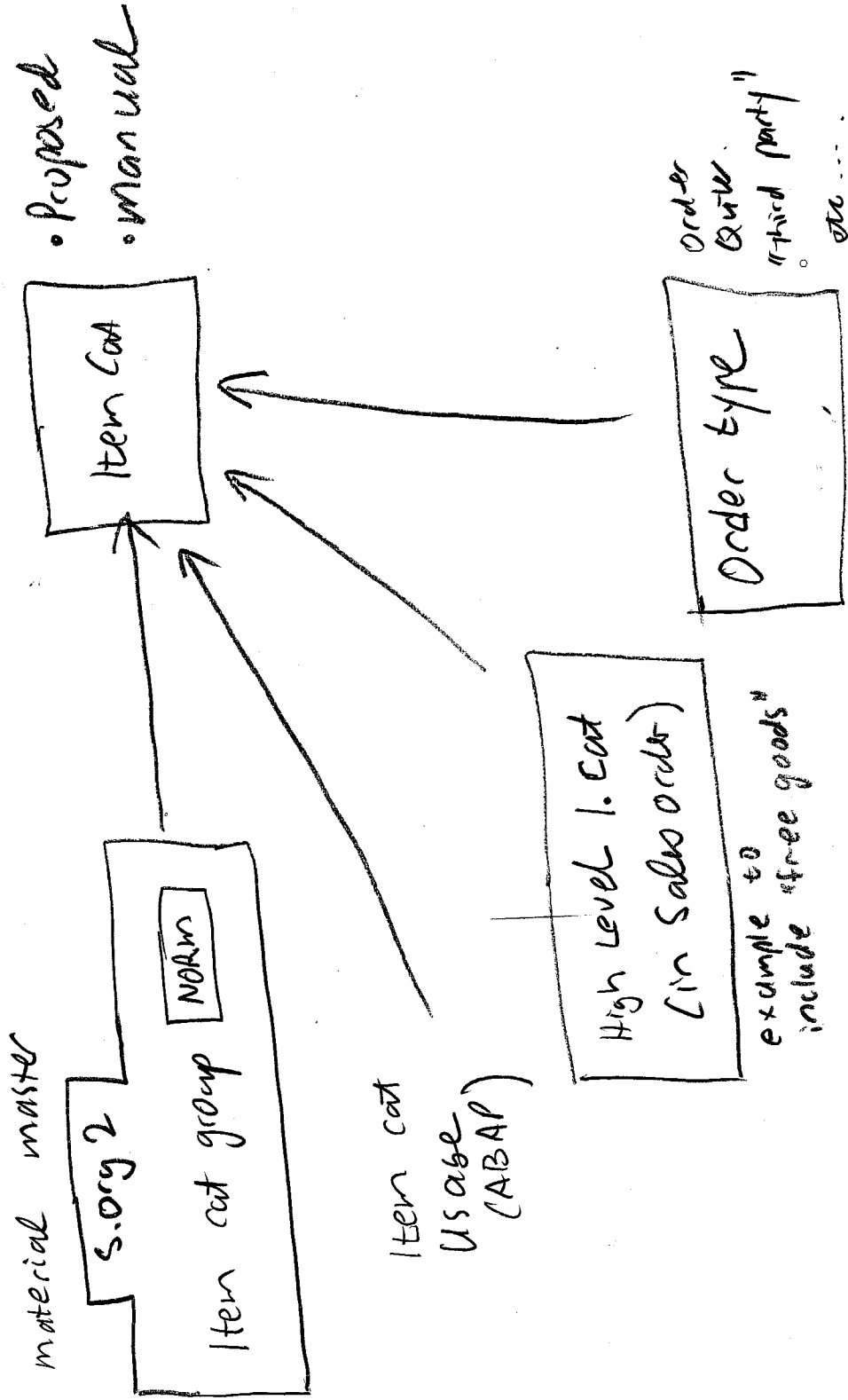
- (1) Img: LE → shipping → Basic
- (2) Shipp. Point: SAP Enterprise → LE (OVXD)
- (3) Doc type take over.

Route Determination

(ims → LE → shipping → Basic → Route)

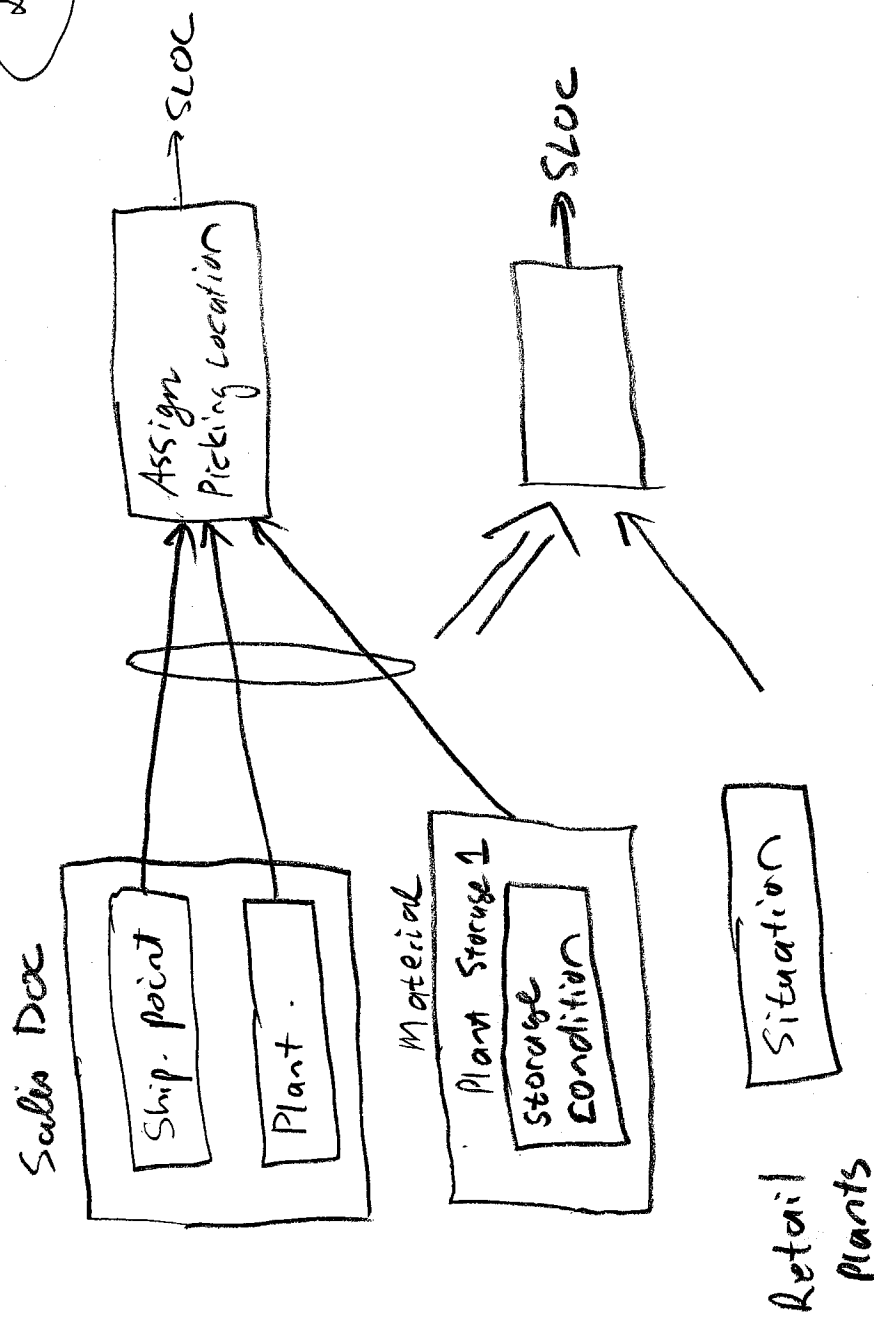


Item cat in Sales Docs



Storage Location for Shipping Point.

Delivery T-type → assign → Rule for Determining Picking SLOC



- MALA

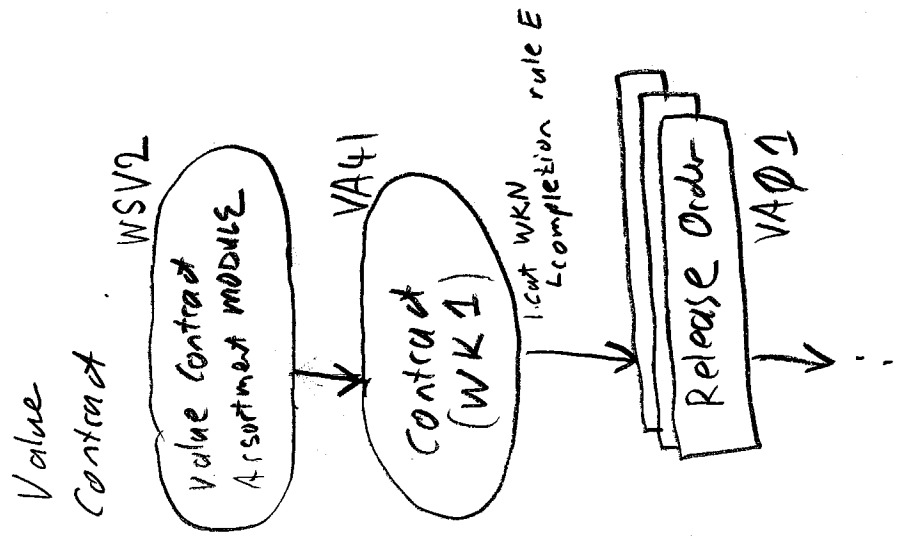
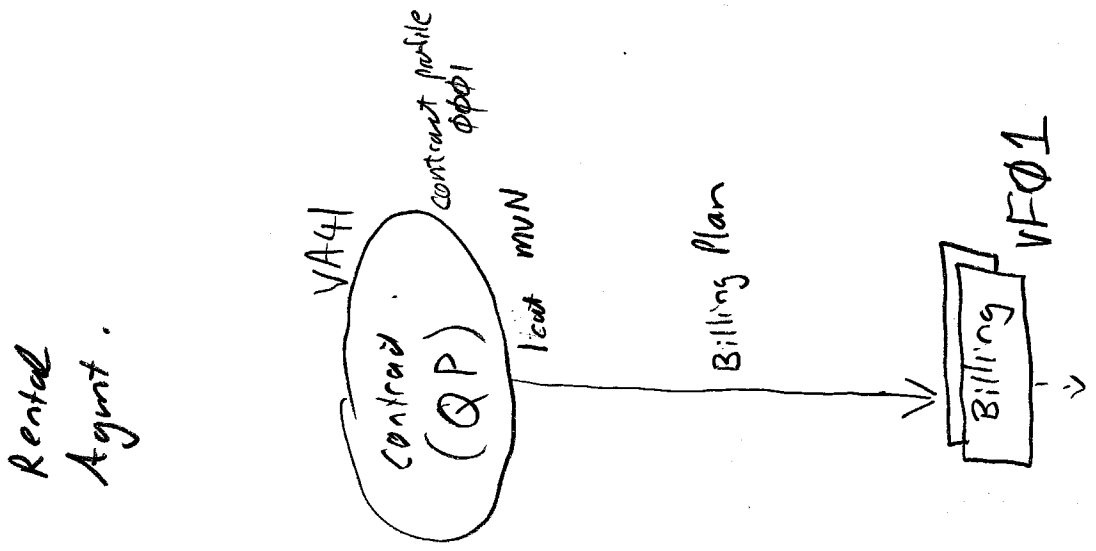
- RETA (SAP Retail IS)

- MARE
check MALA, then RETA

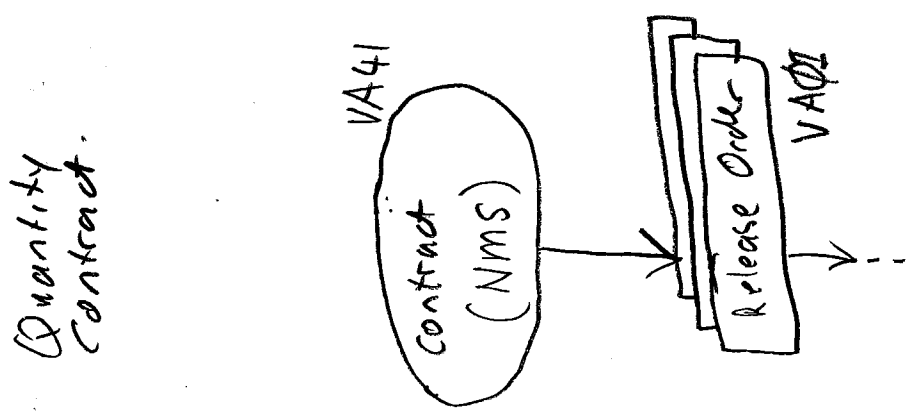
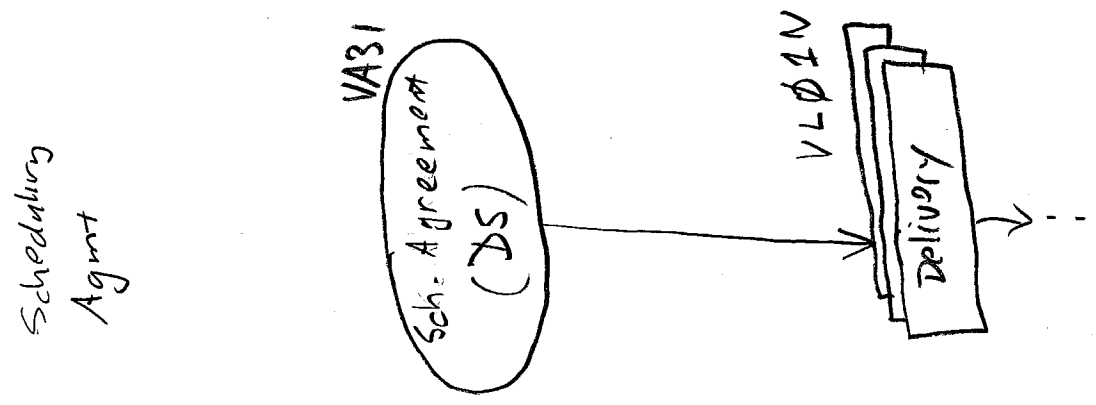
- YF - user exit

config: LE → Shipping → Picking.
→ Determine Picking Location

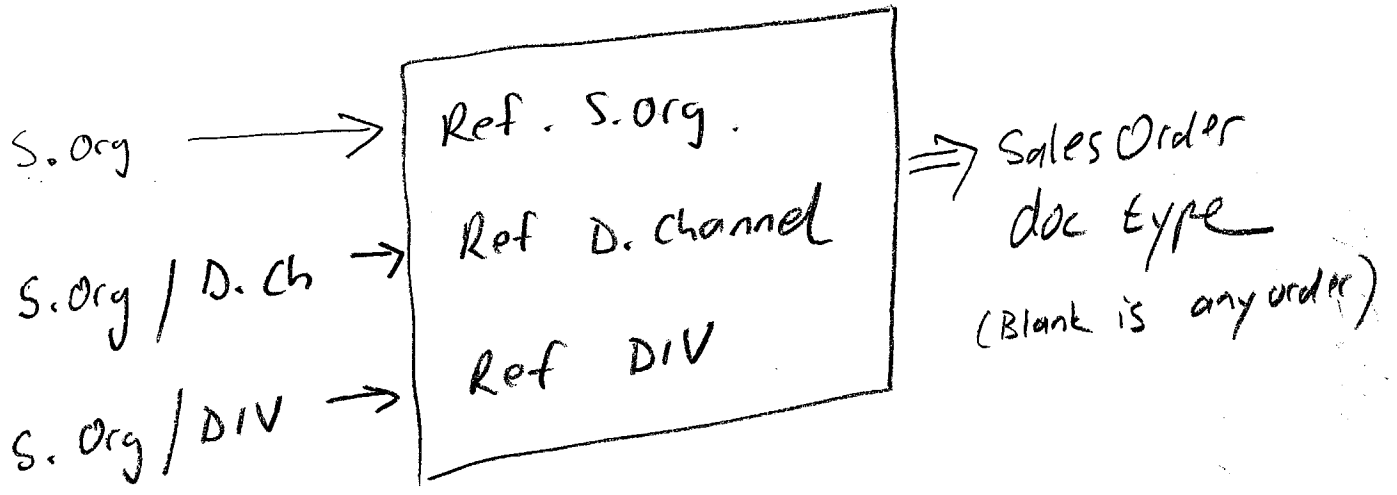
Contracts & Scheduling Agmts



WK1 - Partner Auth = A
 AA - Sdd.
 AW - ship



Can SO doc type be used with a Sales Area?



img: Sales → Sales Doc → Header → Assign Sales Area 2 doc type

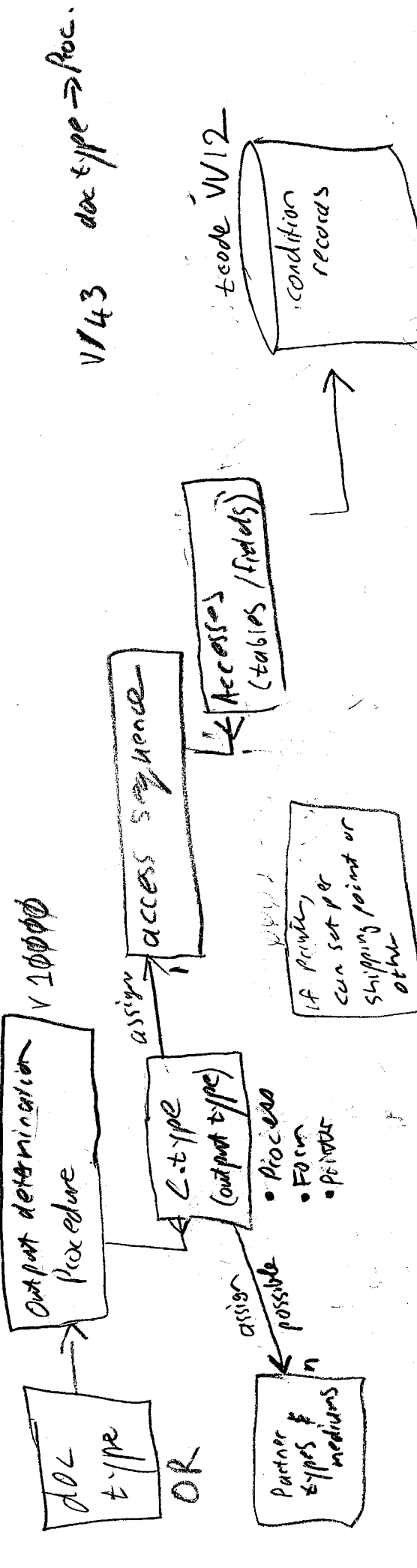
(DIV of material vs. DIV of doc)

- Config of order type → check DIV
- W/E (Variable message V1 370)
- Item division ~ From material header.
- From header.

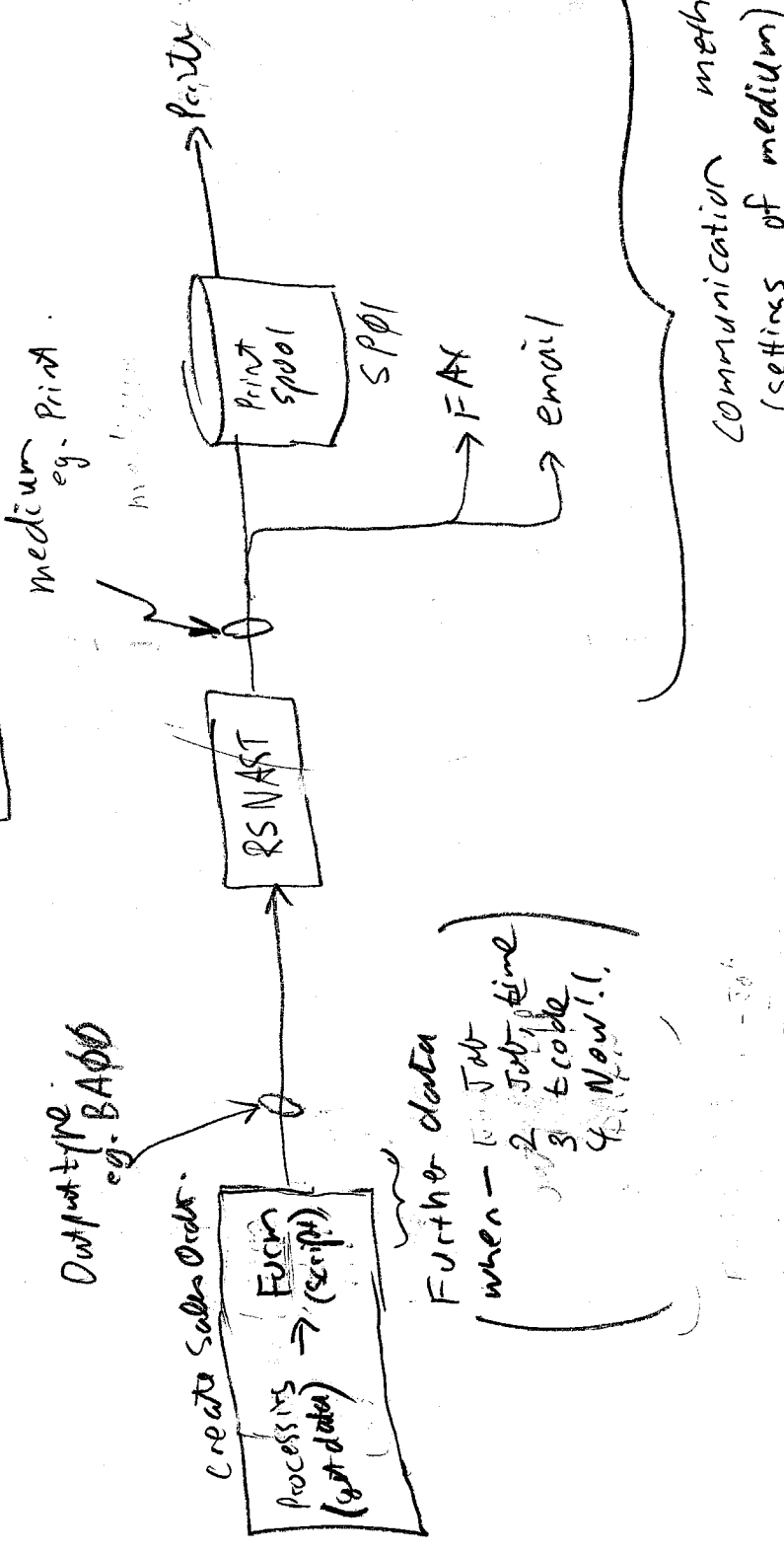
Example

OR / 1000, 12,00 ✓
 OR / 1000, 16,00 x

Output Control (using condition Technique)



- condition records
- partner function
 - Medium
 - When
 - Language (override one in cust.many)
- used in process



Output type eg. BAPP

create Sales Order

Processing (get data) → Form (script)

Further data

- 1. Job
- 2. Job time
- 3. tcode
- 4. New'l.l.

Output determination

Example

Order - header
(OR)

Output determination
procedure

VAPPPPP

output type

PPPP

access seq

Coord. type

BAPPP

Print parms

Link to

Key fields

Access	Key fields
Table 6	Si.Org, Dich, Piv, Curt
Table 4	Si.Org, Curt
Table 7	Order type

Maintain date via table VV12
Partner function when (dispatch time)

Device - when (spool)

output type

create doc

Further data

Print Spool

DR 3

when (dispatch time)

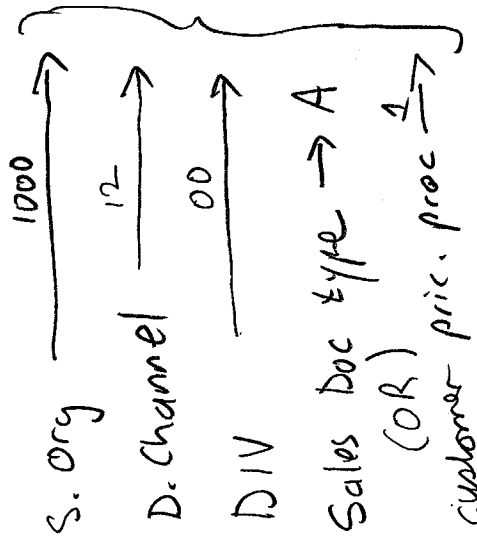
- 1 - Job
- 2 - Job time
- 3 - TRX
- 4 - when save

"Communication" method

Auto Pricing in Sales Order

config: SD → Basic → Pricing

Create Sales Order.



customer master data

• maintain conditions (VK12)

or

• material master (material price)

(RVAA01)

Procedure

consist of

condition types

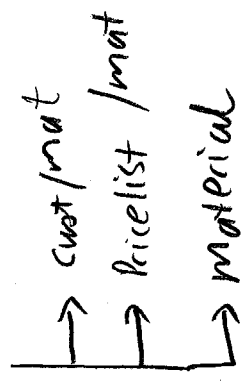
(pricing tables)

Access Seq

PR02

PR00

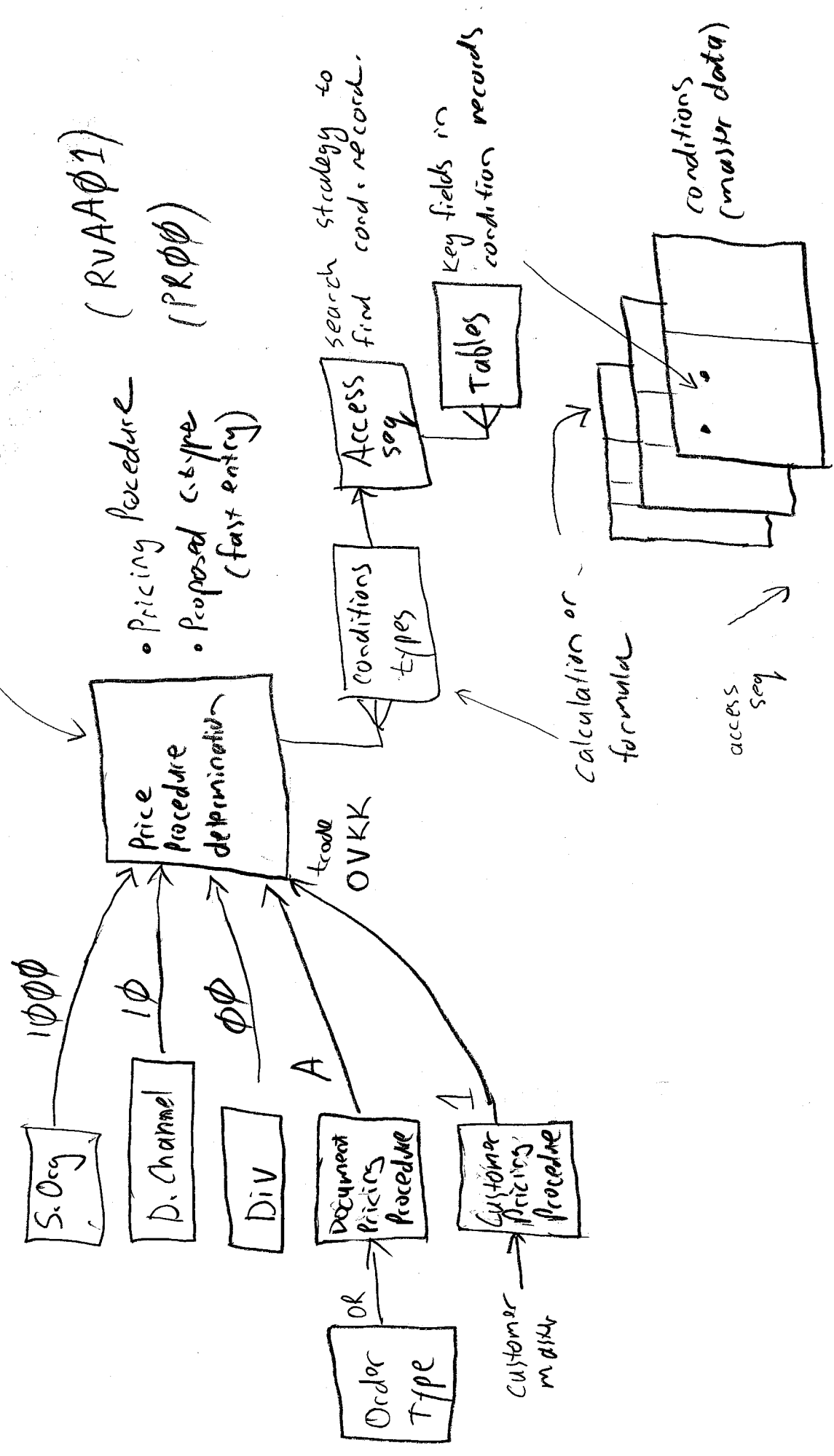
R100



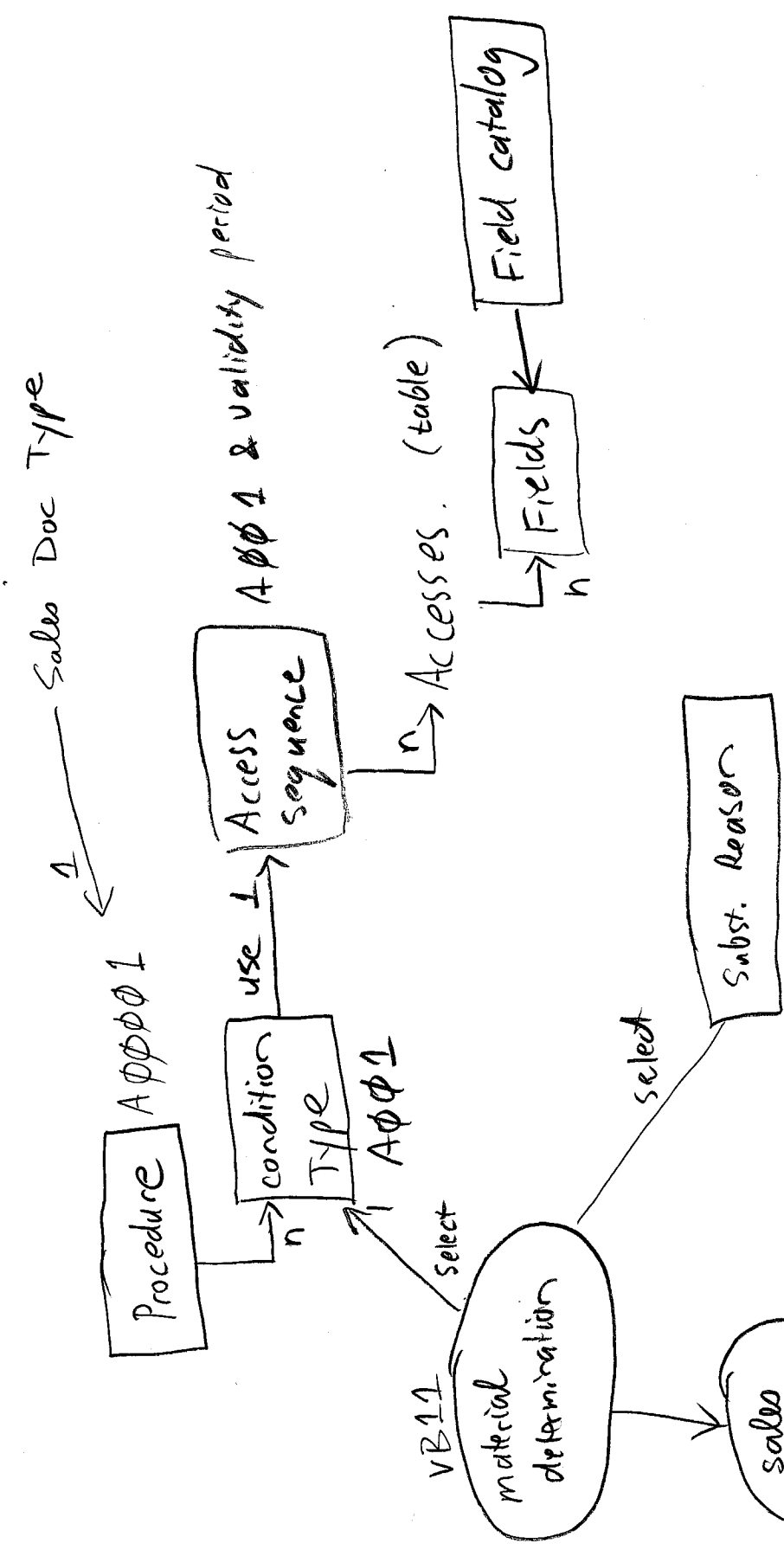
Key 55 (if Pricing in item cat = B)

Condition Technique in Pricing

Sequential list of conditions.

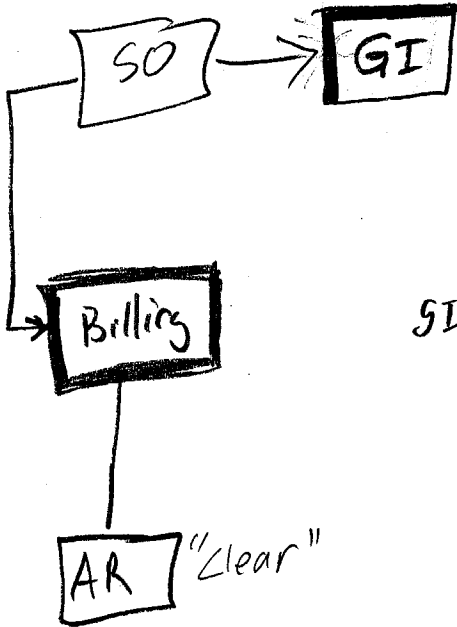


Conditions in Config (Material Determination)



- Notes:
- Config: SP → Basic Func → Mat Det →
 - Conditions for Listing/Exclusion works the same.

FI postings



Stock	costs of goods sold
1000	1000

GI

AR "clear"

Billing
AR

customer	
2200	2200

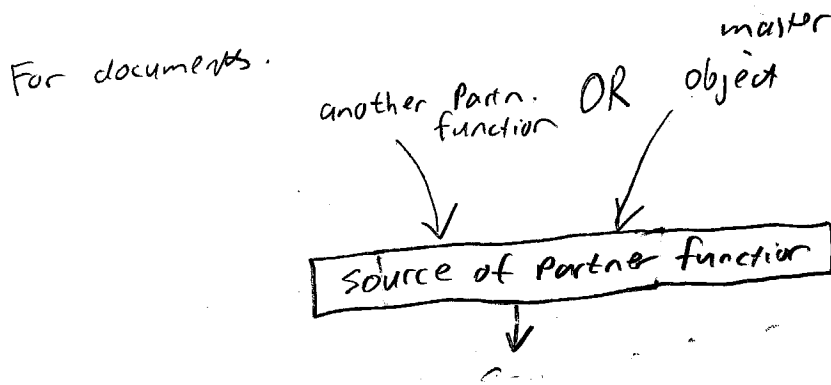
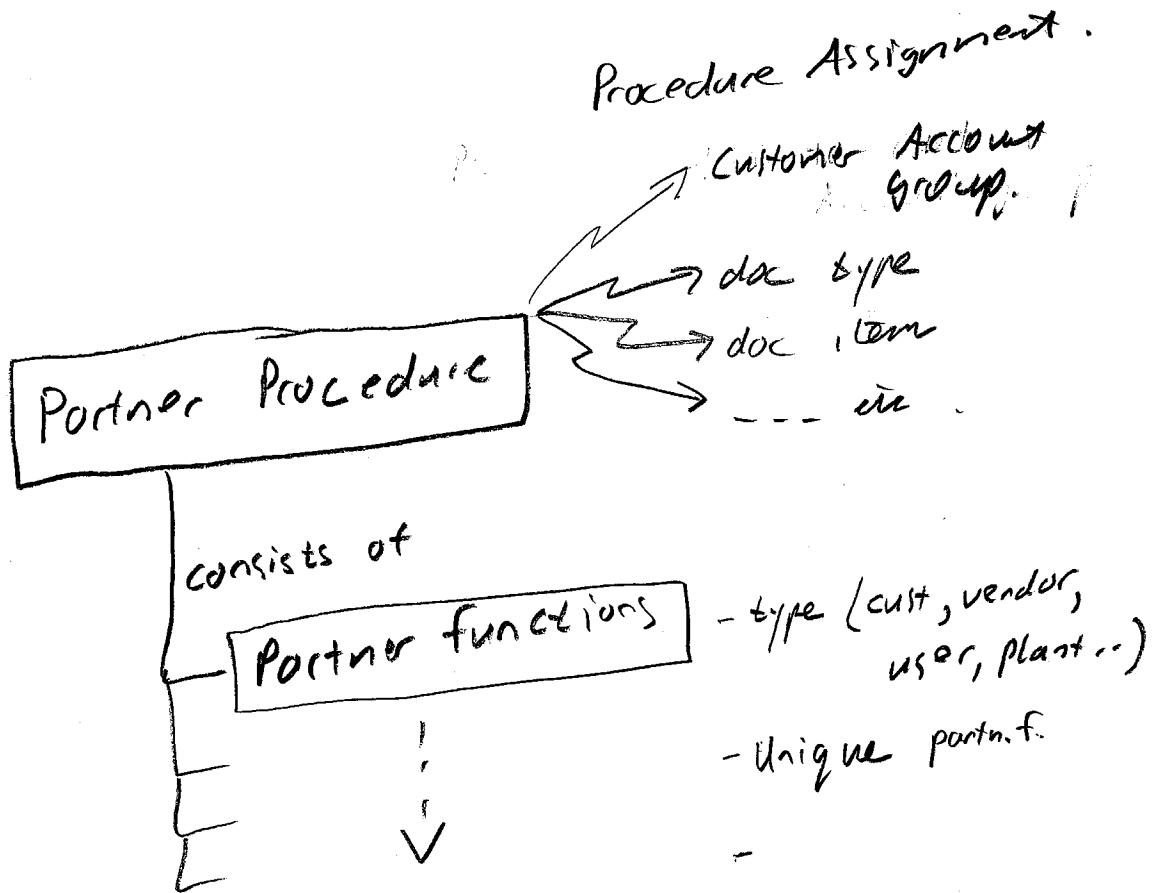
(800002) Sales Revenue	
2000	

Tax	
200	

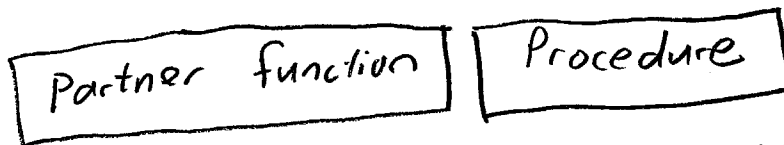
AR.

(100009) Bank	
2200	

Partner Functions



Config: SD → Basic functions → Partner Det → Define Partner functions.



goto → Procedure Assignment.

In completion Log

(Edit → incompletion Log)

Error groups

SAP standard
(used by program)

Procedures

Fields

- Doc type (+IC Dialog)
- Item cat
- Sch line cat
- Partner functions
- Sales activities
- Delivery doc
- Delivery item

Example

OR → 11
TAN → 20
CN → 30
RE bill to → 07

LF →
TAN →

config: SD → Basic functions → Log of Incompletion

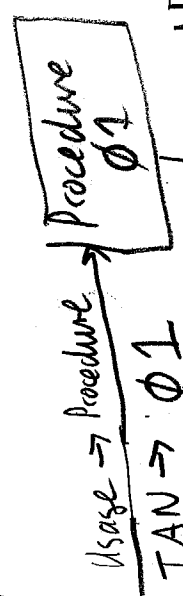
Table	Short text
VBKD	Sales: Business data
VBAK	Sales: Header data
VEDA	Sales: Contract data
VBAP	Sales: Item data
VBKA	Sales activities
VBEP	Sales: Schedule line data
VBPA	Partner
LIKP	Delivery: Header data
LIPS	Delivery: Item Data
LIPSD	Delivery: Item data (dynamic/online)
LIPSVB	Delivery: Item data (LIPS + LIPSD)
V50UC	Delivery: Dynamically generated data (item and header)
FMIII	Funds management-account assignment data
RV45A_UV	Sales: Special rules

Text Example

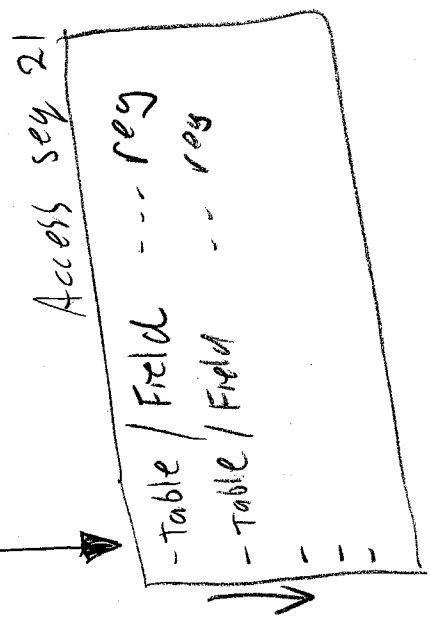
config: SD → Basic → Text
(VOTX)

Sales Doc

Header	Doc
Item	Doc



Text ID	Copy	Mdt	No	Seq
0001				21
0002				22
0003				23
0004				24
0005				
0006				



Text config (VOTX)

also in
doc type config
& item cat
config

Procedure usage/assignment

Text PROCEDURE 01

- Text Objects
- Customer X
 - Info Rec
 - Pric. Card.
 - Sales doc
 - Delivery
 - Billing
 - Contacts
 - Shipments
 - Financial doc
 - Legal control
 - Agency business
 - Trading contact

Text in procedure

Access key

Objed.

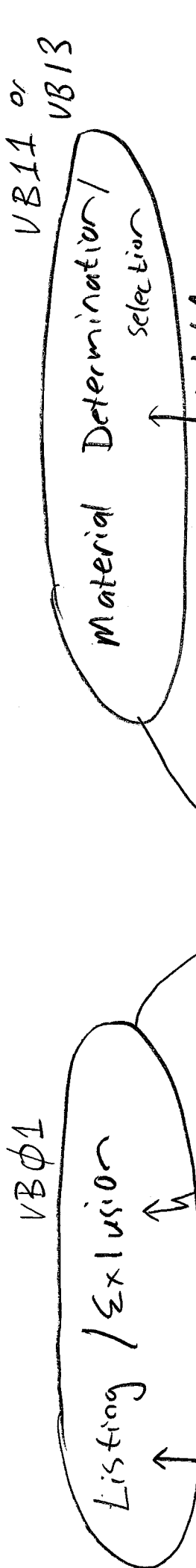
assign

1
2
3

field to
copy.

0001
0002
0003

Listing / Exclusion & Material Determination / Selection



A001

material Entered → substitution

B001
MAY NOT BUY THIS

A001
CAN ONLY BUY

eg. VA01

Default reasons

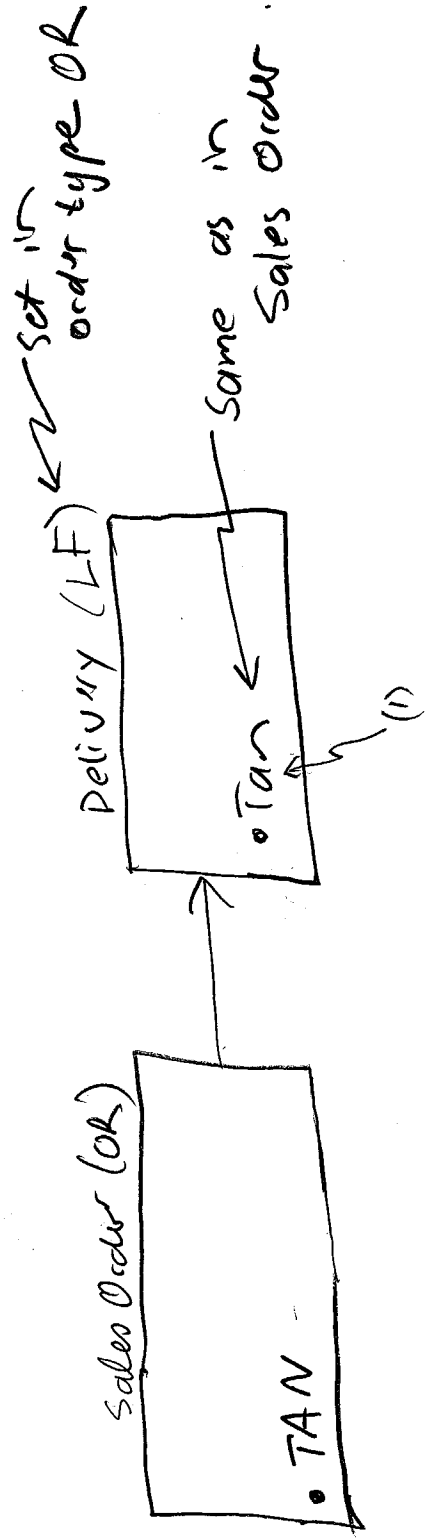
1-3	auto, replace
4	auto, sub-items
5	selection, replace
6	auto, or create only
7	selection - no ATP, replace

Listing
For every material, list - use only it.
if "sold to" have list - use it.
if "payer" have list - use it.

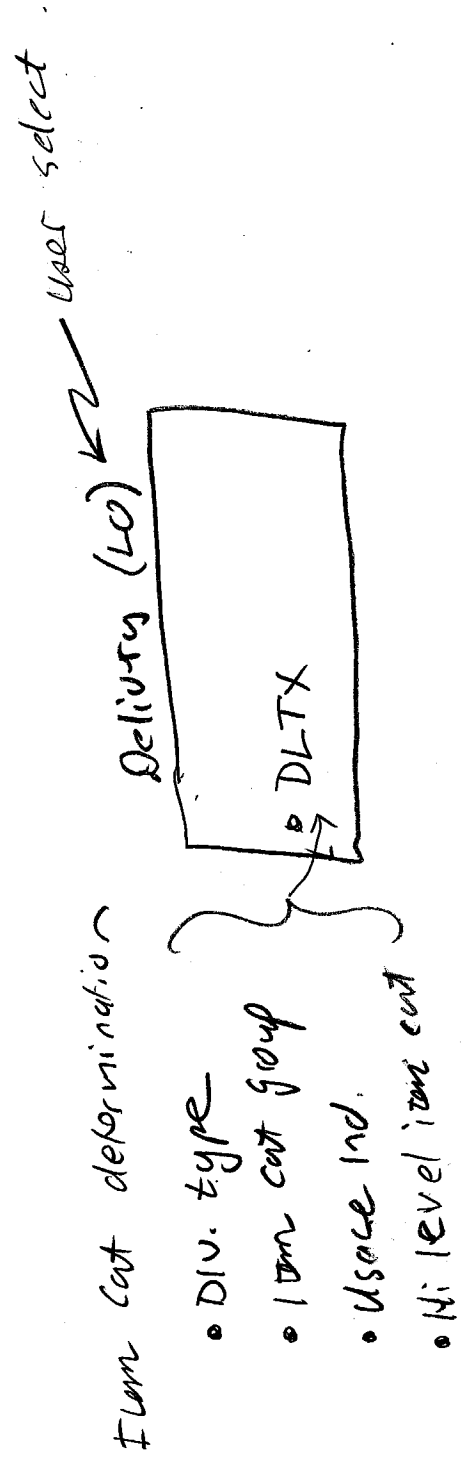
Exclusion
For every material,
first check "payer" list,
then also "sold to" list.

- Note:
- Item Cat Usage = P SHP for Reason 4 (sub-items).
 - Item Sales A

Delivery Type & Item Categories



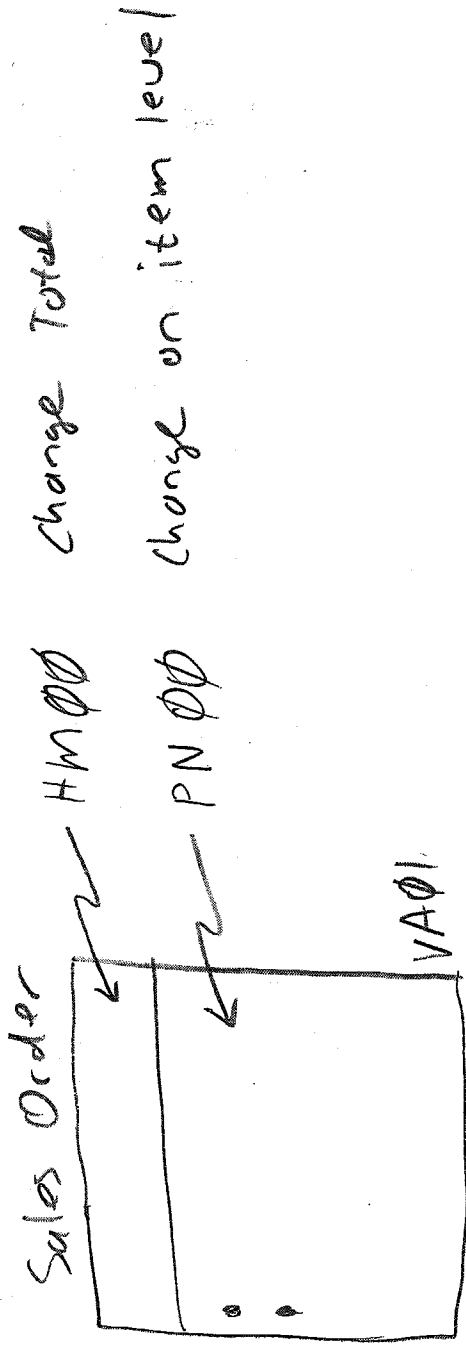
with ref. to Order



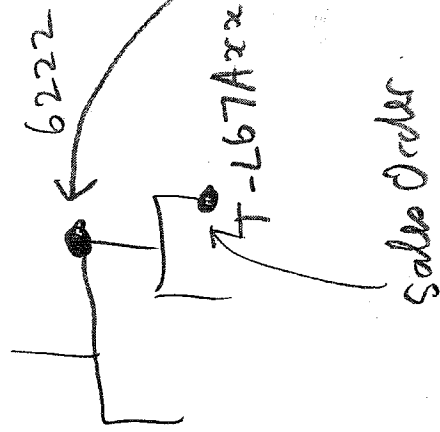
without reference

(1) In config ϕ VEL, can only add what was created in VOU7

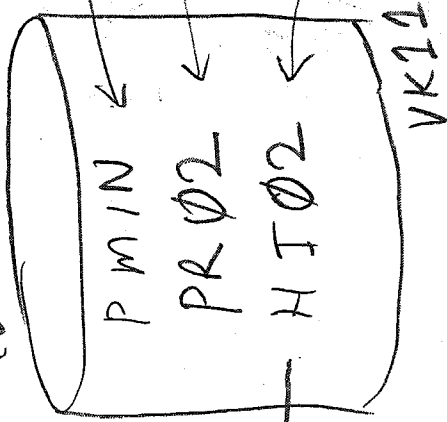
Special Condition Type



Customer Hierarchy



Condition records



Min Price
Interval price (scal t/pe "D")
(x) + () ---
Hierarchy Discount

VDH1N

In completion log

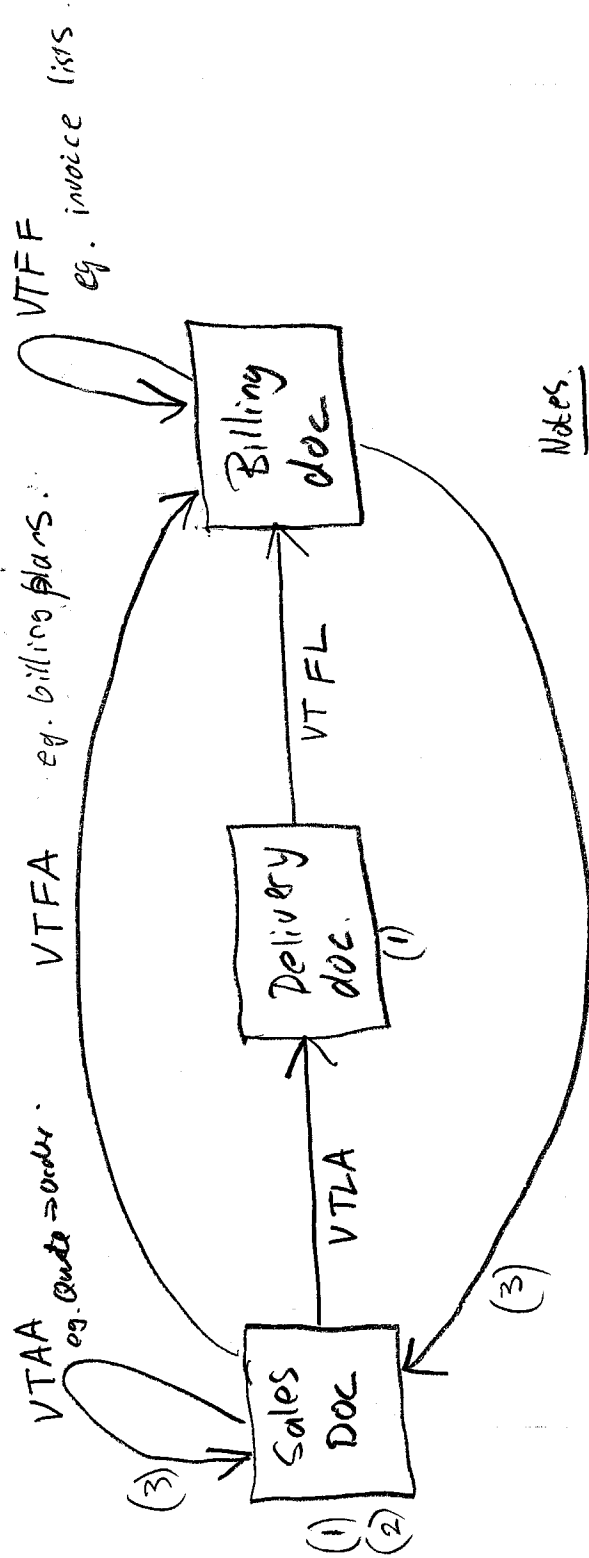
Warning / Error if field is not populated.

Example

doc type → procedure → PO number warn.
(50) (11)
consist of fields

Msg: SD → Basic functions → Log of Incomplete items.

copy control - config



Notes:

(1) Option to "update doc flow" available where target doc is Delivery or Sales doc

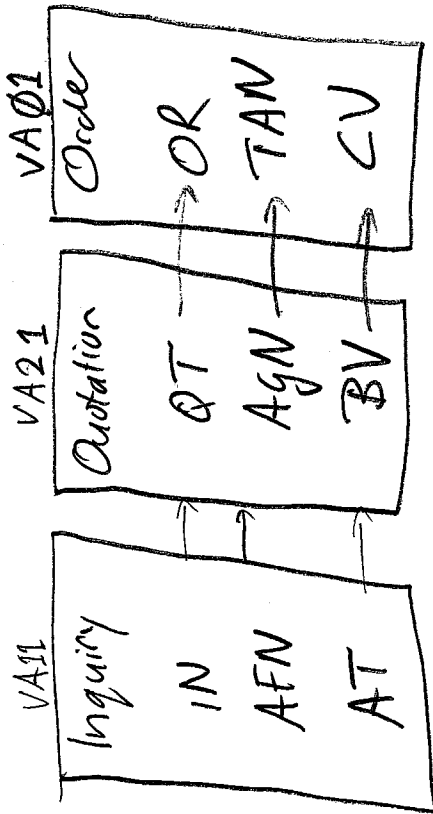
V TAF
eg. invoice correction

VOFM → copy requirements

(2) Ref status (eg "fully referenced") for sales doc's set in item cat config (VOV 7)

(3) For Sales doc, the default item cat determined can be set in copy control

Completion Rule & Copy Control



doc

item

sch. line

Copy key

001 Li 74 cont the same

301 Do not copy completely
demo

501 copy operation

config: SD → Sales → Copy Control

completion rule (doc status)

A

complete after first ref

B

complete when full qty ref.

(tcode: VOFM. maintain key & formulas)

config

Header: - copy item number
- complete ref (message if change qty)

Item: - copy schedule lines
- update doc flow
- carry new pricing

Item cat config: SD → Sales → Sales Docs → Item → Copy

Demo: IN → QT, try again

• Ref → vs. → propose item

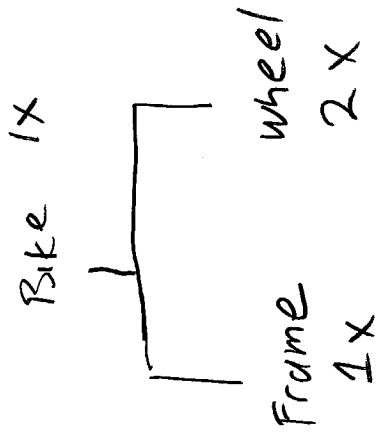
• VA01, ZA01 → REX

• IN → OK ✓ OK → INX

• F2 (invoice) → G2 (credit memo) ✓

Bill of materials in

Sales docs



Bill of material
(CS02)

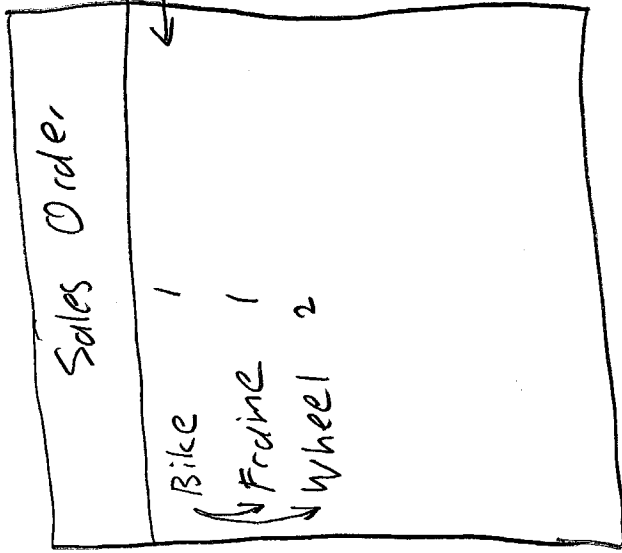
Item cat group (material master)

influence

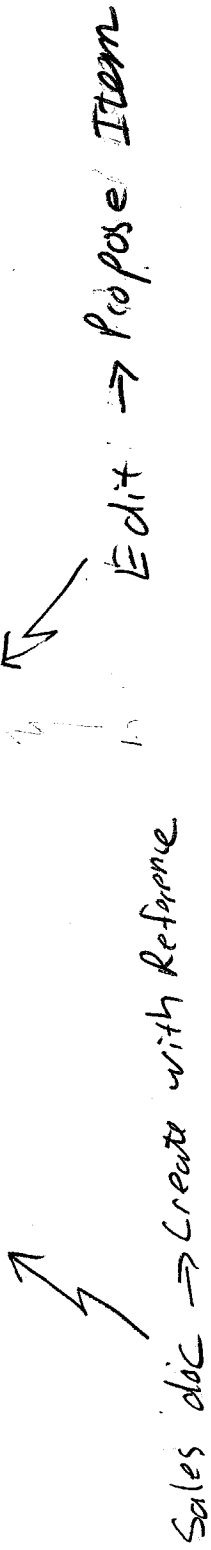
Item cat of TOP

Item must have "structure scope"

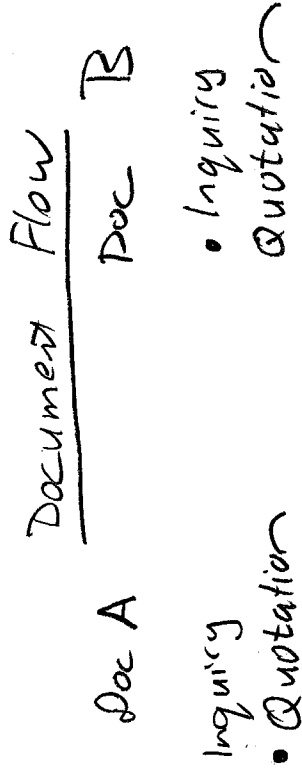
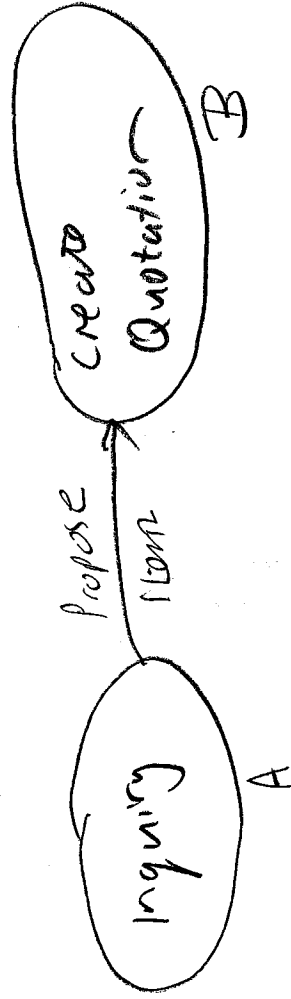
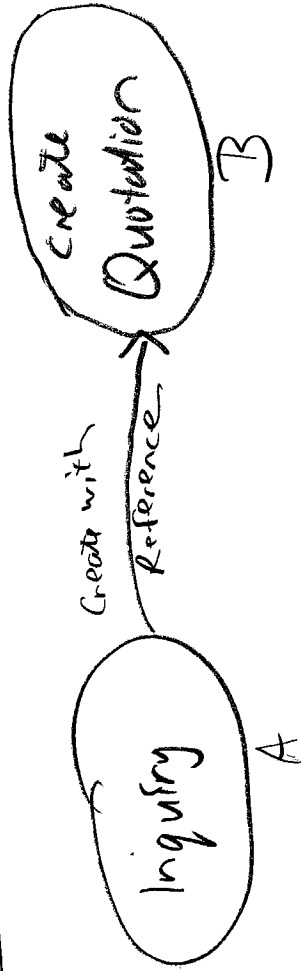
└ A single level
└ B multi level



Reference vs Proposed Item



Example



* Can not see Quotation in Inquiry doc flow!

Backorder Processing

Process manual

code: V-RA

code: C006

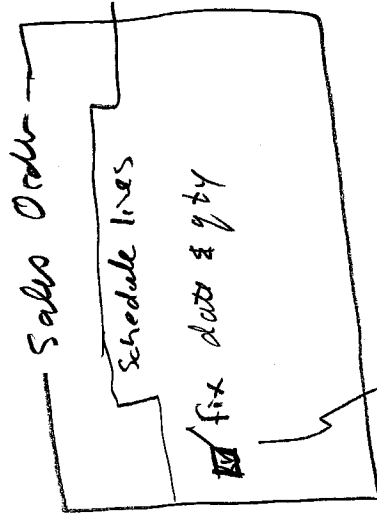
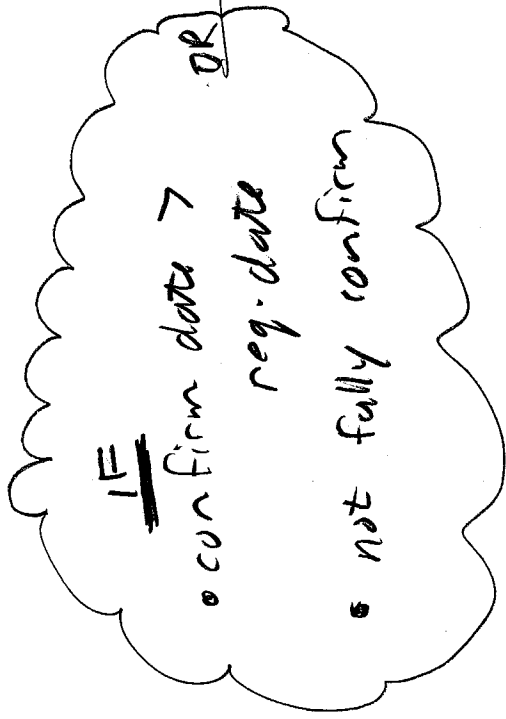
Reschedule (auto)

V-V2

→ reschedule

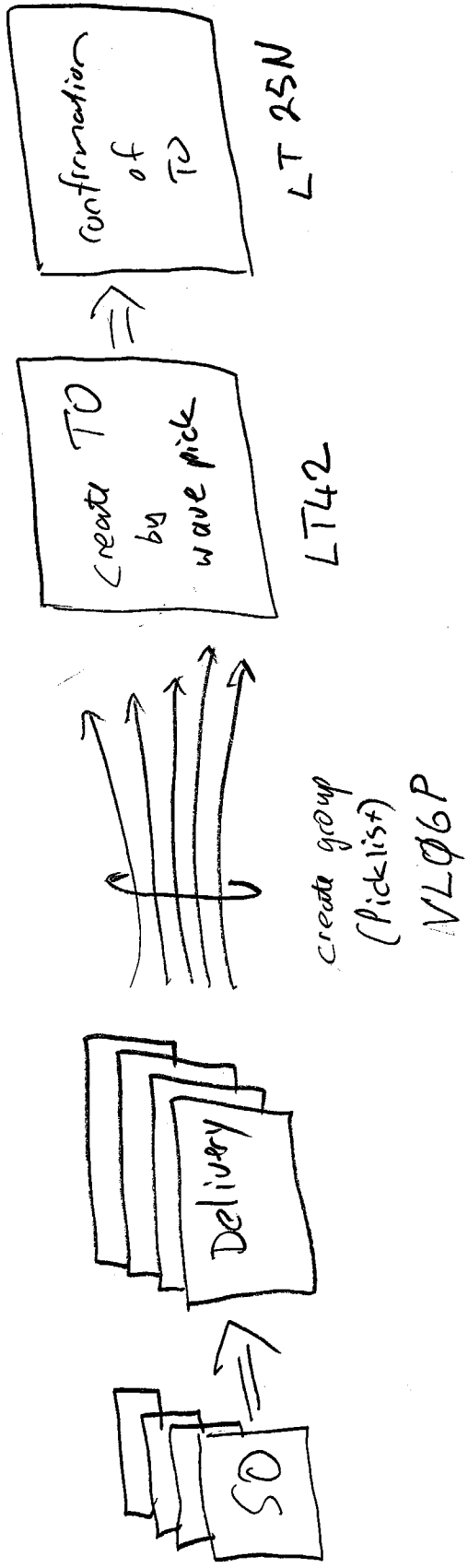
(SD → Sales → Info → Orders)

V.15



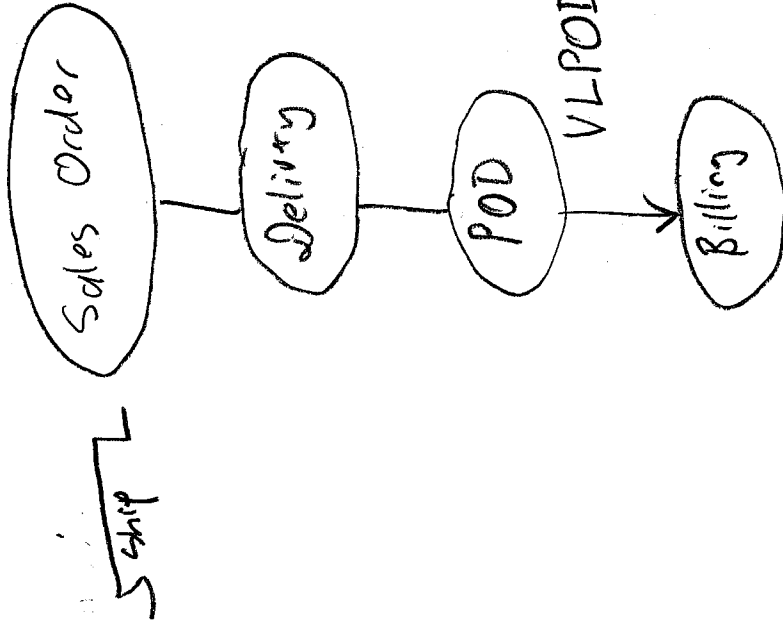
SAP menu: SD → Sales → Backorders

Picking using Lean WM



img: LE → Ship → Pick → Lean WM

Proof of Delivery (POD)



Prereq.

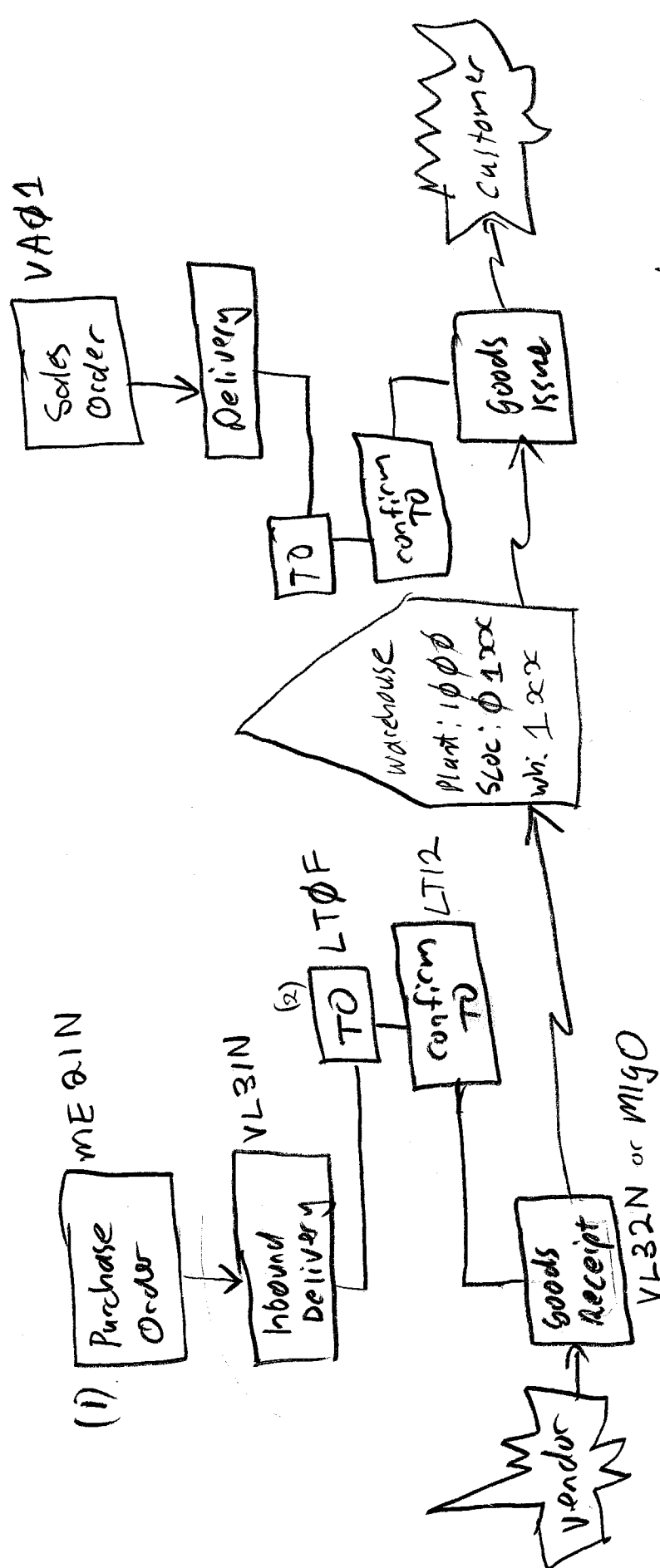
Img
set per 1102-CAT

+

Set on
customer
master

Img: LE → Ship → Del → POD

Inbound Deliveries



Note

(1) Tcode ME&IN
 Vendor T-K12Axx
 P.org 1000, P.group Zxx
 Material T-AU3xx
 Price 10, Qty = 100
 Plant 1000, SLOC 0100

1100x confirmation
 conf. control key ANLI

- (2) Warehouse 0xx
 - (3) Most inbound one only (no conf. control key)
- PO → GR

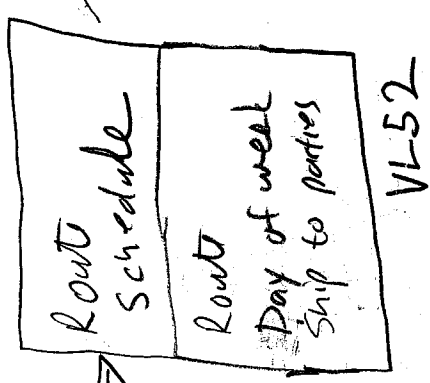
Route Schedule

(Group deliveries based on day of week / route / ship to parties.)

Based on

- Ship point
- Ship 2 party (mat)
- Tr. Group (cont)
- Ship. card (cont)
- GI day

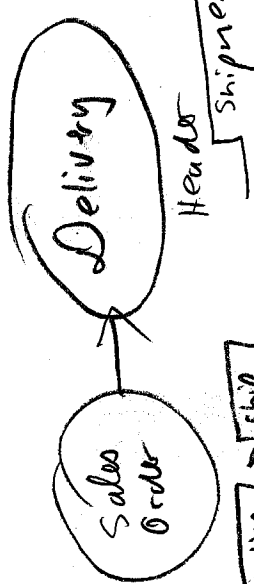
unique



create picking docs based on "Route schedule"

VL35

from SAP 4.5



im [sn. line] → [ship]

master data: LE → master data → Transportation → Routes → Route Schedule (VL52) → ship point
 IMG: LE → shipping → Basic ship → Routes → Route Sched defter → Sales Doc Type → Deliv. Type

Shipping - partial deliveries

Set in Customer master OR customer-material into rec

Partial del. per item:

Partial allowed - specify max. deliveries

(at any date)

A ship once & complete
keep open if qty = 0

(create only 1 del)

B ship all or complete ?

(only complete allowed)

C wait till ALL is available

D keep on sending 'till rejected