

CogSAP'08

Output Configuration in SD

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Session Summary

Output Determination

Purpose: The Output Determination component offers output functions to help manage sales transactions with customers and within an organization.

Employees can send and receive output. Output is directly linked to the corresponding sales transaction like sending an order confirmation via EDI as soon an order is created.

This session is aimed at the basic configurations needed to achieve this.

What we will cover...

- Condition Technique - Components and How they work together?
- Output Determination Analysis
- Enhancing Output Determination
- Wrap-up
- References
- Session Takeaways

Components and Procedure

- Condition Tables
- Output Types
- Access Sequences
- Assignment of Messages to Partner Functions
- Procedures
- Procedure Assignments

Components and Procedure

Condition Technique refer to the method by which the system determines output/pricing from information stored in condition records. In SD, the various elements used in the condition technique are set up and controlled in Customizing.

The components of condition technique are:

- Condition Tables

A condition Table consists of one or more condition keys and a data part. The condition keys can be selected according to the data combination for which a message is to be found. The key fields come from the field catalog.

Condition Table contd....

Display IMG



Existing BC Sets BC Sets for Activity Activated BC Sets for Activity

Structure

- ▼ SAP Customizing Implementation Guide
 - ▶ Activate Business Functions
 - ▶ SAP NetWeaver
 - ▶ Enterprise Structure
 - ▶ Cross-Application Components
 - ▶ Financial Accounting
 - ▶ Financial Supply Chain Management
 - ▶ Strategic Enterprise Management/Business Analytics
 - ▶ Controlling
 - ▶ Investment Management
 - ▶ Enterprise Controlling
 - ▶ Real Estate
 - ▶ Logistics - General
 - ▶ Environment, Health and Safety
 - ▶ Sales and Distribution
 - ▶ Master Data
 - ▼ Basic Functions
 - ▶ Pricing
 - ▶ Free Goods
 - ▶ Bonus Buy
 - ▶ Taxes
 - ▶ Account Assignment/Costing
 - ▶ Availability Check and Transfer of Requirements
 - ▶ Delivery Scheduling and Transportation Scheduling
 - ▶ Output Control
 - ▼ Output Determination
 - ▼ Output Determination Using the Condition Technique
 - ▶ Maintain Output Determination for Sales Activities
 - ▼ Maintain Output Determination for Sales Documents
 - ▶ Maintain Condition Tables
 - ▶ Maintain Output Types
 - ▶ Maintain Access Sequences
 - ▶ Assign Output Types To Partner Functions
 - ▶ Maintain Output Determination Procedure
 - ▶ Assign Output Determination Procedures

Condition Table contd....

Create Condition Table (Output Sales)

Table  

Copy from condition

Table

Condition Table contd....

Display Condition Table (Output Sales): Field O

Technical view Other description Field attributes...

Table 150 Doc.Type/Sales Org./Customer

Selected fields	FieldCatlg
Long Key Word	Long Key Word
Sales Document Type	Billing block
Sales Organization	Buyer
Sold-to party	Credit control area
	Credit rep.group
	Customer
	Customer group
	Customer group 1
	Customer group 2
	Customer group 3
	Customer group 4
	Customer group 5
	Delivery block
	Distribution Channel
	Division
	INTCOM
	Incoterms
	Item category
	Material
	Order reason

Condition Tables Contd...

- Do not change any standard Condition tables.
- If needed new condition tables are to be created. Copy an existing condition table and make the necessary changes.
- Choose the name between 501 to 999.
- Enter a description for the condition table.
- Select the desired fields from the field catalog.
- Generate the table.
- Specify the condition tables in the access sequences.

Components and Procedure

- Output Types:

It represents different outputs such as Order Confirmation, delivery notes and etc..

Assign it to the access sequence.

Provide a description

Detailed data – Output Type, Time, Partner Function, Condition Access, Print Parameters.

Do not change the existing types... copy them and change instead.

Output Type Contd....

Change View "Output Types": Overview

Application: V1

Dialog Structure

- Output Types
 - Mail title and texts
 - Processing routines
 - Partner functions

OutputType	Name
AF00	Inquiry
AN00	Quotation
BA00	Order Confirmation
BAIN	
BAV0	Order confirm. VMI
ESYM	Internal Output
K000	Contract

Output Type Contd....

New Entries: Details of Added Entries

Output Type

Dialog Structure

- Output Types
 - Mail title and texts
 - Processing routines
 - Partner functions

General data | Default values | Time | Storage system | Print | Mail

Access sequence

Access to conditions
 CannotBeChanged
 Multiple issuing
 Partner-indep.output
 do not write processing log

Change output

Program	<input type="text"/>
FORM routine	<input type="text"/>

Replacement of text symbols

Program	<input type="text"/>
FORM routine	<input type="text"/>

Components and Procedure

- Access Sequences:

Is the search strategy which the system would use to search for condition records valid for a condition type.

Has to be a four digit alphanumeric name which is unique.

A short description.

Detailed data – Sequential number, table (condition table)

Do not change any standard sequence, copy and change instead.

Access Sequences Contd...

Change View "Access Sequences": Overview

New Entries

Dialog Structure

- Access Sequences
 - Accesses
 - Fields

Overview Access Sequence

AS	Description	Descripti
0001	Delivery type	
0002	Shipping Point/Route	
0003	SalesOrg/DistrCh/Div/Customer	
0004	SalesOrg/Delivery Type	
0005	SalesOrg/Customer	
0006	Credit Control Area	
0007	Label Type (Cat. 01)	
0008	Sales Org./Sold-to Party	
0009	Receiving plant	
0010	DivType/Shipping Point	
0011	SOrg/CustNo SOrg/DivType	
0012	Shipping point	

Access Sequences Contd...

New Entries: Overview of Added Entries

Dialog Structure

- Access Sequences
- Accesses
- Fields

Overview Access Sequence

AS	Description	Description
ZAA	Test for COGSAP	

Components and Procedure

- Procedures

It defines the Condition Types and the Sequence that it should be processed.

Procedures Contd..

Change View "Procedures": Overview

New Entries

Dialog Structure

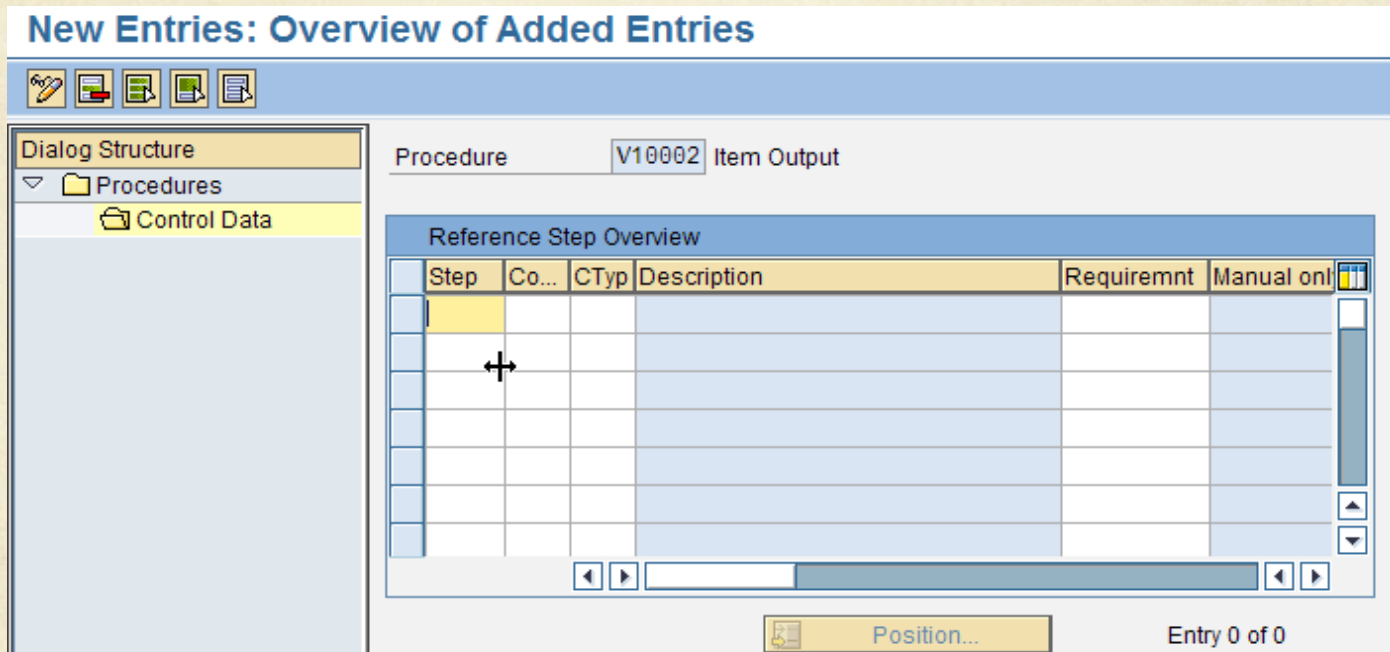
- Procedures
 - Control Data

Usage: B

Application: V1

Proce...	Descript.
V05000	Inquiry Output
V06000	Quotation Output
V07000	Scheduling Agreement Output
V08000	Contract Output
V10000	Order Output
V10001	Cash Sales Output
V10002	Item Output

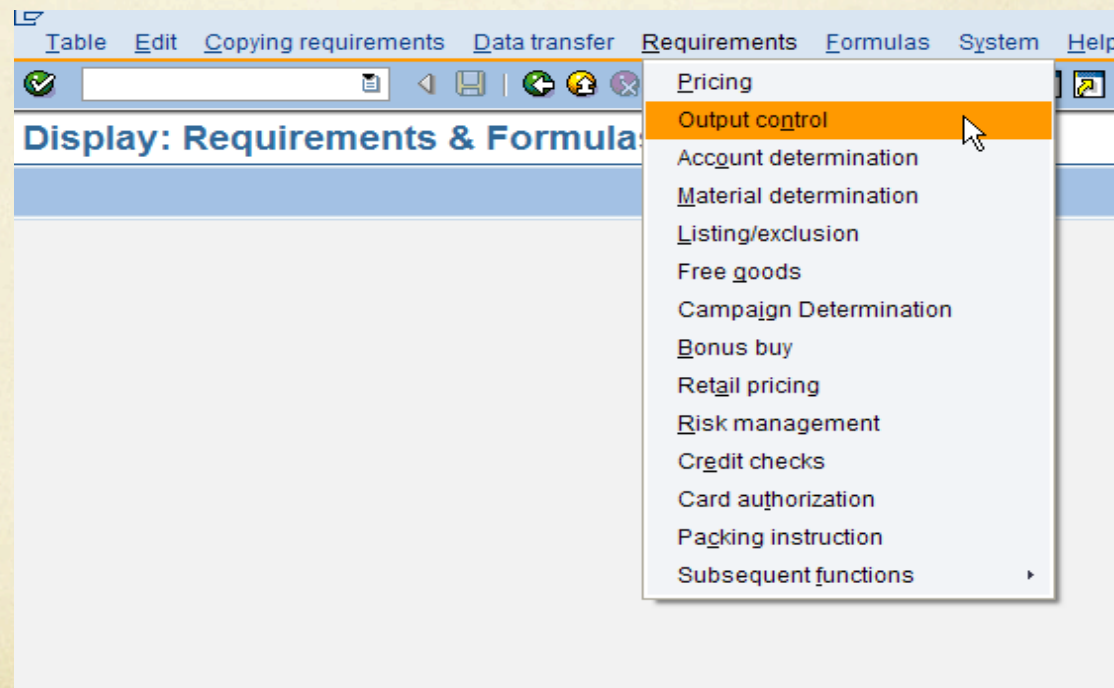
Procedures Contd..



Step - Number that determines the sequence of the conditions within a procedure. Counter - Access number of the conditions within a step. During automatic pricing the system takes into account the sequence specified by the counter.




Procedures Contd..

There is some more flexibility to Control the Output Types from VOFM Routines. For instance, we don't want to issue a PO acknowledgement unless the delivery block is unblocked in a Sales Order.



Procedures Contd..

Display: Requirements Output control

Display: Requirements Output control

Routine number	Description	Active	Application
1	Delivery GI posted	<input checked="" type="checkbox"/>	V2
2	Order Confirmation	<input checked="" type="checkbox"/>	V1
3	Delivery Note	<input checked="" type="checkbox"/>	V2
4	Bill w/o inv.list	<input checked="" type="checkbox"/>	V3
5	Quotation	<input checked="" type="checkbox"/>	V1
6	Scheduling agreement	<input checked="" type="checkbox"/>	V1
7	Contract	<input checked="" type="checkbox"/>	V1
8	Bill w/invoice list	<input checked="" type="checkbox"/>	V3
9	Credit check block	<input checked="" type="checkbox"/>	V1
10	Credit Check Block	<input checked="" type="checkbox"/>	V2
11	Credit Block Order	<input checked="" type="checkbox"/>	V1
12	QualityCertifDelvltm1	<input checked="" type="checkbox"/>	V2
13	QualityCertifDelvltm2	<input checked="" type="checkbox"/>	V2
14	Cash Sale	<input checked="" type="checkbox"/>	V1
15	QualityCertGIPosted 1	<input checked="" type="checkbox"/>	V2
16	QualityCertGIPosted 2	<input checked="" type="checkbox"/>	V2
17	POD on goods issue	<input checked="" type="checkbox"/>	E1
18	Order-rel. ICB	<input checked="" type="checkbox"/>	V3

◀ ▶

Procedures Contd..

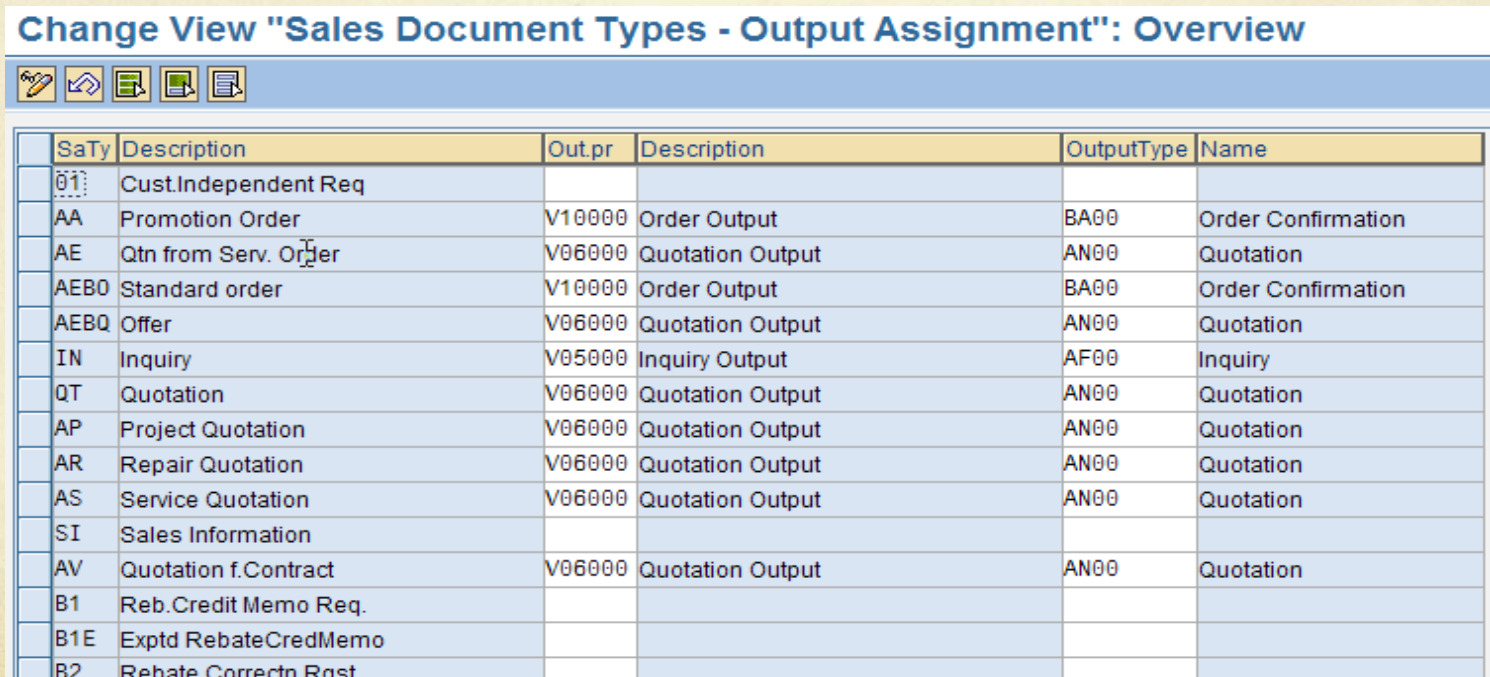
```
FORM KUBED_002.  
* If the sales document is complete, then the output should be created  
SY-SUBRC = 0.  
IF KOMKBV1-UVALL NE 'C'.  
  SY-SUBRC = 4.  
  EXIT.  
ENDIF.  
IF KOMKBV1-COSTA NE SPACE AND  
  KOMKBV1-COSTA NE 'C'.  
  SY-SUBRC = 4.  
  EXIT.  
ENDIF.  
IF NOT KOMKBV1-LIFSK IS INITIAL.  
  IF KOMKBV1-LIFSK NE TVLS-LIFSP.  
    SELECT SINGLE * FROM TVLS WHERE LIFSP = KOMKBV1-LIFSK.  
  ENDIF.  
  IF SY-SUBRC = 0 AND  
    TVLS-SPEDR NE SPACE.  
    SY-SUBRC = 4.  
    EXIT.  
  ENDIF.  
ENDIF.  
* Kein Druck, wenn Kreditsperre sitzt  
* No output if the credit block is set.  
IF KOMKBV1-CMGST CA 'BC'.  
  SY-SUBRC = 4.  
  EXIT.  
ENDIF.  
ENDFORM.
```

Components and Procedure

- Procedure Assignments

Finally the Output Procedure is attached to the Sales document type as shown below:

Change View "Sales Document Types - Output Assignment": Overview

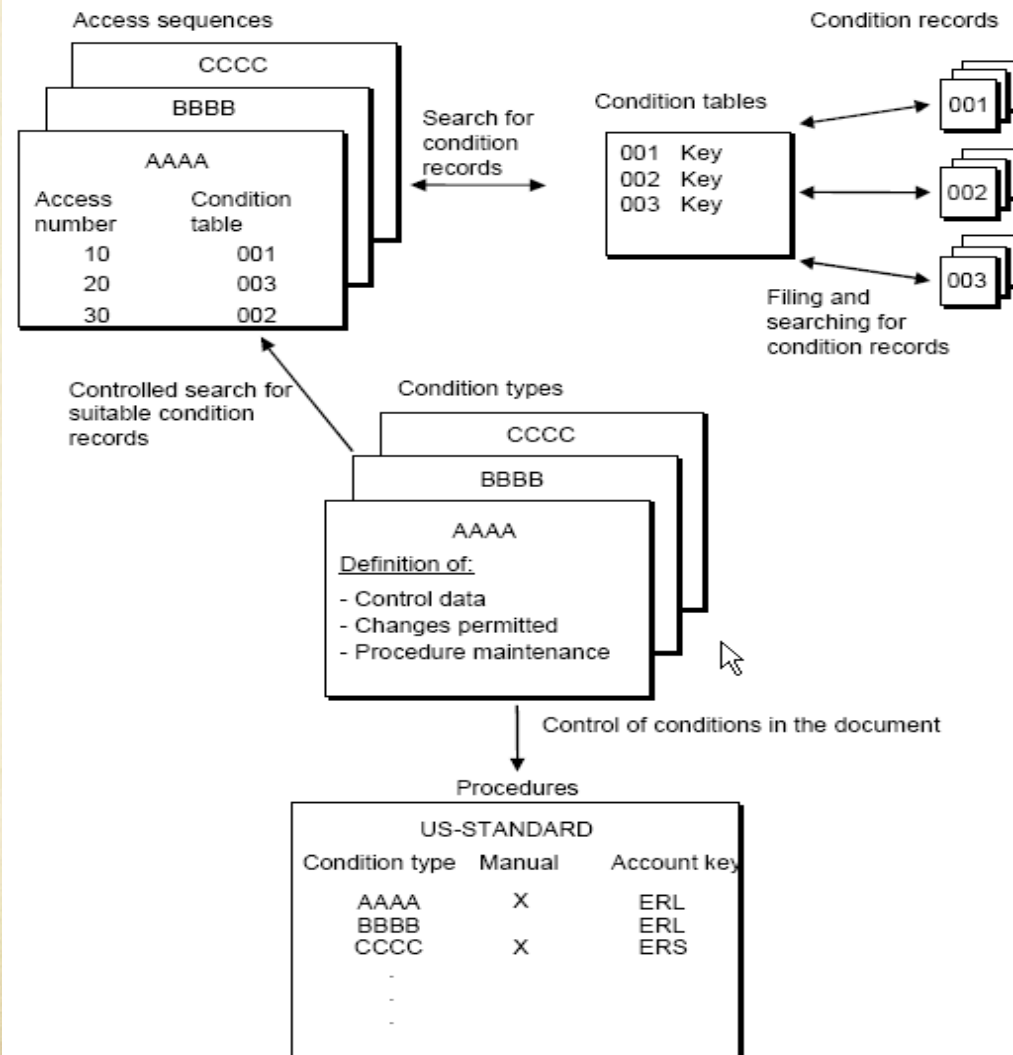


SaTy	Description	Out.pr	Description	OutputType	Name
01	Cust.Independent Req				
AA	Promotion Order	V10000	Order Output	BA00	Order Confirmation
AE	Qtn from Serv. Order	V06000	Quotation Output	AN00	Quotation
AE00	Standard order	V10000	Order Output	BA00	Order Confirmation
AEBQ	Offer	V06000	Quotation Output	AN00	Quotation
IN	Inquiry	V05000	Inquiry Output	AF00	Inquiry
QT	Quotation	V06000	Quotation Output	AN00	Quotation
AP	Project Quotation	V06000	Quotation Output	AN00	Quotation
AR	Repair Quotation	V06000	Quotation Output	AN00	Quotation
AS	Service Quotation	V06000	Quotation Output	AN00	Quotation
SI	Sales Information				
AV	Quotation f.Contract	V06000	Quotation Output	AN00	Quotation
B1	Reb.Credit Memo Req.				
B1E	Exptd RebateCredMemo				
B2	Rebate Correctn Rast				

Components and Procedure

How Condition Technique Elements Work Together

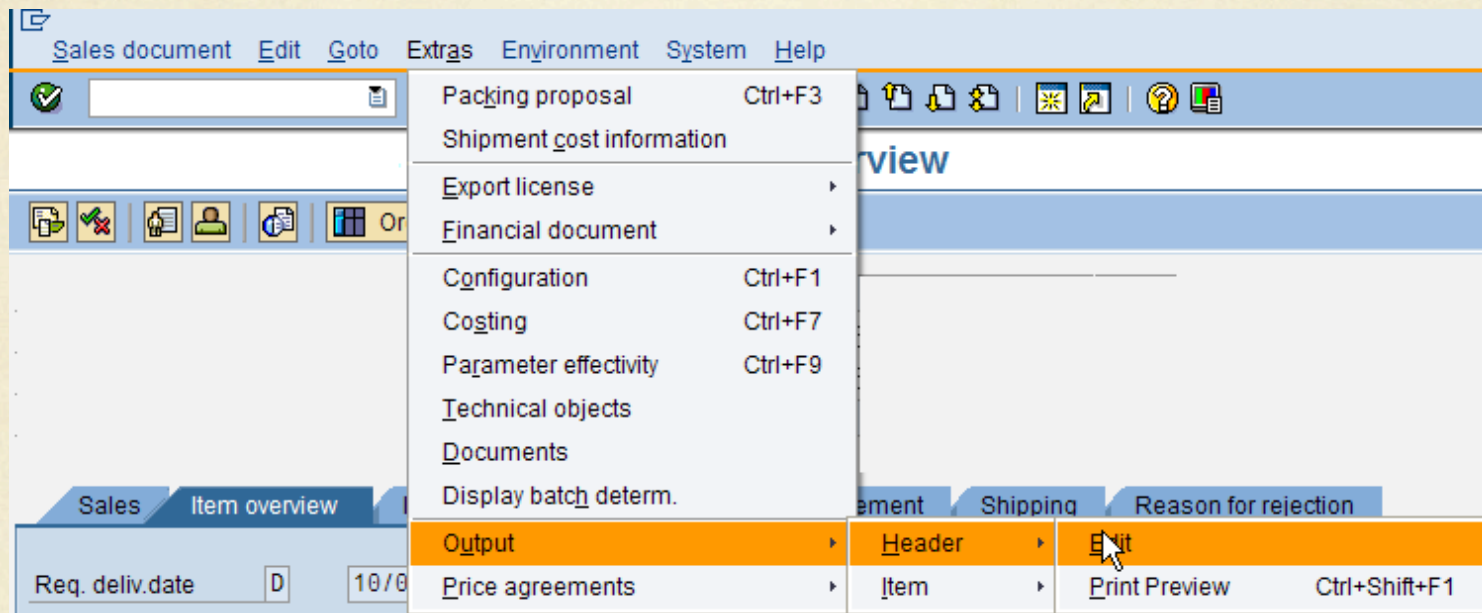
The following figure illustrates the relationships between elements of the condition technique.



What we will cover...

- Condition Technique - Components and How they work together?
- Output Determination Analysis
- Enhancing Output Determination
- Wrap-up
- References
- Session Takeaways

Output Determination Analysis



What we will cover...

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Enhancing Output Determination

The Output Determination could be enhanced by enhancing the communication structures and populating them in the relevant userexits. List of Structure and the Includes are shown below:

```
Basics of modification in output control
o The following communication structures are relevant for output control:
- KOMKBK1 (Output Determination Communication Area CAS Appl. K1)
- KOMKBV1 (Output Determination Communication Area Header Appl. V1)
- KOMKBV2 (Output Determination Communication Area Header Appl. V2)
- KOMKBV3 (Output Determination Communication Area Header Appl. V3)
- KOMKBV5 (Communication Structure for Output Control Groups Appl. V5)
- KOMPBV1 (Output Determination Communication Area Item Appl. V1)
- KOMPBV2 (Output Determination Communication Area Item Appl. V2)
- KOMPBV3 (Output Determination Communication Area Item Appl. V3)
o New fields for output control are entered in the following
INCLUDES:
- Sales activities      : KOMKBZ1 (in KOMKBK1)
- Sales document header : KOMKBZ3 (in KOMKBV1)
- Delivery header      : KOMKBZ4 (in KOMKBV2)
- Groups header        : KOMKBZF (in KOMKBV5)
- Billing document header: KOMKBZ5 (in KOMKBV3)
- Sales document item   : KOMPBZ1 (in KOMPBV1)
- Delivery item         : KOMPBZ3 (in KOMPBV2)
- Billing document item  : KOMKBZ5 (in KOMPBV3)
```

Enhancing Contd.....

The routines and user exits for assigning values to the new fields are found in the programs RVCOMFZZ, RVCOMFZ1 and RVCOMFZ4. It is also possible to copy partners here.

The following user exits exist in member RVCOMFZ1:

- USEREXIT_KOMPBV2_FILL (item fields in delivery)
- USEREXIT_KOMPBV2_PARTNER (item fields for partners in delivery)
- USEREXIT_KOMPBV3_FILL (item fields in billing document)
- USEREXIT_KOMPBV3_PARTNER (item fields for partners in billing document)

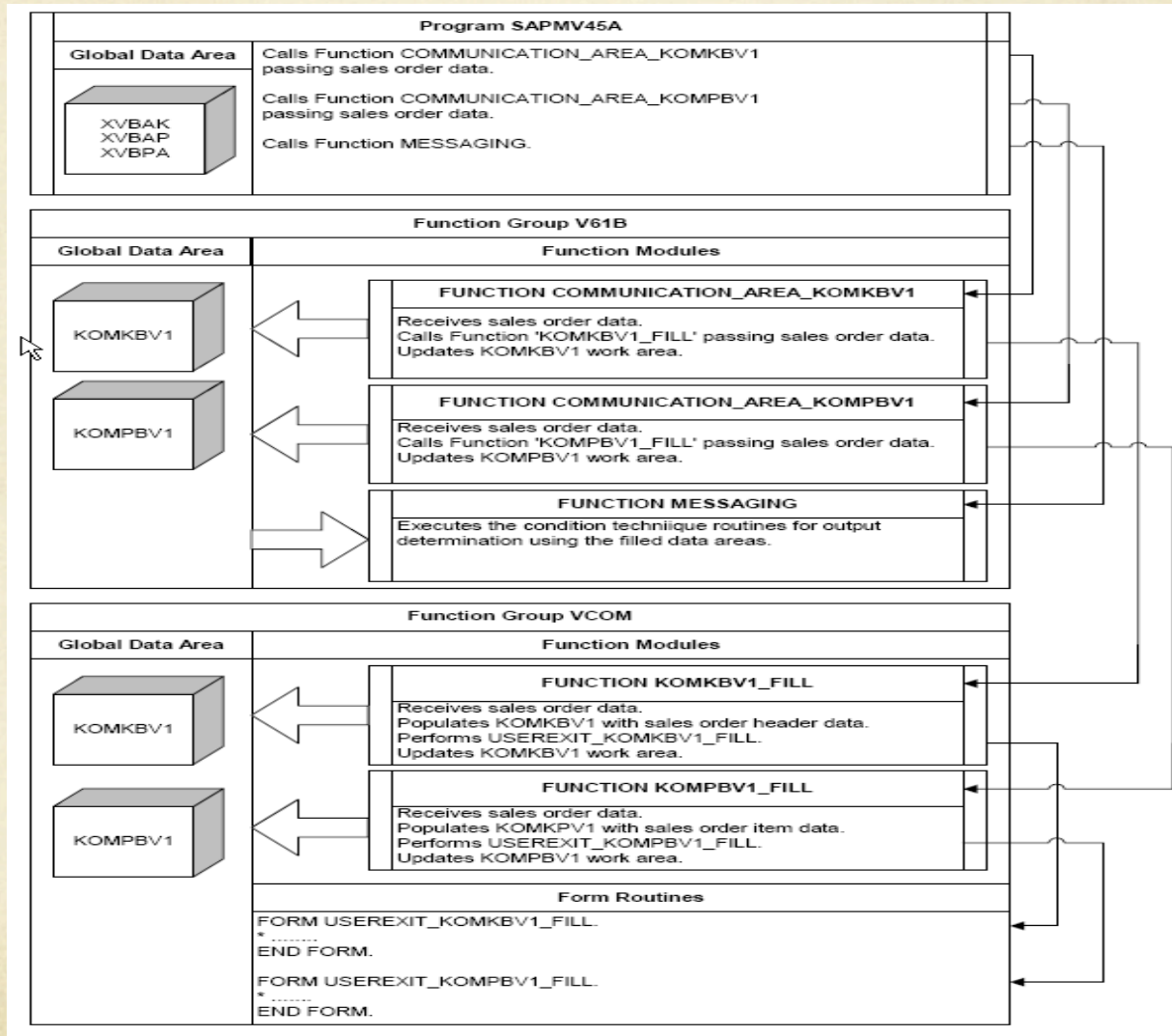
The following user exits exist in member RVCOMFZZ:

- USEREXIT_KOMKBK1_FILL (header fields in sales activities)
- USEREXIT_KOMKBK1_PARTNER (header fields for partners in sales activ.)
- USEREXIT_KOMKBV1_FILL (header fields for sales documents)
- USEREXIT_KOMKBV1_PARTNER (header fields for partners in sales documents)
- USEREXIT_KOMKBV2_FILL (header fields in delivery)
- USEREXIT_KOMKBV2_PARTNER (header fields for partners in delivery)
- USEREXIT_KOMKBV3_FILL (header fields in billing document)
- USEREXIT_KOMKBV3_PARTNER (header fields for partners in billing doc.)

The following user exit exists in RVCOMFZ4:

- USEREXIT_KOMKBV5_FILL (header field for groups)

Enhancing Contd.....










Courtesy:

SAPtechsolutions.com

The Smith Consulting Group, Inc

Enhancing Contd.....

Change View "Field Catalog (Output Sales)": Overview

New Entries       

Field Catalog (Output Sales)

Field	Description
AUART	Sales Document Type
AUGRU	Order reason
BZIRK	Sales district
CMGST	Overall CreditStatus
CTLPC	Risk category
EKAUF	Buyer
FAKSK	Billing block
INC01	Incoterms
INC02	Incoterms (Part 2)
INTCOM	INTCOM
KDGRP	Customer group
KKBER	Credit control area
KNDNR	Customer
KONDA	Price group
KUNNR	Sold-to party

Position... Entry 1 of 34

Enhancing Contd.....

New Entries: Overview of Added Entries



Table Name	Short Description			
Field Name	Short Description	Short	Medium Field Label	Long field label
KOMB	Maintenance			
VKORG	Sales Organization	Sales org.	Sales Org.	Sales Organization
VTWEG	Distribution Channel	Distr. Ch1	Distr. Channel	Distribution Channel
SPART	Division	Division	Division	Division
VSTEL	Shipping Point/Receiving Point	Ship Point	Shipping Point	Shipping Point/Receiving Pt
LSTEL	Loading Point	Loading Pt	Loading Point	Loading Point
VKBUR	Sales Office	Sales Off.	Sales Office	Sales Office
VKGRP	Sales Group	Sales Grp	Sales Group	Sales Group
KDGRP	Customer group	Cust.group	Customer group	Customer group
BZIRK	Sales district	District	Sales district	Sales district
ALAND	Departure country (country from which the goods are sent)	Country	Country	Country
WAERK	SD Document Currency	Currency	Doc. Currency	Document Currency
KNDNR	Customer number	Customer	Customer	Customer
KUNNR	Sold-to party	Sold-to pt	Sold-to party	Sold-to party
KUNWE	Ship-to party	Ship-to	Ship-to party	Ship-to party
KUNRE	Bill-to party	Bill to	Bill-to party	Bill-to party
KNRZE	Payer	Payer	Payer	Payer

Enhancing Contd.....

New Entries: Overview of Added Entries



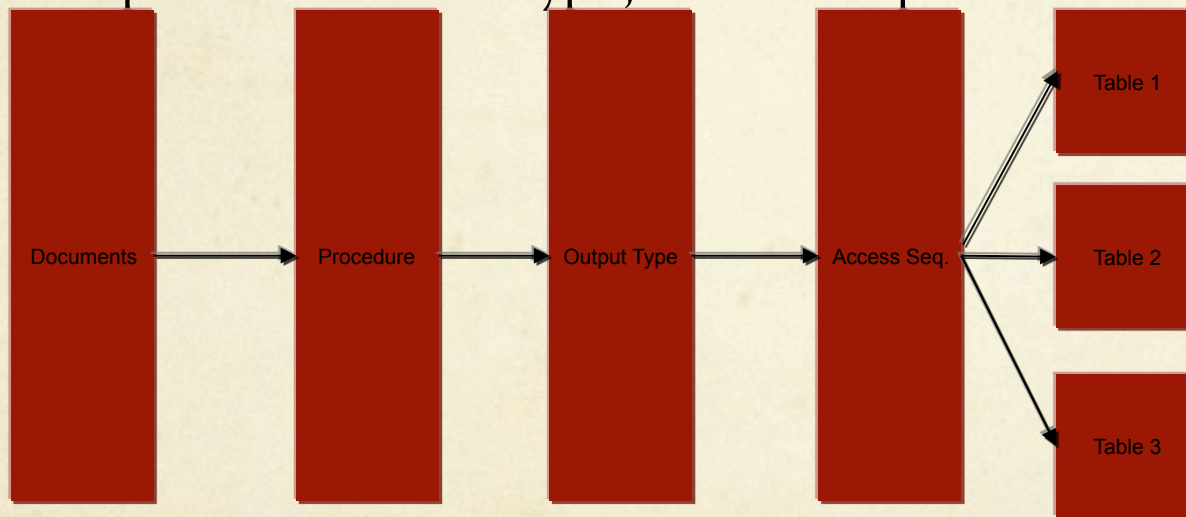
Table Name	Short Description			
Field Name	Short Description	Short	Medium Field Label	Long field label
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VKORG	Sales Organization	Sales org.	Sales Org.	Sales Organization
VTWEG	Distribution Channel	Distr. Ch1	Distr. Channel	Distribution Channel
SPART	Division	Division	Division	Division
VSTEL	Shipping Point/Receiving Point	Ship Point	Shipping Point	Shipping Point/Receiving Pt
LSTEL	Loading Point	Loading Pt	Loading Point	Loading Point
VKBUR	Sales Office	Sales Off.	Sales Office	Sales Office
VKGRP	Sales Group	Sales Grp	Sales Group	Sales Group
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KUNWE	Ship-to party	Ship-to	Ship-to party	Ship-to party
KUNRE	Bill-to party	Bill to	Bill-to party	Bill-to party
KNRZE	Payer	Payer	Payer	Payer

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Wrap-up

- Condition Technique is used to determine output in SD functions.
- The components of Condition Technique are: Condition Table, Output Condition Type, Access sequence and output Procedure.



Wrap-up Contd...

- We can use VOFM routines to control the output determinations
- The output determined could be analyzed from the Sales Transaction.
- Output Determination could be enhanced by extending the communication structure and coding appropriately.

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References

- [SAP Help.SD-BF-OC](#)
- [SAPTechsolutions.com](#)

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Session Takeaways

- 1) What is Output Determination
- 2) How to configure Output in SD documents
- 3) Enhancing Output Determination

CogSAP'08

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Q&A

Finish

