

Output Determination (SD-BF-OC)



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Output Determination (SD-BF-OC)

Purpose

The *Output Determination* component offers output functions for sales, shipping, transportation, and billing to help you manage sales transactions with your customers and within your company. You can create sales activity output (for example, customer telephone calls, mailing campaigns) and group output (for example, freight lists). Your company employees can send and receive output. Output is directly linked to the corresponding sales transaction (for example, the system automatically sends an order confirmation via Electronic Data Interchange ([EDI](#)) [\[Ext.\]](#) as soon as the employee creates an order).

Integration

The *output determination* component is used for output control. Output control is used to exchange information with internal and external partners.

Output control includes the following functions, described in the cross-application (CA) - *Output Control* documentation:

- [Output Determination \[Ext.\]](#)
- [Output Processing \[Ext.\]](#)

Features

The system can automatically propose output for a sales and distribution document. You can change this output in the sales and distribution document.

The system uses the condition technique to determine output. For more information on the condition technique, see [Conditions and Pricing \[Ext.\]](#).

See also:

For further information on output, refer to the following documentation:

Application	Documentation
Basis-Services	SAP Internet Mail Gateway [Ext.] SAP Communication: Configuration (BC-SRV) [Ext.]
Cross-Application Components	CA – Output Control [Ext.] BC - SAP Business Workflow [Ext.] SD – Sales and Distribution: Workflow-Scenarios [Ext.]

For information on Customizing settings and examples, refer to [Output Control Customizing in Sales and Distribution \(SD\) \[Ext.\]](#) in the CA - Output Control documentation.

Output Type (SD)

Output Type (SD)

Output types are used to represent various forms of output in the SAP system. Examples of output types in Sales and Distribution processing are order confirmations, freight lists, and invoices. You use the output type to control how the output should be transmitted, for example whether an order confirmation should be sent via EDI, or be printed.

In Customizing, you can display the output types available in the SAP R/3 system. To display sales output types, for example, go to Customizing and choose *Sales and Distribution* → *Basic Functions* → *Output Control* → *Output Determination* → *Output Determination Using the Condition Technique* → *Maintain Output Determination for Sales Documents* → *Maintain Output Types*.

See also:

For more information on output types in general, refer to [Output Type \[Ext.\]](#) in the *CA - Message Control* documentation.

Processing Condition Records for SD Output

Prerequisites

Before you can create a condition record, you must define the corresponding output type in Customizing. To maintain the output type for a sales document, for example, choose *Basic Functions* → *Output Control* → *Output Determination* → *Output Determination Using the Condition Technique* → *Maintain Output Determination for Sales Documents* → *Maintain Output Types* in Customizing for Sales and Distribution.

Procedure

To access the individual functions, choose *Logistics* → *Sales and distribution* → *Master data*.

The table below contains an example that shows you how to process sales and distribution output for a sales document. You use the same procedure for other types of sales and distribution output.

Function	Menu path	What you should know
Creating condition records for sales and distribution output	<i>Output</i> → <i>Sales document</i> → <i>Create</i>	See Creating Condition Records for SD Output [Page 8]
Changing condition records for sales and distribution output	<i>Output</i> → <i>Sales document</i> → <i>Change</i>	
Displaying condition records for sales and distribution output	<i>Output</i> → <i>Sales document</i> → <i>Display</i>	

Creating Condition Records for SD Output

Creating Condition Records for SD Output

Prerequisites

The procedure is explained using a sales document as an example.

Procedure

1. Enter an output type.
2. Choose *Edit* → *Key combination*.
3. Select the key combination for which condition records are to be created.
4. Choose *Enter*.
5. Enter the appropriate key for each condition record, according to the key combination you selected.

Make entries for each condition record in the following fields:

- *Function*
 - *Partner*
 - *Transmission medium*
 - *Time*
 - *Language*
6. For transmission medium 1 (Print output) or 7 (SAPoffice = internal mail), you can maintain the communication data. To do this, choose *Communication*.
 7. Save the condition records.

Output Determination Analysis (SD)

Use

You can analyze how the system determined output in a sales and distribution document. For example, you can list the criteria the system used to search for output information and whether the search was successful or not.

Features

Output determination analysis provides you with the following information:

- Whether the system proposed the output from a condition record or from the customer master record
- Which output documents were found using output determination and which were not
- Which accesses resulted in finding valid condition records, and the results
- Which key combinations (combinations of fields) the system used in the accesses

Call

1. Change the corresponding sales and distribution document, for example a sales document:
 - a) [Sales Screen \[Ext.\]](#)
 - b) *Sales document* → *Change*
2. *Extras* → *Output* → *Header* or *Item*
3. *Goto* → *Determin. analysis*



The determination analysis task only works if you change the sales and distribution document (it does not work in display mode).



There is no output determination analysis available for the picking list.

Output Processing

Output Processing

Use

Output processing issues the output documents (for example, by printing them or sending them via EDI).

Prerequisites

Output must previously exist in the sales and distribution documents. For further information, refer to [Message Determination \[Ext.\]](#) in the *CA - Message Control* documentation.

Features

You can process output by:

- [Selecting a worklist for output \[Page 11\]](#)

If required, you can edit output before it is processed.



You can process output online or in the background.

- Selecting a worklist using report RSNAST00

This is useful if you need to process output over several applications and periods of time.

- [Processing directly from SD documents \[Page 15\]](#)



If you choose background processing, you can start several reports simultaneously. For example, after creating the billing documents, you can run two reports concurrently:

- To print the billing documents
- To transmit the billing documents to Financial Accounting

See also:

For more information on report RSNAST00, see [Subsequent Processing \[Ext.\]](#)

For more information on output processing in general, refer to [Message Processing \[Ext.\]](#) in the cross-application documentation *CA - Message Control*.

Selecting a Worklist for Output

1. Call the corresponding function:

Function	Menu path	What you should know
Shipping	Shipping screen [Ext.]	
Creating delivery output	<i>Outbound delivery → Delivery output</i>	
Creating loading output	<i>Pack/load → Loading output</i>	
Creating shipping unit output	<i>Pack/load → Shp. unit output</i>	
Shipment	Transportation screen [Ext.]	
Creating shipment output	<i>Output → Shipment</i>	You can print shipment output and other output for documents that refer to a shipment (such as billing documents or deliveries). To do this, select the corresponding field and enter the processing data in the relevant sections.
Billing	Billing screen [Ext.]	
Creating billing output	<i>Output → Billing documents</i>	See Output from billing documents [Page 17] .
Sales and Distribution in general		
Using background processing	<i>Tools → ABAP Workbench, ABAP Editor</i>	Reports used for output begin with SD70A.
Report RSNAST00	<i>Tools → ABAP Workbench, ABAP Editor</i>	Run report RSNAST00.

1. Enter the output type, the transmission medium, and, if required, further selection parameters.



If you wish to have a worklist displayed for output that was not processed successfully, enter 3 in the *Processing mode* field. The system displays all types of output with errors, and you can then process them once again.

2. If you want to display the worklist first and/or make changes, select *Program → Execute*.
If you want to process the output as a background job, select *Program → Execute in background*. In this case, you cannot make any changes.

Selecting a Worklist for Output

3. If you want to edit output, select the corresponding output.
For more information on processing output, refer to [Processing Output in Worklists \[Page 13\]](#).
4. Choose *Edit* → *Process*.
The system creates and processes the selected output.
5. If you wish to have a **log** generated after processing the output, choose *Goto* → *Log*.

Processing Output in Worklists

Prerequisites

You must first generate the worklist. For more information on creating a worklist, refer to [Selecting a Worklist for Output \[Page 11\]](#).

Procedure

Select the corresponding output and perform the required function:

Function	Menu path	What you should know
Changing the printing parameters	<i>Edit → Printer default</i>	<p>You use this function if you want to specify the same printing parameters for several output documents.</p> <p>For all selected output documents, the system copies the printing parameters from the <i>Printer default</i> screen, if the <i>Transmission medium</i> field has value 1 (<i>Print output</i>).</p>
Issuing output (printing, faxing, and so on)	<i>Edit → Process</i>	<p>After output is processed, it is highlighted as follows:</p> <ul style="list-style-type: none"> • green (processed successfully) • red (processed with errors)
Changing details	<i>Goto → Communication</i>	<p>You use this function if you want to specify individual printing parameters for each output document.</p> <p>You can only change the parameters for the transmission media <i>Print</i> and <i>Telefax</i>. For all other transmission media, the parameters are in display-mode only.</p>
Generating a screen display	<i>Goto → Print preview</i>	<p>The system displays the first output document selected.</p> <p>For all output documents that were generated by print editing using SAPscript (for example, delivery note and packing list) you can generate a screen display of the output.</p>
Displaying the processing log	<i>Goto → Log</i>	<p>The system creates a log for each output document.</p>

Processing Output in Worklists

Processing Output in Sales and Distribution Documents

Prerequisites

Usually, the system automatically proposes output types and parameters in sales and distribution documents.

If you need to edit output, choose one of the following menu paths depending on the type of sales and distribution document:

Sales and distribution document	Menu path
Sales documents	<i>Extras → Output → Header or Item</i>
Delivery	<i>Extras → Delivery output → Header or Item</i>
Shipment	<i>Goto → Output</i>
Billing document	<i>Goto → Header → Output</i>
Invoice list	<i>Header or Item → Output</i>

If you have selected several output documents, you can continue to the next document by choosing *Goto → Next detail screen*.

Procedure

Function	Menu path	What you should know
Repeating output	Select the output document and choose <i>Repeat output</i>	You can send output documents more than once. This can be useful if, for example, there are technical or other problems when you print an output document the first time. The system copies the selected output document. You can then edit and send this document.
Changing and re-sending output documents	Select the output document and choose <i>Change output</i>	If you have changed a document, you can change and re-send the output document based on the document. The system copies the selected output document. You can then edit and send this document. The system marks the output document as changed in the <i>Change</i> column.

Processing Output in Sales and Distribution Documents

Changing the printing parameters	Select the output document and choose <i>Communication method</i>	The output document must be selected for printing. The <i>Transmission medium</i> field must have a value of 1 (<i>Print output</i>) or 2 (<i>Fax</i>).
Changing transmission data	Select the output document and choose <i>Further data</i>	Example: dispatch time Here you can also see the processing date and the processing status.
Performing an output determination analysis	<i>Goto</i> → <i>Determin. analysis</i>	For a description of this feature, refer to Output Determination Analysis in Sales and Distribution [Page 9] . The system displays all accesses. To see each access, choose <i>Goto</i> → <i>Details</i> to display the fields used in the access.

Output from Billing Documents

Use

You use this report (SD70AV3A) to produce output from billing documents, such as printouts. The report enables you to determine how often you want to generate the invoices, whether daily or weekly, for example.

You can also use report RSNAST00 for the same purpose. It has a shorter runtime than report SD70AV3A, but the latter enables you to specify more detailed selection criteria regarding which invoices to generate.

Prerequisites

Before you can produce output for a specific billing document, that output must have been determined previously in the billing document, either:

- Automatically with output determination
- Manually

To check whether an output type is available in a billing document, choose *Goto* → *Header* → *Output* when changing or displaying the document.

Features

When you call up this report and enter the selection criteria, you receive a list of the billing documents with output to be issued. Select the output that you would like to issue and choose *Edit* → *Process*.

See also:

For more information on worklists, refer to [Selecting a Worklist for Output \[Page 11\]](#).

For more information on output control and determination, refer to [Message Control \[Ext.\]](#) and [Message Determination \[Ext.\]](#) in the *Cross Application - Message Control* documentation.

For further information on print control, see the [BC - R/3 Printing Guide. \[Ext.\]](#)

For more information on billing documents, see [Billing documents \[Ext.\]](#).

Transmission Media (SD)

Transmission Media (SD)

Sales and Distribution provides the following options for transmitting output:

Medium	Description	Further information
1	Printing	<i>BC - SAPoffice:</i> BC - SAPscript: Printing with Forms [Ext.]
2	Telefax	<i>BC - SAPoffice:</i> Forms in the Business Workplace [Ext.]
4	Telex	<i>BC - SAPoffice:</i> Forms in the Business Workplace [Ext.]
5	External transmission	
6	Electronic Data Interchange	<i>SD - EDI</i> Electronic Data Interchange/IDoc Interface (SD) [Ext.]
7	SAPoffice	<i>BC - SAPoffice:</i> SAPoffice [Ext.]
8	Special functions	
9	Events (SAP Business Workflow)	<i>BC - SAP Business Workflow:</i> Event [Ext.]
A	Distribution (ALE)	<i>CA - Business Framework Architecture:</i> Application Link Enabling Integration Technology [Ext.] <i>LO - Logistics Information System:</i> Components of the Logistics Information System (LIS) [Ext.]
T	Tasks (SAP Business Workflow)	<i>BC - SAP Business Workflow:</i> Tasks and Task Groups [Ext.]

Printing Output (SD)

Use

For example, you can print an order confirmation for a sales order.

Prerequisites

The following prerequisites must be met:

- An output type for printing must be available in the sales document. The output can be:
 - Determined automatically by the system using [message determination \[Ext.\]](#) in the sales document
 - For further information, refer to [Message Determination \(SD\) \[Ext.\]](#) in the *CA - Message Control* documentation.
 - Entered manually in the sales document
 - If an output exists in the output determination procedure, you can enter it manually in the sales document.
 - For further information, refer to [Message Determination Procedure \[Ext.\]](#) in the *CA - Message Control* documentation.
 - To enter an output manually (or to display an existing output), choose *Extras* → *Output* → *Header* or *Item* → *Edit* on the overview screen of the sales document. The *Transmission medium* field, for the output you want to print, must have a value of 1 (*Print output*) or 2 (*Fax*).
 - For further information about proposing output, refer to [Message Default and Message Processing \[Ext.\]](#) in the *CA - Output Control* documentation.
- The traffic light should be yellow in the *Status* column. If the traffic light is red, you can reprint the output by selecting the output and choosing *Repeat output*.
 - For further information, refer to [Message Status Records \[Ext.\]](#) in the *CA - Message Control* documentation.

Features

You can print output as follows:

- Using the worklist (online)
- Using the worklist (background job).
- [Printing output manually \[Page 21\]](#)

See also:

For more information on worklists, refer to [Selecting a Worklist for Output \[Page 11\]](#).

Printing Output (SD)

Printing Output Manually for a Sales Document

Use

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

You can:

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

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

Prerequisites

The general prerequisites that are described in [Printing Output \(SD\) \[Page 19\]](#) also apply here.

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

Procedure

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

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



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

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

Sending Electronic Mails Internally

Sending Electronic Mails Internally

Use

You can send a mail to the responsible employee to inform that person about a sales and distribution document that requires attention. The responsible employee can call up the document directly from the electronic mail to review or process it.

Features

The procedure for processing electronic mails is described in the section on [Processing Internal Mails \[Page 24\] in SD](#).

You can make the automatic proposal procedure dependent on certain requirements. For example, you can specify that an electronic mail should only be sent if the value of a sales order exceeds 1,000 USD. For further information, refer to [Message Determination: Processing Condition Component Hierarchies \[Ext.\]](#) in the *CA - Message Control* documentation.

You can also [manually enter mails in sales and distribution documents \[Page 23\]](#). If you are responsible for the original document, you can decide whether an electronic mail should be sent. If so, you can enter output information in the document header.

See also:

[Formatting SAPoffice Messages \[Ext.\]](#) in the *CA - Message Control* documentation.

Entering Electronic Mails Manually in SD Documents

1. Choose *Extras* → *Output* → *Header* or *Item* in the document you are currently processing.
2. Enter the following data:
 - **Mail** in the *Output type* field
 - Output medium 7 in the *Output medium* field
 - **MP** in the *PartFunct.* field
 - the user name of the mail recipient in the *Partner* field
 - the language in which the mail should be sent in the *Language* field
3. Choose *Further data* to enter the timing data for the electronic mail.
4. Choose *Communication method* to maintain the communication data for the electronic mail:
 - Mark either the *Functional* or *Standard* field (for mail that is not confidential) or the *Confidential* field.
 - Enter the transaction code with which the recipient can process the sales order. For example, enter VA02 to change a sales order or VA03 to display a sales order.
 - If you want to write a text to go along with the mail, choose *Edit* → *Editor* to reach the SAPscript Editor.
5. Choose *Back* to return to the output screen.

The system sends the electronic mail at the time you have specified in the timing data.

Processing Internal Mails in SD

Processing Internal Mails in SD

To process an electronic that you have received:

1. Choose *Office* → *Inbox* from the main menu.
2. Mark the incoming mail that you want to process, then choose *Document* → *Display*.

The system displays basic information about the selected document, such as the document number, who created the document, and so on. If the employee who created the document has included a text, the system displays this, too.

3. Choose *Edit* → *Process*.

The system automatically calls the transaction specified in the electronic mail. After you process the document, you return to the electronic mail. You can repeat this process as often as you like.



You can process an electronic mail without displaying the document by choosing *Edit* → *Process* after marking the relevant mail.

Optical Archiving in Sales and Distribution

For information on archiving incoming and outgoing documents in Sales and Distribution, see the *Basis Components - Basis Services / Communication* documentation and the *Cross Application (CA)* documentation [Introduction to SAP ArchiveLink \[Ext.\]](#).