

# How to debug a background job (BJOB)



In the work of a SAP Consultant comes time when you need to debug a program in the background mode or a running BJob.

There is a simple trick how to do this:

1. Set a breakpoint in ABAP report / FM that you want to debug.

The screenshot shows the SAP Function Builder interface for the function module 'SD\_SCHEDULING'. The 'Source code' tab is active. The code is displayed in a list format with line numbers on the left. Line 396, containing the statement 'PERFORM route\_schedule\_determine', is highlighted in red, indicating a breakpoint has been set. The code includes comments and parameter lists for 'activity parameters' and 'other parameters'.

```
394
395 * APPL0G 60 Routenfahrplan-Terminierung beginnt (Parameter siehe Detail)
396 PERFORM route_schedule_determine
397 USING
398 * activity parameters
399     lf_rs_shippoint_sw          if_rs_document_sw
400     if_schedule_shipping       if_schedule_transport
401 * other parameters
402     gf_schedule_direction      ls_scheddu
403     if_shipping_point          if_shipping_conditions
404     if_transport_route         if_transport_group
405     ls_kuwevsched              if_delivery_time
406     if_delivery_date           if_delivery_time
407 CHANGING
408     ls_schedev                 ef_route_schedule.
```

2. Create a background JOB in SM36 transaction or use any other available methods. Set a future time for start (enough +10 min).

Program Edit Goto System Help

Execute F8  
 Execute and Print Ctrl+P  
 Execute in Background F9  
 Exit Shift+F3

Material [ ] to [ ]  
 Plant [ ] to [ ]

Options

Process sales documents  
 Process stock transfer docs  
 \_\_\_ At item level   
 \_\_\_ At schedule line level   
 Unconfirmed documents required  
 Simulation

Sort order

	Priority	
Document category	1	
___ Prioritize sales documents		<input checked="" type="radio"/>
___ Prioritize stock transfer documents		<input type="radio"/>
Delivery priority	2	
Date	3	
___ Sort item by date of creation		<input checked="" type="radio"/>
___ Sort by delivery date of earliest schedule line		<input type="radio"/>
Document number	4	
Document item	5	

### Rescheduling sales and stock transfer documents: by material



**OE1(2)/100 Background Print Parameters**

Output Device:

Number of Copies:

**Page Area**

Everything

Page  to

**Properties**

Print Time:

Properties

Sort order

	Priority	
Document category	1	
<input type="checkbox"/> Prioritize sales documents		<input checked="" type="radio"/>
<input type="checkbox"/> Prioritize stock transfer documents		<input type="radio"/>
Delivery priority	2	
Date	3	
<input type="checkbox"/> Sort item by date of creation		<input checked="" type="radio"/>
<input type="checkbox"/> Sort by delivery date of earliest schedule line		<input type="radio"/>
Document number	4	
Document item	5	

# Rescheduling sales and stock transfer documents: by material



OE1(2)/100 Start Time

Immediate

Date/Time

After Job

After Event

Operation Mode



Date/Time

After Job

Operation Mode

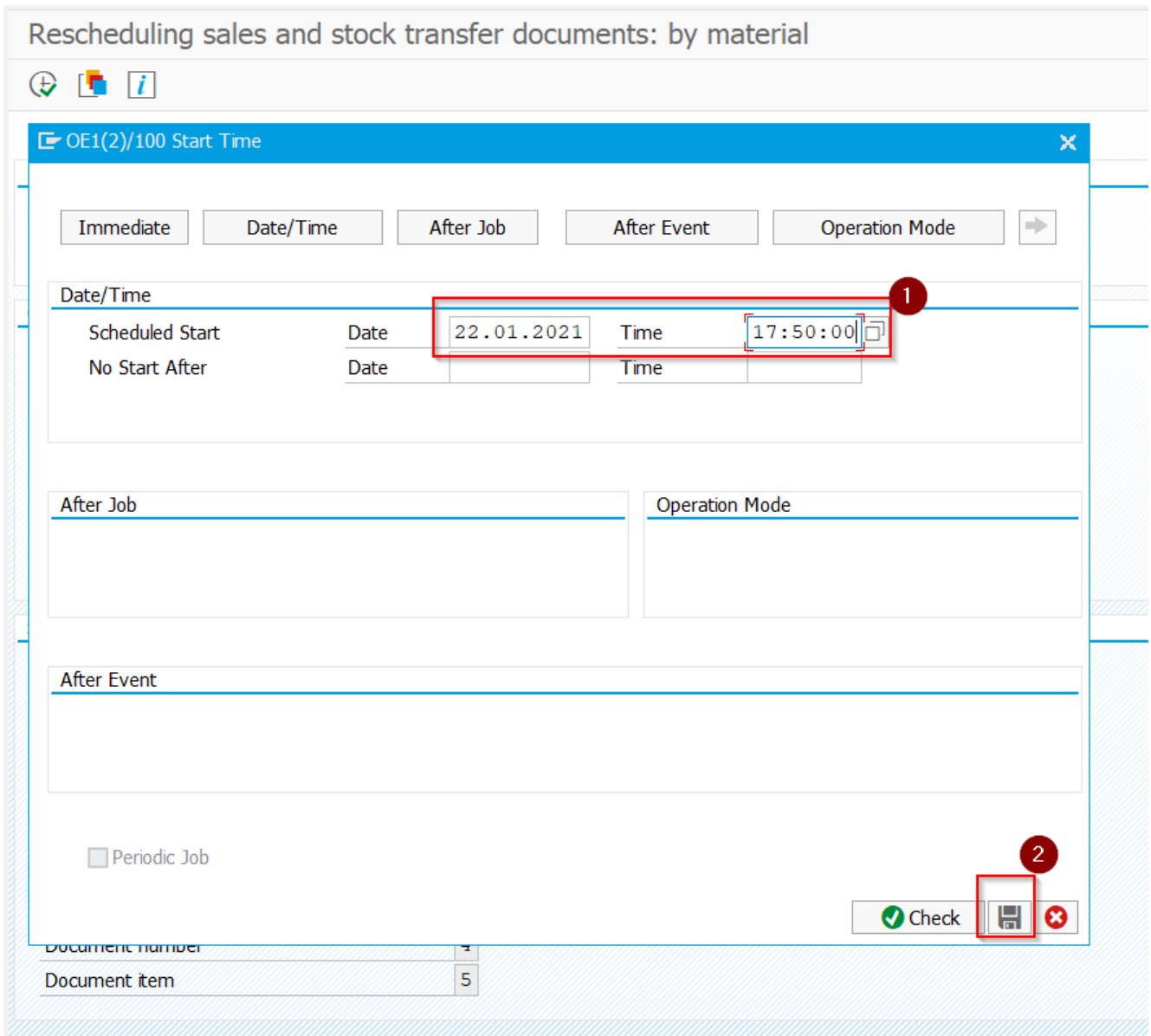
After Event

Check

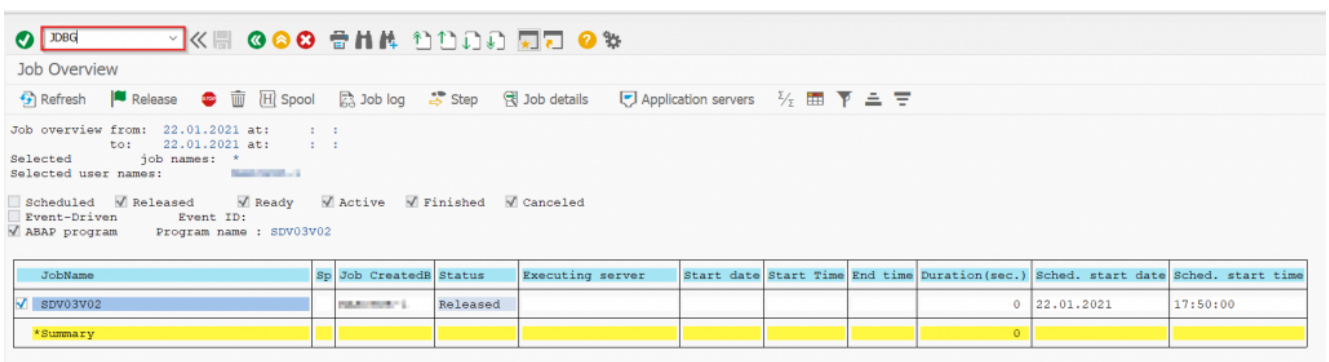


Document number 4

Document item 5



3. In SM37 transaction, put the cursor on the job line, type 'JDBG' in the command line ( no '/' ) and press enter.



4. The JOB will start in debug mode.

Debugger Edit Goto Breakpoints Settings Miscellaneous System Help

(/hs)ABAP Debugger(2) (Exclusive)(ch0000000000000000)

Step Size Watchpoint Layout Configure Debugger Layer

SAPLSPOO / LSP0007 / 14 SY-SUBRC 0  
 FUNCTION / RSPO\_TEST\_LAYOUT SY-TABIX 2

Desktop 1 Desktop 2 Desktop 3 Standard Structures Tables Objects DetailDisplay Data Explorer Break/Watchpoints Diff Script

```

8  ** EXPORTING
9  **   VALUE(ANSWER)
10 **   VALUE(LAYOUT_EXISTS)
11 **   VALUE(LAYOUT_TYPE) TYPE RSPOFMITYF
12 **
13
14 IF devicetype IS INITIAL.
15   SELECT SINGLE * FROM tsp03 WHERE padest = device.
16   IF sy-subrc <> 0.
17     answer = ' '.           "Gerät existiert nicht
18     EXIT.
19   ENDIF.
20
21   devicetype = tsp03-patyp.
22   ENDIF.
23
24   PERFORM test_layout USING devicetype layout
25                           CHANGING layout_type.
26
27 IF sy-subrc = 0.
28   answer = 'X'.
29   layout_exists = 'X'.
30 ELSE.
31   layout_exists = ' '.
32   answer = ' '.
33   CLEAR layout_type.
34 ENDIF.
35
36 ENDFUNCTION.
37
38

```

ABAP and Screen Stack

Sta...	Stac...	S...	Event Type	Event	Program	Na...	Include
9		S...	FUNCTION	RSPO_TEST_LAYOUT	SAPLSPOO		LSP0007
8		S...	FORM	FIT_PARAMS	SAPLSPRI		LSPRIF14
7		S...	FORM	GET_PRINT_INFO	SAPLSPRI		LSPRIF11
6		S...	FUNCTION	GET_PRINT_PARAMETERS	SAPLSPRI		LSPRIU01
5		S...	FUNCTION	PRINT_REPORT	SAPLSPRI		LSPRIU05
4		S...	FORM	%_PRINT_REPORT_%	RSDBRUNT		RSDBRUNT
3		S...	EVENT	SYSTEM-EXIT	SDV03V02		<SYSINI>
2		S...	PBO MODULE	SYSTEM-ASUBM			
1		S...	PBO SCREEN	1000	SAPMSY0		

Variables 1 Variables 2 Locals Globals Auto Memory Analysis

St...	Variable	V...	Val.	C...	Hexadecimal Value

S | ABAP | Ln 14 Col 1 | NUM

Standard layout used (user-specific layout -> long text)