

Events and Event Controlled Job Scheduling



Applies to:

SAP R3, ECC. For more information, visit the [ABAP homepage](#).

Summary

While executing Jobs, we can use an Event as the indicator to tell the Job that the desired status and time is fulfilled to start the Job. The detail of creating Events and scheduling Jobs depending on the event is explained here.

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Overview of Event

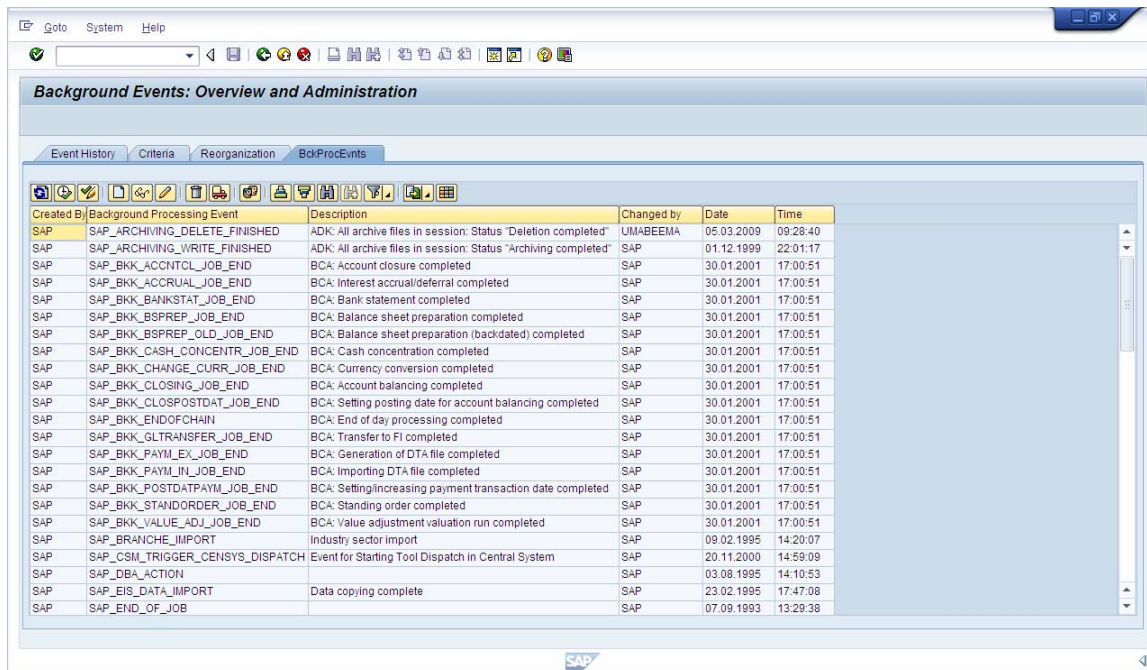
Events can be defined as the Indicator or signal. It communicates the system or associated task that the particular status or time has achieved to start the dependent work.

Use of Events:

- Events have meaning only in the background processing system and can be used only to start background jobs.
- After successful trigger of an Event, a notification is sent to background processing that a particular (predefined at the time of defining the Job) condition has been met.
- The Background processing system receives events and then starts all Jobs linked to the particular event.

Creation of Events

Go to TCode: SM64



The screenshot shows the SAP 'Background Events: Overview and Administration' window. It features a table with columns for 'Created By', 'Background Processing Event', 'Description', 'Changed by', 'Date', and 'Time'. The table lists various events such as 'SAP_ARCHIVING_DELETE_FINISHED', 'SAP_ARCHIVING_WRITE_FINISHED', and 'SAP_BKK_ACCRUAL_JOB_END', each with a corresponding description and timestamp.

Created By	Background Processing Event	Description	Changed by	Date	Time
SAP	SAP_ARCHIVING_DELETE_FINISHED	ADK: All archive files in session: Status 'Deletion completed'	UMABEEMA	05.03.2009	09:28:40
SAP	SAP_ARCHIVING_WRITE_FINISHED	ADK: All archive files in session: Status 'Archiving completed'	SAP	01.12.1999	22:01:17
SAP	SAP_BKK_ACCRUAL_JOB_END	BCA: Account closure completed	SAP	30.01.2001	17:00:51
SAP	SAP_BKK_ACCRUAL_JOB_END	BCA: Interest accrual/deferral completed	SAP	30.01.2001	17:00:51
SAP	SAP_BKK_BANKSTAT_JOB_END	BCA: Bank statement completed	SAP	30.01.2001	17:00:51
SAP	SAP_BKK_BSPREP_JOB_END	BCA: Balance sheet preparation completed	SAP	30.01.2001	17:00:51
SAP	SAP_BKK_BSPREP_JOB_END	BCA: Balance sheet preparation (backdated) completed	SAP	30.01.2001	17:00:51
SAP	SAP_BKK_CASH_CONCENTR_JOB_END	BCA: Cash concentration completed	SAP	30.01.2001	17:00:51
SAP	SAP_BKK_CHANGE_CURR_JOB_END	BCA: Currency conversion completed	SAP	30.01.2001	17:00:51
SAP	SAP_BKK_CLOSING_JOB_END	BCA: Account balancing completed	SAP	30.01.2001	17:00:51
SAP	SAP_BKK_CLOSEPOSTDAT_JOB_END	BCA: Setting posting date for account balancing completed	SAP	30.01.2001	17:00:51
SAP	SAP_BKK_ENDOFCHAIN	BCA: End of day processing completed	SAP	30.01.2001	17:00:51
SAP	SAP_BKK_GLTRANSFER_JOB_END	BCA: Transfer to FI completed	SAP	30.01.2001	17:00:51
SAP	SAP_BKK_PAYM_EX_JOB_END	BCA: Generation of DTA file completed	SAP	30.01.2001	17:00:51
SAP	SAP_BKK_PAYM_EX_JOB_END	BCA: Importing DTA file completed	SAP	30.01.2001	17:00:51
SAP	SAP_BKK_POSTDATPAYM_JOB_END	BCA: Setting/increasing payment transaction date completed	SAP	30.01.2001	17:00:51
SAP	SAP_BKK_STANDORDER_JOB_END	BCA: Standing order completed	SAP	30.01.2001	17:00:51
SAP	SAP_BKK_VALUE_ADJ_JOB_END	BCA: Value adjustment valuation run completed	SAP	30.01.2001	17:00:51
SAP	SAP_BRANCHE_IMPORT	Industry sector import	SAP	09.02.1995	14:20:07
SAP	SAP_CSM_TRIGGER_CENSYS_DISPATCH	Event for Starting Tool Dispatch in Central System	SAP	20.11.2000	14:59:09
SAP	SAP_DBA_ACTION		SAP	03.08.1995	14:10:53
SAP	SAP_EIS_DATA_IMPORT	Data copying complete	SAP	23.02.1995	17:47:08
SAP	SAP_END_OF_JOB		SAP	07.09.1993	13:29:38

Click on Create button and give the Event Name and Description.



The screenshot shows the 'Event Definition' dialog box in SAP. It has two input fields: 'Event' with the value 'EVENT_DS' and 'Description' with the value 'Demo Event'. There is a checkbox labeled 'System' which is currently unchecked. At the bottom right, there are 'Save' and 'Cancel' buttons.

Do not select "System". Save the entry.

Defining Job with Event

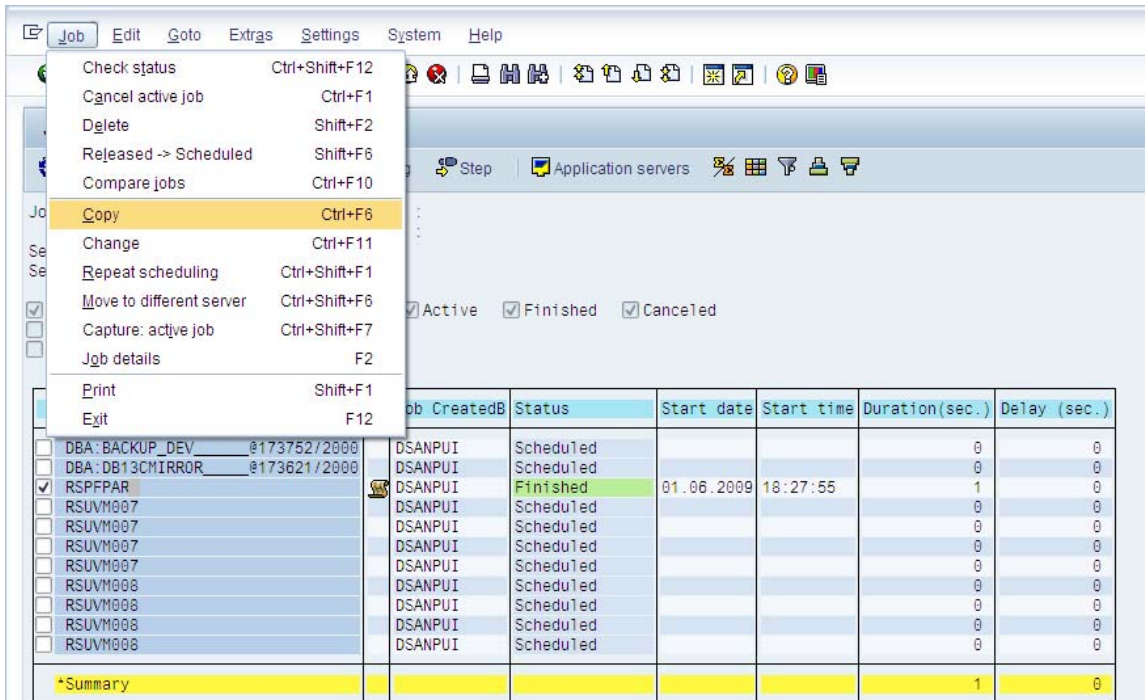
Go to SM37 and give a search criterion to find out all the Jobs available as per your requirement. Here as: with User name, All Job status, 2 days of time period (both dates inclusive).

A list of Jobs with selected types will be shown by using SAP ALV grid display.

Job	Ln	Job Created@	Status	Start date	Start time	Duration(sec.)	Delay (sec.)
DBA: BACKUP_DEV_@173752/2000		DSANPUI	Scheduled			0	0
DBA: DB13CHIRRROR_@173621/2000		DSANPUI	Scheduled			0	0
RSFFPAR		DSANPUI	Finished	01.06.2009	18:27:55	1	0
RSUVM007		DSANPUI	Scheduled			0	0
RSUVM007		DSANPUI	Scheduled			0	0
RSUVM007		DSANPUI	Scheduled			0	0
RSUVM007		DSANPUI	Scheduled			0	0
RSUVM008		DSANPUI	Scheduled			0	0
RSUVM008		DSANPUI	Scheduled			0	0
RSUVM008		DSANPUI	Scheduled			0	0
RSUVM008		DSANPUI	Scheduled			0	0
*Summary						1	0

Here we will Copy an existing Job to create a new one with Event ID. **Please note that we can define a new Job also in the same manner.**

Choose the job **RSPFPAR** and select “Job” → “Copy”

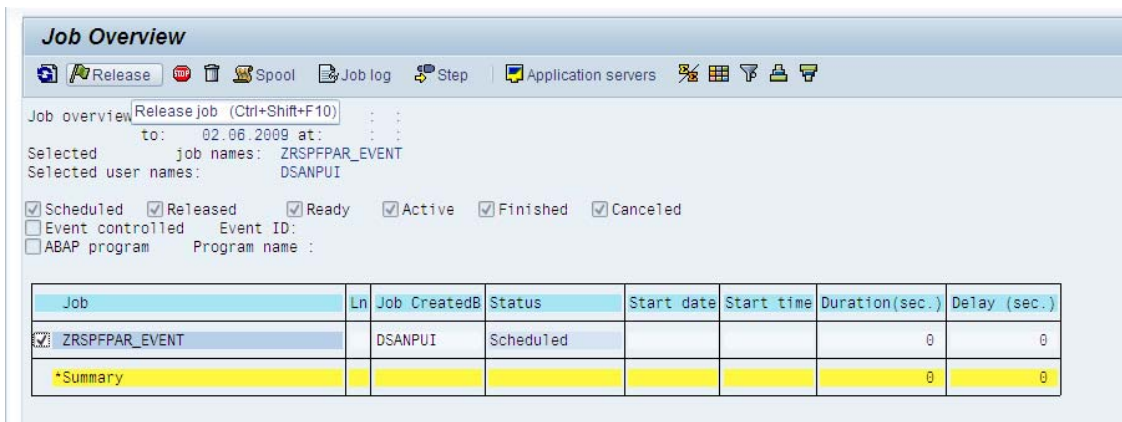


Give the name of the Copied Job as “**ZRSPFPAR_EVENT**”.



After saving the Job will be in “**Scheduled**” status.

Select the Job and click on “**Release**”



In the next screen, select the option “**After Event**”

The screenshot shows a dialog box titled "Start Time" with a close button (X) in the top right corner. At the top, there are six buttons: "Immediate", "Date/Time", "After job", "After event", "At operation mode", and a button with a right-pointing arrow and two dots. The "After event" button is highlighted in yellow. Below the buttons are three input fields: "Date/Time" (a large single-line field), "After job" (a smaller single-line field), and "At operation mode" (a smaller single-line field).

Put the Event ID as created in the 1st stage. Do not put anything in the Parameter field. Make the job periodic by clicking the option “Periodic Job” at bottom.

The screenshot shows the same "Start Time" dialog box. The "After event" button is highlighted in yellow. The "Date/Time" field is empty. The "After job" and "At operation mode" fields are empty. The "After event" section is expanded, showing an "Event" field with the value "EVENT_DS" and an empty "Parameter" field. At the bottom, there is a checkbox labeled "Periodic job" which is checked. In the bottom right corner, there are three buttons: "Check" (with a green checkmark icon), "Save" (with a floppy disk icon), and "Close" (with a red X icon).

Save. It will release the Job.

Now, to select the Job in SM37, you need to select the Job Start Condition: After event – put the Event ID or preferably put *.

It will show you the Job in “Released” status as below.

Job	Ln	Job Created@	Status	Start date	Start time	Duration(sec.)	Delay (sec.)
ZRSPPAR_EVENT		DSANPUI	Released			0	0
*Summary						0	0

Triggering the Event

Start TCode SM64 and select the event **EVENT_DS**.

SAP	SAP_TR_TXRP_DONE	Tax Reporter completed creating the forms cluster.	SAP	19.05.2000	19:21:19
Customer	AFTER_LC		CURA	15.01.2007	15:15:50
Customer	APO_1		CURA	24.10.2002	08:54:29
Customer	APO_2		CURA	24.10.2002	08:54:39
Customer	APO_3		CURA	24.10.2002	08:54:50
Customer	CLONE	Import Users on Event	MAASSBERG	11.06.2004	19:42:46
Customer	CONVERT		CURA	09.07.2002	10:48:42
Customer	EVENT_DS	Demo Event	DSANPUI	02.06.2009	19:30:10
Customer	EWU_PHASEN_ALL_START_CLIENT		D021845	29.05.1998	17:48:17
Customer	EWU_PHASEN_START_CLIENT		D021845	29.05.1998	17:48:17
Customer	EXPORT_USERS		CURA	10.01.2003	10:45:05
Customer	IMPORT_USERS		CURA	10.01.2003	10:45:19
Customer	RSPROCESS	Process Chain Management Event	DBOSE	07.05.2009	12:59:52
Customer	START_CC_R34	START_CC_R34	EPPLER	04.03.2004	18:53:32
Customer	START_CC_TE3	START_CC_TE3	EPPLER	12.03.2004	10:14:11
Customer	START_CONV		CURA	24.10.2002	08:53:42
Customer	ULOC		KLOSES	16.09.1996	13:39:27
Customer	ULOC_CLIENT_800		BUCHERT	15.01.2001	15:23:08

Choose **“Trigger”**

Created by	Event	Description	Changed by	Date	Time
SAP	STEM_STOP		SAP	07.09.1993	13:30:13
SAP	ST		SAP	07.07.1993	10:59:37
SAP	SAP_TRANSLATION_WORKLIST_START	Start signal for background jobs in the translation environment	SAP	02.11.1998	12:51:11
SAP	SAP_TRIGGER_RDDIMPDP	Event to start transport program RDDIMPDP	SAP	16.05.1995	21:09:59
SAP	SAP_TRIGGER_RDDIMPDP_CLIENT		SAP	16.05.1995	21:09:29
SAP	SAP_TR_TXRP_DONE	Tax Reporter completed creating the forms cluster.	SAP	19.05.2000	19:21:19
Customer	AFTER_LC		CURA	15.01.2007	15:15:50
Customer	APO_1		CURA	24.10.2002	08:54:29
Customer	APO_2		CURA	24.10.2002	08:54:39
Customer	APO_3		CURA	24.10.2002	08:54:50
Customer	CLONE	Import Users on Event	MAASSBERG	11.06.2004	19:42:46
Customer	CONVERT		CURA	09.07.2002	10:48:42
Customer	EVENT_DS	Demo Event	DSANPUI	02.06.2009	19:30:10
Customer	EWU_PHASEN_ALL_START_CLIENT		D021845	29.05.1998	17:48:17
Customer	EWU_PHASEN_START_CLIENT		D021845	29.05.1998	17:48:17

It will ask for Parameter

Trigger an Event

Event

EventID:

Parameter:

Target

Trgt Svr:

Leave the Parameter field empty and choose Trigger again.

Event will be triggered and thus the Job just defined will be processed now. If you select the Job with selection criteria considering Event ID, the Job will be shown as **Finished** (and of course **Cancelled** if it didn't have a chance to execute successfully).

The screenshot shows the SAP Job Overview window. At the top, there is a menu bar with 'Job', 'Edit', 'Goto', 'Extras', 'Settings', 'System', and 'Help'. Below the menu is a toolbar with various icons. The main area is titled 'Job Overview' and contains the following information:

Job overview from: 02.06.2009 at: : :
to: 02.06.2009 at: : :
Selected job names: ZRSPPAR_EVENT
Selected user names: DSANPUI

Filters: Scheduled Released Ready Active Finished Canceled
 Event controlled Event ID: EVENT_DS
 ABAP program Program name :

Job	Ln	Job CreatedBy	Status	Start date	Start time	Duration(sec.)	Delay (sec.)
ZRSPPAR_EVENT		DSANPUI	Released			0	0
ZRSPPAR_EVENT		DSANPUI	Finished	02.06.2009	19:50:50	3	0
*Summary						3	0

Related Content

[SAP Central Process Scheduling Administration Guide](#)

[Events in Background Processing Explained \(SAP Library - Background Processing\)](#)

[SAP Note 386646 Event-controlled jobs start with a delay](#)

[SAP Note 577070 Starting event-based jobs while background WPs are busy](#)

[SAP Note 1074639 Event-based job interception](#)

[SAP Note 564391 Other method during the job immediate- and event start](#)

For more information, visit the [ABAP homepage](#).

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