165084 - Why does my job not start?

Version	21	Туре	SAP Note
Language	English	Master Language	German
Priority	Recommendations / Additional Info	Category	Help for error analysis
Release Status	Released for Customer	Released On	10.07.2018
Component	BC-CCM-BTC (Background Processing)		

Please find the original document at https://launchpad.support.sap.com/#/notes/ 165084

Symptom

You want to find out why a specific job will not start.

Other Terms

SAPMSSY2, SM37, SM37C, resources, background processes, jobs, delay

Reason and Prerequisites

Since the cause of the problem may vary according to the status of the job, you must first determine the job status. Then refer to the relevant section below.

- 1. Job status "Scheduled"
- 2. Job status "Released"
- 3. Job status "Ready"

Solution

1. Job status "Scheduled"

A job that has the status 'Scheduled' can never start because it lacks a start condition. The job has either been descheduled (in this case, the original start condition is still visible), or it never had a start condition. In the latter case, an error may have occurred when the job was scheduled. Check the system log (transaction SM21) for error messages at the time the job was created.

If the job has a start condition but still has the status 'Planned', either the release of the job was reset or the job was scheduled using program means. The function module JOB_CLOSE was called with the parameter DIRECT_START = 'X'. In this case, JOB_CLOSE returns an error if the job cannot be started immediately because, for example, there are no free resources.

2. Job status "Released"

You must first check whether transaction SM37 indicates a delay for the job. If this is the case, the start condition of the job has taken effect. If a released job is delayed, it may not start for one of the following reasons:

a) The job waits for the time scheduler to be executed.

This is a 'normal' delay. The time scheduler runs in an interval that is determined by the profile parameter rdisp/btctime.

b) There are insufficient free background processes.

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To start a job, the system requires a free background work process. You can choose the 'Active' tab in transaction SM37C to check which jobs were active when your job should have started.

Note 923228 greatly improves the throughput of SAP background processing because, when each job ends, it informs the system that its work process is free.

c) There are insufficient dialog processes for schedulers.

Time-controlled or event-controlled schedulers require a free dialog process. If an instance is occupied by several RFC calls, for example, the scheduler cannot start. You can use transaction SM61 to check when the time-controlled or eventcontrolled scheduler last ran.

d) Operation modes are defined incorrectly.

If an operation mode is defined in a transaction, which, for example, defines that only jobs with class A may run on an instance, jobs with class B or C will not run on this instance.

e) The target server is no longer active, or no more background processes are available.

A job will never start if its target server is no longer active, or if there are no background processes available on the target server.

f) The target server group indicates an invalid instance.

A job that is assigned to a target server group cannot start if this group contains only invalid instances. This applies to the default server group SAP_DEFAULT_BTC, too (see SAP Note 786412). For invalid entries in the server groups, the system issues warnings in the system log (see Note 1143377).

g) Hanging lock on BTCRMTCLN

To ensure that only one time scheduler runs at any one time for each server, the system sets a lock on the table BTCRMTCLN. If this lock cannot be removed for some reason, no scheduler can run. You can use transaction SM12 to check whether a lock is set on BTCRMTCLN.

As of SAP Note 2449783, locks that hang for a long period of time are deleted by the system itself.

h) Scheduler deactivated

The time- or event-controlled scheduler has been deactivated in transaction SM61. In this case, the system writes entries into the system log every minute. As of SAP Note <u>1385751</u>, the deactivation is no longer possible.

i) Scheduler not started by dispatcher

If the aforementioned profile parameter **rdisp/btctime** has the value 0, the scheduler is never started. There are also situations in which the dispatcher cannot start the dispatcher due to an error. Known reasons for this are described in SAP Notes <u>1761481</u>, <u>2106325</u>, and <u>2356238</u>.

j) In the case of event-controlled jobs whose event should be triggered by the program sapevt, an incorrect configuration might be the cause. SAP Note <u>11661</u> provides further information.

k) Entries missing from TBTCS or BTCEVJOB.

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Each released job must have an entry in table TBTCS (time-controlled jobs) or BTCEVTJOB (event-controlled jobs). Otherwise, a released job will not start. You can display inconsistencies between the background processing tables by calling transaction SM65 and choosing the menu options 'Goto -> Additional Tests'. If inconsistencies occur frequently, report the problem to SAP Support.

1) Start dates in TBTCO and TBTCS do not match

For a customer, it has been noticed that the start date in the table TBTCO was earlier than the start date in the table TBTCS. Transaction SM37 indicated a delay for the affected jobs; however, the job was executed correctly for the start date of the table TBTCS. This problem was caused by direct table accesses in customer programs.

m) Incorrect index TBTCS~1

In the case of an incorrect index TBTCS~1, jobs are not executed. SAP Note <u>2519972</u> describes an analysis option.

n) As of Release 7.51: The system is in maintenance mode (German: Wartungsmodus).

In maintenance mode, only batch jobs scheduled using a user with increased privileges can start. The report RLFW_MANAGE_MAINTENANCE_MODE can be used to determine whether the system is in maintenance mode.

3. Job status "Ready"

A job should never have the status 'ready' for longer than five seconds. If this status remains for a longer period of time, a problem occurred during the sending of the start message, or the receiving batch work process does not have a connection to the database. Check the system log (transaction SM21) for error messages. If the problem occurs again after you import a new kernel, report the problem to SAP Support. If the problem only occurs for jobs that are started by sapevt, install a new sapevt as well as a new kernel.

As of Release 7.40 SP05, there is a mechanism for restarting jobs that hang in the status "Ready".

4. Job has the status 'active'

This job is currently running, so there is no problem.

5. Job has the status 'complete'

This job has already ended, so there is no problem.

6. Job has the status 'terminated'

This job terminated during runtime. The job log records the cause of the termination.

This document refers to

SAP Note/KBA	Title
930567	Overview: Jobs remain in status "ready" for a long time

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2519972	Time-drive jobs are not executed
2449783	Background jobs do not run on a server
2356238	Periodic Tasks are not being executed after DB reconnect
2106325	Batch scheduler does not run any longer
1761481	Periodic jobs do not run
1385751	Deactivating background processing
1169524	Program for periodic status query of jobs
11661	Event-driven call of background jobs does not work
1035000	Dynamic time scheduler appears not to work

This document is referenced by

SAP Note/KBA	Title
1591783	Newly executed package does not display in package status
2519972	Time-drive jobs are not executed
930567	Overview: Jobs remain in status "ready" for a long time
1169524	Program for periodic status query of jobs
1035000	Dynamic time scheduler appears not to work