

# PBS exit codes

## Category: Running Jobs with PBS

The PBS exit value of a job may fall in one of four ranges:

- $X = 0$  (= JOB\_EXEC\_OK)

This is a PBS special return value indicating that the job executed successfully

- $X < 0$

This is a PBS special return value indicating that the job could not be executed.

These negative values are:

- ◆ -1 = JOB\_EXEC\_FAIL1 : Job exec failed, before files, no retry
- ◆ -2 = JOB\_EXEC\_FAIL2 : Job exec failed, after files, no retry
- ◆ -3 = JOB\_EXEC\_RETRY : Job exec failed, do retry
- ◆ -4 = JOB\_EXEC\_INITABT : Job aborted on MOM initialization
- ◆ -5 = JOB\_EXEC\_INITRST : Job aborted on MOM initialization, checkpoint, no migrate
- ◆ -6 = JOB\_EXEC\_INITRMG : Job aborted on MOM initialization, checkpoint, ok migrate
- ◆ -7 = JOB\_EXEC\_BADRESRT : Job restart failed
- ◆ -8 = JOB\_EXEC\_GLOBUS\_INIT\_RETRY : Initialization of Globus job failed. Do retry.
- ◆ -9 = JOB\_EXEC\_GLOBUS\_INIT\_FAIL : Initialization of Globus job failed. Do not retry.
- ◆ -10 = JOB\_EXEC\_FAILUID : Invalid UID/GID for job
- ◆ -11 = JOB\_EXEC\_RERUN : Job was rerun
- ◆ -12 = JOB\_EXEC\_CHKP : Job was checkpointed and killed
- ◆ -13 = JOB\_EXEC\_FAIL\_PASSWORD : Job failed due to a bad password
- ◆ -14 = JOB\_EXEC\_RERUN\_ON\_SIS\_FAIL : Job was requeued (if rerunnable) or deleted (if not) due to a communication failure between Mother Superior and a Sister

- $0 \leq X < 128$  (or 256 depending on the system)

This is the exit value of the top process in the job, typically the shell. This may be the exit value of the last command executed in the shell or the `.logout` script if the user has such a script (csh).

- $X \geq 128$  (or 256 depending on the system)

This means the job was killed with a signal. The signal is given by  $X \bmod 128$  (or 256). For example an exit value of 137 means the job's top process was killed with signal 9 ( $137 \% 128 = 9$ ).

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