

Job States

As a job moves from submission to execution to completion, it goes through a variety of states - and at any given moment every job is in exactly one of several possible states. The starting state of a job can be specified by the user or developer through the job structure in the API, or through the command line.

State	Meaning
pending	Default state for submitted jobs. Signals to the Supervisor that the job may be started at any time. Jobs which have been suspended will also be marked as pending
blocked	Alternate state for submitted jobs. Tells the system to hold the job until it is unblocked by something, usually another job that this one depends on.
running	Job that is doing work, with no failures.
failing	Job that has not finished, but has at least one frame or instance that has failed.
retrying	Jobs that have retry counts greater than zero, and have been retried (automatically) at least once, are marked as retrying.
killed	Job that has been killed by a user. Killed jobs must be manually retried or resubmitted.
complete	Job is no longer running, and all frames have succeeded.
failed	Job is no longer running, and at least one frame or instance has failed.

Actions

States can be changed due to various actions taken by users or the Supervisor.

Action	Meaning
block	Typically done by users, but auto-wrangling will also block instances and jobs.
interrupt	Kill the current frame and put the job into a pending state, where it can be picked up and rerun.
kill	End the current frame and don't restart the job. A user must retry or resubmit this job.
resubmit	Bring up the submission UI and possibly modify the job's parameters before sending it back to the Supervisor.
retry	Put the job back onto the queue as-is, without modifying any of the submission parameters.
suspend	Like "interrupt" except that it allows the current frame to finish first.