



## API OBJECTS

## API Objects

### Jobs

Jobs are part of the **batch** API group. They are used to run a set number of pods to completion. If a pod fails, it will be restarted until the number of completion is reached.

While they can be seen as a way to do batch processing in Kubernetes, they can also be used to run one-off pods. A Job specification will have a parallelism and a completion key. If omitted, they will be set to one. If they are present, the parallelism number will set the number of pods that can run concurrently, and the completion number will set how many pods need to run successfully for the Job itself to be considered done. Several Job patterns can be implemented, like a traditional work queue.

Cronjobs work in a similar manner to Linux jobs, with the same time syntax. There are some cases where a job would not be run during a time period or could run twice; as a result, the requested Pod should be idempotent.

An option spec field is **.spec.concurrencyPolicy**, which determines how to handle existing jobs, should the time segment expire. If set to **Allow**, the default, another concurrent job will be run. If set to **Forbid**, the current job continues and the new job is skipped. A value of **Replace** cancels the current job and starts a new job in its place.