

# What is grid-control?

grid-control is a versatile **user job submission tool**, that ...

- runs **arbitrary scripts** (or comfortably runs experiment software)
- supports complex **parameterized / dataset** based jobs
- can retrieve dataset information from many sources, and **partition them along user defined content / metadata boundaries**
- allows to **chain tasks** to create complex **(live)** analysis chains
- submits **local or remote jobs**, leveraging the available submission backends
- is successfully used **since early 2007** by different communities

## Technical aspects:

- Easy steering with **ini-style or python config files** or via API that allows to supply site, host or user specific settings
- **Highly modular**, easily extendable, coded in python
- Tasks can **react to changes** in the parameter space (eg. new user parameters or expanding/shrinking datasets)
- It routinely manages single user tasks with  **$O(10,000)$  jobs**
- **Plugins enable integration of experiment specific functionality**
- **CMS experiment integration**: direct support of CMSSW jobs, DBS/PhEDEx, dashboard monitoring – cmsenv is optional
- Very easy to deploy – **no external dependencies** except for CPython 2.3-3.5 or pypy (useful for **long term analysis** efforts)