Summary of *batch* (Slurm) command

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The *batch* command is a tool that can be used to submit jobs to a remote cluster which is (already) using Slurm workload manager. This command works as a front end to make job submission, result retrial and remote cleaning more convenient. The full documentation for the batch command as well as corresponding examples is available online[1] but for some reason it is not indexed in the table of content of cm4 documentation [2]. In the following sections, the main assumptions are presented and possible improvement of the tool are described in form of questions:

- Each job created by this tool only takes in one remote Slurm cluster. So in case the user wants to submit a job to more than one Slurm cluster, she has to create another job manually. Is it useful to submit one job to more than one Slurm cluster?

- The batch command assumes that the Slurm file is already created and debugged. Is it useful for the batch command to build the Slurm file?

- The batch tool uses the SSH config file for initiating the connection and authentication (either credentials or private key).

- The input type of the Slurm job is assumed to be either a set of command line arguments possibly accompanied by other data files.

- similar to vcluster command, the Slurm command also saves its temporary configurations, including current submitted jobs and required information to check/retrieve the results, in a yaml file located in the *workspace* folder. Should this be changed to use MongoDB instead of a local file?

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[1]https://cloudmesh-community.github.io/cm/batch.html
[2]https://cloudmesh-community.github.io/cm/index.html