



ARTEMISA Experience

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ARTEMISA: CPU



TWiki: <https://twiki.ific.uv.es/twiki/bin/view/Artemisa/UsageGuide>

user area ~100 GB: /lhome/ific/<initial_letter>/<username>

group area ~5 TB: /lustre/ific.uv.es/ml/<group_name>

- Successfully followed instructions from TWiki
- Initial setup worked without problems from any location
- Jobs which have large output while running have to be run at group area (even increased, by demand)
- Jobs with smaller run-time output can be run at user area
- 100 jobs in 4 days complete without errors (!), multiple times (!)
- Jobs using pre-compiled libraries from cvmfs had a interruption for a few jobs while running 10 days (not a large fraction, but need to develop scripts to locate them and re-submit)
- ARTEMISA setup really really fast and reliable (running, copy, cvmfs great, small UFO delays locally)
- Good log and err output, very important for debugging of pilot jobs
- Very good experience with running the jobs, and support from Javier (!) for tailoring the job submission
- Condor queue system good for small number of users, for higher number of users upgrade probably needed
- Looking forward to ARTEMISA upgrade, for higher number of users higher capacities are needed
- Generated $\mathcal{O}100$ TB of MC samples for machine learning tasks, will be used for GPU jobs
- Require higher storage space (perhaps this job is extreme)
- Many next applications in pipe-line
- Super super happy with ARTEMISA, managed calculations like never before!

ARTEMISA: GPU



TWiki: <https://twiki.ific.uv.es/twiki/bin/view/Artemisa/UsageGuide>

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group area ~5 TB: `/lustre/ific.uv.es/ml/<group_name>`

- Successfully followed instructions from TWiki
- Initial setup worked without problems from any location
- Usage of standard machine learning tools (Scikit-learn, Keras, TensorFlow)
 - Installed standard libraries locally, export location in condor job
 - Run single GPU per condor job
- Hardware is state of the art, very fast!
- No issues with GPU usage!

