

## Publication

### Reproducibility in Practice: Lessons Learned from Research and Teaching Experiments

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Nowadays computer systems, with the new multi-core architectures comprising accelerators such as GPU and Intel Xeon Phi, have a high complexity and are exclusively targeting performance: it becomes more and more difficult for scientists to preserve the context of their experiments and let them be reproducible by others. In the previous years researchers mainly focused on their own work, not caring about letting it be useful for the others and for science to move forward. The majority of the experiments on parallel computers have been reported at conferences and in journals usually without the possibility to verify the results presented. While this is still the state-of-the-art, current research targets for solutions to this problem. We discuss early results regarding our workflow system based approach, implemented in order to address the reproducibility problem in the context of high performance computation. We used our framework to reproduce the results of some papers and classroom code. In order to allow an easy interface to our system and let it be accessible from everywhere we set up a web application.

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