**Journal of Parallel and Distributed Computing (JPDC)**

Summary of differences between conference papers and current submitted article

Dear Editors and Reviewers,

The present letter highlights the differences between the submitted manuscript and two papers based on which it was written:

1. [Damaris: How to Efficiently Leverage Multicore Parallelism to Achieve Scalable, Jitter-free I/O](http://hal.inria.fr/hal-00715252), M. Dorier, G. Antoniu, F. Cappello, M. Snir, L. Orf, in Proceedings of the IEEE Cluster 2012 conference. September 2012 (Beijing, China)
2. [Damaris/Viz: a Nonintrusive, Adaptable and User-Friendly In Situ Visualization Framework](http://hal.inria.fr/hal-00859603), M. Dorier, R. Sisneros, T. Peterka, G. Antoniu, D. Semeraro, in Proceedings of the IEEE LDAV 2013 conference. October 2013 (Atlanta, GA, USA).

First of all, we would like to point out that while the submitted paper is partially based on experimental results presented in [1] and [2], most of its content has been rewritten from scratch to fit the current status of our work (in particular the current implementation of Damaris), to better group contributions related to I/O and In Situ Visualization, and to give a broader description of the background, motivation and related work.

We made the following important extensions to our already published work.

1. The background and motivation section is entirely new compared with previous works. This section gives an overview of current practices in I/O and data analysis/visualization, as well as our vision, motivating the contributions presented in the rest of the paper.
2. The description of Damaris in Section 3 corresponds to its current design and implementation as of Damaris 1.0, as opposed to the design and implementation of older prototypes in [1] and [2]. It goes much deeper into the detail of the software architecture, and exemplifies its usage thanks to code samples of scenarios of I/O and in situ visualization tasks.
3. In the evaluation with respect to I/O performance (Section 4.1), compared with [1],
   1. We added a study of the I/O variability through the cumulative distribution functions of write time (figures 7a and 10).
   2. While our Cluster paper [1] presented experiments only with the CM1 simulation, we added 50% new experiments conducted with the Nek5000 simulation.
4. While Section 4 is partially based on results presented in [1] and [2], the way these results are presented have been entirely re-organized to clarify them and better interpret them.
5. The extension of Damaris to support dedicated nodes, as well as the experimental comparison between dedicated cores and dedicated nodes conducted in Section 6 represent entirely new contributions as well.
6. The related work has been updated to take into account more recent works on I/O, in situ visualization and data management approaches featuring dedicated cores or nodes.

Sincerely yours,

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