

Évry, 20/04/2018

**Subject: Explanation for the extension of the submitted paper to the original one published in proc. SolCT2017.**

Dear Sir/Madam

I would like to explain for the extension of the paper submitted on Journal Informatica from that one on proceeding SolCT2017.

The biggest extension in this paper is the presentation and evaluation about Time-Stamp Incremental Checkpointing – a checkpoint technique. TICKPT is an improvement of Discontinuous Incremental Checkpointing by adding new factor – Time-stamp, and selecting only the modified memory of shared-variables to write to checkpoint file. These techniques contributes on reducing of checkpoint's size and communication time. The details of techniques, analysis and evaluation are presented at Section 3 – Time-stamp Incremental Checkpointing (TICKPT) and Section 5 – Analysis and Evaluation. These section have not published on SolCT'2017 proceeding and others.

In addition, this paper is also add some more contents to make it more clear and complete. The main points are listed as follows:

1) Paper's title and abstract.

The new title is "*Time-stamp incremental checkpointing and its applying for an optimization of execution model to improve performance of CAPE*", and the abstract is re-written to adapt with the new contents of the paper

2) CAPE Principles section

In this section, we have added a subsection to present summary of Discontinuous Incremental Checkpoint (DICKPT) – a checkpoint technique used on previous version of CAPE. To explain more clear about CAPE principles.

3) Time-stamp Incremental Checkpointing (TICKPT) section

This is one of the new main contributions on this paper, we have presented the methods to improve checkpoint technique on CAPE. The new checkpointing method is called TICKPT.

4) Analysis and Evaluation section

In this section we have added the analysis and evaluation of using TICKPT instead of DICKPT. That shows the advantages of TICKPT on CAPE.

These are the expansion points of this version compared to the previous version on proceeding SolCT2017. I hope that it adapts the requirements of Informatica Journal. If you need further explanation, please feel free to send us your requirements.

With our best regards,  
Authors.