Author's Reply

February 1, 2017

Overview

I appreciate these quite thorough reviews. I appreciate the feedback and suggestions.

Reviewer

<< Reviewer's comments to the author(s) >>

The SEDONA is based on the probability that any daemons run during the measurement. And cutoff time is based on the actual measurement time. The proposed approach is interesting, but I cannot understand why the author employs such statistics and heuristic way, and how efficient the proposed approach will work. Please refer to my comments, and consider to revise the manuscript and re-submit.

I understand your concern. I respond to individually below. Please also note that your (excellent) comments are incorporated into the revision.

Comments: (1) In the last of the manuscript, the author describes "Our plan is to integrate SEDONA into the query timing protocol [8]." If the research goal is the combination of the SEDONA and the query timing protocol, the proposed approach may be suitable. However, the goal is not clearly described in the manuscript. The readers will recognize the SEDONA is a generic protocol. If the research goal is the combination of this work and the prior work, the author should mention so.

I understand that the goal of this paper is not well articulated. Yes, SEDONA is a generic protocol, which can be applied to any arbitrary Linux system when it comes to reducing variability of the execution time of a program of interest. I now state the actual goal, marked in blue, in the introduction section.

Note also that the mention of my plan in the future work is just one aspect of the extension of the SEDONA protocol. I claim that the combination is not the ultimate research goal of this paper. To avoid confusion, I removed that sentence.

- (2) If the proposed approach is for a generic purpose, there is a strong doubt about usability. The improvement of the SEDONA is little. And the extent of the each benchmarks improvement described in Table 3 varies widely. Thus, the experimental results does not confirm whether the SEDONA is widely practical or is useful. The description to clarify the SEDONAs characteristics is needed.
- (3) The improvement of the SEDONA is little. And the extent of the each benchmarks improvement described in Table 3 varies widely. Thus, the experimental results does not confirm whether the SEDONA is widely practical or is useful.

This review is the same as (2). Please refer to our response of (2) for this comment.

(4) Since the explanation of "dual-PUT" is not enough, I can not well understand the algorithm shown in Fig. 3. Similarly, what is 1st Halfs ET (ms) attached at Fig. 4(b), 4(c), 4(d)? I understood only that the label is related with dual-PUT. These words are important in the manuscript. So, please keep in mind to write understandably.