

Rebuttal Letter:

A Collaborative Virtual Reality Oil & Gas Workflow



Several improvements were inserted in the reviser version of the paper to IJVR, the paper present several detailed aspects of some important points and questions from the reviewers were even better explained now. It appears that the virtual reality topics were not a big problem for the readers but the workflow topics could be improved.

Other areas of application were presented in the document, showing that the solution presented can be applied in different contexts. Even the examples were better illustrated showing how complex is the solution and how to integrated the several application involved in possible workflows for a final result.

The Problem Solving Environment (PSE) was better detailed showing how it can be use in the complete solutions, and how is integrated with the Collaborative Problem Solving Environments (CPSE) that are one of the most important points of this research.

It is also detailed how the Data Driven Multiphysics Simulation Framework (DDMSF) are being used and how it is a powerful idea for workflows, and our view that it is being a important resource for the future in several areas.

Another deep view of how CEE works is presented showing that IAM (the Integrated Asset Management) is a clever framework to integrate solutions.

A table was incorporated presenting the features of the related work and the solution proposed. It is important to note that this table shows that the solution proposed cover important points that the other solutions are not paying attention.

A more detailed scrutinized view of the main topics of soultion is presented, for instance a complete presentation of the Scientific Workflow Environment is shown in the document. All these details will improve the possibility of readers to reproduce the research develop in the paper.

The possibility to trace workflow executions is explained showing how important is that for engineers. Also a comparison between the Scientific Workflows and Business Workflows is presented showing what is similar but also the difference and the contributions of the scientific workflow for this research.

The unified data format called GXML was also presented showing the advantages of its use in the workflow. This data format had really improved the results since transmission and conversion issues were reduced. This format is still under development but already proved be an important point for these kind of system.

The videoconference sessions were better described for the collaborative sessions covered during the paper. The main three kinds of sessions are Informal, Classroom and Lecture.

A new figure also shows the main components of the CEE interaction that were not previously presented, this image improved the understanding of the platform, that is very complex and have several details.

A better explanation of the examples presented is shown, detailing the information like the arrows and other points not completely presented before.

More future work directions were incorporated, and finally more references were included giving more point to the people reading the document to get better understanding.