

Reviewer: 1

In general, the authors seem to have fixed and considered most of the major comments reported by the reviewers. In particular, concerning the increment for the ECMFA original paper, the review suggested that the main contribution was about making Jorvik compliant to Papyrus 3.0, and the authors highlighted that they tried to shift the focus to how MDE can improve productivity. The reviewer also reported an example that in his opinion wasn't supported by this approach but the authors identified that the OCL constraints used in the example may not apply, resulting incorrect. Moreover, they stated that the presented tool is not intended for industrial application and it isn't still a complete product. Another point related to the last one is that the tool presents some limitations inherited from Papyrus, so this is not solvable in the current version of the tool but it is also not part of the direct limitations of Jorvik.

Another point was the case study when the profile was already existing and the authors proposed a workaround mentioned in the text that will be part of the future work of the tool.

A major concern was also in the comparison made for the evaluation that has been solved by the authors changing the comparison method, and also, in this case, was in favor of Jorvik.

The related work section has been extended with the missing work on Sirius and the authors provided clarification in the letter for maintaining the section as it is, reasonable to me.

Also the comment about the verbose section about the implementation has been considered and the section has been slightly reduced. The other points previously raised by the reviewer have been partially implemented and the authors also declared to be open in considering additional suggestions for improving the usability of the tool, e.g., changing the keywords, etc. When the review's suggestions haven't been taken into consideration the authors clearly motivated the reason.

I only have very a few small suggestions: I suggest to try to fill the gap at page 25 where the paper seems to conclude, but actually the next page is a table. Table 6 seems to be unnecessary and can be reported as text and also the appendix looks strange appearing before the bibliography (if this is forced by the current style don't consider it).

Thank you very much for your effort in reviewing our work. We removed Table 6 as suggested, the rest are style problems which we believe the editors will fix for publication.

Reviewer: 2

- Regarding the example given by the reviewer in the first round regarding the creation of OCL constraints, I am not convinced by the authors' reply. In fact, I do not agree with the fact that the UML profile (with OCL constraints) suggested by the reviewer would not be correct. Especially the argument that dependencies (constraints!) between classes and associations are not typical in UML profiling is actually not true. The

authors should better motivate why Jorvik may be useful in these matters, considering that what the previous reviewer said, actually stands.

- The authors (some of them have published works on combining Sirius and Xtext) should better motivate why Jorvik was and is needed and preferable to customized existing tools, like e.g. Sirius.

The decision to implement a UML profile in Papyrus versus a standalone DSL with Sirius/Xtext can be due to an existing investment on Papyrus/UML (in terms of staff expertise, training material, existing software that interoperates with or builds on top of Papyrus) within an organisation.

- A major point that the authors still need to properly address is why they go through an ecore-based description of profiles. The authors state that the work is not to sell Jorvik, but rather to support Papyrus, but then they focus on annotated ecore to describe profiles instead of working directly on Papyrus UML profiles. This does not sound convincing at all. The problem gets even worse when it gets to existing UML profiles, which are supposed to be first transformed to ecore equivalents to then generate editors for them. It is far from straightforward to grasp the motivations behind this intricate path. Why not using native (maybe simplified, or reshaped to only allow certain operations and provide a certain view) UML profiles in Papyrus.

Our intention with choosing Ecore as the mechanism for describing profiles, is to make Papyrus profile development accessible to a wider audience. Also, expressing the abstract syntax of the language in Ecore, makes it easier to target Xtext/Sirius in case a Papyrus profile turns out to be unsuitable for the problem at hand later in the development process.

- Related to the previous point, it is not clear to me what would happen with existing OCL constraints in existing UML profiles. An ecore for the profile should be generated, then annotated and editors would be generated. What about the original OCL constraints? Are they kept and materialized in the editors? If yes, how? if not, why?

Existing UML profiles are not supported by Jorvik and adding such support is beyond the scope of this paper.

Reviewer: 3

This is a revised version of a previously submitted paper (that I did not review). The revision represents a considerable improvement where the authors addressed many of the concerns made by the previous reviewers. In particular:

- the scope of the paper is now much better defined; this is due to the fact that the authors improved the presentation and clarified relevant technical aspects, eg tool limitation
- a better comparison with related tools and approaches
- more background is given making the reader's life easier

Overall, I think that the paper in its current shape is mature enough to be considered for publication.

Thank you very much for your effort in reviewing our work, it has been a pleasure.