

BRINGING ACADEMIC SOFTWARE TO THE USERS

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We present preCICE, a coupling library for partitioned multi-physics simulation. preCICE started from a closed academic project and transformed into an open-source project with a community built around it. Milestones that constitute this transformation will be presented.

Academic software is usually produced inside an idiosyncratic bubble. Its freedom from economic pressure may either produce software that – in the best case – outshines its commercial counterparts or – in the worst case – may basically be useless for anyone but the author.

Technical issues are selection and managing of dependencies and inclusion of third-party libraries, so that the user on one hand is able to compile the project on his or her machine, while the developer can efficiently work at the core aspects of the software. Standard compliant code and availability of the libraries are, among others, a requirement for cross-platform portability. A development workflow that automates repetitive tasks, can ensure compliance to coding standards and aid the developers in spotting and fixing bugs.

Non-technical issues, though often disregarded, are of great importance to build a sustainable software project. Ways to gain visibility and attract future users, visibility of the software outside your own academic circle and easy methods to communicate from the users to the developers and vice versa ensure the project gets the feedback it deserves.

REFERENCES

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