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Aims and Scope

The Dagstuhl Artifacts Series (DARTS) publishes evaluated research data and artifacts in all areas of computer science. An artifact can be any kind of content related to computer science research, e.g., experimental data, source code, virtual machines containing a complete setup, test suites, or tools.

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■ Preface

ECOOP has a long-standing tradition of offering artifact evaluation dating back to 2013. Following the process introduced in 2022, the artifact evaluation involved every single paper submission to ECOOP 2023, rather than just accepted papers, and happened in parallel with the paper review process. Besides providing feedback on the artifacts irrespective of paper acceptance, evaluation results were made available to the technical PC. Artifact submissions could, thus, provide more insights on the technical contributions described in the papers and help to improve the overall review process.

To handle the high review load that such a process entails, we recruited a large artifact evaluation committee that included a total of 51 artifact reviewers. The submission deadlines for artifacts were just 10 days after the paper deadlines for both submission rounds. We received a total of 45 submissions (20 for R1 and 25 for R2). After a kick-the-tires review and author response phase, during which authors had the opportunity to clarify or address technical issues with their submissions, each submitted artifact was reviewed by three committee members, leading to an overall review load of around 3 artifact reviews per committee member.

Following the positive experience with adopting ACM's artifact badges for ECOOP 2021 and 2022, we adopted the same badging policies for ECOOP 2023. The artifact evaluation committee positively evaluated 38 submissions (15/23 for R1/R2) as *functional* or *reusable*, out of which 22 belong to papers to appear in the technical program of ECOOP 2023. 4 submitted artifacts that did not pass the bar for the *functional* and *reusable* badges in R1 were found eligible for the *available* badge, 2 of which are associated with papers accepted for presentation at ECOOP 2023.

In order to streamline the artifact review process and to decouple artifact from paper review aspects, we asked authors to submit documentation of explicit *claims* in a pre-specified format that the artifact evaluation committee checked the artifacts against. At the same time, the PC could assess the *importance of these claims* for the submitted papers as a frame of reference for the strength of support for the paper that an artifact can provide. This separation greatly facilitated the artifact evaluation committee's discussions regarding which badges to award.

The smooth and thorough artifact evaluation process would have not been possible without the members of the committee, who handled the artifact review workload and contributed to the technical PC discussions with great dedication. We would like to thank them for their valuable work and the inspiring discussions. We would also like to thank the ECOOP 2023 program committee chairs Karim Ali and Guido Salvaneschi for the pleasant and productive interactions over the coordination of the paper and artifact review processes and the Dagstuhl Publishing team for their assistance with preparing this DARTS volume.

Hernán Ponce de León and Stefan Winter

■ Artifact Evaluation Process

With ECOOP’s long standing tradition of artifact evaluations, the artifact review process for ECOOP 2023 builds on a wealth of experiences and insights from previous years and adopts concepts that have proven successful, such as the ‘kick-the-tires’ review phase and the adoption of the ACM’s badging scheme. The details of the process are documented in the call for artifacts (<https://doi.org/10.5281/zenodo.8012885>), the artifact submission template (<https://doi.org/10.5281/zenodo.7314238>), and an artifact review template (<https://doi.org/10.5281/zenodo.7314204>) that we provided as guidance for artifact reviewers. In the following we briefly highlight changes compared to previous year’s evaluation.

Badges

Following adoption of ACM’s artifact badges for ECOOP 2021 and 2022, we adopted the same badges’ sub-branding for ECOOP as in 2022, but changed the badging policy to better comply with ACM’s guidelines. In particular, these guidelines demand that only one of the “Artifacts Evaluated” badges, “Functional” *or* “Reusable”, are assigned as the latter implies the former. We are grateful to ACM’s Scott Delman and Wayne Graves, who provided helpful clarifications regarding the correct interpretation of ACM’s guidelines, and to Dagstuhl Publishing for the many thoughtful checks in the artifact publication process.

Coupling Paper Reviews with Artifact Evaluations

Similar to last year, the review processes for research articles and artifacts were tightly coupled. To address the high review load for the artifact evaluation committee, which also resulted in our decision to provide three reviews for each submitted artifact, we assembled a larger committee than last year. Given the slightly lower artifact submission numbers in 2023 (45 compared to 57 in 2022), each committee member was entrusted with 2-3 artifact reviews over two submission rounds. In addition artifact evaluation committee members contributed 1-2 paper reviews to the technical research track as members of the extended review committee. The lower review load compared to last year left more time for discussions in the badge-assignment process, which we perceived as productive.



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