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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 2024, rather than just accepted papers. As such, it happened in parallel with the paper review process. This approach has two benefits: all authors who submitted an artifact received feedback (independently from paper acceptance), and evaluation results were made available to the reviewers of the papers. In addition, senior artifact evaluation committee members (representing half of the members) contributed to an average of 2 paper reviews to the technical research track as members of the extended review committee, improving the information sharing between the two processes. Artifact submissions could, thus, provide more insights into 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 61 artifact reviewers. The artifact submissions were due around one week after the paper deadline, for both submission rounds of ECOOP. We received a total of 64 submissions (41 for R1 and 23 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.

We have followed ACM's badging policy[1] since 2023; details about the evaluation process are provided in the next chapter. Out of the 64 submissions, the artifact evaluation committee awarded the highest qualification (available, functional and reusable badges) to 19 artifacts, the available and functional badges to 18 artifacts, the available badge to 23 artifacts. Out of those 64 submissions, 30 associated with papers accepted for presentation at ECOOP 2024.

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, feedback to authors and the inspiring discussions! We would also like to thank the ECOOP 2024 program committee chairs Guido Salvaneschi and Jonathan Aldrich for the pleasant and productive interactions over the coordination of the paper and artifact review processes, and the Dagstuhl Publishing team for their proactive and highly responsive assistance during the preparation of this DARTS volume.

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[1] https://www.acm.org/publications/policies/artifact-review-and-badging-current

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Artifact Evaluation Process

With ECOOP's long standing tradition of artifact evaluations, the artifact review process for ECOOP 2024 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.

In order to streamline and reduce the variance of the artifact review process, we asked authors to fill a detailed submission form[2], explicitly listing all experimental claims from their paper alongside steps to reproduce those claims. We also provided the artifact evaluation committee with a detailed reviewing template[3].

Selecting the Committee

We distributed and publicized a self-application form to select artifact evaluation committee members. In general, members ranged from starting a PhD to having a few years of experience as postdocs or being industry practitioners. Most members we selected had already experience in performing artifact evaluation. We ensured the committee was diverse, both in terms of expertise, gender and geographical location. In particular, we made sure our committee would have a wide range of expertise addressing all potential topics related to ECOOP.

Badges

We wish to highlight that for an artifact to be granted the "functional" badge, the ACM policy requires it to be "Complete [meaning that] to the extent possible, all components relevant to the paper in question are included". As chairs, we have decided to enforce this constraint for ECOOP 2024. In our experience, this is a stricter interpretation than most other artifact evaluation committees. We hope that this move – following ACM's policy – will raise the bar and overall improve the quality of artifacts.

[2] https://zenodo.org/records/10462431
[3] https://zenodo.org/records/10462437

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