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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

The goals of the *Artifact Evaluation* (AE) are to foster the reproducibility of results by providing authors the possibility to submit an artifact for accepted papers. Artifacts include, but are not limited to, software artifacts, data sets, and proofs. An *Artifact Evaluation Committee* (AEC) reviews these artifacts and decides upon their acceptance. The accepted artifacts are archived in the *Dagstuhl Artifacts Series* (DARTS) published on the *Dagstuhl Research Online Publication Server* (DROPS). Each artifact is assigned a *Digital Object Identifier (DOI)* that can be used in future citations.

The AE process for 2019 was a continuation of the AE process of previous ECOOP editions. In particular, the process was still based on the artifact evaluation guidelines by Shriram Krishnamurthi, Matthias Hauswirth, Steve Blackburn, and Jan Vitek published on the Artifact Evaluation site.[1] The guidelines for artifacts that contain mechanized proofs developed by the ECOOP 2018 AEC were also reused to help both reviewers and authors in creating and reviewing such artifacts.

This year, the committee evaluated 16 artifacts, which correspond to 57% of all accepted papers. 14 of the artifacts were accepted (a 88% acceptance rate). In total, 50% of the research papers published at ECOOP 2018 have successfully passed the AE process, indicated by an artifact-evaluation badge. This outcome is similar to the outcomes of previous ECOOP editions; in 2018, 38% of the research papers, and in 2017, 59% of the research papers were accompanied by accepted artifacts.

We would like to thank the 19 members of this year's AEC, who donated their valuable time and effort to make the AE process possible. We would also like to thank Michael Wagner for the publication of the artifacts volume, and the Program Chair Alastair Donaldson for helping us coordinate the artifact evaluation with the paper review process.

Maria Christakis and Manuel Rigger
(Artifact Evaluation Co-Chairs)

[1] http://www.artifact-eval.org

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Artifact Evaluation Process

As part of the preparation process, each co-chair selected 12 AEC candidates, which were mostly either PhD students or postdocs. Of the 24 AEC candidates, 17 accepted the invitation to serve on the AEC. After receiving the notifications, the authors of all accepted ECOOP 2019 papers could submit an artifact with their paper, irrespective of the paper category (i.e., Research, Tool Insights, Reproduction Study, Experience Report, Pearl, and Brave New Idea). Each artifact was evaluated by three AEC members, which corresponded to a reviewer load of two to three artifacts. The reviewing process consisted of two phases. In the "kick-the-tires" phase, reviewers briefly verified the basic integrity of the artifacts to discover any issues that could prevent the evaluation of the artifact (e.g., a corrupted virtual machine image) and to assign a grade for the getting-started guide. In case of any issues, reviewers could, as part of a response phase, indicate issues and ask clarifying questions to the authors. Authors, in turn, could respond to the reviewers' first feedback, and update their artifacts to address any issues that were raised by the reviewers. In the second phase, each reviewer had three weeks to do a comprehensive evaluation of each artifact. Reviewers were asked to assess the consistency of the artifact with respect to the paper, the artifact's completeness, documentation, and reusability for future research and to decide on an overall grade. The review phase was then followed by a discussion phase, in which artifacts were discussed to converge on either the artifacts' acceptance or rejection. Authors that received an acceptance notification were given one week of time to incorporate reviewers' feedback and submit the camera-ready version of their artifacts. Table 1 summarizes the process and illustrates the timeline.

Table 1 Timeline of the AEC process.

AE Phase	Date
Submission of the artifacts	Thu 11 April
Artifact bidding period	Fri 12 April - Mon 15 April
Kick-the-tires period	Tue 16 April - Sat 20 April
Kick-the-tires response period	Sun April 21 - Wed April 24
Main reviewing period	Thu April 25 - Wed May 15
Discussion period	Thu May 16 - Sun May 19
Notification	Mon May 20
Camera-ready version	Mon May 27

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