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Edited by

Maria Christakis, Philipp Haller, and Marianna Rapoport

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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 artifact evaluation (AE) committee reviews software artifacts and data sets that accompany research papers published at ECOOP. The goals of the committee are to ensure that the reviewed artifacts are reproducible, well-documented, and closely correspond to the associated paper.

The AE process for 2018 closely resembled the work done for ECOOP 2017. The artifact evaluation guidelines by Shriram Krishnamurthi, Matthias Hauswirth, Steve Blackburn, and Jan Vitek published on the Artifact Evaluation site (http://www.artifact-eval.org) were of great help. Additionally, this year we created new guidelines for reviewers and authors of artifacts that contain mechanized proofs (https://proofartifacts.github.io/guidelines/).

This year, the committee evaluated 13 artifacts (which correspond to 50% of all accepted papers), and accepted 10 of these (a 77% acceptance rate). In total, 38% of the research papers published at ECOOP 2018 have successfully passed the artifact evaluation process, indicated by an artifact-evaluation badge.

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.

We would like to thank the 20 members of this year's committee, 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 Todd Millstein for helping us coordinate the artifact evaluation with the paper review process.

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Artifact Evaluation Process

The authors of all papers that were accepted to ECOOP 2018 had the option to submit an artifact with their paper. Each artifact was evaluated by three reviewers who were part of the artifact evaluation committee. The reviewing process consisted of two phases. In the "kick-the-tires" phase, reviewers briefly verified the basic integrity, documentation, and set-up of the artifacts. In case of any issues, reviewers had the opportunity to ask clarifying questions to the authors. Authors, in turn, could respond to the reviewers' first feedback, and provide missing documentation or small fixes to the artifacts, to ensure that reviewers were able to fully evaluate the artifacts. In the second phase, each reviewer had three weeks to do a comprehensive evaluation of the three artifacts they were assigned to review. This included assessing whether an artifact fully corresponded to the paper, whether all results presented in the paper could be reproduced, how well the artifact was documented, and how easy it would be to re-use the artifact in future research.

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