

USENIX Security '27 Artifact Appendix: <Paper Title>

Your names

A Artifact Appendix

This artifact appendix is meant to be a self-contained document which describes a roadmap for the evaluation of your artifact. It should include a clear description of the hardware, software, and configuration requirements. In case your artifact aims to receive the functional or results reproduced badge, it should also include the major claims made by your paper and instructions on how to reproduce each claim through your artifact. Linking the claims of your paper to the artifact is a necessary step that ultimately allows artifact evaluators to reproduce your results.

Please fill all the mandatory sections, keeping their titles and organization but removing the current illustrative content, and remove the optional sections where those do not apply to your artifact.

A.1 Abstract

[Mandatory] Provide a short description of your artifact.

A.2 Description & Requirements

[Mandatory] This section should list all the information necessary to recreate the same experimental setup you have used to run your artifact. Where it applies, the minimal hardware and software requirements to run your artifact. It is also very good practice to list and describe in this section benchmarks where those are part of, or simply have been used to produce results with, your artifact.

A.2.1 Security, privacy, and ethical concerns

[Mandatory] Describe any risk for evaluators while executing your artifact to their machines security, data privacy or others ethical concerns. This is particularly important if destructive steps are taken or security mechanisms are disabled during the execution.

A.2.2 How to access

[Mandatory] Describe here how to access your artifact. If you are applying for the Artifacts Available badge, the archived copy of the artifacts must be accessible via a stable reference or DOI. For this purpose, we recommend Zenodo, but other valid hosting options include institutional and third-party digital repositories (e.g., FigShare, Dryad, Software Heritage, GitHub, or GitLab — not personal webpages). For repositories that can evolve over time (e.g., GitHub), a stable reference to the evaluated version (e.g., a URL pointing to a commit hash or tag) rather than the evolving version reference (e.g., a URL pointing to a mere repository) is required. Note that the stable reference provided at submission time is for the purpose of Artifact Evaluation. Since the artifact can potentially evolve during the evaluation to address feedback from the reviewers, another (potentially different) stable reference will be later collected for the final version of the artifact (to be included here for the camera-ready version).

A.2.3 Hardware dependencies

[Mandatory] Describe any specific hardware features required to evaluate your artifact (vendor, CPU/GPU/FPGA, number of processors/cores, microarchitecture, interconnect, memory, hardware counters, etc). If your artifact requires special hardware, please provide instructions on how to gain access to the hardware. For example, provide private SSH keys to access the machines remotely. Please keep in mind that the anonymity of the reviewers needs to be maintained and you may not collect or request personally identifying information (e.g., email, name, address). [Simply write "None." where this does not apply to your artifact.]

A.2.4 Software dependencies

[Mandatory] Describe any specific OS and software packages required to evaluate your artifact. This is particularly important if you share your source code and it must be compiled or if you rely on some proprietary software that you cannot include in your package. In such a case, you must describe how to obtain and to install all third-party software, data sets, and models. [Simply write "None." where this does not apply to your artifact.]

A.2.5 Benchmarks

[Mandatory] Describe here any data (e.g., data-sets, models, workloads, etc.) required by the experiments with this artifact reported in your paper. [Simply write "None." where this does not apply to your artifact.]

A.3 Set-up

[Mandatory] This section should include all the installation and configuration steps required to prepare the environment to be used for the evaluation of your artifact.

A.3.1 Installation

[Mandatory] Instructions to download and install dependencies as well as the main artifact. After these steps the evaluator should be able to run a simple functionality test.

A.3.2 Basic Test

[Mandatory] Instructions to run a simple functionality test. Does not need to run the entire system, but should check that all required software components are used and functioning fine. Please include the expected successful output and any required input parameters.

A.4 Evaluation workflow

[Mandatory for Artifacts Functional & Results Reproduced, optional for Artifact Available] This section should include all the operational steps and experiments which must be performed to evaluate if your your artifact is functional and to validate your paper's key results and claims. For that purpose, we ask you to use the two following subsections and cross-reference the items therein as explained next.

A.4.1 Major Claims

[Mandatory for Artifacts Functional & Results Reproduced, optional for Artifact Available] Enumerate here the major claims (Cx) made in your paper. Follows an example:

(C1): *System_name achieves the same accuracy of the state-of-the-art systems for a task X while saving 2x storage resources. This is proven by the experiment (E1) described in [refer to your paper's sections] whose results are illustrated/reported in [refer to your paper's plots, tables, sections or the sort].*

(C2): *System_name has been used to uncover new bugs in the Y software. This is proven by the experiments (E2) and (E3) in [ibid].*

A.4.2 Experiments

[Mandatory for Artifacts Functional & Results Reproduced, optional for Artifact Available] Link explicitly the description of your experiments to the items you have provided in the previous subsection about Major Claims. Please provide your estimates of human- and compute-time for each of the listed experiments (using the suggested hardware/software configuration above). Follows an example:

(E1): *[Optional Name] [30 human-minutes + 1 compute-hour + 5GB disk]: provide a short explanation of the experiment and expected results.*
How to: *Describe thoroughly the steps to perform the experiment and to collect and organize the results as expected from your paper. We encourage you to use the following structure with three main blocks for the description of your experiment.*
Preparation: *Describe in this block the steps required to prepare and configure the environment for this experiment.*
Execution: *Describe in this block the steps to run this experiment.*
Results: *Describe in this block the steps required to collect and interpret the results for this experiment.*

(E2): *[Optional Name] [1 human-hour + 3 compute-hour]: ...*

(E3): *[Optional Name] [1 human-hour + 3 compute-hour]: ...*

In all of the above blocks, please provide indications about the expected outcome for each of the steps (given the suggested hardware/software configuration above).

A.5 Notes on Reusability

[Optional] This section is meant to optionally share additional information on how to use your artifact beyond the research presented in your paper. In fact, a broader objective of an artifact evaluation is to help you make your research reusable by others.

You can include in this section any sort of instruction that you believe would help others re-use your artifact, like, for example, scaling down/up certain components of your artifact, working on different kinds of input or data-set, customizing the behavior replacing a specific module/algorithm, etc.

A.6 Version

Based on the LaTeX template for Artifact Evaluation V20231005. Submission, reviewing and badging methodology followed for the evaluation of this artifact can be found at https://secartifacts.github.io/usenixsec2027/.