Type Abstraction for Relaxed Noninterference (Artifact) *

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───── **Abstract** ─────

This artifact is a web interpreter for the ObSec language defined in the companion paper. ObSec is a simple object-oriented language that supports *type-based declassification*. Type-base declassification exploits the familiar notion of type abstraction to support expressive declassification policies in a simple and expressive manner.

1   Scope

The artifact is designed to test the semantics of the ObSec language described in companion paper, allowing users to define their own declassification policies.

2   Content

The artifact package includes:
- a Virtual Box Linux machine.
- a .zip file including the binaries of the ObSec interpreter.
- detailed instructions for using the artifact provided as an `readme.pdf` file.

To simplify the access, we provide an online ObSec Pad at `https://pleiad.cl/obsec/` which does not require any installation and is always up-to-date. If you want to use an snapshot of the state of the interpreter (at the submission time), then follow the instructions in the `readme.pdf` file to use either the Virtual Box machine or the ObSec interpreter binaries.

3   Getting the artifact

The artifact endorsed by the Artifact Evaluation Committee is available free of charge on the Dagstuhl Research Online Publication Server (DROPS). The latest version of our artifact is available at the PLEIAD Lab website (`https://pleiad.cl/research/software/obsec`)

4   Tested platforms

The artifact is known to work on any platform running Oracle VirtualBox version 5.1.18 (`https://www.virtualbox.org/`) with at least 9 GB of free space on disk and at least 2 GB of free space in RAM.

5   License

BSD-3 (`https://opensource.org/licenses/BSD-3-Clause`)

6   MD5 sum of the artifact

6088db75bcf48d9ca75af124b781335e

7   Size of the artifact

2.1 GB