A Capability-Based Module System for Authority Control (Artifact)*

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Abstract

This artifact is intended to demonstrate the module system of the Wyvern programming language and consists of a Linux virtual machine with a snapshot of the Wyvern programming language's codebase. The Wyvern codebase contains a test suite that corresponds to the code examples in the paper accompanying the artifact. In addition, the artifact contains a document describing how to compile and run Wyvern programs.
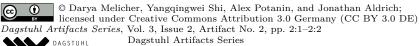
1   Scope

The artifact is intended to demonstrate only Wyvern's module system, which is described in the accompanying paper, and not any other feature. Since Wyvern is a research programming language, some features of a full-fledged language are missing. Also, since this artifact is a snapshot of an actively developed programming language, some language features that are not related to the module system may not be bug-free.

2   Content

The artifact consists of an Oracle VirtualBox 5.1 image containing an installation of a 64-bit Ubuntu 16.10 (Yakkety Yak) with a snapshot of the Wyvern programming language's codebase at commit 94d7a8d5696ec1eb2dd88ac62c12b353c98df689 made on April 7, 2017. The Wyvern codebase contains a test suite that corresponds to the code examples in the paper accompanying the artifact. In addition, the artifact contains a PDF document describing how to compile and run Wyvern programs.

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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 the Wyvern codebase is available on GitHub: `https://github.com/wyvernlang/wyvern`.

4   Tested platforms

The artifact is known to work on any platform running Oracle VirtualBox version 5 (`https://www.virtualbox.org/`) with at least 10 GB of free space on disk and at least 2 GB of free space in RAM.

5   License

GNU General Public License (GPL), Version 2.0 (`https://www.gnu.org/licenses/gpl-2.0.html`)

6   MD5 sum of the artifact

1c10ef1f84e6283f6ce962790da20fcc

7   Size of the artifact

2.8 GB