NumLin: Linear Types for Linear Algebra (Artifact)

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Abstract

The artifact package includes a Debian 9.7 Stretch VirtualBox virtual machine on which is the implementation of NumLin and the required OCaml platform and packages.

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1 Scope

This artifact demonstrates the feasibility of implementation of NumLin, and substantiates the claimed execution times via a benchmarking program.

2 Content

The artifact package includes a 64-bit Debian 9.7 Stretch VirtualBox virtual machine on which is the implementation of NumLin and the required OCaml platform and packages.

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). In addition, the most recent sources for the artifact are also available at: `https://github.com/dc-mak/NumLin`.

4 Tested platforms

Windows 10, using VirtualBox (5.2.26); 3GB RAM seemed to be sufficient to run it smoothly.

5 License

The artifact is available under GPLv3 (the GNU General Public License, Version 3).

6 MD5 sum of the artifact

DC249913408FDD2E0E2D5B3120974A59

7 Size of the artifact

4.09 GiB

A Quickstart

Login (password: osboxes.org), open up a terminal (Activites > Terminal), `cd NumLin`. From there, open up `write-up/artifact-evaluation-instructions.md` for full detailed instructions. The same instructions are accessible via the repository link given in Section 3.