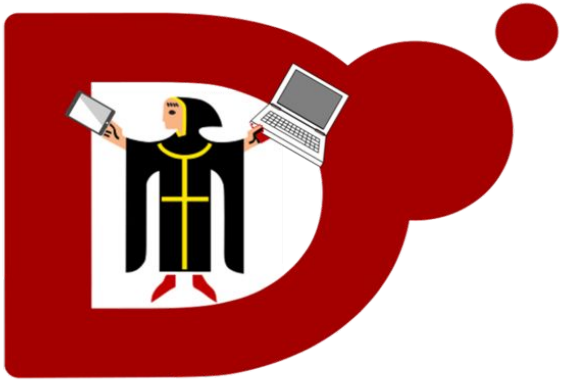

Usage of D Compiler in Docker

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Motivation

- usage of a D Compiler on Cloud instances without any prior installation
- support for light weight linux (alpine, busybox, coreos, …)
- well defined compiler environment

Usual Installation (if not by OS)

- curl -fsS https://dlang.org/install.sh | bash -s dmd
- installs the compilers into ~/dlang
- activation by sourcing an environment file

Usually no testing except for the standard use case

gdc cannot be installed using install.sh since 5.2.0

ldc cannot be installed using install.sh since 1.1.0

Tagging ldc, gdc and providing the installation package are two different things.

In the past, it has been tagged way before the installation package was avail.

→ Usage of this Docker thing as a little test

There are ...

- dmd
- ldc
- gdc
- (sdc)
- (dub)

Secure | https://hub.docker.com/r/dlanguage/

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Repos

dlanguage

http://dlang.org

Joined October 2016

dlanguage/ldc public | automated build	2 STARS	7.1K PULLS	DETAILS
dlanguage/dmd public | automated build	3 STARS	3.0K PULLS	DETAILS
dlanguage/gdc public | automated build	2 STARS	610 PULLS	DETAILS
dlanguage/sdc public | automated build	0 STARS	27 PULLS	DETAILS

What's not yet supported

- nightlies…..dmd:nightly
- betas…..dmd:beta
- daily builds...dmd:20010203

What's supported

- all tags dmd:2.072.2
- newest dmd:latest

everything dmd/gdc/ldc/sdc Tag will be dockerized automatically

Usage

https://github.com/d-muc/docker-compiler-examples

contains:

- return code - simplest possible D program
- hello world - simplest possible D-phobos program
- all dmd version - compile the same program with every avail DMD
- dub - simplest possible dub program
- building dub with dub - real world dub example

Compile Script

```
#!/bin/bash
COMPILER=${DCOMPILER:=dmd}
VERSION=${DVERSION:=latest}
TOOL=${DTOOL:=${COMPILER}}

if [ "${TOOL}" = "ldc" ]; then
  TOOL='ldc2'
fi

if [ -n "${verbose}" ]; then
  echo "Compiler ${COMPILER} in Version ${VERSION} using ${TOOL}"
fi

if [ -n "${USE_LOCAL_USER}" ]; then
  OPTIONS="-e USER -e HOME -e LOCAL_USER_ID=`id -u $USER` -e LOCAL_GROUP_ID=`id -g $USER`"
fi
if [ -n "${FORCE_PULL}" ]; then
  docker pull dlanguage/${COMPILER}:${VERSION}
fi
docker run --rm -ti ${OPTIONS:=} -w /user -v $(pwd):/user dlanguage/${COMPILER}:${VERSION}
${TOOL} $@
```