dugaire Documentation

Release latest

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CONTENTS

1 Install (on Linux) **3**
- 1.1 Using pip (recommended) . . . 3
- 1.2 From source . . . 3

2 Usage **5**
- 2.1 dugaire build . . . 5

3 Enable autocomplete **7**
- 3.1 bash . . . 7
- 3.2 zsh . . . 7

4 Supported features **9**
- 4.1 Base images . . . 9
- 4.2 Package/Dependency managers . . . 9
- 4.3 Applications . . . 10

5 License **13**
- 5.1 Product license . . . 13
- 5.2 FOSSA scan overview . . . 13
- 5.3 FOSSA Live Project report . . . 13

Quickly build custom Docker images for local development without having to write Dockerfiles.

```
# Build an image with vim and curl using apt-get
docker run -it --rm $(dugaire build --apt=vim,curl)

# Build an image with wget, and nano using apt-get and install latest azure-cli version␣
↪using pip3.
docker run -it --rm $(dugaire build --apt=wget,nano --pip3=azure-cli)

# Build an image with latest kubectl version
docker run -it --rm $(dugaire build --with-kubectl=latest)

# Build an image with kubectl 1.15.0
docker run -it --rm $(dugaire build --with-kubectl=1.15.0)
```

CHAPTER

ONE

INSTALL (ON LINUX)

1.1 Using pip (recommended)

```
pip install dugaire
```

1.2 From source

Clone this repository.

```
git clone https://github.com/tadeugr/dugaire.git
```

`cd` to its directory.

```
cd dugaire
```

Install it (requires `pip`).

```
make install
```

You should have the command available.

```
dugaire build --help
```

CHAPTER

TWO

USAGE

```
Usage: dugaire [OPTIONS] COMMAND [ARGS]...

  CLI tool to build and manage custom Docker images.

Options:
  --version  Show the version and exit.
  --help     Show this message and exit.

Commands:
  build    Build Docker images with custom packages.
  list     List images built with dugaire.
  rmi      Remove images built with dugaire.
  version  Show the version and exit.
```

2.1 dugaire build

```
Usage: dugaire build [OPTIONS]

  Build Docker images with custom packages.

  Examples:

  Build an image and install vim and curl using apt-get.

  $ dugaire build --apt=vim,curl

  Build an image and install python3 using apt-get and ansible using pip3.

  $ dugaire build --apt=python3-pip --pip3=ansible

  Build an image and install the latest version of kubectl.

  $ dugaire build --with-kubectl=latest

Options:
  --from <name:tag>               Base image (used in Dockerfile FROM).
                                  Example: --from=ubuntu:20.04  [default:
                                  ubuntu:20.04; required]
```

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```
  --name <name:tag>                Image name. Example: --name="myimage:0.0.1"
                                   [default: random]
  --apt <pkg01|pkg01,pkg02>        Comma separeted list of packages (no blank
                                   space) to install using apt-get install.
                                   Requires a base image with apt-get. Example:
                                   -apt=curl,vim
  --pip3 <pkg01|pkg01,pkg02>       Comma separeted list of packages (no blank
                                   space) to install using pip3 install.
                                   WARNING: requires -apt=python3-pip. Example:
                                   -apt=python3-pip -pip3=ansible,jinja2
  --with-kubectl <latest|semantic versioning>
                                   Install kubectl. Examples: --with-
                                   kubectl=latest / --with-kubectl=1.17.0
  --with-terraform <latest|semantic versioning>
                                   Install terrafom. Examples: --with-
                                   terraform=latest / --with-terraform=0.15.5
  --with-velero <latest|semantic versioning>
                                   Install velero. Examples: --with-
                                   velero=latest / --with-velero=1.5.2
  --force                          Ignore Docker cache and build from scratch.
  --dry-run                        Do not build image.
  -o, --output [image.id|image.id.short|image.name|dockerfile]
                                   Command output options.  [default:
                                   image.id.short]
  --help                           Show this message and exit.
```

CHAPTER

THREE

ENABLE AUTOCOMPLETE

To enable autocomplete for your current terminal session, run:

```
eval "$(_DUGAIRE_COMPLETE=source dugaire)"
```

Follow the instructions bellow to permanently enable autocomplete.

3.1 bash

```
echo 'eval "$(_DUGAIRE_COMPLETE=source dugaire)"' >> ~/.bashrc
```

3.2 zsh

```
echo 'eval "$(_DUGAIRE_COMPLETE=source dugaire)"' >> ~/.zshrc
```

CHAPTER

FOUR

SUPPORTED FEATURES

4.1 Base images

Tested with:

- `ubuntu:20.04`

  You may use base images that were built from the tested images.

4.2 Package/Dependency managers

4.2.1 apt-get

You can install any package using `apt`

Use a comma separated list (no blank space) of packages you want to install.

Example:

```
dugaire build --apt=wget,iputils-ping
```

4.2.2 pip3

You can install any package using `pip3`

Use a comma separated list (no blank space) of packages you want to install.

Use `<package name>==<version>` to install specific versions.

Example:

```
dugaire build --pip3=jinja2,azure-cli==2.39.0
```

4.3 Applications

4.3.1 kubectl

Options

`--with-kubectl=latest` to install the latest version.

`--with-kubectl=1.17.0` *(example)* to install specific versions.

See all versions available here.

Covered by automated tests

> You may install any version available. The commands bellow only describes versions included in the automated tests.

```
dugaire build --from=ubuntu:20.04 --with-kubectl=latest
dugaire build --from=ubuntu:20.04 --with-kubectl=1.18.0
dugaire build --from=ubuntu:20.04 --with-kubectl=1.17.0
dugaire build --from=ubuntu:18.04 --with-kubectl=1.16.0
dugaire build --from=ubuntu:18.04 --with-kubectl=1.15.0
```

4.3.2 terraform

Options

`--with-terraform=latest` to install the latest version.

`--with-terraform=0.15.05` *(example)* to install specific versions.

See all versions available here.

Covered by automated tests

> You may install any version available. The commands bellow only describes versions included in the automated tests.

```
dugaire build --from=ubuntu:20.04 --with-terraform=latest
dugaire build --from=ubuntu:20.04 --with-terraform=0.15.05
```

4.3.3 velero

Options

`--with-velero=latest` to install the latest version.

`--with-velero=1.5.2` *(example)* to install specific versions.

See all versions available here.

Covered by automated tests

You may install any version available. The commands bellow only describes versions included in the automated tests.

```
dugaire build --from=ubuntu:20.04 --with-kubectl=latest --with-velero=latest
dugaire build --from=ubuntu:20.04 --with-kubectl=1.17.0 --with-velero=1.5.2
```

CHAPTER

FIVE

LICENSE

5.1 Product license

Apache License Version 2.0, January 2004. Read more.

5.2 FOSSA scan overview

5.3 FOSSA Live Project report

The report is available here