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# **ebuildtester Documentation**

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This script is a tool to test a Gentoo ebuild and its dependencies. The idea is that the package is emerged in a clean (and current) stage3 Docker container.



# CHAPTER 1

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## Requirements

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You require **Docker** and **FUSE**. Docker must be configured to use the **devicemapper** storage driver. This can be achieved with the following inside `/etc/docker/daemon.json`:

```
{  
  "storage-driver": "devicemapper"  
}
```





## CHAPTER 2

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### Usage

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We are going to assume that the user has a local git clone of the portage tree in

```
/usr/local/git/gentoo
```

We have added a new ebuild and would like to verify that the build dependencies are all correct. We can build the package (ATOM) with:

```
ebuildtester --portage-dir /usr/local/git/gentoo \  
  --atom ATOM \  
  --use USE1 USE2
```

where we have specified two USE flags, USE1 and USE2. The *ebuildtester* command will now create a docker container and start installing the ATOM. All specified dependencies will be installed as well.



## CHAPTER 3

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### Command line arguments

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The command understands the following command line arguments:

```
usage: ebuildtester [-h] [--version] [--atom ATOM [ATOM ...]] [--binhost BINHOST] [--
↳live-ebuild]
                        [--manual] --portage-dir PORTAGE_DIR [--overlay-dir OVERLAY_DIR]
↳[--update]
                        [--install-basic-packages] [--threads N] [--use USE [USE ...]]
                        [--global-use GLOBAL_USE [GLOBAL_USE ...]] [--unmask ATOM] [--
↳unstable]
                        [--gcc-version VER] [--python-single-target PYTHON_SINGLE_TARGET]
                        [--python-targets PYTHON_TARGETS] [--rm]
                        [--storage-opt STORAGE_OPT [STORAGE_OPT ...]] [--with-X] [--with-
↳vnc]
                        [--profile PROFILE] [--docker-image DOCKER_IMAGE] [--pull]
```

A dockerized approach to test a Gentoo package within a clean stage3.

optional arguments:

-h, --help	show this help message and exit
--version	show program's version number and exit
--atom ATOM [ATOM ...]	The package atom(s) to install
--binhost BINHOST	Binhost URI
--live-ebuild	Unmask the live ebuild of the atom
--manual	Install package manually
--portage-dir PORTAGE_DIR	The local portage directory
--overlay-dir OVERLAY_DIR	Add overlay dir (can be used multiple times)
--update	Update container before installing atom
--install-basic-packages	Install basic packages after container starts
--threads N	Use N (default 8) threads to build packages
--use USE [USE ...]	The use flags for the atom

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```
--global-use GLOBAL_USE [GLOBAL_USE ...]
                        Set global USE flag
--unmask ATOM           Unmask atom (can be used multiple times)
--unstable             Globally 'unstable' system, i.e. ~amd64
--gcc-version VER      Use gcc version VER
--python-single-target PYTHON_SINGLE_TARGET
                        Specify a PYTHON_SINGLE_TARGET
--python-targets PYTHON_TARGETS
                        Specify a PYTHON_TARGETS
--rm                   Remove container after session is done
--storage-opt STORAGE_OPT [STORAGE_OPT ...]
                        Storage driver options for all volumes (same as Docker param)
--with-X               Globally enable the X USE flag
--with-vnc             Install VNC server to test graphical applications
--profile PROFILE      The profile to use (default = default/linux/amd64/17.1)
--docker-image DOCKER_IMAGE
                        Specify the docker image to use (default = gentoo/stage3)
--pull                Download latest docker image
```