

How To Install bilibop-lockfs on Ubuntu 20.04

In this tutorial we learn how to install bilibop-lockfs on Ubuntu 20.04. bilibop-lockfs is lock filesystems and write changes into RAM

Introduction

In this tutorial we learn how to install `bilibop-lockfs` on Ubuntu 20.04.

What is bilibop-lockfs [↗](#)

bilibop-lockfs is:

Bilibop helps to maintain a Debian GNU/Linux operating system installed on an external media (USB, FireWire, Flash memory, eSATA). It hardens standard rules and policies to make the system more robust in this particular situation.

If the lockfs feature is enabled (in a configuration file, in the boot commandline or by a heuristic), nothing will be written on the filesystems listed in `/etc/fstab`, except for those that have been whitelisted, or for the encrypted swap devices. More, bilibop-lockfs now is able to detect if the drive has been locked by a physical switch, and then overrides its own settings to unconditionally apply a 'hard' policy.

The root filesystem is locked (set readonly, using either aufs or overlay) by an initramfs script which also modifies the temporary fstab to prepare other filesystems to be locked later by a mount helper script.

bilibop-lockfs provides the following features:

- whitelist based policy: filesystems on which you want to allow persistent changes must be explicitly listed in a configuration file.
- swap devices policy: they can be used 'as is', noauto, only if encrypted, only if encrypted with a random key, or not used at all.
- not only filesystems are set read-only, but also block devices: this forbids changes of the partition table, boot sectors, LUKS headers and LVM metadata.

- plymouth messages to know at boot time if bilibop-lockfs is enabled or not, or if an error occurred.
- desktop notifications at startup about filesystems status, to inform the user that volatile or persistent changes are allowed or not, and where.

This package can be used as an alternative to fsprotect or overlayroot, especially for writable operating systems embedded on a USB stick; but it may also be installed on public or personal computers, for daily use, kiosks, testing purposes, or as a tool in anti-forensics strategies.

There are three methods to install `bilibop-lockfs` on Ubuntu 20.04. We can use `apt-get`, `apt` and `aptitude`. In the following sections we will describe each method. You can choose one of them.

Install bilibop-lockfs Using apt-get

Update apt database with `apt-get` using the following command.

```
sudo apt-get update
```

After updating apt database, We can install `bilibop-lockfs` using `apt-get` by running the following command:

```
sudo apt-get -y install bilibop-lockfs
```

Install bilibop-lockfs Using apt

Update apt database with `apt` using the following command.

```
sudo apt update
```

After updating apt database, We can install `bilibop-lockfs` using `apt` by running the following command:

```
sudo apt -y install bilibop-lockfs
```

Install bilibop-lockfs Using aptitude

If you want to follow this method, you might need to install [aptitude](#) first since aptitude is usually not installed by default on Ubuntu. Update apt database with `aptitude` using the following command.

```
sudo aptitude update
```

After updating apt database, We can install `bilibop-lockfs` using `aptitude` by running the following command:

```
sudo aptitude -y install bilibop-lockfs
```

How To Uninstall bilibop-lockfs on Ubuntu 20.04

To uninstall only the `bilibop-lockfs` package we can use the following command:

```
sudo apt-get remove bilibop-lockfs
```

Uninstall bilibop-lockfs And Its Dependencies

To uninstall `bilibop-lockfs` and its dependencies that are no longer needed by Ubuntu 20.04, we can use the command below:

```
sudo apt-get -y autoremove bilibop-lockfs
```

Remove bilibop-lockfs Configurations and Data

To remove `bilibop-lockfs` configuration and data from Ubuntu 20.04 we can use the following command:

```
sudo apt-get -y purge bilibop-lockfs
```

Remove bilibop-lockfs configuration, data, and all of its dependencies

We can use the following command to remove `bilibop-lockfs` configurations, data and all of its dependencies, we can use the following command:

```
sudo apt-get -y autoremove --purge bilibop-lockfs
```

References

- [bilibop-lockfs website](#)
- [bilibop-lockfs on packages.ubuntu.com](#)

Summary

In this tutorial we learn how to install `bilibop-lockfs` package on Ubuntu 20.04 using different package management tools: `apt` , `apt-get` and `aptitude` .