

Flatpak & AppImage Usage on openSUSE. Which One Suitable for openSUSE Users?

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Hello (world)



- Kukuh Syafaat
 - インドネシア
 - FOSS Enthusiast
 - openSUSE-ID
 - Translator
 - <https://l10n.opensuse.org>
 - <https://l10n.gnome.org>
 - Some FOSS projects at transifex.com
 - Endless Ambassador

- アプリケーションコンテナ技術の Flatpak と AppImage どちらを使うべきか?
 - アプリケーション、ライブラリを 1 つのコンテナ(パッケージ)にしてどのディストリでも動くように

Cross Distribution Packages/Containerised Applications

Snap, AppImage, Flatpak

Feature	Snap	AppImage	Flatpak
No software necessary to install a package	No	Yes	No
Shared runtimes	Basic	None	Full
Sandboxing	AppArmor	None	Custom
Repository support	Yes	No	Yes
Central repo	Yes	No	Yes
Updates	Automatic	None	Automatic



Snap

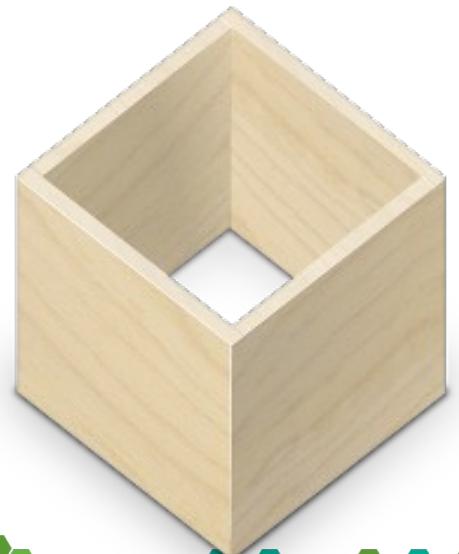
- <https://snapcraft.io/>
- The installation (on distros other than Ubuntu) of Snapcraft have a lot more difficult and buggy



Flatpak

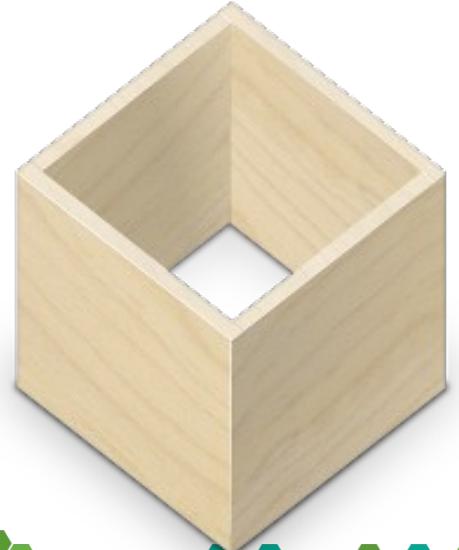
Flatpak

- Flatpak (formerly xdg-app) is a software utility for software deployment, package management, and application virtualization for Linux desktop computers.
- <http://flatpak.org/>



Why Flatpak?

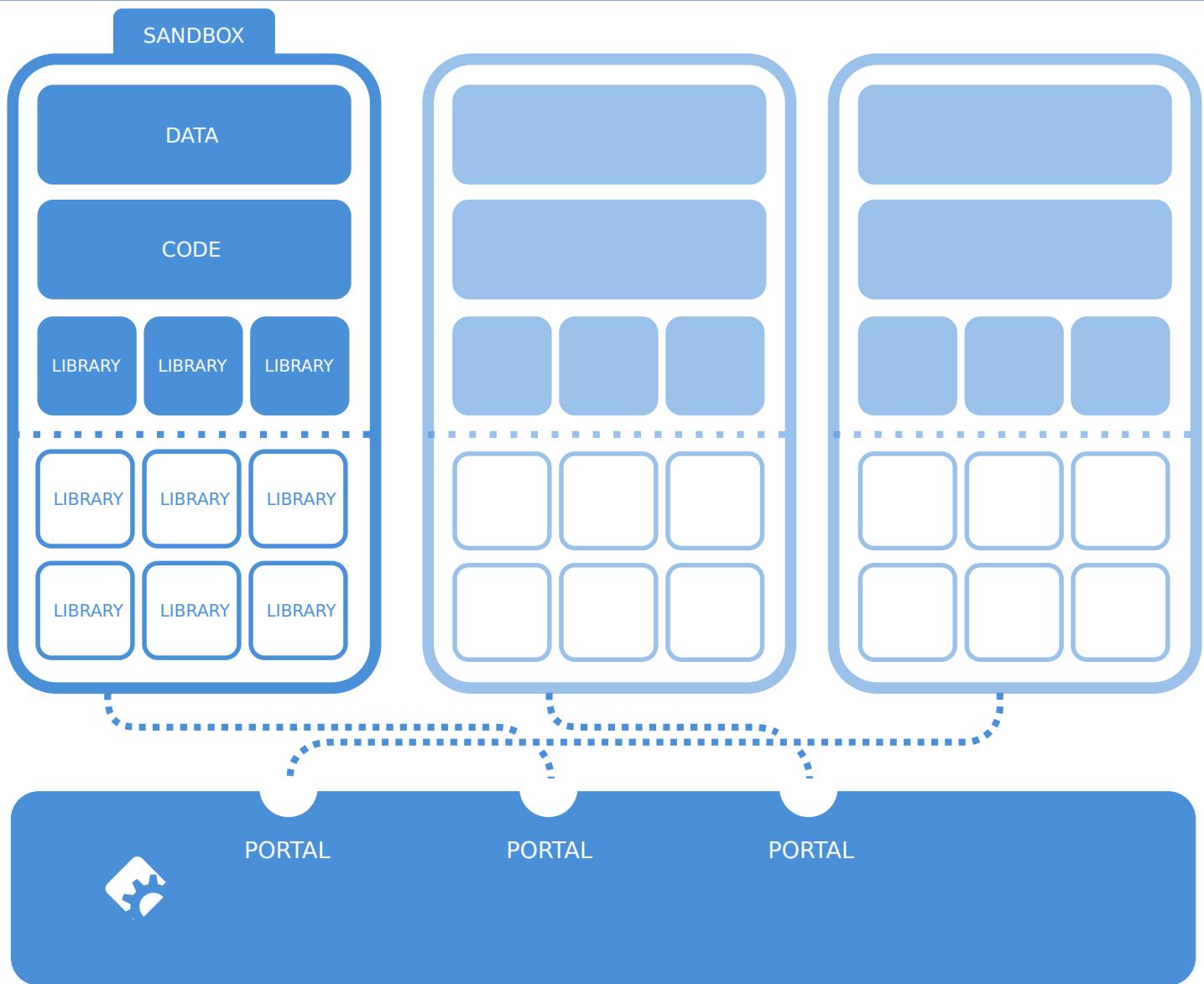
- Access a wide variety of applications
- Get new versions faster
- Safely update your apps without having to reboot
- Install different versions of the same application
- Secure, sandboxed applications



APPLICATION

RUNTIME
(SHARED)

OPERATING SYSTEM

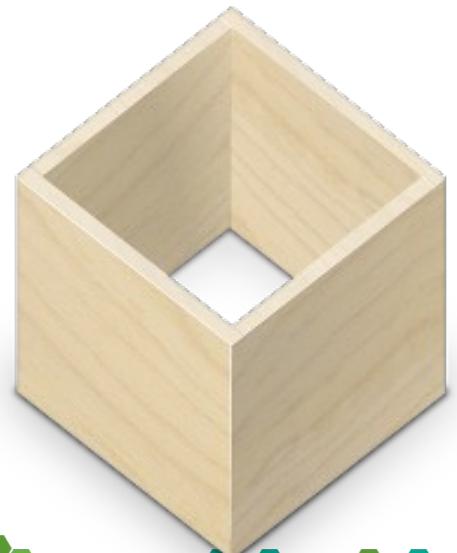


Install Flatpak on openSUSE

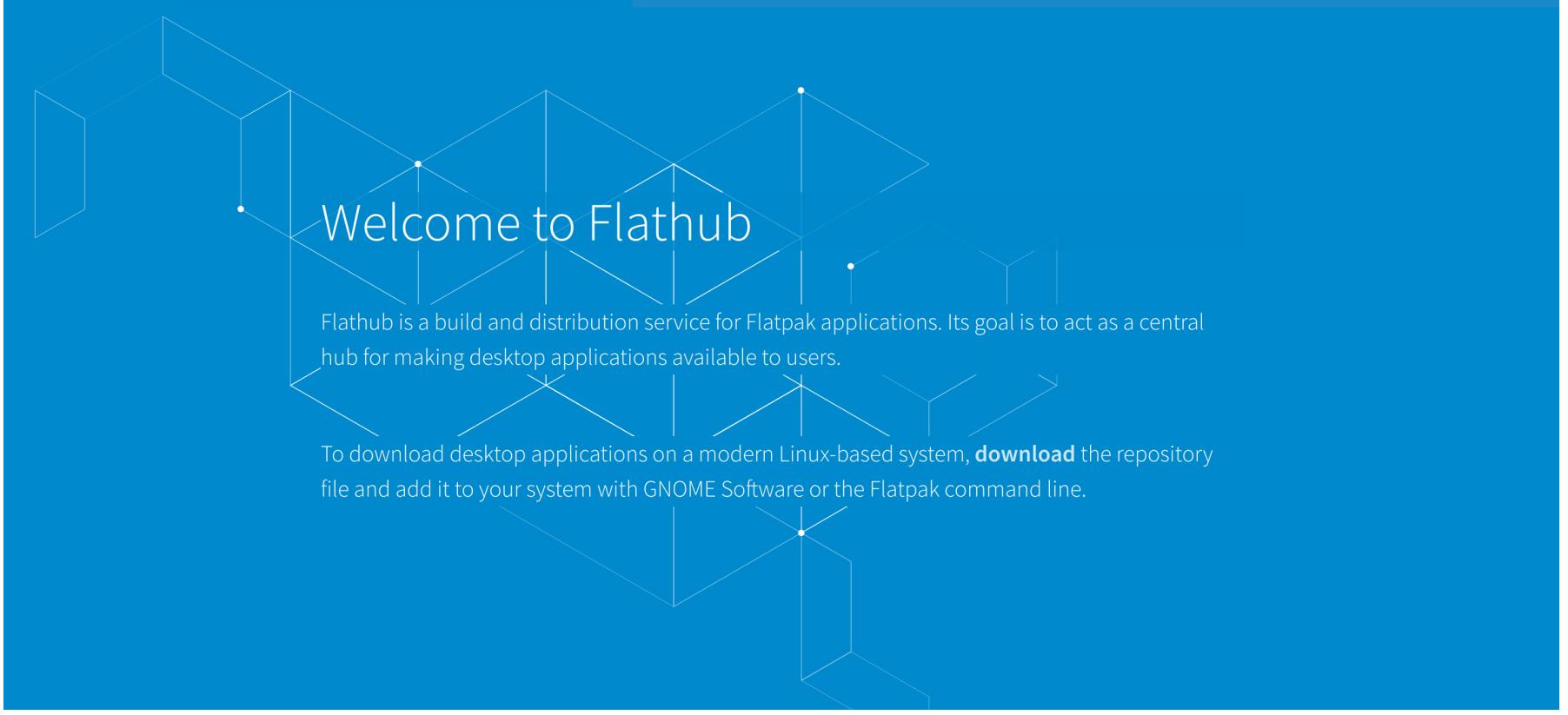
```
$ sudo zypper install flatpak
```

Current Version

- Tumbleweed: 0.9.8
- Leap 42.3: 0.8.6



<https://flathub.org/>



Flatpak Repositories

- **Flathub**

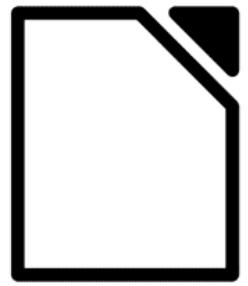
```
$ flatpak remote-add --if-not-exists flathub  
https://flathub.org/repo/flathub.flatpakrepo
```

- **GNOME**

```
$ flatpak remote-add --if-not-exists gnome-nightly  
https://sdk.gnome.org/gnome-nightly.flatpakrepo
```

```
$ flatpak remote-add --if-not-exists gnome-apps-nightly  
https://sdk.gnome.org/gnome-apps-nightly.flatpakrepo
```

Flatpak Case Study



LibreOffice
The Document Foundation



LibreOffice in openSUSE

- **Current Version**
 - Tumbleweed: 5.4.2
 - Leap 42.3: 5.3.6



LibreOffice Flatpak

- <http://www.libreoffice.org/download/flatpak/>
- <http://download.documentfoundation.org/libreoffice/flatpak/>

```
$ wget
```

```
http://download.documentfoundation.org/libreoffice/flatpak/latest/LibreOffice.flatpak
```

```
$ flatpak install --user --bundle  
LibreOffice.flatpak
```

```
$ flatpak run org.libreoffice.LibreOffice
```



Spotify®



Package Search



Show development, language and debug packages

Show distribution: openSUSE Leap 42.3 ▾



spotify-easyrpm

Download, convert and install the Spotify for Linux package



spotifywebplayer

Spotify Player for Linux



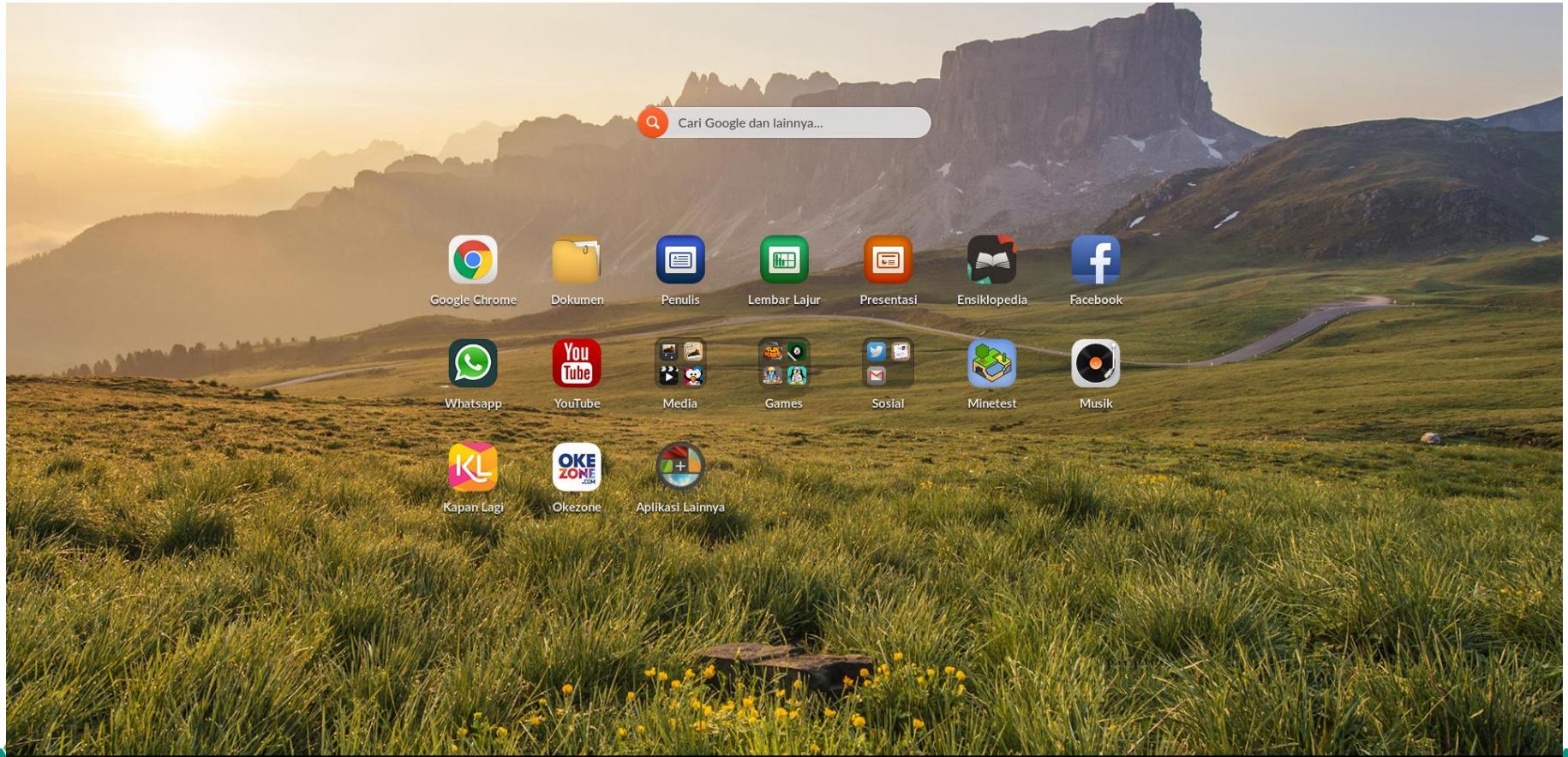
nuvola-app-spotify

Configuration data for Nuvolaplayer for Spotify service

Spotify Flatpak

```
$ flatpak install --from  
https://flathub.org/repo/appstream/com.spotify.  
Client.flatpakref  
$ flatpak run com.spotify.Client
```

<https://endlessos.com/>





ENDLESS = **Flatpak** + **GNOME** + **OSTree**





Flatpak
@FlatpakApps

Follow



.@sysrich builds variant of OpenSUSE with atomic OS updates and Flatpak as the sole application delivery mechanism.
hackweek.suse.com/16/projects/ku...

2:31 AM - 11 Oct 2017



Kubic Desktop - aka Sgt Peppers Read Only Hearts Club Band

an invention by [RBrownSUSE](#)

Last updated about 6 hours ago. Captured 3 hacker hearts.

The Kubic Project currently produces a "CaaSP-like" Tumbleweed OS, focused on Kubernetes clusters

However many of the attributes of Kubic (read-only filesystem, transactional updates, containerised services) could be an interesting platform for another use **A Chromebook-like Linux Desktop**

A read-only Tumbleweed installation, with the GNOME Desktop could be a very interesting platform for basic Linux users.

Stability can be preserved by the lack of variables introduced by the locked down base OS. OS Updates can be pushed out automatically on a regular basis (Weekly?). OS Updates will be atomic and automatically rolled back if they don't work, as we do in CaaSP / Vanilla Kubic.

The only question then becomes User-land Applications.

There's already lots of new answers for that - AppImage, Snaps & Flatpak

So my hackweek project will be to create a Kubic Desktop image and experiment with Flatpaks as the source of Application packages. I'm choosing Flatpak because of the tight integration with GNOME, and GNOME will be the only desktop, because it's my hackweek project, and so it's my choice ;)

Yes, this means after all of my talks about Flatpaks I am going to spend my hackweek using them..

Hell has frozen over

Hackers:



Looking for mad skills in:

[containers](#) [flatpak](#) [obs](#) [gnome](#)

This project is part of:

Hack Week 16

+ Ad

Flatpak/Flathub Issues



Richard Brown
@sysrich

[Follow](#)



Dear Flathub - if you don't document and include licenses when redistributing software, you might not have the right to distribute it
#sigh

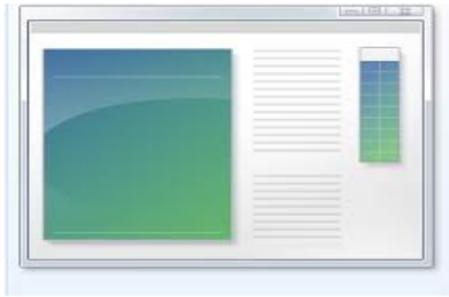
1:51 PM - 11 Sep 2017

Applimage

AppImage

- Format for distributing portable software on Linux without needing superuser permissions to install the application.
- <https://appimage.org/>





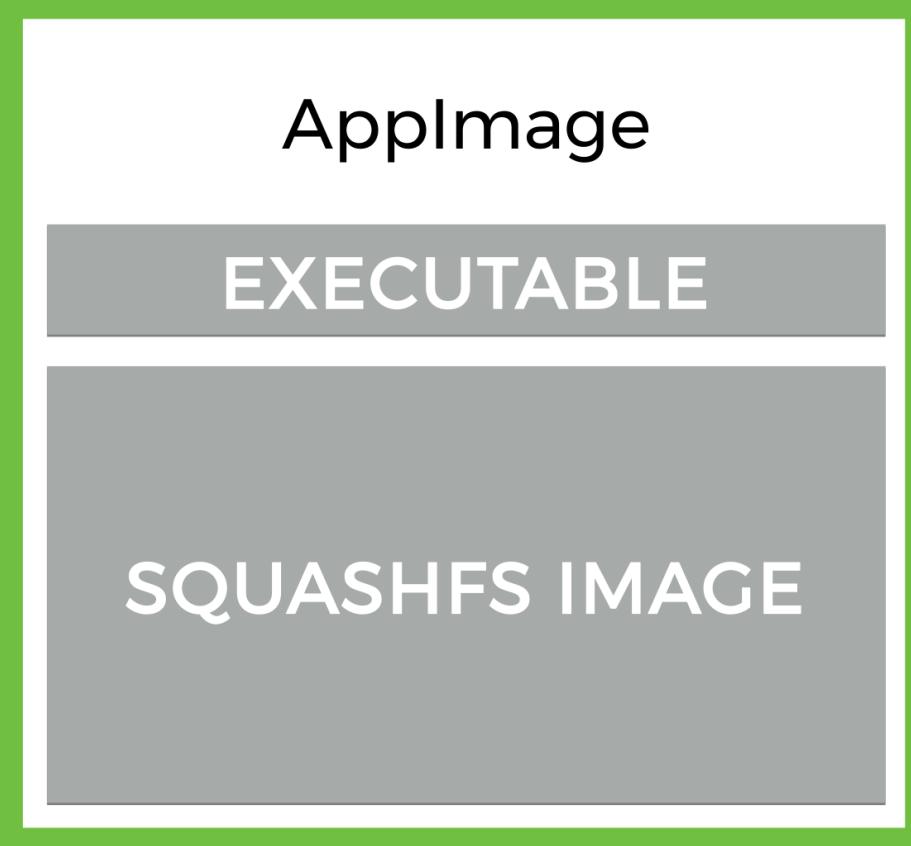
.exe



.dmg



.ApplImage



AppImage

EXECUTABLE

SQUASHFS IMAGE

- One file per app and version

AppImage

EXECUTABLE

SQUASHFS IMAGE

- Binary
- Mounts the image with FUSE when executed

AppImage

EXECUTABLE

SQUASHFS IMAGE

- Bundle app and everything that is not part of all target systems: icons, i18n, Qt 5, KF5,...
- Built on host that as old as the oldest target systems

Running AppImage

- Make it executable

```
$ chmod a+x YourApp.AppImage
```

- Run

```
$ ./YourApp.AppImage
```

Applimage Case Study

LibreOffice ApplImage

- <http://libreoffice.soluzioniopen.com/>
 - Stable
 - LibreOffice-5.3.6
 - LibreOffice-5.4.1
 - Pre-Releases
 - LibreOffice-5.4.2.2
 - Daily
 - LibreOfficeDev-6.0.0



LibreOffice
The Document Foundation

Kdenlive

- <https://kdenlive.org/download/>
 - Latest AppImage 17.08.1



OpenShot

- <http://www.openshot.org/download/>
 - Latest AppImage v2.4.0



Krita

- <https://krita.org/en/download/krita-desktop/>
 - Latest AppImage v3.3.0



AppImageHub

- Crowd-sourced central AppImage directory
- <https://appimage.github.io/apps/>



Apps in ApplImage format

We currently have 133 apps in our database. Something missing? [Report it at GitHub](#).

Name	Description	Authors	License	Update Information	Signature
Alduin GitHub, Install	Utility: An Atom and RSS feed aggregator	Xstoudi	MIT		
AlphaT GitHub, Install	Utility: 文档翻工具	sigoden			
ApplImageUpdate GitHub, Install	System: Update ApplImages from their upstream location	ApplImage	MIT	✓ Yes, can use ApplImageUpdate	
ApplImageUpdateTest	: Web, GitHub, Install,	ApplImage	MIT		
BitShares GitHub, Install	Finance: Advanced wallet interface for the BitShares financial blockchain	bitshares	MIT		

[Downloads](#)[Support](#)[Community](#)[Development](#)

Package Search

[Search](#)

Show development, language and debug packages

Show distribution: AppImage ▾



Get Pencil

Pencil is available in two different types of packaging: standalone application and Firefox extension.

Standalone version for your own operating system

Different builds of Pencils are made for popular operating systems. Please select the build on the right side and start installing Pencil.



- [Fedora 64 bit RPM package](#)
- [Fedora 32 bit RPM package](#)
- [Ubuntu 64 bit .DEB Package](#)
- [Ubuntu 32 bit .DEB Package](#)



Windows Installer (32 and 64 bit)

73 MB, .exe file



- [Mac OSX .dmg Image](#)
- [Mac OSX .zip archive](#)

[Code](#)[Issues 239](#)[Pull requests 5](#)[Projects 0](#)[Wiki](#)[Insights](#)

Pencil AppImage #424

[Edit](#)[New issue](#)[Open](#)

cho2 opened this issue 16 days ago · 2 comments



cho2 commented 16 days ago



- Operating system: all Linux
- Pencil version: 3.x.xx

Any plan to make Pencil AppImage (<https://appimage.org/>)?



2



1



philipzae commented 6 days ago



More users could easily try out the nightly builds if they were in appimage format and it not overwriting the installed version.



1



probonopd commented 6 days ago



Since this project is already using `electron-builder`, it should be **very** easy to do since `electron-builder` has native support for generating AppImage.

Assignees

No one assigned

Labels

None yet

Projects

None yet

Milestone

No milestone

Notifications

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3 participants





probono
@probonopd

Follow



"ApplImage is by far the simplest solution of the three."

DevPy @devpytech

Snapcraft, ApplImage, and Flatpak ... which one is the best? dlvr.it/Pq8dHC

1:17 PM - 26 Sep 2017



Linus Torvalds

„This is just very cool.“

Applimage & Flatpak

Feature	Applimage	Flatpak
No software necessary to install a package	Yes	No
Shared runtimes	None	Full
Sandboxing	None	Custom
Repository support	No	Yes
Central repo	No	Yes
Updates	None	Automatic

OBS



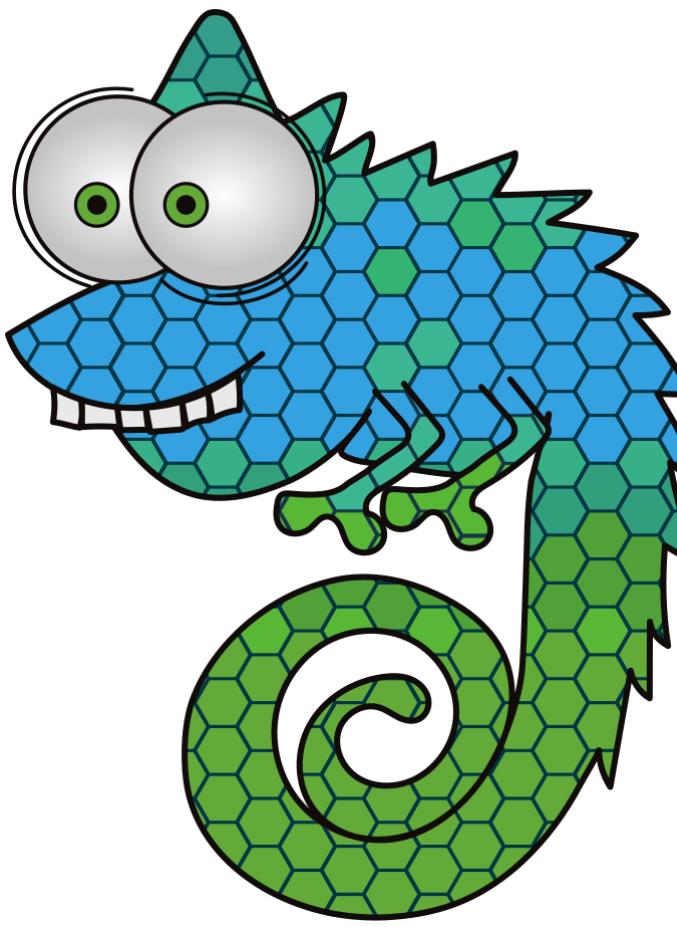
Applimage

Next session:

Using **OBS** to Build Containerised Application Image
Learn How To Generate **Applimage**

Q&A

THANK YOU
ありがとうございました



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