



LibreOffice Flatpak, Snap and AppImage

- ▼ Kukuh Syafaat
- ▼ kukuh@syafaat.id
- ▼ Tokyo, 25 May 2019



Hello (world)

- ▼ Kukuh Syafaat
 - ▼ インドネシア
 - ▼ FOSS Enthusiast
 - ▼ Contributor @gnome @openSUSE
 - ▼ @LibreOfficeID team

Agenda

- ▼ Intro: Universal Linux Package
- ▼ Survey of Flatpak, Snap, and AppImage Usage in Indonesia
- ▼ Comparisons

Intro: Universal Linux Package

Flatpak

Flatpak

- ▼ Flatpak is a system for building, distributing, and running sandboxed desktop applications on Linux.
- ▼ <http://flatpak.org/>
- ▼ Linux distribution example:
 - ▼ Endless OS (<https://endlessos.com>) only use Flatpak for their apps

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

LibreOffice Flatpak

- ▼ <https://www.libreoffice.org/download/flatpak/>
- ▼ LibreOffice Flatpak source code
<https://github.com/flathub/org.libreoffice.LibreOffice>
- ▼ Available on Flathub
 - ▼ <https://flathub.org/apps/details/org.libreoffice.LibreOffice>
 - ▼ Install with command `flatpak install flathub org.libreoffice.LibreOffice` or through GNOME Software/KDE Discover

Snap

Snap

- ▼ Snaps are app packages for desktop, cloud and IoT that are easy to install, secure, cross-platform and dependency-free.
- ▼ <https://snapcraft.io/>
- ▼ Developed by Canonical
- ▼ Linux distribution example:
 - ▼ By default, Ubuntu use snap beside apt

Why Snap?

- ▼ Auto-updating
- ▼ Secure
- ▼ Channels, e.g.
 - ▼ Stable
 - ▼ Candidate
 - ▼ Beta
 - ▼ Daily/Nightly

LibreOffice Snap

- ▼ <https://www.libreoffice.org/download/snap>
- ▼ Available on Snap Store
 - ▼ <https://snapcraft.io/libreoffice>
 - ▼ Install with command `snap install libreoffice` or through Ubuntu Software Center

AppImage

AppImage

- ▼ Format for distributing portable software on Linux without needing superuser permissions to install the application.
- ▼ <https://appimage.org/>
- ▼ Linux distribution example:
 - ▼ Nitrox (<https://nxos.org/>) use AppImage on their NX Software Center

Why AppImage?

- ▼ Run on various Linux distributions
- ▼ Click and run
- ▼ No need root
- ▼ Portability

LibreOffice AppImage

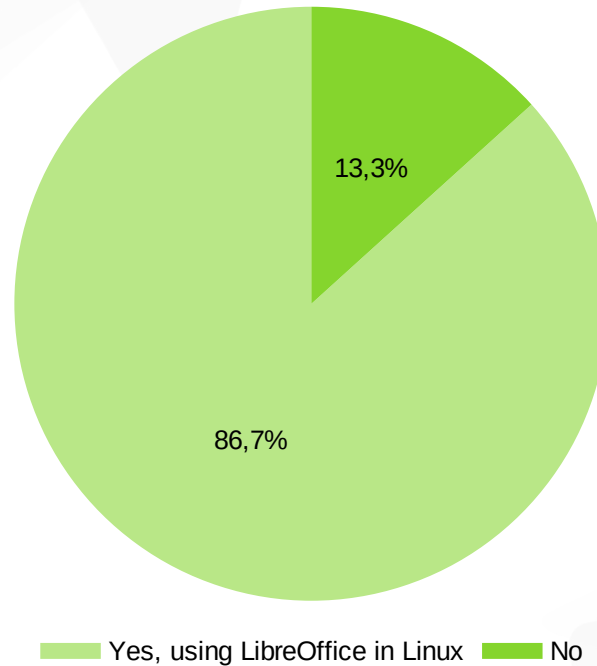
- ▼ <https://www.libreoffice.org/download/appimage/>
- ▼ <https://libreoffice.soluzioniopen.com/>
- ▼ Available in (fresh & still)
 - ▼ Basic version (only en_US)
 - ▼ Standard version (en_US, en_GB, ar, zh_CN, fr, de, etc...)
 - ▼ Full version (all languages)also
 - ▼ Stable Version
 - ▼ Daily Version (recent build)
 - ▼ Old Version (since 3.3.0)
 - ▼ Pre-Release Version (upcoming release)

Survey of Flatpak, Snap, and AppImage Usage In Indonesia

April-May 2019

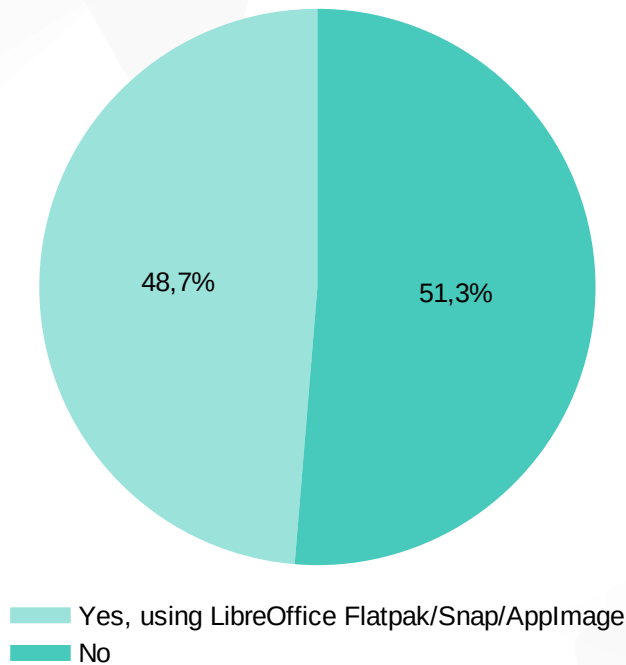
Using LibreOffice in Linux?

▼ n = 45



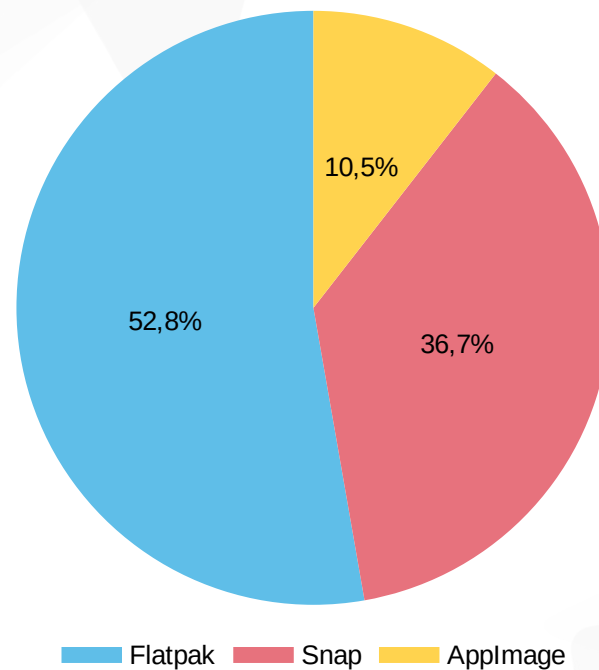
Using LibreOffice Flatpak/Snap/AppImage?

▼ n = 39



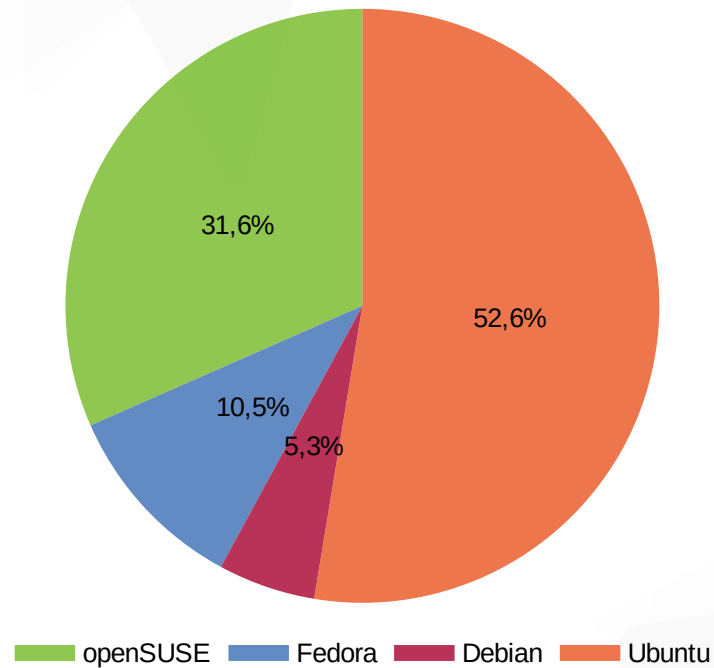
Using Which? Flatpak/Snap/AppImage?

▼ n = 19



Linux Distributions

▼ n = 19



Comparisons

Tested on openSUSE Tumbleweed, May 2019
LibreOffice 6.2.3.2 on Flatpak, Snap, and AppImage

App Size (Installed)

Flatpak	<pre>cho2@gnome-next:~> du -hs /var/lib/flatpak/app/org.libreoffice.LibreOffice/ 656M /var/lib/flatpak/app/org.libreoffice.LibreOffice/</pre>
Snap	<pre>cho2@gnome-next:~> sudo du -hs /snap/libreoffice/ [sudo] password for root: 2,1G /snap/libreoffice/</pre>
AppImage	<pre>cho2@gnome-next:~> ls -lh LibreOffice-fresh.basic-x86_64.AppImage -rw-r--r-- 1 cho2 users 235M Apr 19 22:01 LibreOffice-fresh.basic-x86_64.AppImage</pre>

App Size (Installation/Download)

Flatpak

```
cho2@gnome-next:~> flatpak install flathub org.libreoffice.LibreOffice
Mencari kecocokan...

Diperlukan runtime untuk org.libreoffice.LibreOffice/x86_64/stable (runtime/org.freedesktop.Platform/x86_64/18.08) ditemukan di remote flathub
Apakah Anda ingin memasangnya? [Y/n]: y

org.libreoffice.LibreOffice izin:
  ipc                network                pulseaudio            wayland              x11                  dri                   file access [1]
  dbus access [2]    bus ownership [3]

[1] host, xdg-run/dconf
[2] ca.desrt.dconf, org.gtk.vfs.*
[3] org.libreoffice.LibreOfficeIpc0


```

	ID	Arsitektur	Cabang	Remote	Unduh
1.	org.freedesktop.Platform	x86_64	18.08	flathub	< 292,7 MB
2.	org.freedesktop.Platform.Locale	x86_64	18.08	flathub	< 315,9 MB (parsial)
3.	org.freedesktop.Platform.html5-codecs	x86_64	18.08	flathub	< 2,9 MB
4.	org.libreoffice.LibreOffice	x86_64	stable	flathub	< 263,8 MB
5.	org.libreoffice.LibreOffice.Locale	x86_64	stable	flathub	< 65,7 MB (parsial)

```
Proceed with these changes to the Default system installation? [Y/n]: █
```

Snap

```
cho2@gnome-next:~> sudo snap install libreoffice
[sudo] password for root:
Download snap "libreoffice" (117) from channel "stable" 84% 167kB/s 8m45s
```

AppImage

```
cho2@gnome-next:~> wget -c https://libreoffice.soluzioniopen.com/stable/fresh/LibreOffice-fresh.basic-x86_64.AppImage
--2019-05-13 16:15:51-- https://libreoffice.soluzioniopen.com/stable/fresh/LibreOffice-fresh.basic-x86_64.AppImage
Resolving libreoffice.soluzioniopen.com (libreoffice.soluzioniopen.com)... 91.134.142.159, 64:ff9b::5b86:8e9f, 64:ff9c::5b86:8e9f
Menghubungi libreoffice.soluzioniopen.com (libreoffice.soluzioniopen.com)[91.134.142.159]:443... terhubung.
Permitas HTTP dilampirkan, menunggu balasan... 200 OK
Besarnya: 245460936 (234M)
Simpan ke: LibreOffice-fresh.basic-x86_64.AppImage

LibreOffice-fresh.basic-x86_64.AppImage 62%[=====] ] 145,80M 610KB/s eta 9m 6s
```


Memory Usage

Flatpak										
Q libreoffice										
Nama Proses	Pengguna	% CPU	ID	Memori	Total baca disl	Total tulis disl	Baca disk	Tulis disk	Prioritas	
bwrap	cho2	0	3084	500,0 KiB	59,5 MiB	N/A	N/A	N/A	Normal	
flatpak	cho2	0	3068	108,0 KiB	4,6 MiB	24,0 KiB	N/A	N/A	Normal	
oosplash	cho2	0	3085	976,0 KiB	662,4 MiB	3,8 MiB	N/A	N/A	Normal	
soffice.bin	cho2	0	3122	57,6 MiB	225,2 MiB	340,0 KiB	N/A	N/A	Normal	

Snap										
Q libreoffice										
Nama Proses	Pengguna	% CPU	ID	Memori	Total baca disl	Total tulis disl	Baca disk	Tulis disk	Prioritas	
libreoffice.wrapper	cho2	0	2687	264,0 KiB	35,8 MiB	N/A	N/A	N/A	Normal	
soffice.bin	cho2	0	2736	82,4 MiB	328,3 MiB	696,0 KiB	N/A	N/A	Normal	

AppImage										
Q libreoffice										
Nama Proses	Pengguna	% CPU	ID	Memori	Total baca disl	Total tulis disl	Baca disk	Tulis disk	Prioritas	
LibreOffice-fresh.basic-x86_6	cho2	0	17096	1008,0 KiB	2,1 GiB	N/A	N/A	N/A	Normal	
oosplash	cho2	0	17092	N/A	82,8 MiB	N/A	N/A	N/A	Normal	
soffice.bin	cho2	0	17112	67,0 MiB	3,1 GiB	2,8 MiB	N/A	N/A	Normal	

Extension

▼ Tested with ChordDiagrams 1.1.1

<https://extensions.libreoffice.org/extensions/chorddiagrams>

Flatpak	<input checked="" type="checkbox"/>
Snap	<input checked="" type="checkbox"/>
AppImage	<input checked="" type="checkbox"/>

Fonts

- ▼ Tested with Google Fonts (Cabin)
- ▼ <https://fonts.google.com/specimen/Cabin>
- ▼ `sudo zypper in google-cabin-fonts`
- ▼ Installed on `/usr/share/fonts/truetype`

Flatpak	<input checked="" type="checkbox"/>
Snap	<input checked="" type="checkbox"/>
AppImage	<input checked="" type="checkbox"/>

Limitations

- ▼ Result may be vary in
 - ▼ Other Linux distributions
 - ▼ Other LibreOffice Versions
 - ▼ Other Extensions



Thank you
ありがとうございました



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