A Look at Copperhead OS
Security-focused Android

Jim Campbell

Penguicon!!!

April 30th, 2017

Introduction to Copperhead OS

What we'll talk about . . .

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- Background
- Good for me? Not good for me?
- Key Features
- Copperhead IRL
- Useful F-Droid applications
- Links / Resources

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Started consultancy to provide security services to organizations, and to build Copperhead OS protect sensitive mobile communications.

Good For You

Copperhead OS is cool if:

Good For You

Copperhead OS is cool if:

- You're a free software enthusiast
- You don't want apps that eat personal data and privacy
- You can live without Spotify and Snapchat
- . . . or are willing to fuss (i.e., side-load apps)
- You like the supported phones (Google Phones)

Maybe For Someone Else

Copperhead may not be the best if:

Maybe For Someone Else

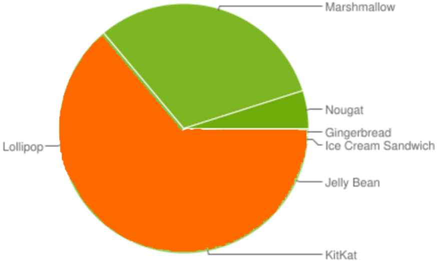
Copperhead may not be the best if:

- You want a Libre phone
- You want to use Spotify without fuss
- You don't want to tinker or device isn't what you want
- There's a proprietary app that you have to use for work

WHY??

Why does this even exist?

Android device support == * Sad Emoji *



63.9%

But my phone has support!

Android Security Compromises

Even among supported devices, security is less than ideal:

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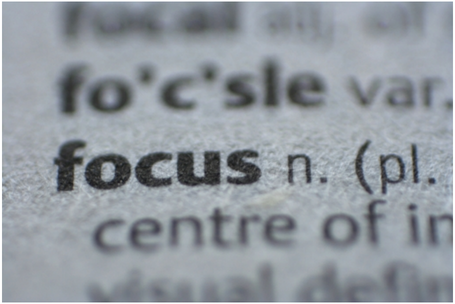
Filling This Gap - Hardened OS for well-supported devices



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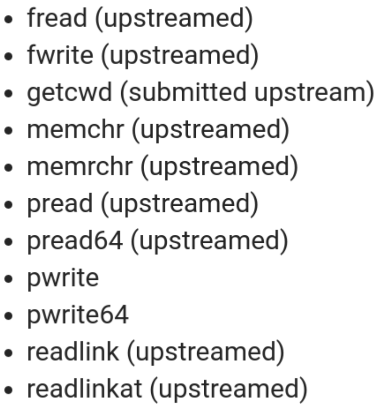
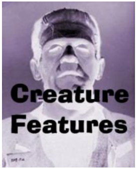
Probably Not Shitty - A Lot is Upstreamed



- fread (upstreamed)
- fwrite (upstreamed)
- getcwd (submitted upstream)
- memchr (upstreamed)
- memrchr (upstreamed)
- pread (upstreamed)
- pread64 (upstreamed)
- pwrite
- pwrite64
- readlink (upstreamed)
- readlinkat (upstreamed)

Source: AOSP repository

What are some of its features?



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- Others: Navigation error correction, contextual search, network prediction, metrics and hyperlink auditing are disabled by default.

Additional Features

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OS-related Questions?

ASK US!!!!!
Pokemon Sun and Moon Starters!
Please Ask Questions
We will awnser almost anything
Please no Swearing or NSFW Questions

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- Roughly weekly, super-simple updates

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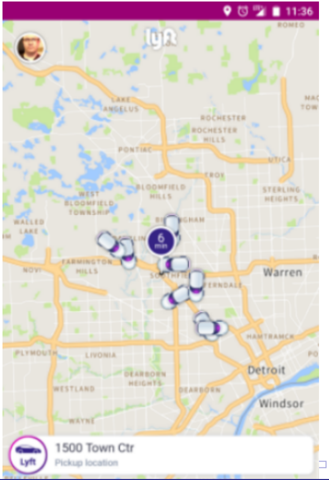
OHAI WEB APPZ

5 months in, I discover https://m.lyft.com



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Additional Resources

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- Copperhead OS on Github
- Copperhead OS forum on Reddit
- Copperhead OS on Twitter

Thank you!
– jcampbell - ate - gnome - dote - org –