

### Turtles all the way down - what about APMs?

Josef Holzmayr Head of Developer Relations, Mender.io

LPC, 18.09.2024

Hello, my name is Josef.

I am a recovering embedded developer.





### Some technical details

#### Street credibility

Yocto Project Community Manager & Ambassador

OpenEmbedded Social Media Manager

Kernel contributor (yup, really!)

#### <u>Fame</u>











### Warning! Attention!

This is a super sad topic. It is a problem, its growing, and there is no solution in sight!





### Why?



Everybody of them is the most special butterfly, "doing it right, finally".



# They make life easier for app developers.



They make our (distribution builders) lives miserable.





- Downloading arbitrary things at compile time
  - Time or configuration dependent, even!
- Hidden dependencies
  - Even duplicates
  - Even multiple version
  - With conflicting licenses
  - With various levels of vulnerability patches



## Some approaches





### - IGNORANCE IS BLISS

- Build externally and wrap up
- Possible legal implications, but hey!
- Chopping things up one by one
  - python3-xyz packages in Debian, Yocto, ...
- INVOLVING \$DEITIES
  - Beating the APM process into the build, and hoping for it to not break during maintenance period



### Others?



### Conclusion: we're doomed...

Thanks for listening.



#### Learn more









#### **Get started now**

docs.mender.io/getting-started

#### **Join the Mender Hub community**

hub.mender.io

#### **Mender on Github**

github.com/mendersoftware



### Q & A

Josef Holzmayr

 ${\it Head of Developer Relations, Mender \& Community Manager, The Yocto Project}$ 

https://github.com/TheYoctoJester/

https://www.linkedin.com/in/josef-holzmayr/





### Thank you

Contact us

mender.io/contact-us