What is Wasm/WASI and why should you care?
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WebAssembly (Wasm)

- Built for browsers

- Non-browser VMs emerged

- Now generic compute target

- How to interact with the OS?

Source: webassembly.org (https://webassembly.org/)

WebAssembly System Interface (WASI)

- POSIX-like API for interacting with the OS

- Growing language support (Rust, Go, Python, Java, more)

- Write-once-run-anywhere

- Cloud vendor support

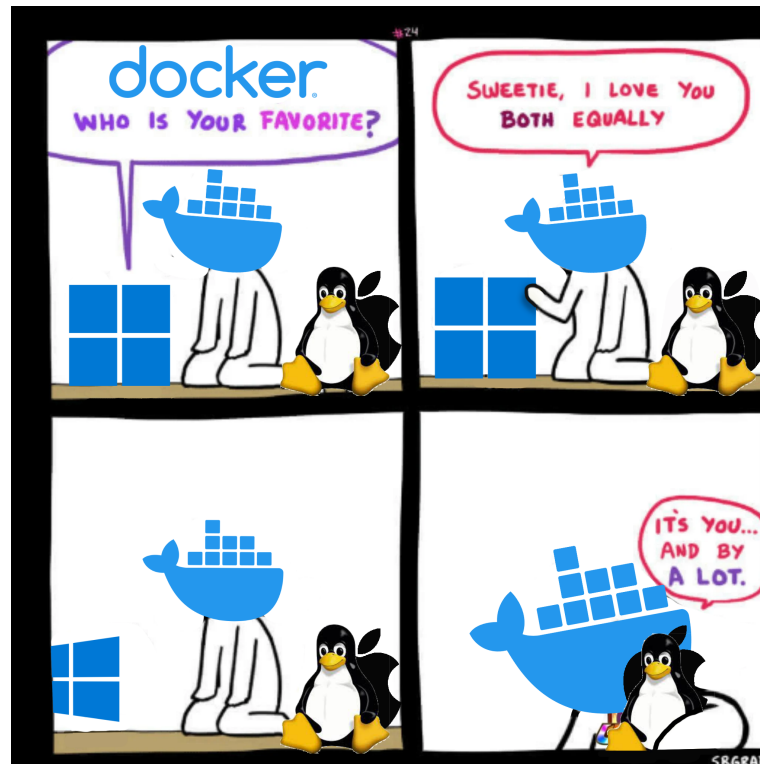Source: wasi.dev (https://wasi.dev)

Why should we care?

- Java did it decades ago

- More recently, containers (Docker)

- NodeJS kinda did it too

Source: reddit.com (https://www.reddit.com/r/ProgrammerHumor/comments/8d6r19/nodejs/)

Problems

- Docker depends on the underlying OS kernel

- Windows/Mac support is lacking

- Ever tried running pre-built containers on Mac M1 (ARM)?

Source: reddit.com (https://www.reddit.com/r/ProgrammerHumor/comments/wq9d6k/build_once_run_anywhere/)

The future

- Wasm/WASI is truly platform agnostic

- Docker now has a WASI executor

- Kubernetes supports WASI

- We may look at WASI like we look at containers today

Source: Noto color emoji set

Thank you

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