Why should you care?

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If WASM+WASI existed in 2008, we wouldn't have needed to created Docker. That's how important it is. Webassembly on the server is the future of computing. A standardized system interface was the missing link. Let's hope WASI is up to the task! https://t.co/wnXQg4kwa4

02:09 AM · Mar 28, 2019

♡ 2.2K   ⇄ 852   ♡ 32

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"So will wasm replace Docker?" No, but imagine a future where Docker runs linux containers, windows containers and wasm containers side by side. Over time wasm might become the most popular container type. Docker will love them all equally, and run it all :) https://t.co/qVq3fomv9d
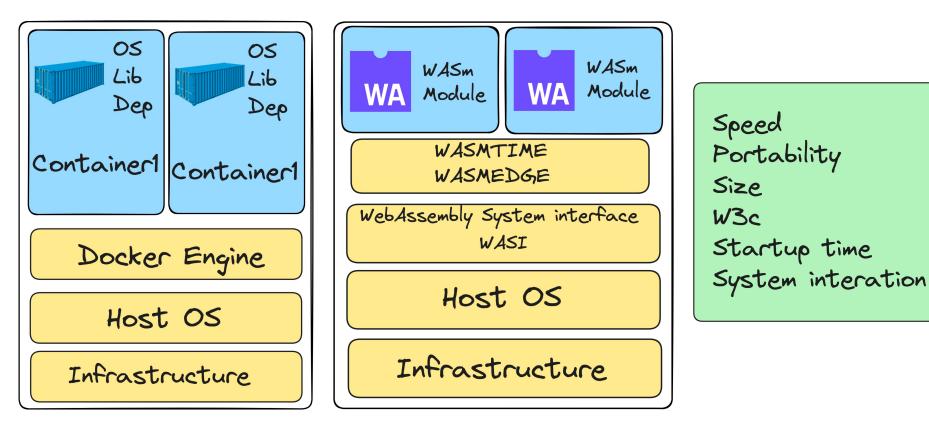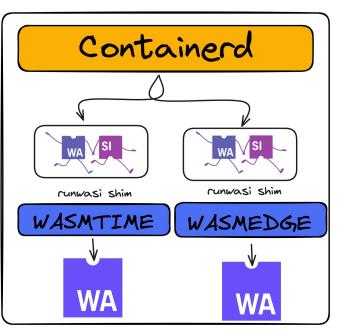
09:20 AM · Mar 28, 2019
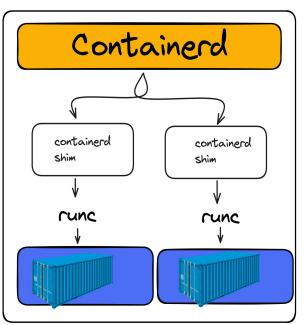
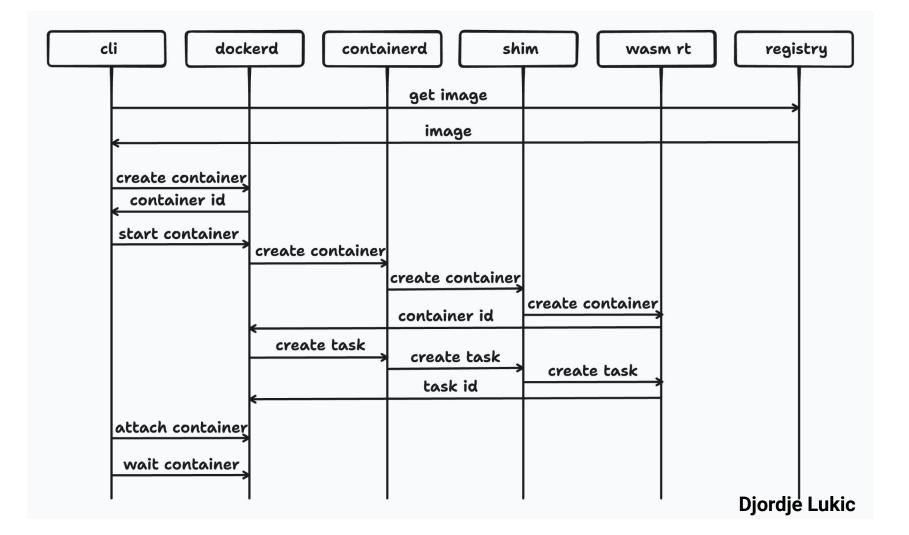♡ 171   ⇄ 55   ♡ 3

Wasm Vs Docker?

Docker (left stack):

Container1	Container1
OS Lib Dep	OS Lib Dep

- Docker Engine
- Host OS
- Infrastructure

Wasm (middle stack):

WASm Module	WASm Module
WA	WA

- WASMTIME WASMEDGE
- WebAssembly System interface WASI
- Host OS
- Infrastructure

Comparison (right box):

- Speed
- Portability
- Size
- W3c
- Startup time
- System interation

Djordje Lukic

Webassembly and Kubernetes

Enter spin - making wasm development easy

RUST	JS	Python	more...

SPIN

WASM Runtime (wasmedge/wasmtime)

Host OS

Exciting stuff

WASI
Component model

WASI 2.0 with
better networking

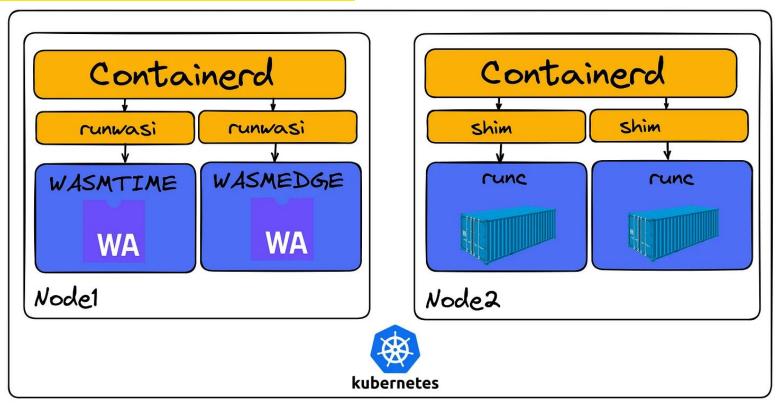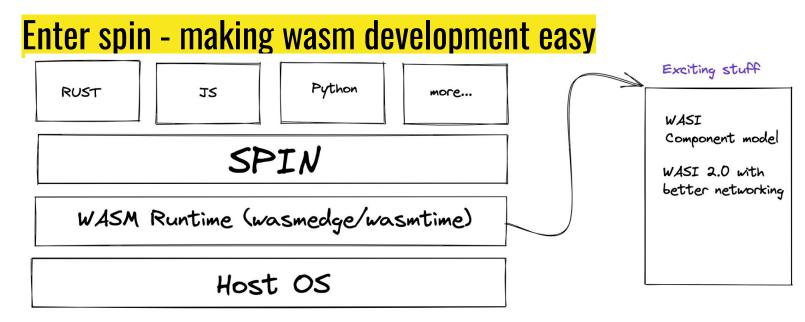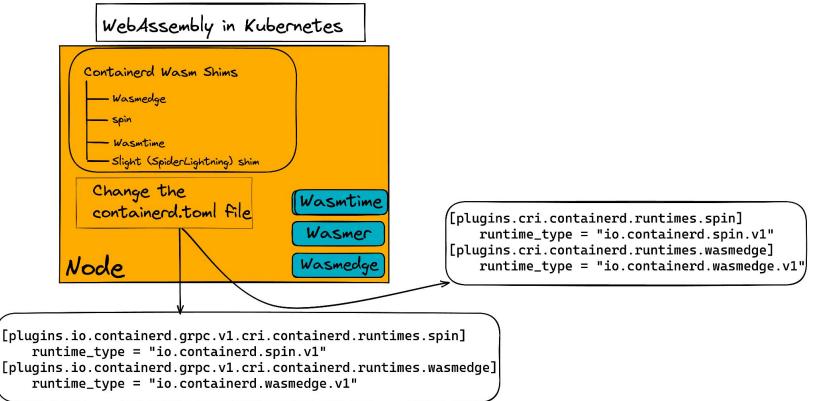### Choose your language

Spin SDKs are available in Python, Go, JavaScript, Rust, Go and .NET. And all WASI-compatible languages are supported.

JS JavaScript

GO

C#

.NET

TS

What needs to be done?

WebAssembly in Kubernetes

Containerd Wasm Shims
- Wasmedge
- spin
- Wasmtime
- Slight (SpiderLightning) shim

Change the containerd.toml file

Wasmtime

Wasmer

Wasmedge

Node

```
[plugins.cri.containerd.runtimes.spin]
    runtime_type = "io.containerd.spin.v1"
[plugins.cri.containerd.runtimes.wasmedge]
    runtime_type = "io.containerd.wasmedge.v1"
```

```
[plugins.io.containerd.grpc.v1.cri.containerd.runtimes.spin]
    runtime_type = "io.containerd.spin.v1"
[plugins.io.containerd.grpc.v1.cri.containerd.runtimes.wasmedge]
    runtime_type = "io.containerd.wasmedge.v1"
```

Kwasm

- Operator to all previous steps in an automated way ;)