



The DShell Pattern

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David McKay

→ Developer Advocate for
InfluxData

→ Kubernetes Release
Team

→ Tweets [@rawkode](#)

★ Scottish

★ Lover of esoteric
programming languages

★ Likes symmetry





Some* developers don't want to use Docker

* No developer with macOS wants to use Docker



BREAKING NEWS



Docker is useful

Encapsulated
Dependencies

Documented Build
Process

Deployable



3 Components

Dockerfile

Docker
Compose

Makefile



Dockerfile

Make it work for all environments



Dockerfile

```
FROM elixir:1.9-alpine AS base
```

```
FROM base AS development  
RUN apk add --update vim git make
```

```
FROM base AS build  
RUN make compile
```

```
FROM base AS production  
COPY --from=build ... ..
```





Docker Compose

Make it as (more) painful as possible (than normal)



dshell

dshell:

```
@docker-compose run \  
  --rm \  
  --service-ports \  
  --user $UID \  
  --use-aliases \  
  --entrypoint=ash \  
  myapp
```





Encourage DShell

Block Up

```
service:  
  myapp:  
    entrypoint: sh  
    command: echo
```

Publish Service Ports

```
--service-ports
```

Override Entrypoint

```
--entrypoint=ash
```



DO NOT
use compose syntax v3
in dev



UNPOPULAR OPINION



Best Practice

Use Depends On

```
depends_on:  
  mongodb:  
    condition:  
      service_healthy
```

12-Factor

```
env_file: .env  
  
env_file:  
  - .env  
  - .env.secret
```





Makefile

Unify Developers



The Sausage

```
.PHONY: dshell dclean up
```

```
up: deps  
    @mix run --no-halt
```

```
compile: deps  
    @mix compile
```





up

up:

```
@npm run develop
```

```
@mix test
```

```
@FLASK_APP=hello flask run
```





dclean!

dclean:

```
@docker-compose down --rmi=local -v
```





Final API

- ❑ `make dshell` [host]
- ❑ `make up` [container]
- ❑ `make test | deps | whatever` [container]
- ❑ `make dclean` [host]





Better Together

We're **deploying Docker to production** (I hope), so **encourage** (not force) it's usage for **local development**; make it **easy** for people to dip their toe in.



VSCode Remotes

```
{  
  "dockerComposeFile": [  
    "../docker-compose.yml",  
  ],  
  "service": "node",  
}
```





Thank You

- Follow me on Twitter ([@rawkode](#))
- At the [InfluxData](#) booth
(I've got badges and stickers)
- Come speak to me about [InfluxDB](#), [Cloud Native](#),
[Monitoring](#), [Docker](#), or [Kubernetes](#)

