

# Moving from Docker Compose to Kubernetes Using Kompose

---



**Dan Wahlin**

WAHLIN CONSULTING

@danwahlin [www.codewithdan.com](http://www.codewithdan.com)



# Module Overview

Kompose Overview

Installing Kompose

The kompose convert Command

kompose convert in Action

Exploring the Generated YAML



# Kompose Overview

---



**Kubernetes + Compose = Kompose**

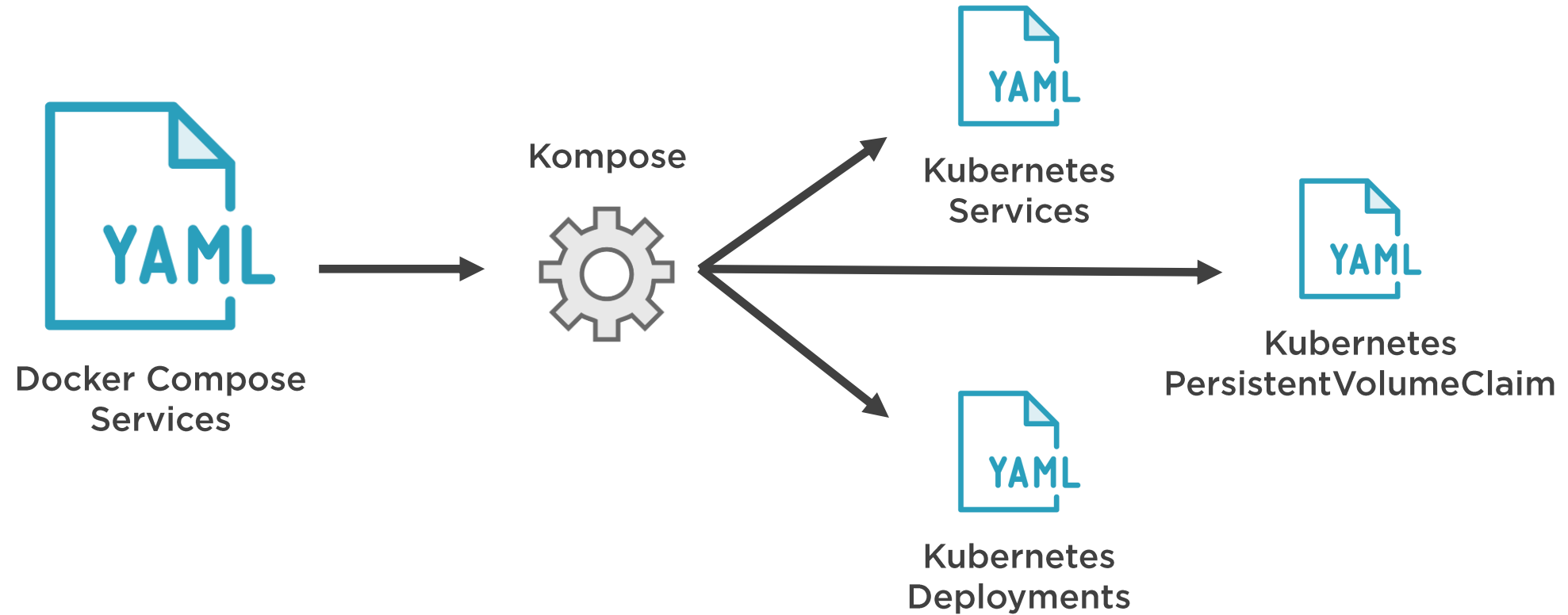


Kompose is a tool to help users familiar with docker-compose move to Kubernetes. It takes a Docker Compose file and translates it into Kubernetes resources.

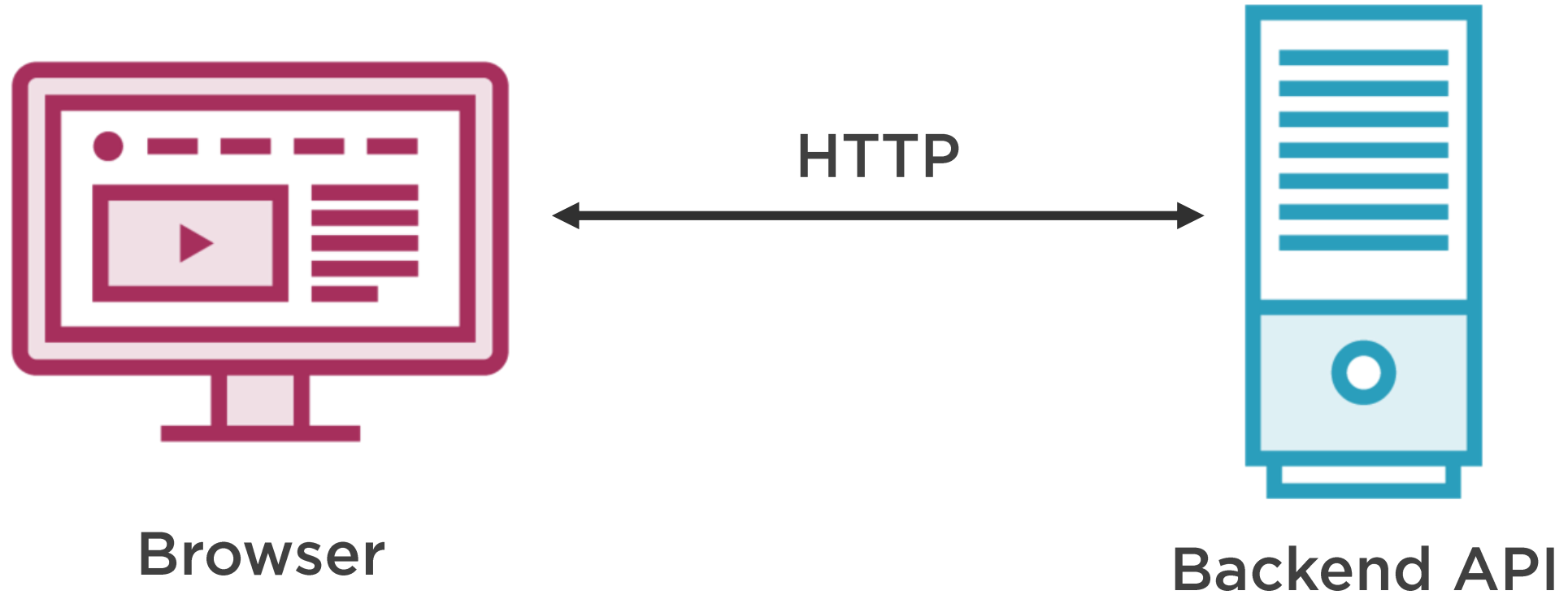
<https://kompose.io>



# Docker Compose YAML to Kubernetes YAML



# Networking Between Pods



# Installing Kompose

---





# The kompose convert Command

---



```
# The convert command converts compose YAML to k8s YAML
kompose convert
```

```
# Getting help with the convert command
kompose convert --help
```

Getting Help with the kompose convert Command

**kompose convert** provides several different flags that can be used.

Use the **--help** or **-h** flag with the command to get help.



## Key *kompose convert* Flags

`--file`

◀ Define alternative compose file

`--chart`

◀ Create a Helm chart for converted objects

`--json`

◀ Generate JSON resource files

`--out`

◀ File name or directory where resources will be saved

`--replicas`

◀ Number of replicas in the generated resource spec (default=1)

`--stdout`

◀ Print converted objects to stdout

`--volumes`

◀ Volume type

("persistentVolumeClaim"|"emptyDir"|"hostPath" | "configMap")  
(default "persistentVolumeClaim")



```
# Converting a compose file with a different name from the default
kompose convert --file docker-compose.prod.yml
```

```
# Multiple Docker Compose files can be defined
kompose convert --file docker-compose1.yml --file docker-compose2.yml
```

## Using the --file Flag

Use the **--file** or **-f** flag to reference a non-default compose file name or to convert multiple compose files



```
# Write resources to stdout  
kompose convert --stdout
```

```
# Write resources to a specific folder (must exist)  
kompose convert --out ./output
```

```
# Write resources to a single file  
kompose convert --out k8s.yml
```

```
# Write resources to a specific folder and use 3 replicas in Deployments  
kompose convert --out ./output --replicas 3
```

## Using kompose convert Output Flags

Flags such as **--stdout** and **--out** can be used to define where the generated Kubernetes resources are written.



# kompose convert in Action

---



# Code Sample

<https://github.com/DanWahlin/Angular-JumpStart>



# Exploring the Generated YAML

---





# Summary



The Kompose tool can be used to convert Docker Compose files into Kubernetes resources files

Install Kompose on any Operating System

The **kompose convert** command provides several flags. Examples include:

- file
- stdout
- out
- volumes

