Developer Tips

Ron Fybish

Easy Steps

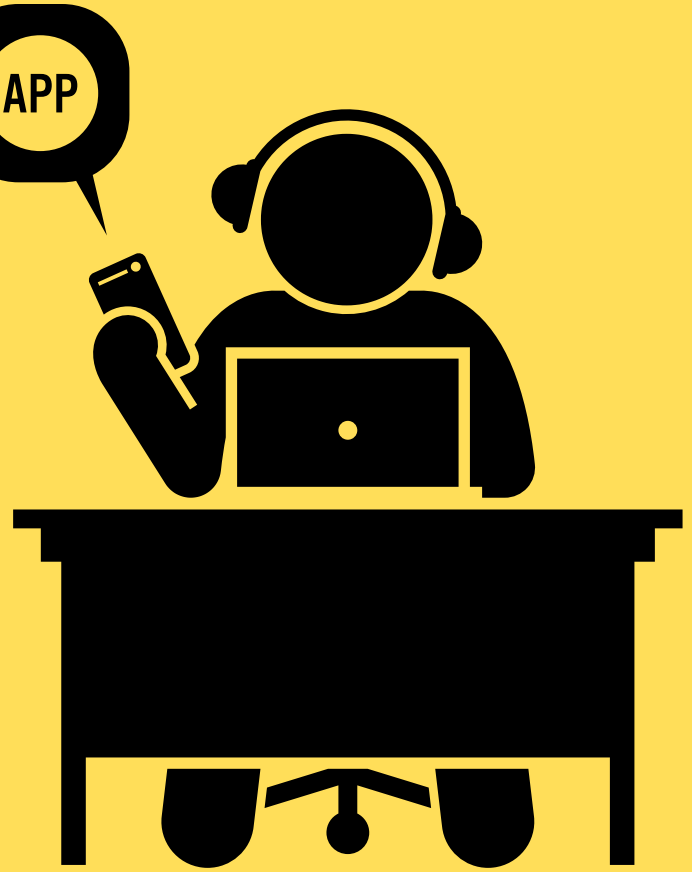
Kubernetes In Simple Words

Developer Tips

Ron Fybish

Imagine that Bob builds a new application

Let's share this experience with everyone



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And now Bob chose to use Docker containers to package the application

Docker will allow my app to function consistently regardless of the environment

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Bob has deployed his application on 5 different servers using Docker and his app starts getting a lot of traffic

Wow my app is doing significantly better than I expected

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Now Bob needs more servers. He has 5 now, but he might need 80!

How will Bob know what to do when determining where each container should go? Should he monitor all containers constantly? If they die, is it Bob's responsibility to make sure they're restarted again?

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How am I going to manage all this?

Wouldn't it be easier if this behavior was handled by a system?

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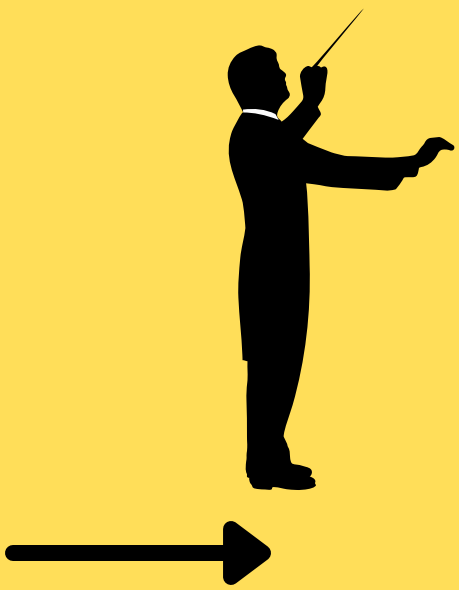
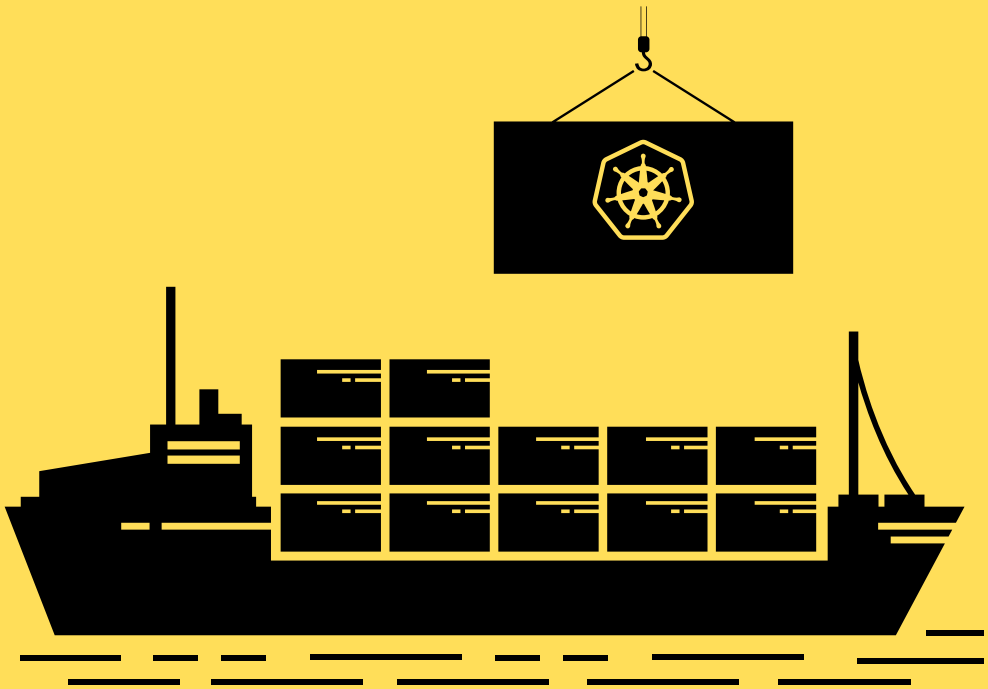
This is where Kubernetes becomes useful

For those unfamiliar Kubernetes is an open-source container orchestration platform that automates tasks such as deploying and managing applications running in containers

Don't worry I will take care of everything





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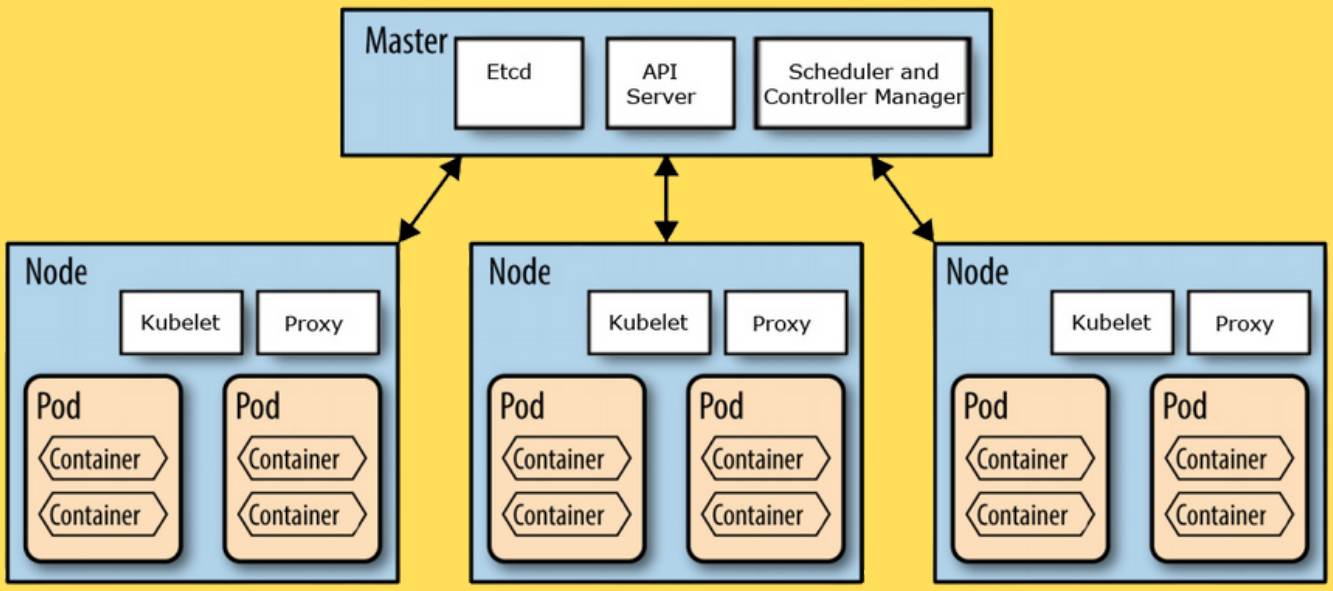
A Kubernetes cluster consists of worker machines called nodes that run containerized applications



Every cluster has at least one worker node however if a single node fails your application will still be accessible from the other nodes because multiple nodes are grouped in a cluster

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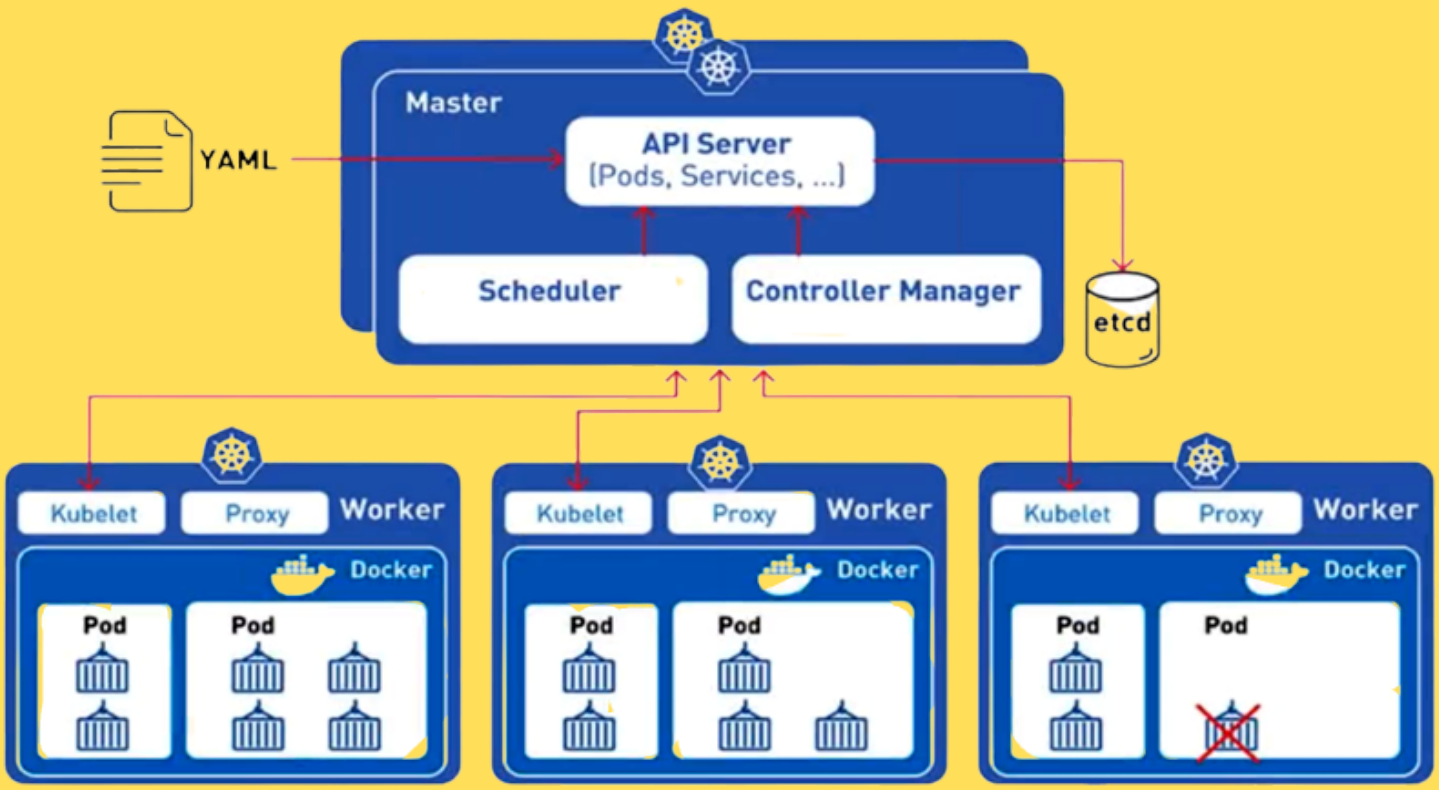
Every node contains a container runtime:

- **Kubelet** - (for starting, stopping, and managing individual containers by requests from the Kubernetes control plane)
- **Kube - proxy** (for networking and load balancing)



Ron Fybish
Developer Advocate

What do You Think About This Post?

I hope this helps! Comment below
to let me know what else you like to learn.
Follow @ronfybish to get updated :)