

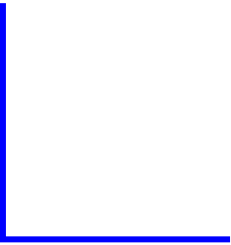


Cloud Infrastructure

Lecture 12

Docker Orchestration #1

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Docker Orchestration

- Manage a collection of machines as a cluster
- Schedule docker instances onto those machines
- Allow those instances to communicate and share storage
- Allow those instances to have private space
- Allow these clusters to scale and evolve

Docker Swarm

Docker Swarm

- Imbedded tool from Docker
- Fairly easy to use
- Can be set up on a laptop
- <https://rominirani.com/docker-swarm-tutorial-b67470cf8872#.10pt4hjd9>
- <https://stefanscherer.github.io/build-your-local-windows-docker-swarm/>

Swarm on Digital Ocean

- Create a small cluster on DigitalOcean
- Uses automation API so we need to set that up first
- Fairly easy to follow

<https://www.digitalocean.com/community/tutorials/how-to-create-a-cluster-of-docker-containers-with-docker-swarm-and-digitalocean-on-ubuntu-16-04>



Minikube



Minikube

- Small Kubernetes cluster controller
- Excellent for development
- Uses Kubectl as CLI
- Sets up Minikube **context** for Kubectl
- <https://kubernetes.io/docs/getting-started-guides/minikube/#installation>
- <https://github.com/kubernetes/minikube>

Reading

Read the links in the slides.