# Deployment + Clusters

# What is deployment? Set(Activities) ⇒ Customer

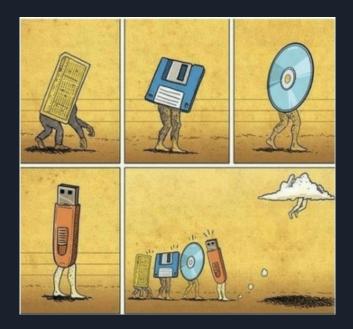
Analogy?



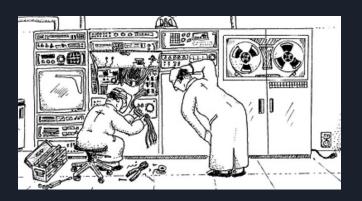


# History - traceback?

Age of Micro Computers < User>



#### Age of Large Computers < Manu>

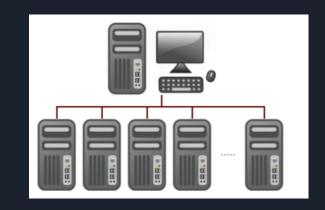


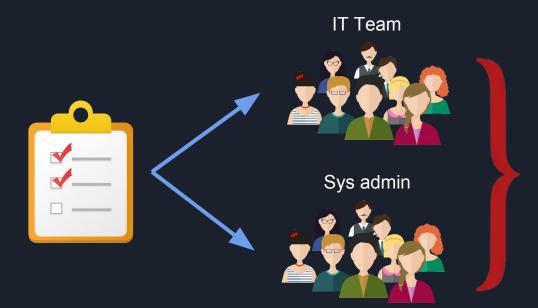
Age of Cloud Computing + Internet Boom < Manu>

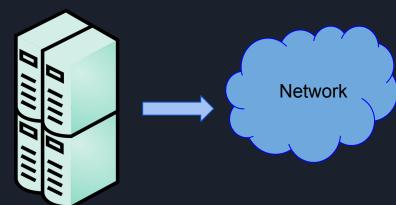


# **Deployment in Clusters:**

**Clusters?** group(computer) => work together

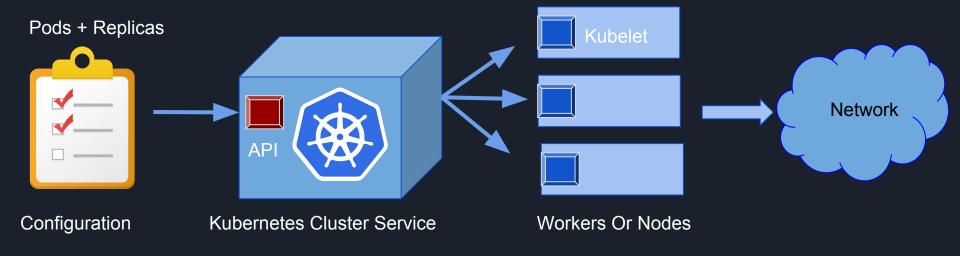






## Kubernetes

Automation => deployment + scaling + management of containerized applications



## **Kubernetes vs Docker Swarm**

#### Why Kubernetes?

- Complex setup to bring up a setup and altering the configuration with respect to kubernetes
- Success stories at Google, Pokemon
- Logging and monitoring tools are provisioned

#### Why DockerSwarm?

- Native docker implementation, response times are faster
- Easy transition from docker-compose to swarm deployment

### References:

- Picture 1 <u>http://www.dailymail.co.uk/sciencetech/article-3345542/Jumbo-jet-launch-Virgin-Galac</u>tic-spaceship.html
- Picture 2 <u>https://qz.com/1209330/spacexs-falcon-heavy-rocket-is-the-envy-of-china-and-europe-why-isnt-nasa-on-board/</u>
- Wiki reference <a href="https://en.wikipedia.org/wiki/Software-deployment">https://en.wikipedia.org/wiki/Software-deployment</a>
- Picture3 <u>https://strugglebots.wordpress.com/2011/12/21/people-vs-machines-which-one-is-more-problematic/</u>
- Picture4 <a href="https://www.pcmag.com/article2/0,2817,2372163,00.asp">https://www.pcmag.com/article2/0,2817,2372163,00.asp</a>
- Clusters <a href="https://www.cogenda.com/article/Cluster">https://www.cogenda.com/article/Cluster</a>
- Picture5 <a href="http://laoblogger.com/server-clusters-clipart.html">http://laoblogger.com/server-clusters-clipart.html</a>
- Kubernetes <a href="https://kubernetes.io/">https://kubernetes.io/</a>