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# Multi Cloud and Containers

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# What is Multi Cloud

- **Multicloud** is the use of multiple cloud computing and storage services in a single heterogeneous architecture (AWS, Microsoft Azure, Google Cloud Platform)
- A typical multicloud architecture utilizes two or more public clouds as well as multiple private clouds
  - Aims to eliminate reliance on any single cloud provider
  - Private cloud: A private cloud consists of computing resources used exclusively by one business or organization
  - services and infrastructure are always maintained on a private network, rather than cloud provider
- Synchronization between clouds is not essential
  - This differs from parallel and distributed computing environments
- Multicloud Services/Apps:
  - G suite, salesforce, atlassian, adobe



# Why Multi Cloud

- Lower risk of DDoS attacks
  - If one cloud goes down, others can take the load
  - 98% of business say that an hour of downtime cost their company more than 100,00
- Ability to use different providers for different parts of a business
  - Very difficult for one cloud service to match every need of a company efficiently
  - Ex: Google cloud has strong DevOps expertise
- Avoid being locked into one vendor
  - Important to small business' that have specific needs and low budgets
- Multi Cloud is a la carte

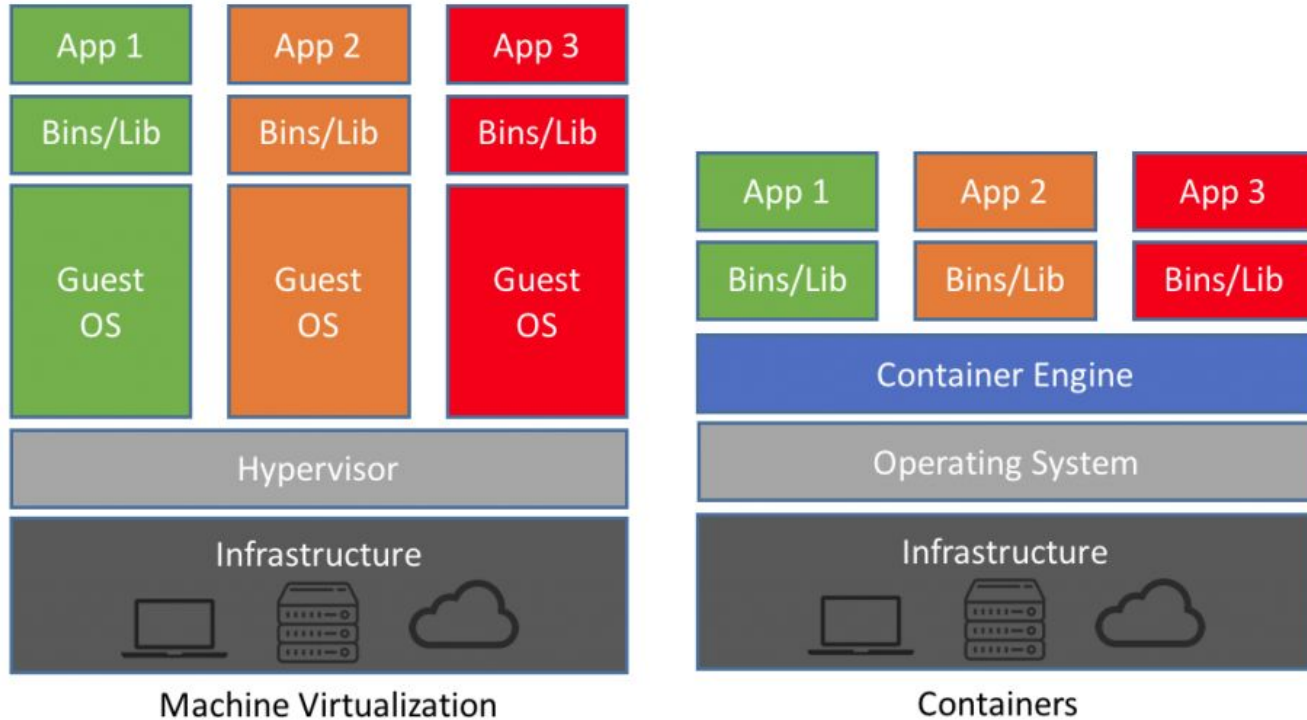


# Challenges with Multi Cloud

- Complexity to manage becomes larger with wider range of cloud services
- Transition to Multi Cloud becomes extensive
- Lack of Expertise
- Security Risks
  - Larger Attack Surface/Vectors
  - Configuration of network defense mechanisms get more complex
  - Most likely require more 3rd party security professionals



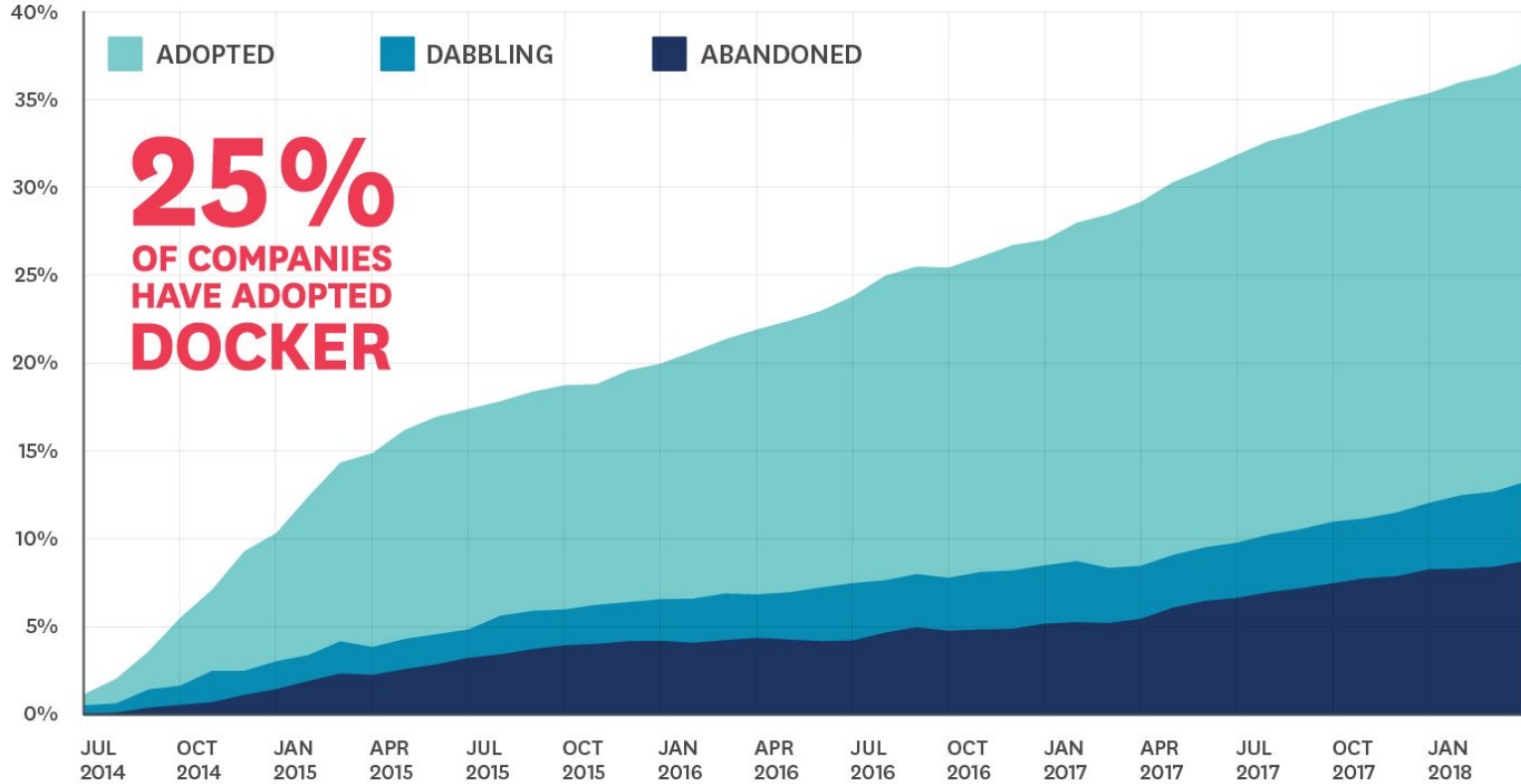
# What are containers (and virtualization)



# Benefits of containers

- Containers provide a consistent environment to work in
- Containers are portable
- Containers are faster than VM's
- There is little overhead when using containers

# Docker Adoption Behavior



Month (segmentation based on end-of-month snapshot)

# References

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Questions?