
Cloud Computing

Dani Akash S

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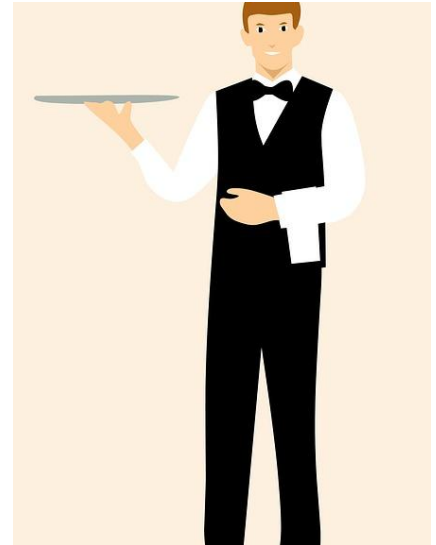
The practice of using a network of remote servers hosted on the Internet to store, manage, and process data, rather than a local server or a personal computer.

Server

A person or thing that serves.

Or

A computer or computer program which manages access to a centralized resource or service in a network.



Where do we use a server?



Dhiraj

@dheedkv



Why do we need node.js??
WHY WHY??

@DaniAkashS @iMagesh
@nodejs

What does it take to Manage a Server?



Hardware

- Servers
- Space
- Electricity
- Air Conditioning
- Maintenance
- Upgrades
- Personnel
- Security
- Disaster Recovery
- Backup Units



Software

- Operating System
- System Updates
- Softwares
- Software Updates
- Security Config
- Environment Config
- Load Balancing
- CDN
- Storage



What does it cost to manage that?

It's probably costlier than your actual project...

How does startups manage that?

They subscribe to what they need...

- Software as a Service
- Platform as a Service
- Infrastructure as a Service

Software as a Service

- Freshworks
- Zoho
- Chargebee

Platform as a Service

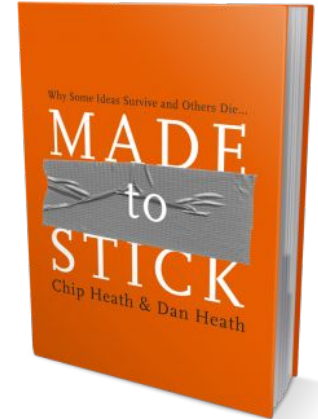
- Hasura
- Heroku
- KooKoo
- ShepHertz

Infrastructure as a Service

- AWS
- Azure
- Google Cloud

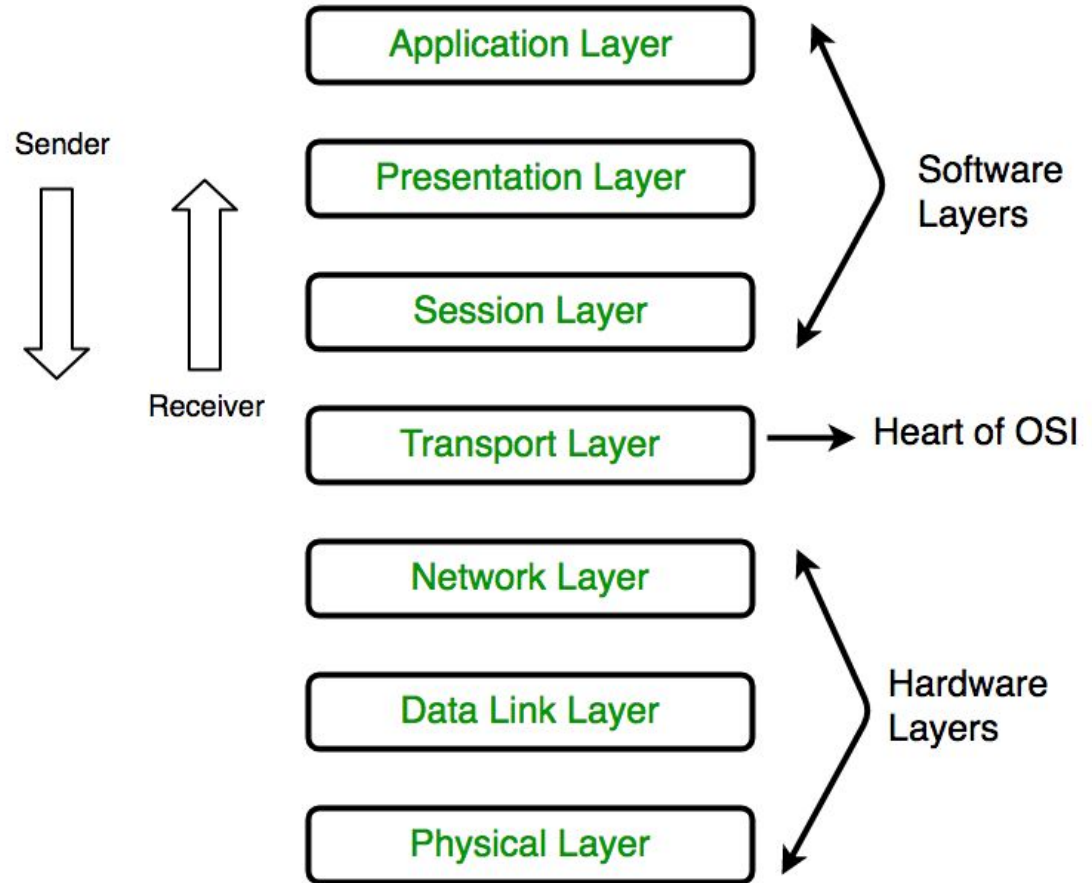
Why go for a cloud Provider

- Pay only for what you use
- No Maintenance cost
- More time on core project
- Reduced Cost
- Support from the experts



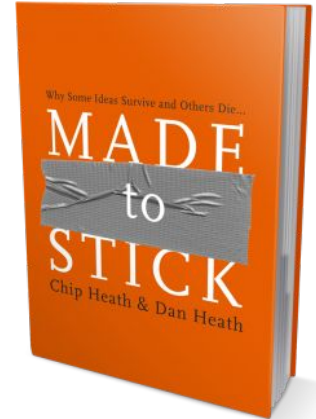
Setting Up your Infrastructure

OSI Network Model



AWS Components

- EC2
- AWS Lambda
- S3
- CloudFront



EC2

A computation Service which pretty much executes your code.

Storage in EC2

EC2 => S3

Depending on the scenario

EC2 <=> S3

Things Needed in EC2

- Operating System
- NGINX
- Node

Using the configurations and policies

Setting Up Alerts

Getting things Started!

References

- Launching a EC2 instance
- Enable inbound & outbound traffic
- SSH into the machine
- Installing NGINX -
<https://comtechies.com/how-to-install-and-configure-nginx-on-amazon-ec2-rhel-and-ubuntu-instances.html#1-install-nginx-on-rhel-amp-centos>
- Installing Node -
<https://docs.aws.amazon.com/sdk-for-javascript/v2/developer-guide/setting-up-node-on-ec2-instance.html>
- NGINX forwarding -
<https://stackoverflow.com/questions/24861311/forwarding-port-80-to-8080-using-nginx>
- Config file - /etc/nginx/nginx.conf