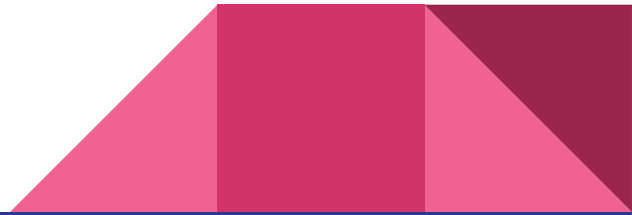
Lab 10 - Heroku

Objective of today lab

- Learn about cloud and cloud computing!
- Different types of cloud infrastructures.
- Into to Heroku.
- Deploying an app on to Heroku.



What is the Cloud?

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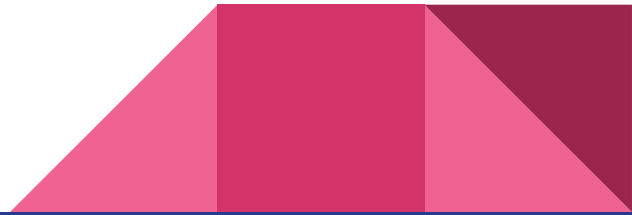
IaaS

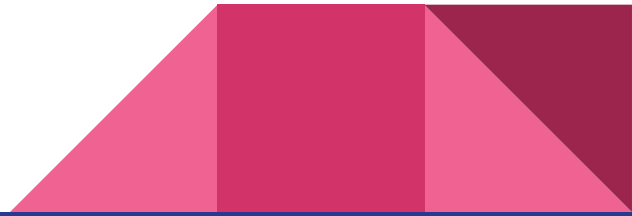
- ➔ Infrastructure as a Service (IaaS), sometimes known as hardware-as-a-service, refers to the leasing of computer hardware instead of purchasing and installing it in-house.
- ➔ The hardware you rent may include servers, storage, networking technology, cables, firewalls, etc.
- ➔ With IaaS, the cloud hosting provider provides the infrastructure required to build custom hosting solutions, the hardware is configured remotely, and then your hosting solution is installed on it.



IaaS

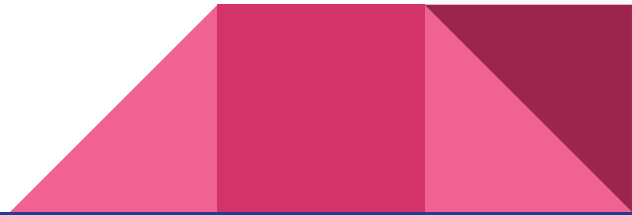
Examples of IaaS:-

- AWS EC2
- DigitalOcean
- Rackspace
- Google Compute Engine



Paas

- ➔ PaaS is a platform on which you can develop or run(deploy) custom software. The vendor manages the servers to ensure that you get to focus on the development of the software.
- ➔ So, if you have to build an application and deploy it as soon as possible - Paas is the way to go.
- ➔ You can focus on the code to get the app running and leave the deployment side of things like data storage, server virtualization, load balancing, etc to the company providing Paas.
- ➔ It provides abstraction on the work of dealing with physical servers and hardware.



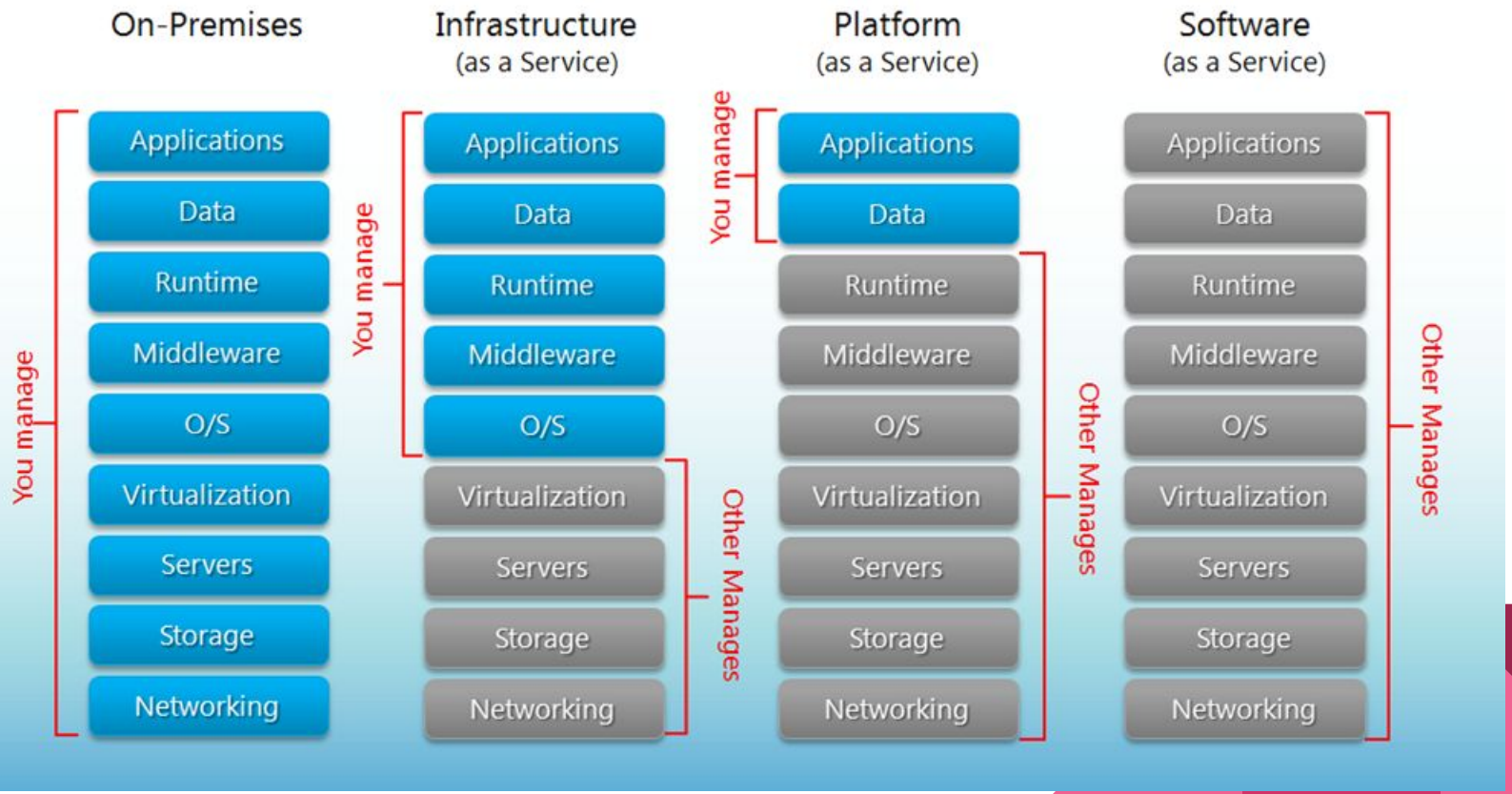
PaaS

Examples of PaaS:-

- Heroku
- Google App Engine
- OpenShift
- AWS Elastic Beanstalk
- Windows Azure

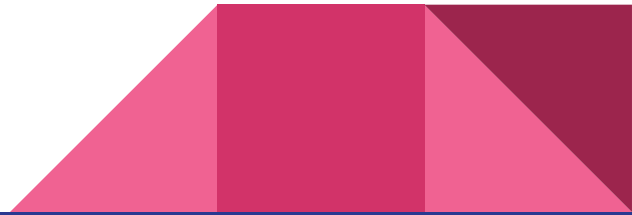
IaaS vs PaaS?

Separation of Responsibilities



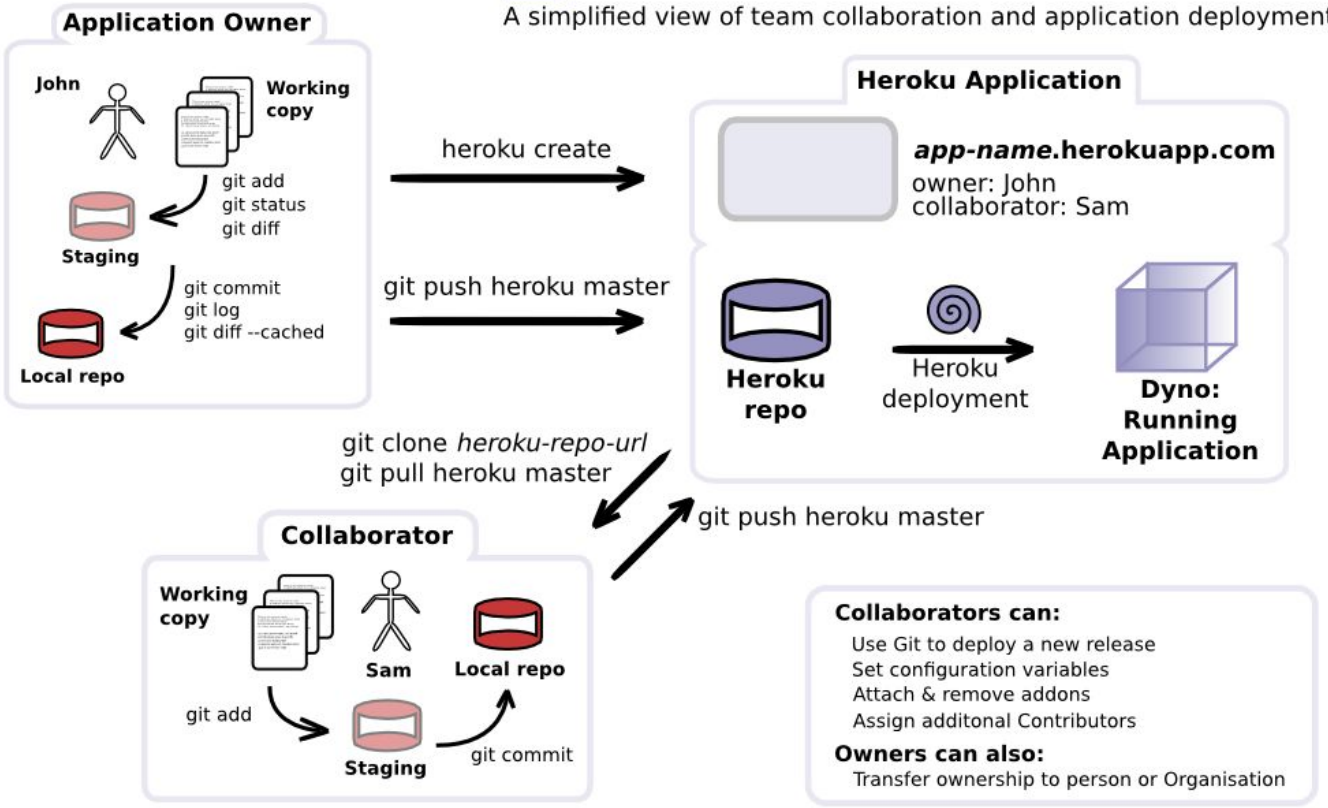
Heroku

- ➔ Heroku is a **cloud Platform-as-a-Service(PaaS)** that supports multiple languages: **Ruby, Python, Node.js, Java, PHP, Go, Scala and Clojure**.
- ➔ In real world production, applications require a set of complicated infrastructure, however, with Heroku, you only need to focus on the development of your app.
- ➔ Best part of heroku is that it is versioned by **git**! So, deploying your app would be as simple as a ***'git push heroku master'!***



heroku DeveloperTeam Workflow

A simplified view of team collaboration and application deployment



Developer Guides https://devcenter.heroku.com/ @jr0cket Building Scalable apps http://12factor.net/