MULTIPLE DEVELOPMENT WITH "DOCKER"

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Futami Food & Beverages

Website

Directions

Save

4.1 ★★★★ 35 Google reviews

Manufacturer in Tangkil, West Java

Address: JL. Telkom Pasir Muncang, RT 03/ RW 02, Pasir Muncang, Caringin, Pasir Muncang, Kec. Caringin, Bogor, Jawa Barat 16730

Hours: Open · Closes 5PM ▼

A user suggested these hours

Mon-Sun 8AM-5PM

Phone: (0251) 220033

Feb 2019 - Now PT. Futami Food & Bevereges - IT Support

Agt 2018 - Feb 2019 PT. Aplikanusa LINTASARTA - Project Engineer

Nov 2017 - Agt 2018 KOPERASI Simpan Pinjam Sejahtera Bersama -Network Engineer

Jul 2017 - Nov 2017 Kementrian Agama Jakarta - System Engineer

Jun 2016 - Jul 2017 PT Defender Nusa Semesta - Security Engineer

Mei 2015 - Jun 2016 PT. Futami Food & Bevereges - IT Support

Jun 2011 - Mei 2015 SMK WIKRAMA BOGOR - Maintenance & Repair

Metode Pengembangan Software Aplikasi



Sumber: https://www.hestanto.web.id/

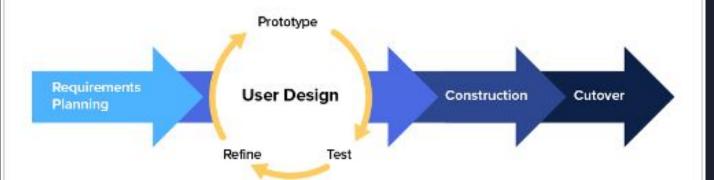


Sumber: https://static.javatpoint.com/



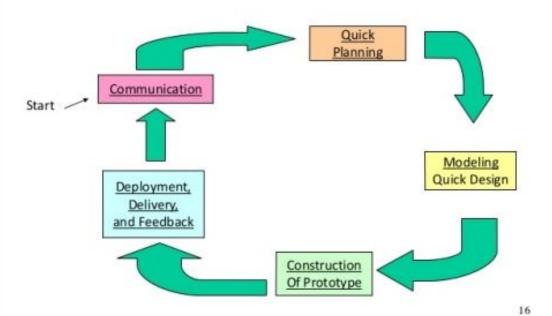
Sumber: https://img.evbuc.com/

Rapid Application Development (RAD)



Sumber: https://kissflow.com/

Prototyping Model (Diagram)

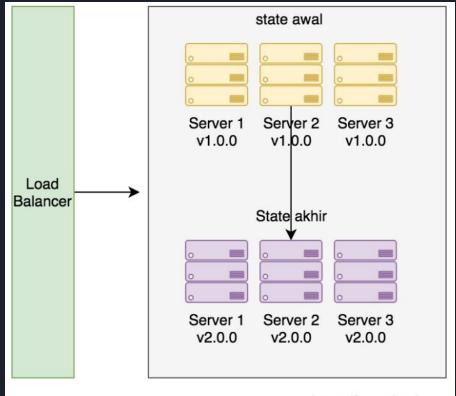


Sumber: https://image.slidesharecdn.com/



Implementasi Pengembangan Software Aplikasi

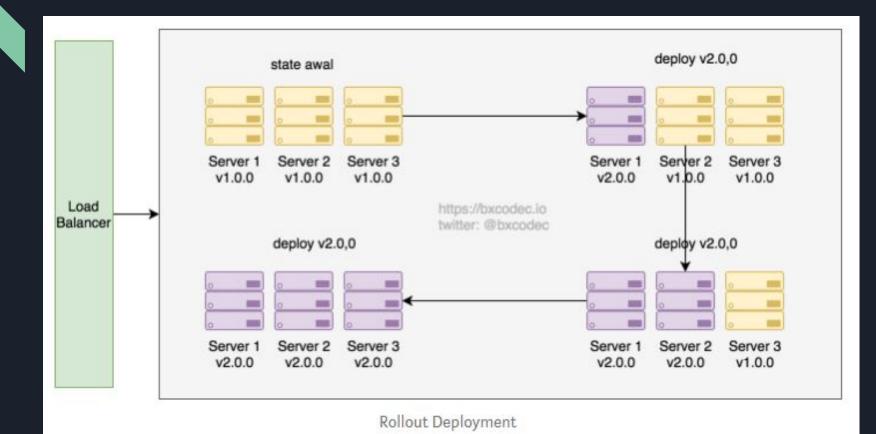
Big-Bang Deployment Strategy



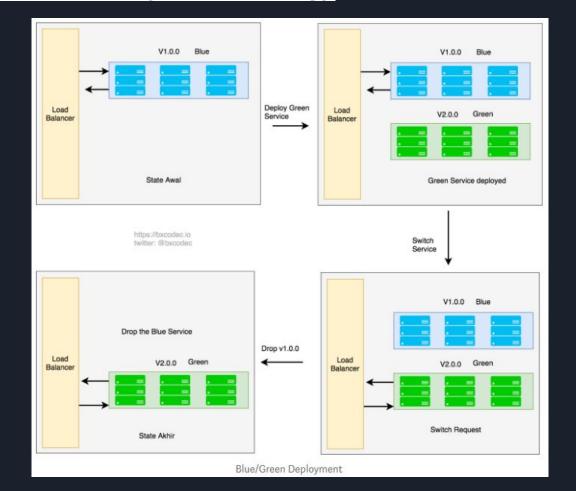
https://bxcodec.io twitter: @bxcodec

Bigbang/Replace/Recreate Deployment

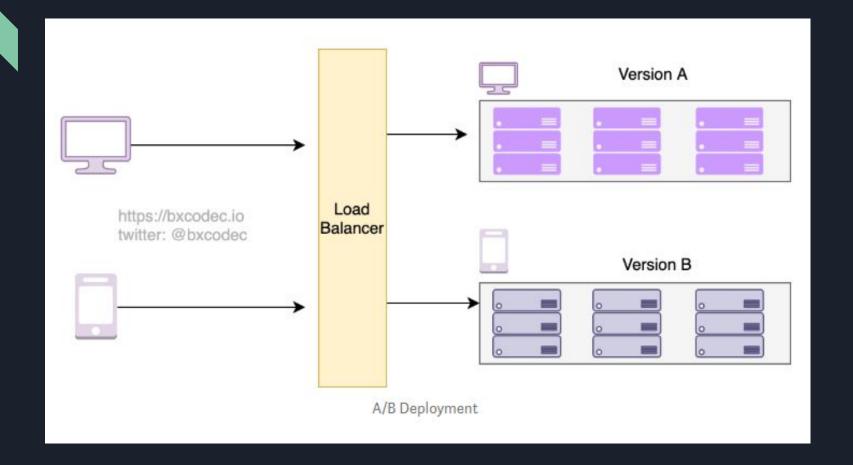
Rollout Deployment Strategy



Blue/Green Deployment Strategy

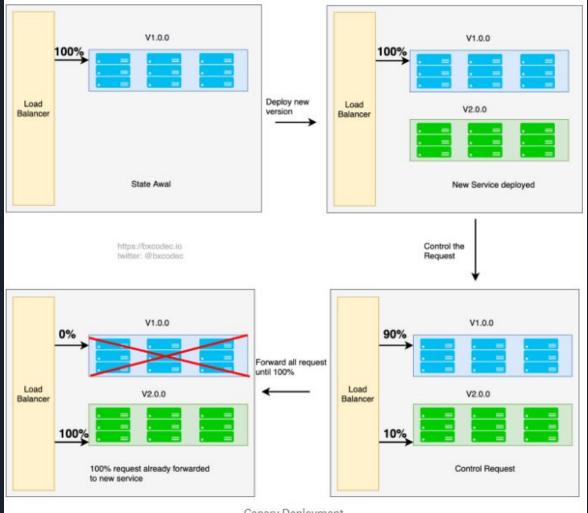


A/B Deployment Strategy



Canary

Deployment Strategy



Canary Deployment

Apa permasalahannya

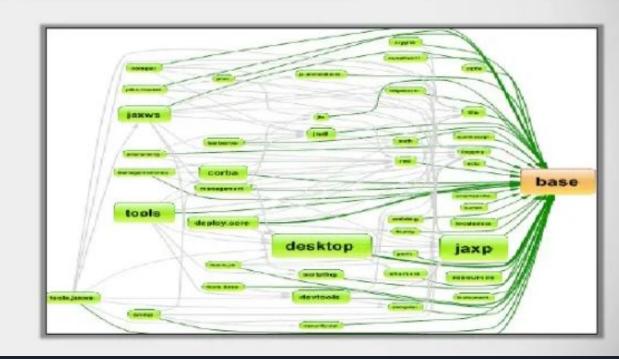
The dependency hell

· pip: Python

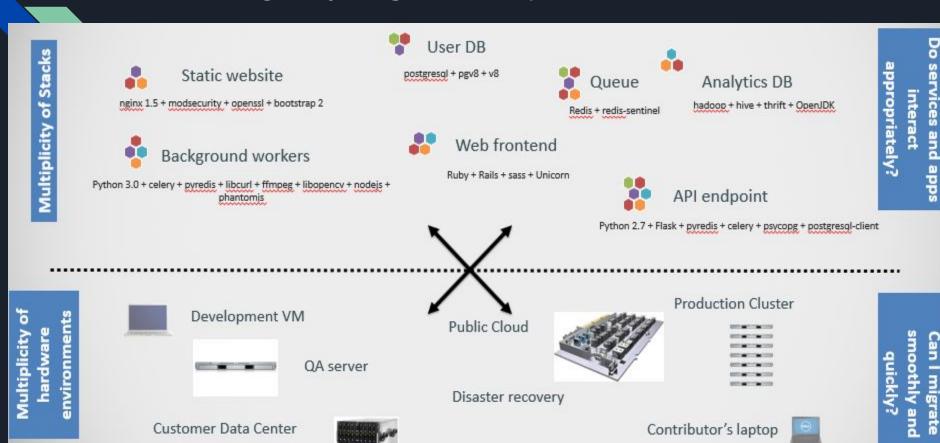
· Gem: Ruby

· npm: Node.js

Composer: PHP



Tantangan yang dihadapi



Production Servers

Matrik penyebaran service aplikasi

			1					444
		Development VM	QA Server	Single Prod Server	Onsite Cluster	Public Cloud	Contributor's laptop	Customer Servers
*	Queue	?	?	?	?	?	?	?
•	Analytics DB	?	?	?	?	?	?	?
*	User DB	?	?	?	?	?	?	?
•	Background workers	?	?	?	?	?	?	?
**	Web frontend	?	?	?	?	?	?	?
*	Static website	?	?	?	?	?	?	?

Cargo Transport Pre-1960

e.g. from boat to train









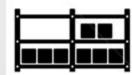






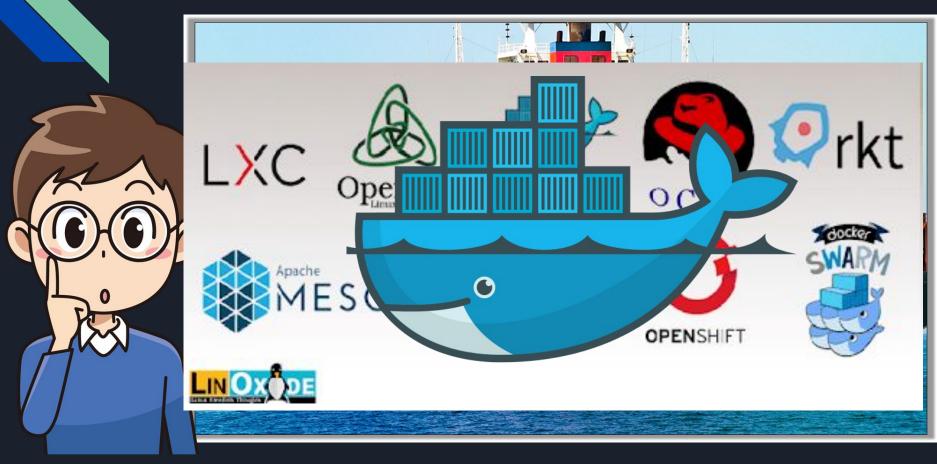






transporting/storin **Multipilicity of** methods for

Bagaimana solusinya?

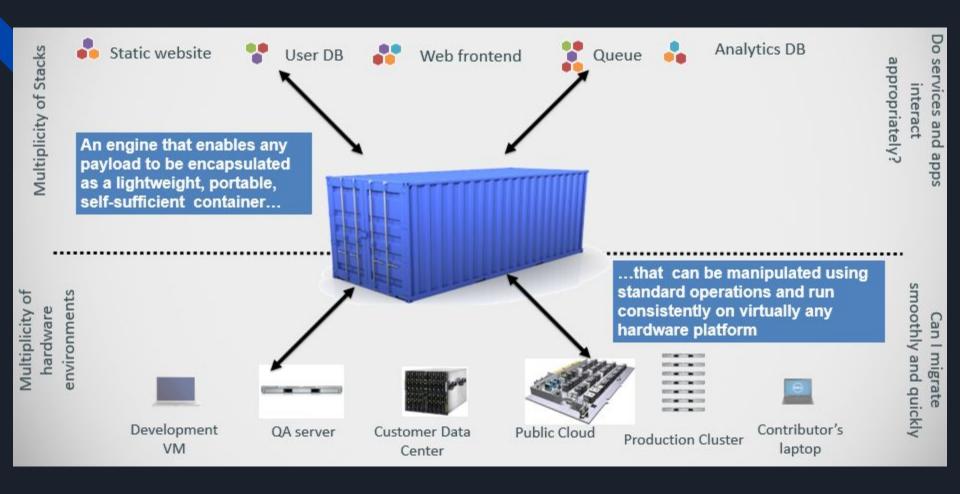


Container?

Menurut Docker:

Suatu unit standar perangkat lunak yang mengemas perangkat lunak dan komponen pendukungnya untuk pengembangan dan pengerahan, agar dapat berjalan mulus tanpa halangan di suatu lingkungan komputasi yang satu dan yang lainnya

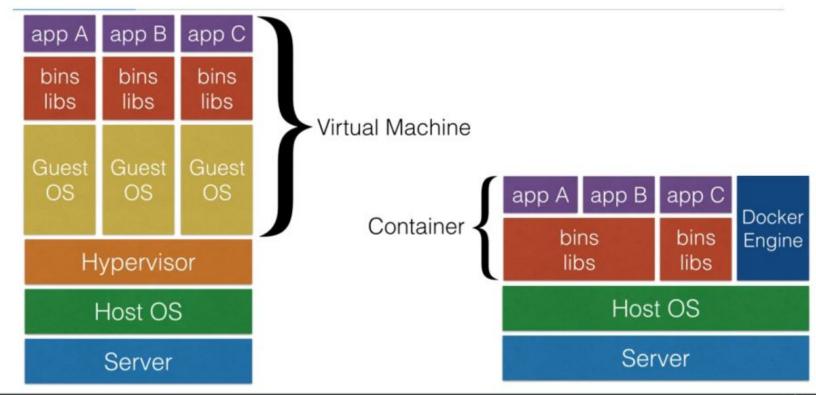




Matrik penyebaran service aplikasi

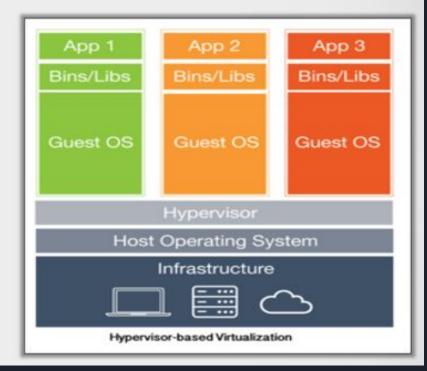


Virtual Machines vs Containers



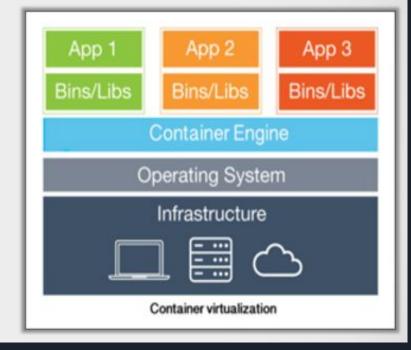
VMs





Containers





Why are containers lightweight?

VMs

A'

OS

App App App A Α Bins/ Bins/ Bins/ Libs Libs Libs Guest Guest Guest OS OS

VMs

Every app, every copy of an app, and every slight modification of the app requires a new virtual server

Containers

App Α Bins/ Libs





Original App (No OS to take up space, resources, or require restart)

Copy of App No OS, Can Share bins/libs

Modified App

Copy on write capabilities allow us to only save the diffs Between container A and container A'

Your Datacenter or VPC App 6 App 5 Bins/Libs Bins/Libs Bins/Libs App 7 App 3 App 1 App 2 Container Container Engine Bins/Libs Bins/Libs Bins/Libs Bins/Libs Engine WS 2016 Linux OS **Container Engine** Hypervisor **Operating System Physical Server Physical Server**

Build, Ship, Run, Any App Anywhere





Any App























Any OS



Windows





Anywhere







Latihan yuk, play with docker....

- 1. Running ubuntu server
- 2. Deployment multi web server multi port
- 3. Deployment webserver + database mysql
- 4. Deployment webserver + database mysql & postgresql
- 5. Deployment Secure webserver with let's encrypt
- 6. Deployment webserver php laravel + database postgresql
- 7. Deployment node js + database mysql
- 8. Deployment free opensource hosting panel vesta cp
- 9. Deployment monero (XMR) mining cryptocurrency
- 10. Deployment custom container

Link referensi

- 1. https://medium.com/programmer-zaman-now/kenapa-wajib-mengerti-docker-6b48bc2c05c3
- 2. https://www.youtube.com/watch?v=-fRqXr97sZl
- 3. https://stackify.com/docker-tutorial/
- 4. https://www.youtube.com/watch?v=Vyp5 F42NGs
- 5. https://www.duckademy.com/course/docker
- 6. https://medium.freecodecamp.org/docker-quick-start-video-tutorials-1dfc57552
 2a0
- 7. https://www.toptal.com/devops/getting-started-with-docker-simplifying-devops
- 8. https://www.katacoda.com/courses/docker
- 9. https://likegeeks.com/docker-tutorial/
- 10. https://training.docker.com/instructor-led-training/docker-fundamentals-enterprise-operations
- 11. https://www.zeolearn.com/docker-essentials-and-administration-training
- 12. https://dzone.com/articles/why-docker-not-enough?fromrel=true
- 13. https://github.com/mikegcoleman/docker101
- 14. https://www.academia.edu/38378976/Docker

Terimakasih