stackbuilders

# Lift & Shift

## Our Journey to Serverless

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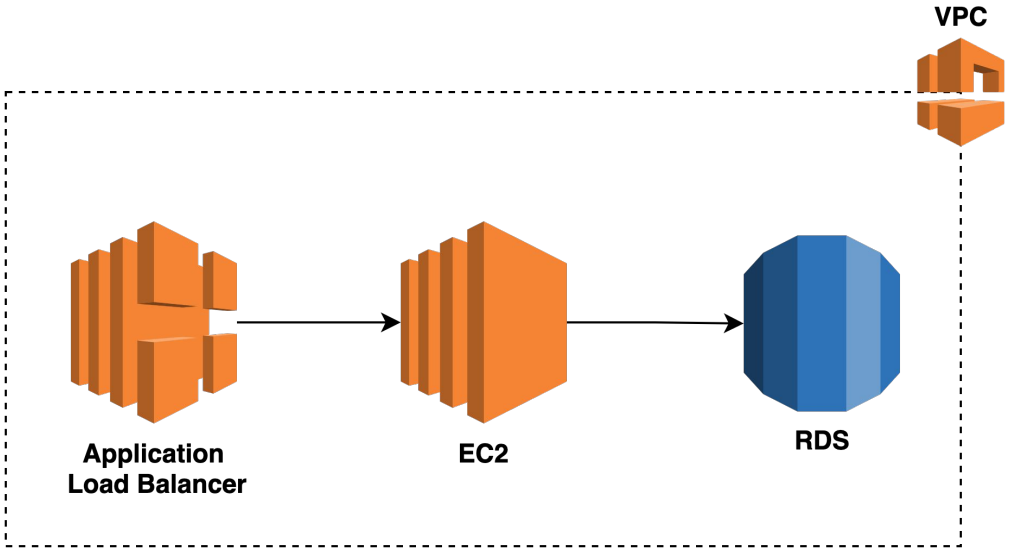
Stack Builders

Quito - Ecuador

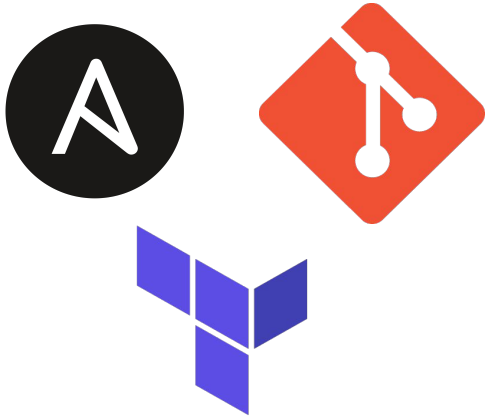
# A couple of years ago…

- Basic Infrastructure ALB - EC2 - RDS

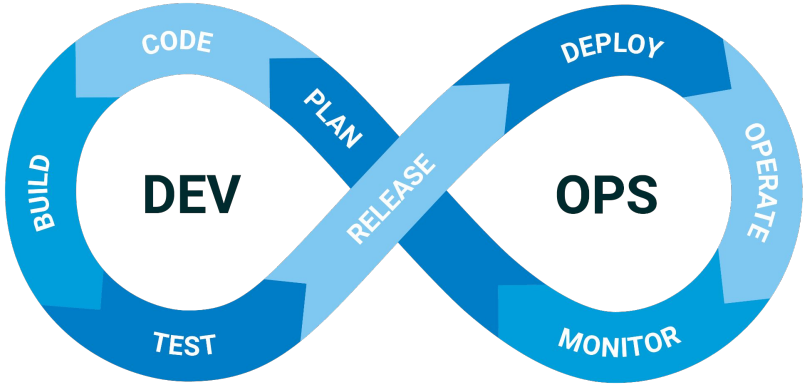


## Everything under control

- Infrastructure as Code - Terraform
- Configuration Management - Ansible
- CI/CD pipelines based on Gitflow



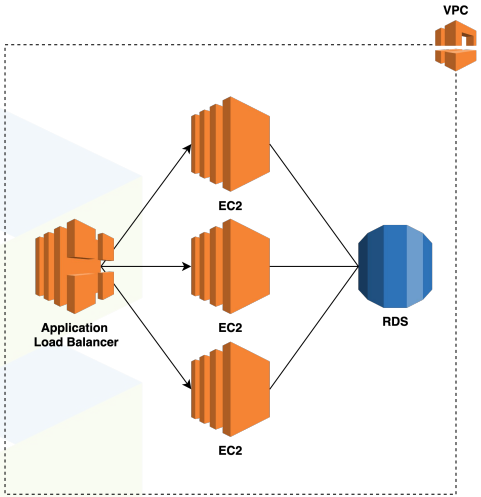
- Implemented DevOps pipeline



# Time came up and new technologies arrived!

Keep the current infrastructure

- Traditional Horizontal and Vertical scaling.
- Increase resources.
- Add more nodes



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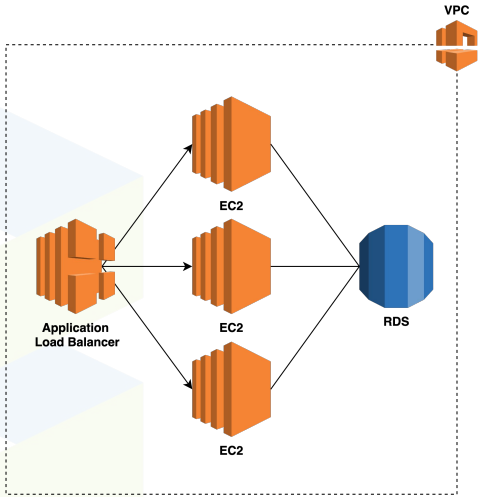
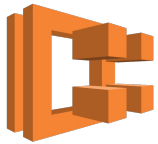
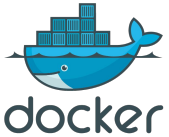



Rebuild the infrastructure

- Containers
- Orchestration
- Serverless





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- Simplicity
- Scalability
- Security
- Cost-effective
- Docker friendly

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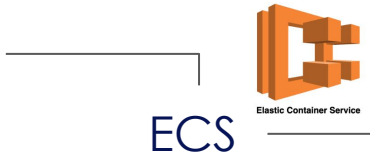


ECS

Native Docker management and orchestration service

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ECS

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Fargate

- Reduce maintenance burden
- Pay for the usage
- Friendly auto scaling configuration

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- Incremental changes.
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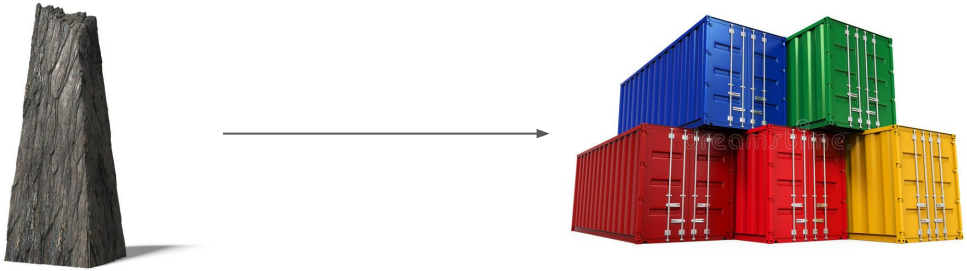
- Maximize the operational time of the application.
- Detect issues early in the workflow and reduce bottlenecks.

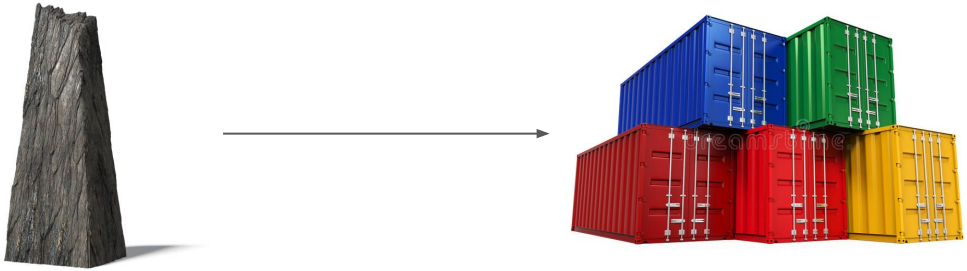
# Not everything is perfect…

- Monolith applications to container-based architecture



# Not everything is perfect…

- Monolith applications to container-based architecture
  - Compatibility
  - Data storage
  - Performance



# And…

- Clients' expectations
  - Deliver value
  - Fit the budget
  - Business growth

# Lessons Learned

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- Manage persistent data. Containers are ephemeral.
- Always share context with the Dev team. Collaboration is crucial.
- Improve the monitoring. Application's health and limits.
- Avoid reactive scalability.
- Focus on fast reproducibility.
- Make everything to be resilient.

# Thanks!

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