Cloud and DevOps

- 1. Hello Cloud
- 2. Software development
- 3. AWS & Serverless
- 4. Security in AWS
- 5. Advanced Security & CICD
- 6. Testing, Cost and Security at Ohpen
- 7. 😂 Final Recap + Guest speaker 😂

Today class ...

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• 09:00 - 11:00 : Recap
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• 11:00 - 11:30 : Break + Conference setup

• 11:30 - 13:00 : Conference + Q&A

DEVelopment & OPerationS

Culture, practices, and tools that teams use to deliver services at high velocity.

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What is Devops?

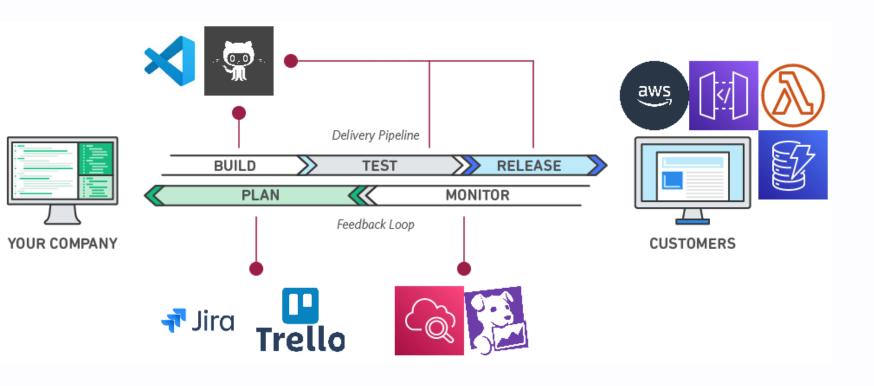
DevOps Culture

- Break barries between siloed teams:
 Development, QA, Security, and Operations
- Improve the productivity of developers and reliability of operations.
- Communicate frequently, increase efficiency, and improve quality.
- Full ownership with Customer-first mindset.

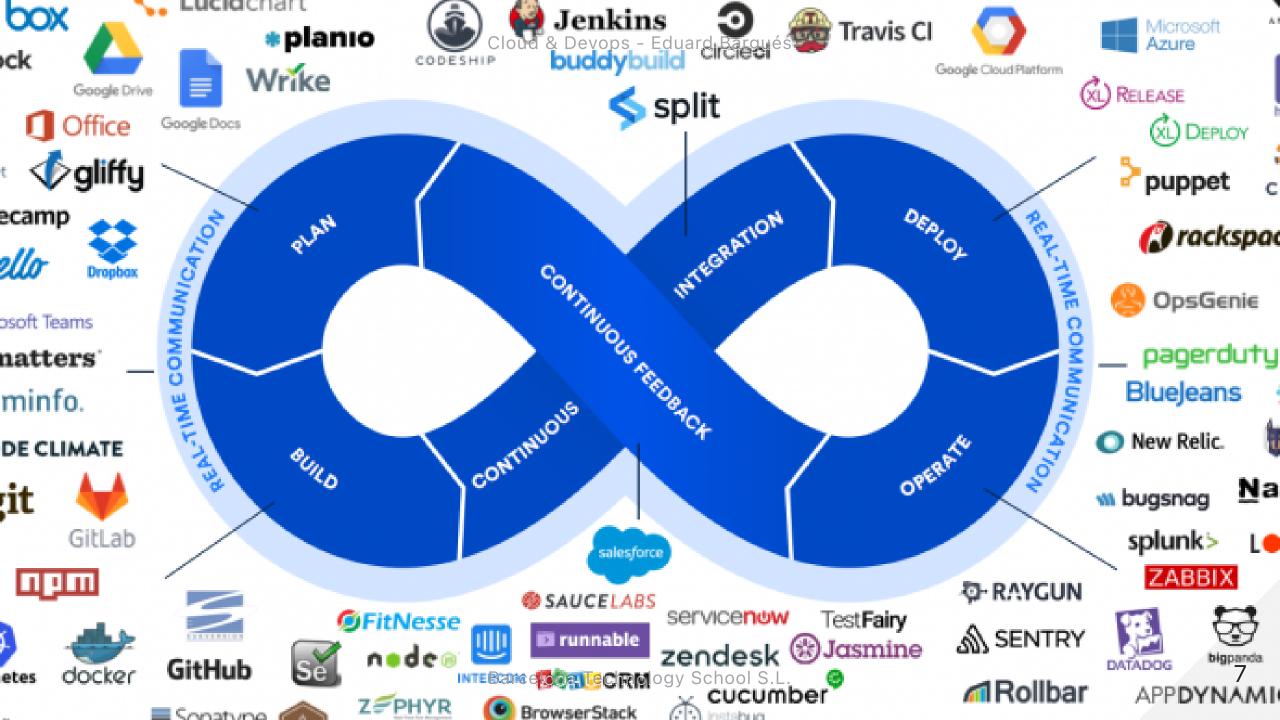
DevOps Practices

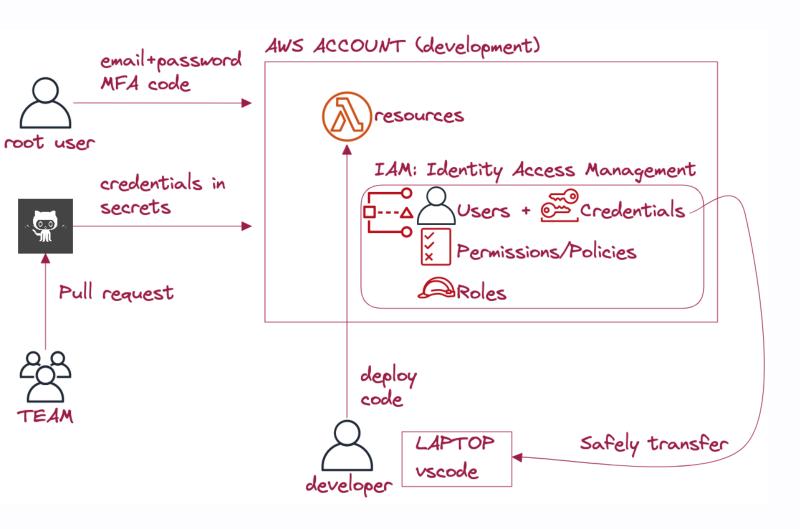
- Frequent and small updates.
- Decoupled architectures: Micro-services, Event-driven
- Continuous Integration and Delivery
- Infrastructure automation: IaC such as Terraform
- Monitoring: execution and performance via Cloudwatch

• ...



DevOps Tools





Security recap

Security IAM roles

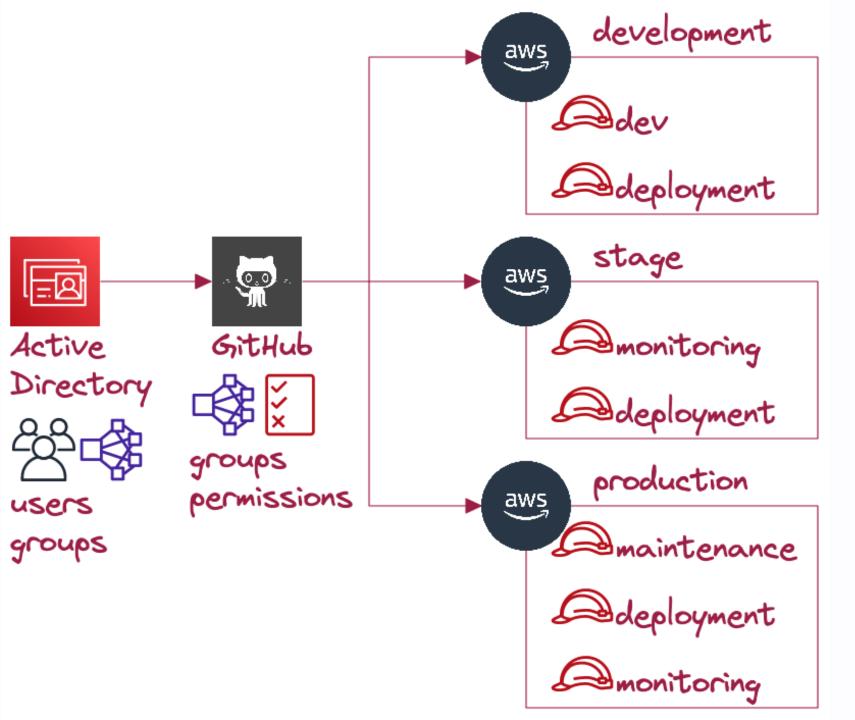


- How do we translate user permissions into Services?
- Roles can be assumed if allowed.
- Roles don't have credentials but temporary keys.
- AWS services use IAM roles. Let's see it.
- How are our lambdas allowed to access our Dynamodb?



Permissions at Ohpen

- How users access AWS?
- How does Github deploy?
- How we ensure nobody can deploy from laptop?



Active Directory & AWS SSO