



Shared Automation Initiative

*We believe that nothing and no one should be left out of this new path,
for that reason we want you to be part of the change...*

Learn, Test, Automate and Share

\$ whoami



Jonathan Prado

Cloud Architect Lead. Nerd & Rider

Ninja skills

- Python
- Bash

Ninja Tools

- Kubernetes
- Docker & compose
- Terraform
- Chaos Engineering

AWS:

EC2, RDS, EKS, ELB, S3, R53, EBS



Objectives



Our objective is **Improve the “Customer Lifetime Value”**. To do it we need some actions:

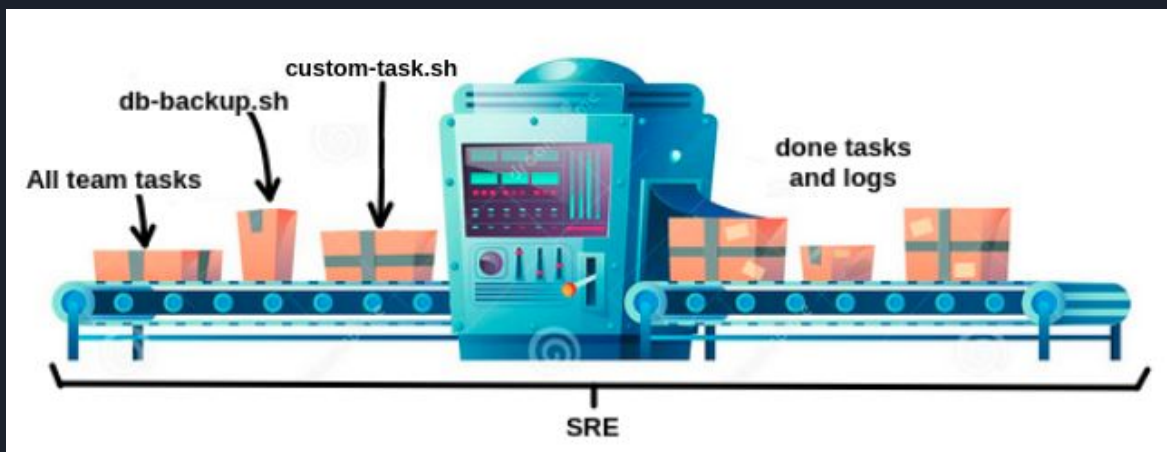
- Reduce manual intervention.
- Automate as many manual tasks as possible.
- Share knowledge between areas.



Common problems:

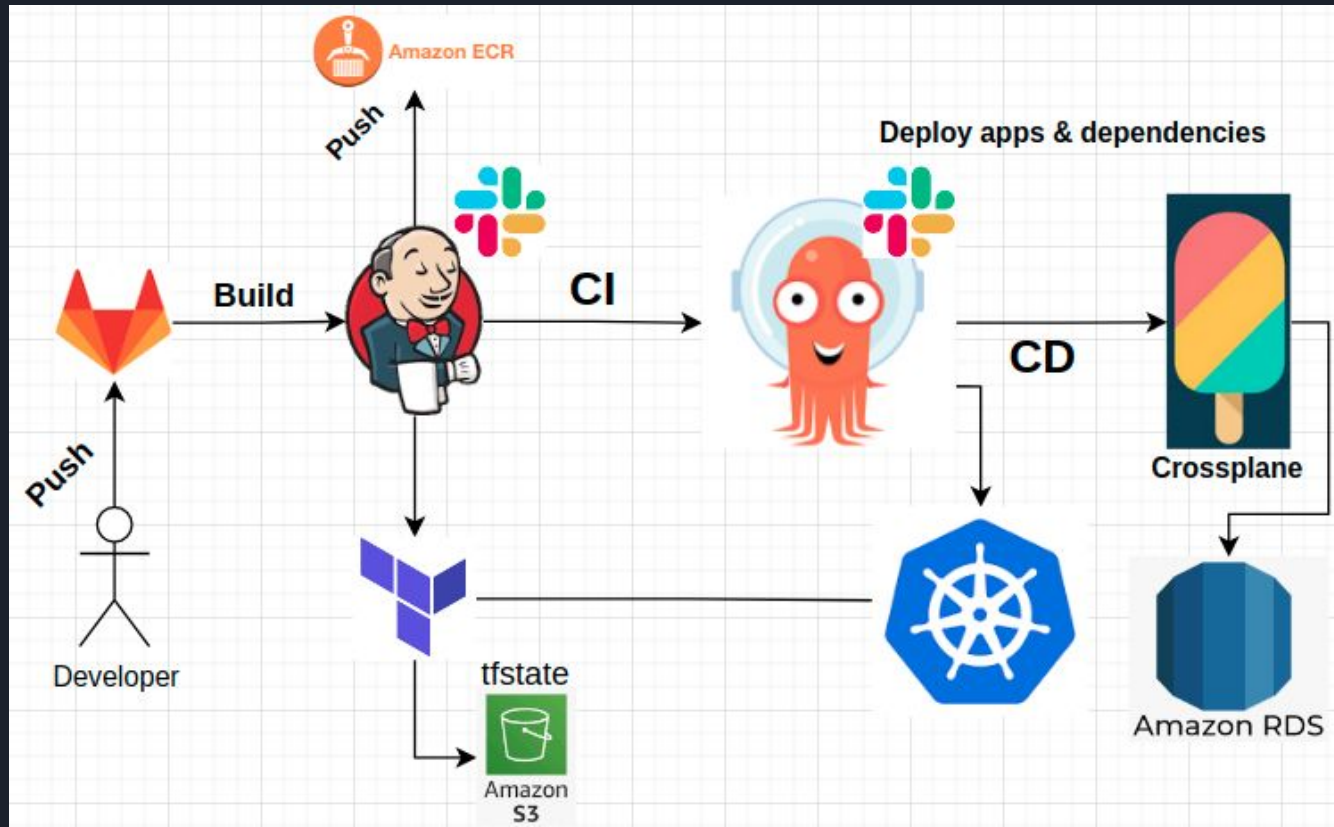
- **Security risks:**
We have a lot users and access points to secure and maintain, this goes against the security best practices (*Least privilege*).
- **Administrative tasks overhead:**
We see a lot of same and recurrently jobs, scripts executions that are executed by humans.
- **Auditory and traceability:**
We can't see and/or is so complicated follow all execution flows.
- **Knowledge is not public:**
We depend on a particular human to do some things, this is a big problem because if it person can't continue doing it no one else can. (Need to use "No code Owner" philosophy)

Our proposal



- **Shared automaton:** sharing information everyone can participate in the improvement of the platform.
- **Centralized jobs/tasks:** Each team can create and maintain our own code and scripts in a centralized repo.
- **Security risks:** Create a only one access point to do all tasks.
- **Administrative task overload:** splitting tasks, there will be no dependencies between teams (we will use a new concept: "put it here and execute it where and when you need").
- **Auditory and traceability:** Centralizing logins we can eliminate risks of shared credentials. And we can do the reverse way (rollback) if something was wrong, because we can see all executed steps/jobs
- **Knowledge is not public:** We don't have secrets, our code is shared with all and it can be maintained by all
- **AaaC:** All as a code, all jobs or tasks need to be code, because it can be improved, managed and save & restore easily and can be checked in a control version platform (like git)

High level design





Demo



Doubts or questions

