



# Shared Automation Initiative

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

*Learn, Test, Automate and Share*



## *Jonathan Prado*

Cloud Architect Lead. Nerd & Rider all the time.

### *Ninja skills:*

- Bash
- Python

### *Ninja tools:*

- Docker & compose
- Kubernetes
- 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:

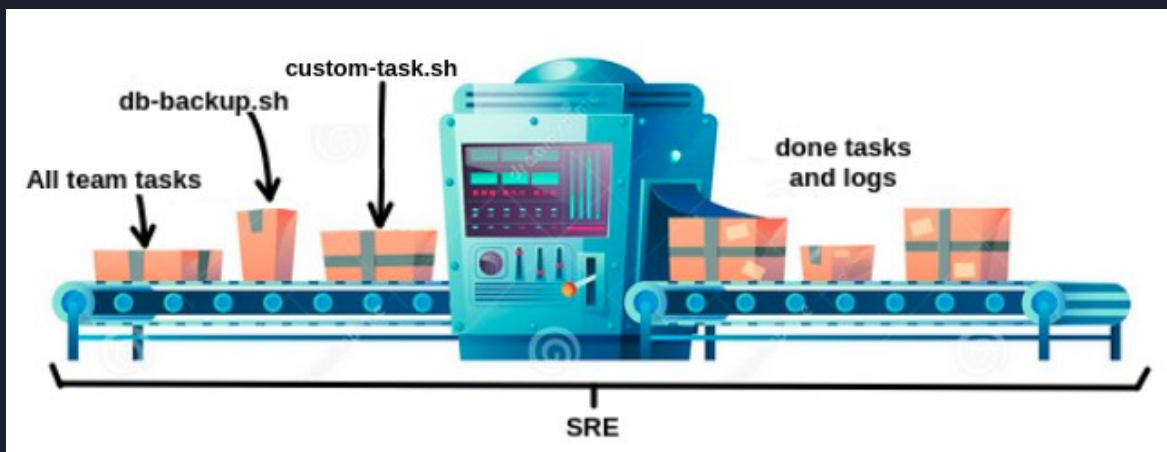
- Reduce manual intervention.
- Automate as many manual tasks as possible.
- Share knowledge between areas.



## Common Problems:

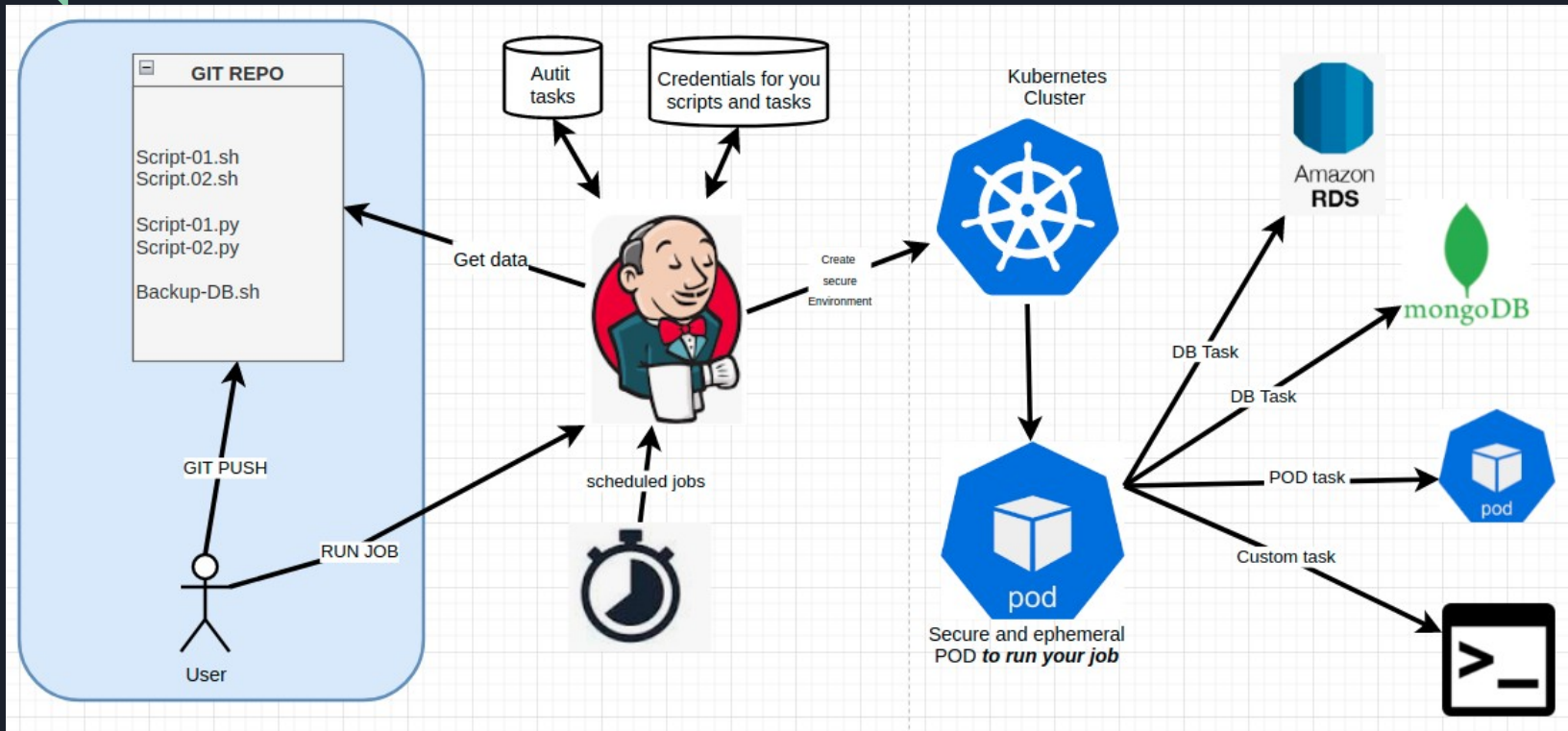
- **Security risks:** we have a lot users and access points to secure and maintain, this goes against the security best practices (*Least privilege*).
- **Administrative tasks overhead:** We saw a lot of same and recurrently jobs, scripts executions that are executed by humans.
- **Auditory and traceability:**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

# Our proposal




- **Shared automaton:** sharing information everyone can participate in the improvement of the platform.
- **Centralized jobs:** Each team can create and maintain our own scripts in a centralized gitlab repo.
- **Security risks:** Create a only one access point to do all tasks.
- **Administrative task overload:** separating the tasks, there will be no dependencies between teams (we will use a new concept: "***put it here and execute it where and when you want***" ).
- **Auditory and traceability:** Centralizing logins we can eliminate risks of shared credentials and delete. it when someone leave, and we can generate auditory of all access and all activities.
- **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)

## Continuous Automation - High level design





# Demo



Doubts or questions

