# KV-126.DEVOPS

# **AGENDA**

- Problem
- Solution
- Architecture
- Tech Stack
- Demo



#### **PROBLEM**

#### It is a necessity to:

- receive notifications about new issues in the GitHub repo
- save them for further processing

It is difficult to separate incoming messages without third-party solutions and set up receiving messages to different chats and accumulation in the one workspace.



## SOLUTION

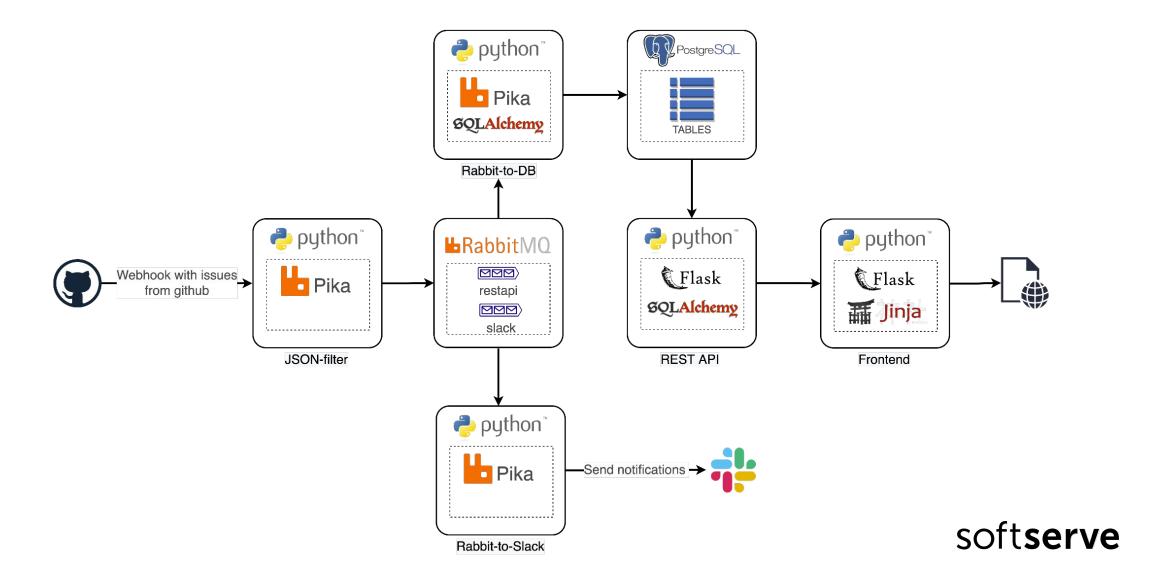
The application allows you to separate JSON files using issue label names and set up sending messages to the required Slack channel.

#### **Additional features:**

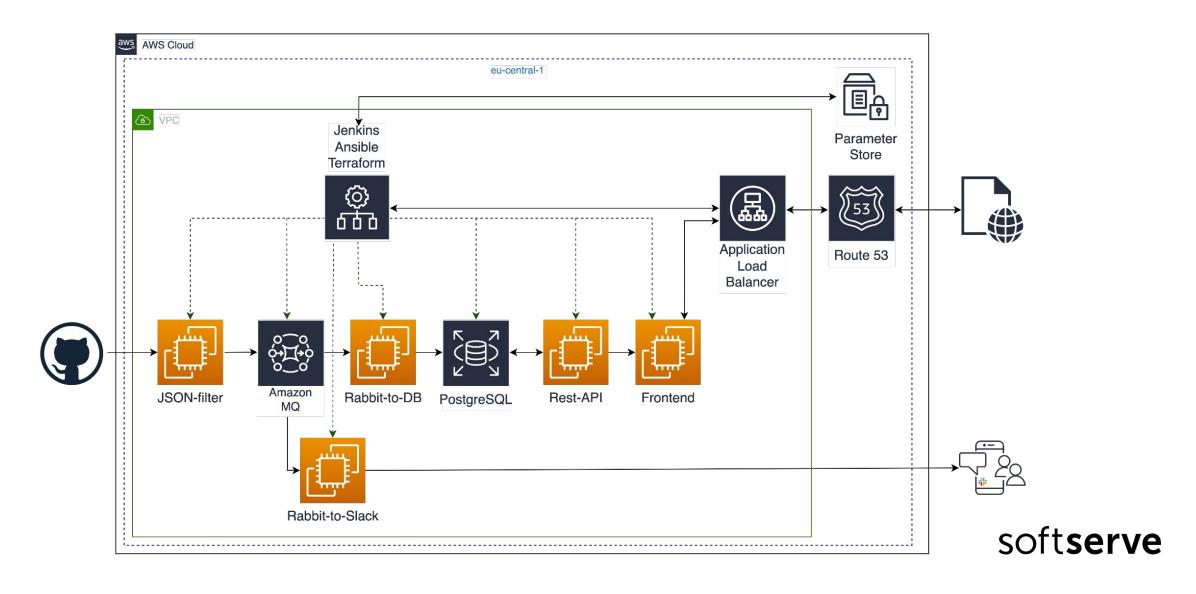
Web application allows you to save and view information about an Issue.



## **APPLICATION ARCHITECTURE**

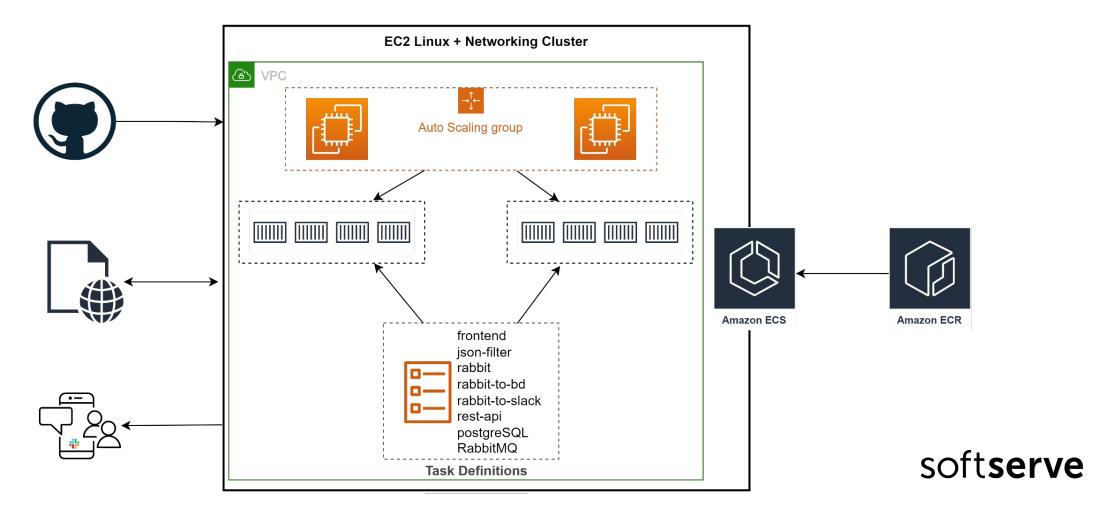


#### INFRASTRUCTURE ARCHITECTURE



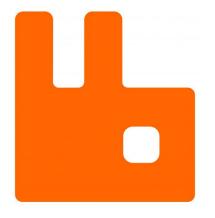
#### INFRASTRUCTURE ARCHITECTURE

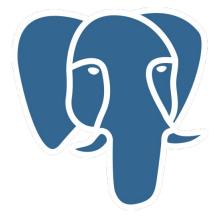




#### **APPLICATION TECH STACK**

- Python (Flask, Pika, SQLAlchemy)
- PostgreSQL
- RabbitMQ







## INFRASTRUCTURE TECH STACK

- GitHub (Webhooks)
- Ansible (Molecule, Jinja, Dynamic Inventory)
- Terraform
- Jenkins (Declarative Pipeline)
- Amazon Linux
- SystemD













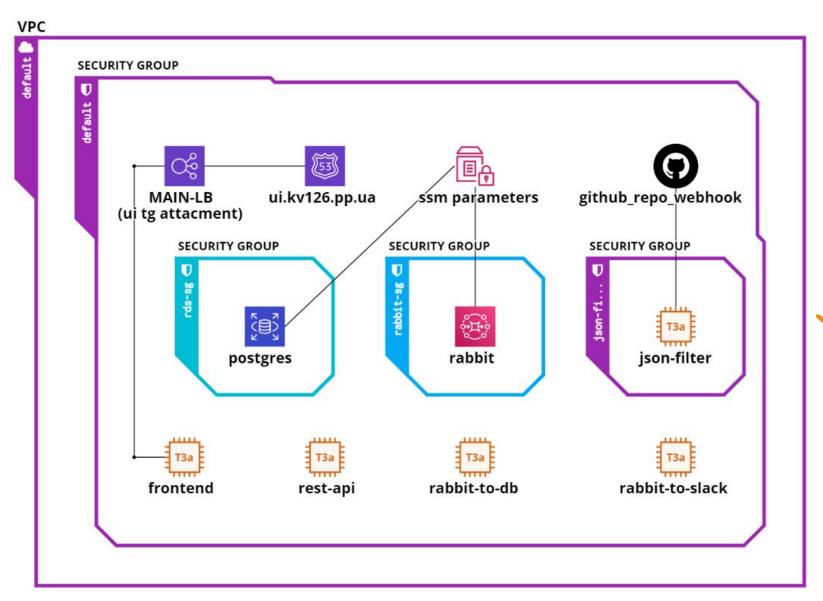
## **AWS TECH STACK**

- VPC, Security Groups
- EC2, Load Balancer
- Amazon RDS
- Amazon MQ
- Identity and Access Management
- Route53

- Systems Manager Parameter Store
- Certificate Manager
- S3
- Billing
- CloudTrail
- CloudWatch
- DynamoDB



#### INFRASTRUCTURE PROVISIONING





**Providers:** 



## **SERVICE PROVISIONING**

