RAFAEL MADOLELL

DEVOPS & CLOUD ENGINEER

SPAIN

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Brief

Highly motivated and results-oriented DevOps Engineer with 3+ years of experience in designing, implementing, and maintaining scalable and secure cloud infrastructure. Proven ability to automate deployments, enhance security practices, and streamline development workflows, resulting in increased efficiency and reduced operational overhead. Passionate about cybersecurity and dedicated to advancing expertise in DevSecOps principles. Expertise in AWS, GCP, CI/CD pipelines, and infrastructure-as-code tools such as Terraform and CloudFormation.

Skills

- **DevOps**
- **AWS: EC2, S3, RDS, R53, AS**
- **GitLab**
- **CI/CD**
- **Nagios**
- **Docker**
- **Docker-Compose**
- **Sonarqube**
- **Postgres**
- **MongoDB**
- **Nginx**
- **Reverse Proxy**
- **Jenkins**
- **Kubernetes**
- **Ansible**
- **Terraform**
- **Bash Scripting**
- **Github Actions**
- **Pentesting**
- **Cyber Threat Intelligence (CTI)**
- **Agile**
- **Wireguard**
- **Elastic/Kibana**
- **GCP**
- **DevSecOps**

Experience

DevOps
Blue Trail Software| February 2022 - Current

CCC:
Responsibilities included:
- Maintenance of all test infrastructure, staging, and production on AWS (EC2, RDS, S3, R53, Lambda, ECS, Cloudfront, ECR).
- Backup and restore plan
- Developing Disaster Recovery Plan. Developed in cloudformation.
- Automated deployments with actions on GitHub (Deployments Builds Backports Lambdas).
- Security best practices applied to services
- Tech-Stack: AWS, Github Actions, CloudFormation (IaaC), Bash Scripting, Linux Managment.
- Jbase and Postgres database migrations.
- Development of containers for debugging
- Datadog Metrics
- Err0 Metrics

Centex:
Responsibilities included:
- Deployment of the whole infrastructure Test, Staging, and Production in AWS (EC2, RDS, S3, R53)
- Backup and Restore plan
- Disaster Recovery Plan. Developed in terraform.
- Automated deployments with GitHub Actions
- Good Security Practices applied to services

Tech-Stack: AWS, Github Actions, Terraform, Bash Scripting, Linux Managment.

Cartier:
For context:
When I joined the project the management of the Megacomputers was based on a direct connection via TeamVeawer. Logs were sent to a GCP instance without SSL certificate and the way to deploy was manual. In the following tasks I will mention MC several times, I mean the name I give to the PC prepared with a great graphic card that allows us to move ALG (The Looking Glass). It is a conventional PC (not a server) that needs several tools to be managed externally.

Responsibilities included:

- Migrate Elastic and Kibana service to a new GCP instance with SSL certificate and manage with DNS.
- New pipelines were generated for the generation of alg images following the defined workflow and the preparation of these images for their launch was automated.
- Backup of the logs collected in the old instance and recovery in the new instance of Elastic and Kibana.
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- Monitoring of containers installed in MC with Metricbeats
- ALG backend installation in the cloud
- Development of Ansible playbooks to deploy ALG on an MC to allow us to automate part of the installation.
- Installation of a Portainer for the management of the MC containers. This tool also allows us to see the status of an MC and to update it easily.
- Creation of new scripts to update ALG on MegaComputers
- A VPN was installed on each MC to be able to connect to them externally and facilitate their administration, allowing us to use Ansible from a remote location.
- Creation of a customized Linux distribution to be able to install ALG on MCs in a simple and automated way. (In progress)

Tech-Stack: GCP, Elastic, Kibana, Docker, Docker Compose, GitLab CI/CD, Wireguard, Ansible, Traeffik, Portainer, Bash Scripting, Linux Management.

Internal projects at BTS:

MyBTS
Responsibilities included:

- Create, configure, and automate the use of services needed to make an application secure, stable, and autonomous.
- Facilitate the developers' work by automating their deployments and code updates.

BTS Office.
I have also defined and implemented the new network infrastructure in the office in Spain and applied new security filters.
Tech-Stack: AWS: EC2, S3 y RDS, Gitlab, Gitlab CI/CD, Docker, Docker-Compose, Sonarqube and Postgres.

MyLuna
Responsibilities included:

- Migration of all MyLuna repositories to GitHub including LFA technology.
- Deployment of the new environment in an isolated AWS space adapted for migration.
- Preparation of the environment with new technologies (Docker, MongoDB, SSL).
- Migration of all MyLuna services to the new environments previously deployed (MyLuna Landing Page, MyLuna API, MyLuna MongoDB) all environments (Production, Pre-Production, and QA) were migrated.
- Deploy a new environment explicitly for Abbott this environment contains more on-demand analysis and autoscaling technologies.
    - EC2 Autoscaling Groups
    - EC2 load balancer
    - SSL Certificates
    - AWS CloudWatch
    - AMI
    - Mongo Atlas
    - KMS Keys
    - Access Control Management
    - UpTimeRobot
    - Nagios
    - Bash Scripting

Security Group

Enhanced BTS Security Guidelines
- Improved security posture by updating guidelines, reducing incidents by 30%.

Implemented New Security Tools
- Integrated cutting-edge security solutions, enhancing threat detection by 40%.

Automated Internal Processes
- Developed scripts to automate tasks, saving 20 hours/week and reducing errors by 90%.

Availability Dashboards
- Created real-time dashboards to improve system visibility and reduce downtime by 25%.

Penetration Testing
- Conducted comprehensive tests on clients' web APIs and mobile apps, identifying and mitigating critical vulnerabilities.

AI

Internal BTS Bot PoC
- Developed a proof of concept for an internal chatbot to enhance efficiency and streamline processes.

Implementation of AI Tools

- Integrated advanced AI tools for cybersecurity and automation, improving threat detection and response capabilities.

Courses

AWS Certified Cloud Practitioner (Course)
AWS DevOps Navigate - Technical
Foundations of Prompt Engineering

Education

Advanced vocational training: Computer Science, Communications and Support Services
TnexT - Spain| 2022

Languages

English: Intermediate
Spanish: Native