

Marouan Chakran

Platform Engineering Consultant, Kubernetes, Crossplane, SRE

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PROFESSIONAL SUMMARY

Certified Kubernetes Administrator (CKA) with 5+ years of experience in Platform Engineering and SRE. I help teams adopt Kubernetes and cloud native practices through platform build work, Crossplane based infrastructure automation, GitOps delivery workflows, and reliability oriented operations. Strong track record of building internal platforms and custom tooling in Python and Go to improve developer experience, standardization, and operational consistency across cloud and bare metal environments.

CERTIFICATIONS & EDUCATION

Certified Kubernetes Administrator (CKA) Linux Foundation (ID: LF-svrxqtbxi), Oct 2021
Computer Science Engineering Degree Sorbonne Paris-Nord Villetaneuse, Sep 2017 to 2021

PROFESSIONAL EXPERIENCE

Senior Site Reliability Engineer, Platform Engineering *InstaDeep Ltd, BioNTech, France*
Oct 2023 to Present

- Designed and delivered an Internal Developer Platform approach to move teams from manual operations to self service infrastructure and standardized delivery.
- Built Crossplane based abstractions and automation to provision and operate Kubernetes clusters and supporting services across multiple cloud providers.
- Developed a Crossplane provider for MAAS to enable bare metal provisioning through the same control plane patterns used for cloud resources.
- Architected GitOps operating model with Flux CD, including environment isolation and secure authentication patterns using workload identity style flows where applicable.
- Built a platform dashboard using Next.js and FastAPI to surface Crossplane claims and reconciliation signals, improving visibility and support workflows for platform users.
- Implemented certificate lifecycle automation for mTLS using Kubernetes operators written in Python, reducing manual handling of sensitive materials.
- Engineered a multi tenant observability stack using Grafana, Loki, Mimir, with strong tenant isolation and mTLS based trust between clusters and control plane services.
- Drove SRE maturity by defining SLIs and SLOs, error budget practices, and toil reduction priorities, aligned with production operations.

DevOps Engineer *Blocs & Compagnie, France*
May 2022 to Oct 2023

- Built and operated observability foundations using Grafana, Loki, Tempo, and Prometheus or Mimir patterns to improve system visibility and incident response.
- Implemented secrets management with HashiCorp Vault and strengthened platform security posture across environments.
- Operated Kubernetes clusters across AWS, Azure, and OVH, delivered through automated GitLab CI CD and GitOps aligned workflows.
- Designed and supported storage architectures for application platforms, including distributed and content addressed components where relevant.

Kubernetes Expert & Technical Referent *Société Générale, Val de Fontenay, France*
Nov 2021 to May 2022

- Maintained high availability Kubernetes clusters supporting critical services, participated in on call rotations and incident response.
- Standardized operational procedures through runbooks and post incident reviews, improving repeatability and knowledge sharing.

Deployment Engineer

Sep 2019 to Aug 2021

Sagemcom, Rueil-Malmaison, France

- Led migration of legacy Java applications to containerized services using Docker and Kubernetes patterns.
- Designed Helm charts and introduced GitOps style delivery workflows using Argo CD.
- Managed on premise infrastructure including VMware vSphere and Rook Ceph storage, supporting platform reliability and capacity needs.

PERSONAL PROJECTS (HOME LAB)

High availability Kubernetes homelab

- Architected a Proxmox VE cluster on physical servers to host Kubernetes and supporting services.
- Implemented Rook Ceph for distributed storage and managed resources through GitOps workflows.
- Designed secure remote access using WireGuard and Netbird, aligned with zero trust principles.

TECHNICAL SKILLS

- **Platform Engineering and IdP:** Crossplane (Compositions, Functions, Providers), Flux CD, Argo CD, Backstage concepts, FinOps.
- **Cloud and Infrastructure:** AWS (EKS), GCP (GKE, Vertex AI), Azure (AKS), OVH, Terraform, Ansible, VMware vSphere, MAAS.
- **Container Orchestration:** Kubernetes (CKA), Docker, Helm, Kustomize, Istio, Linkerd.
- **Development:** Python (Kopf, FastAPI), Go, TypeScript (Next.js), Bash.
- **Observability:** Prometheus, Mimir, Grafana, Loki, OpenTelemetry, Alertmanager.
- **Security:** HashiCorp Vault, mTLS, OIDC and OAuth, RBAC, workload identity patterns.