

Zero Trust Foundations for Fintech

Executive summary

KIBO is a fintech building blockchain-based wallets, payments, and remittances for Latin America. Threading Clouds designed and implemented KIBO's complete AWS cloud foundation — multi-account governance, network architecture, Zero Trust security, DevSecOps pipelines, and observability — enabling a production-grade platform that meets stringent financial compliance while keeping the agility to scale across markets.

The challenge

▶ Regulatory Compliance

The platform needed to meet Bolivian financial regulation (ASFI), international AML/KYC, and GDPR requirements — all before processing a single transaction.

▶ Multi-Domain Complexity

KIBO integrates Web2 backend, Web3 smart contracts, mobile, and payment rails, requiring one unified security and compliance framework.

▶ Startup Speed, Enterprise-grade Requirements

Built from scratch to enterprise-grade standards, while moving fast to capture demand for alternative financial services in Bolivia.

Production-Grade AWS Foundation for Fintech

KIBO needed an enterprise-grade AWS foundation from scratch, spanning multi-account governance, Zero Trust networking, DevSecOps pipelines, and full observability to launch a regulated blockchain-finance platform fast. Threading Clouds delivered all six Well-Architected pillars before the first transaction.



About the customer

KIBO is a fintech focused on blockchain-based financial services in Bolivia. The platform enables enterprises to run cross-border remittance, payments, and KYC/AML-compliant wallets, providing secure, regulated, and cost-effective infrastructure for international transfers and digital finance across Latin America.

Gilles Raynaud

CEO, KIBO

Threading Clouds delivered a production-grade cloud foundation that helped us meet financial regulatory requirements from day one. Their expertise in AWS multi-account architecture and security gave us the confidence to move fast without cutting corners.



Gilles Raynaud

CEO, KIBO

"The multi-account architecture Threading Clouds built gives us complete environment isolation verified through automated testing and firewall rule validation. Every infrastructure and application change is auditable and traceable, meeting evidence requirements for compliance audits. We now have the foundation to serve our enterprise clients and expand across Latin America."

Why Threading Clouds?

KIBO required a partner with deep expertise in AWS multi-account architecture, financial-services compliance, and Infrastructure as Code to build their entire cloud foundation from scratch. Threading Clouds brought proven experience designing enterprise-grade AWS environments across all six Well-Architected pillars. Our specialization in Platform Engineering, DevSecOps, and FinOps — combined with hands-on knowledge of blockchain infrastructure operations and regulated payment workloads — made us uniquely qualified to bridge KIBO's Web2 and Web3 requirements under a single governance model. As an AWS Select Tier Services Partner, we delivered the foundation as a single accountable engagement: architecture, Terraform implementation, security hardening, pipelines, observability, and the runbooks needed to operate it after handover.

The solution

Threading Clouds designed and implemented a comprehensive AWS cloud foundation following the Well-Architected Framework. The engagement covered multi-account governance with AWS Organizations and Control Tower; a hub-and-spoke network topology with centralized traffic inspection through AWS Transit Gateway and Network Firewall; and Zero Trust security with defense-in-depth controls including GuardDuty, AWS Config, Inspector, and IAM Access Analyzer. The application runtime was built on Amazon EKS with dedicated production, staging, and shared-services accounts. DevSecOps pipelines using GitHub Actions and ArgoCD embed security validation at every stage, with OIDC federation eliminating long-lived credentials in CI/CD. Full-stack observability was implemented with Prometheus, Grafana, OpenTelemetry, and centralized CloudWatch Logs across every account, giving the operations team a single pane of glass over infrastructure health, application performance, and security posture from day one of go-live.

Results

The partnership delivered a production-ready, enterprise-grade cloud platform meeting the demanding requirements of a regulated financial services operation. Complete environment isolation was enforced at the network, account, and application layers, verified through automated testing and firewall rule validation. Centralized security monitoring aggregates findings from GuardDuty, AWS Config, Inspector, and IAM Access Analyzer, enabling proactive threat detection and automated remediation. All changes are auditable through CloudTrail, AWS Config, and Terraform state versioning — giving auditors and regulators an unbroken chain of evidence from intent to production state. Zero long-lived credentials live in CI/CD; every pipeline assumes a short-lived role via OIDC federation.

Benefits

Every AWS resource is provisioned through Terraform and Terragrunt with modular, reusable components that can be replicated for new regions or environments. Unified DevSecOps pipelines support distinct deployment types through a single CI/CD platform with integrated quality gates and security scanning at every stage. Automated cost optimization through scheduled start/stop of non-production environments reduces infrastructure costs while maintaining full production resilience. Multi-AZ deployment ensures high availability for all production workloads including EKS clusters and Aurora Serverless. Engineering velocity is preserved because compliance is built into the pipeline, not bolted on at release time — security scanning, IaC policy, and audit logging travel with every change.

Gilles Raynaud
CEO, KIBO

"By investing in modular Infrastructure as Code from the start, our entire multi-account architecture can be replicated in a new AWS region for our planned Latin American expansion. The IaC approach means migrating to a different region or deploying a parallel regional stack requires only variable changes, not architectural redesign. This portability reduces the risk and timeline for geographic expansion, allowing us to enter new markets faster, without the delays and risks associated with traditional infrastructure provisioning."



Next steps

With the cloud foundation in place, KIBO is positioned to scale across Latin America while maintaining the same high standards of security and compliance. Threading Clouds continues to provide ongoing managed support, including security posture monitoring, infrastructure optimization, and platform evolution as KIBO onboards new financial products and enters additional markets. Near-term focus areas include extending the multi-account pattern into new regulatory geographies, refining FinOps controls as transaction volume grows, and integrating new payment-rail and blockchain protocol partners under the existing governance model.

Key highlights

▶ Security and Governance

Centralized threat detection, compliance evidence, and audit trails. All network traffic flows through a single inspection point, with unified observability dashboards giving leadership real-time visibility.

▶ Security and Quality Baked In

Security scanning, quality gates, and credential-free CI/CD embedded in every pipeline, enabling engineering teams to move at startup speed because compliance travels with the code, not behind it.

▶ Infrastructure That Scales and Evolves

The architecture is designed to evolve and adapt to changing business needs and technological advancements. New services, new regions, new compliance requirements can be implemented quickly and efficiently, with cost optimization built in.

About Threading Clouds

Threading Clouds is an AWS Partner specializing in cloud consulting, DevOps and platform engineering, reliability and operations, and innovation in advanced technologies including generative AI and blockchain infrastructure. Headquartered in Europe with teams across Europe and the Americas, Threading Clouds empowers organizations to innovate with confidence by designing, implementing, and managing secure, scalable, and cost-efficient cloud infrastructures.

