Case study

ingenico

# Modernizing Payment Infrastructure at Ingenico

With Gloo Gateway, centralizing multiple bankingsystems and payment methods was simple.



Before their modernization efforts, Ingenico's payment systems were decentralized and relied on legacy technologies. Integrating with multiple banking systems posed challenges, and managing diverse payment methods required a centralized solution. The transition to cloud-native architecture and Kubernetes environment demanded a reliable and scalable API gatewaysolution.

Ingenico chose to use Gloo Gateway as its API gateway to power the new payment systems. Gloo Gateway's cloud-native architecture, based on Envoy Proxy, offered scalability, performance, and flexibility crucial for managing diverse payment methods and accommodating high transaction volumes.

## The Challenges

- Legacy infrastructure: Ingenico's payment systems operated ondecentralized and legacy technologies, posing integration challenges withmultiple banking systems.
- Critical cloud-native transition: The shift towards cloud-native architecture and Kubernetes demanded a reliable, scalable, and flexible API gateway solution.
- Diverse payment methods: Managing various payment methods required acentralized solution, as the existing systems were scattered and lackeduniformity.

"We landed on Solo.io as a partner because theirsolutions are really good in terms of operability, scalability, and performance."

Mohamed Ounis
Platform Engineer at Ingenico

### The Solutions

- Cloud-native architecture: Ingenico embraced a cloud-native approach, leveraging modern architectural principles to ensure flexibility, scalability, and resilience.
- Microservices-based design: Implementing a microservices architecture facilitated modularity and agility, allowing for independent development, deployment, and scaling of services.
- Envoy Proxy integration: By integrating with Envoy Proxy, Ingenico ensured robust traffic management, security, and observability across its distributed payment infrastructure.
- Seamless Kubernetes integration: Gloo Gateway seamlessly integrated with Kubernetes, providing orchestration and management capabilities essential for deploying and scaling containerized applications.
- GitOps mindset adoption: Ingenico adopted a GitOps mindset, emphasizing declarative infrastructure management and version-controlled configuration to streamline deployment and ensure consistency.
- Developer empowerment: Delegating routing configuration tasks to developers empowered teams to take ownership of application behavior, promoting collaboration and accelerating development cycles.



"The system is really tolerant to fault, and can recover and ensure the business it's meant to support."

Mohamed Ounis
Platform Engineer at Ingenico

### The Outcomes

- Impressive performance:
  Ingenico achieved transaction
  processing speeds of up to 3,000
  transactions per second during peak
  loads, leveraging Gloo Gateway's
  scalability and auto-scaling
  capabilities.
- Improved operational efficiency:
  Gloo Gateway's fault-tolerant design
  minimized downtime, enabling quick
  recovery from incidents and ensuring
  business continuity.
- Future readiness:

  Ingenico positioned itself for future growth and innovation now that it's equipped with a modern, adaptable payment infrastructure capable of
- Streamlined development processes:
  Developer empowerment and GitOps
  adoption streamlined deployment
  workflows, promoting collaboration and
  accelerating time-to-market.

meeting evolving market demands.

### What's Next

Looking ahead, Ingenico plans to scale its managed payment solutions globally, introducing them to clients across regions. The company aims to continue its partnership with Solo.io, exploring additional solutions such as Gloo Mesh to enhance its ecosystem further.

