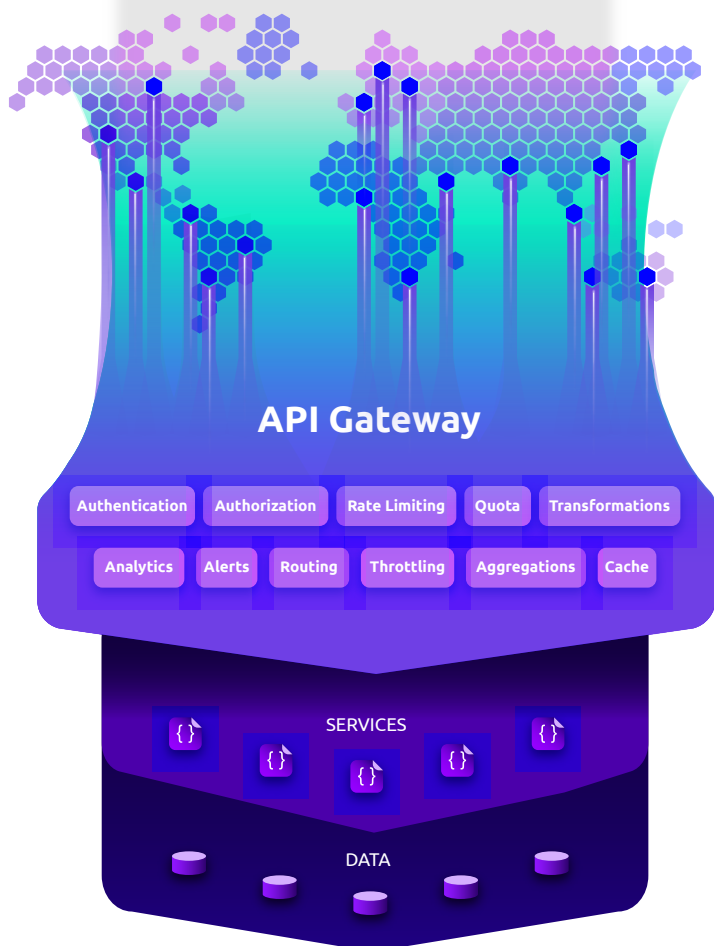


Harper API Gateway

Feeling overwhelmed by the complexities of managing an API gateway across geographically distributed services? Introducing Harper's fully managed API Gateway—your one-stop solution for distributed gateway services, no matter how demanding your requirements.

Gateway Nodes Near Every User



Harper's Unbeatable "Distributed" Advantage

API gateways typically promise a streamlined experience, but they often fall short as requirements evolve. Their architecture, built on multiple technologies, becomes cumbersome as complexity grows. This can lead to scaling headaches that hinder your ability to adapt to shifting demands.

The Harper API Gateway breaks the mold. Unlike its predecessors, it's built entirely on Harper, a single, distributed systems technology. By building with Harper, services are not limited by bulky multi-technology architectures that have defined tech stacks for decades. This innovative single-platform approach is easy to scale across a distributed user base, ensuring unmatched agility that meets everchanging needs.

9 Core API Gateway Capabilities



Authentication

Harper's fully managed API Gateway offers flexible authentication options. You can authenticate users directly with JWT or API keys on any gateway node. Alternatively, leverage mTLS to connect with edge-based authentication systems for an additional security layer. This flexibility empowers you to choose the optimal security posture for your specific API requirements.

Authorization

Building upon the strong foundation of authentication, Harper empowers you with fine-grained authorization controls. You can define granular access rules that determine what resources users can access within your APIs, what actions they can perform, and the specific data they are authorized to see. These access controls can be tailored to individual users, groups, or API keys, ensuring only authorized entities can access the appropriate resources within your APIs. This granular control minimizes security risks and empowers you to implement a least privilege approach, granting users only the permissions they absolutely need.

Distributed Rate Limiting & Quota Enforcement

Distributed gateways often struggle with consistent rate limiting and quota enforcement. Harper overcomes this challenge with CRDT incrementation. This innovative data type ensures accurate usage counts across decentralized nodes, guaranteeing consistent management of both request frequency (rate limiting) and total allowed requests (quotas) – regardless of location. With Harper, you can enjoy smooth enforcement for fixed and sliding window implementations.

Fine-Tuned Throttling

For those with large endpoint portfolios and complex throttling requirements, Harper provides the flexibility to manage endpoints with both group-based and individual endpoint policies. Additionally, throughput limitations can be set uniformly, with a tiered user model, or on the individual token level, giving you complete and efficient control.

Insights, Analytics, and Alerts

Gain valuable insights into API usage across your distributed system with tailored monitoring and analytics. Track request volumes, response times, and throttle frequency to monitor system health and alert sales teams of account expansion opportunities. Take this even further with built-in real-time messaging functionality, ready to notify your infrastructure team of the next growth milestone.

Routing & Traffic Management

Say goodbye to traffic management headaches. With Harper, real-time routing decisions can be based on factors like URL path, headers, custom logic, or telemetry data. This ensures that traffic is efficiently directed to the optimal service location, keeping everything running smoothly.

