

What is an API Gateway?

Empowering Secure, Scalable, High-Performance APIs

SOLUTION OVERVIEW FOR AKAMAI CONNECTED CLOUD

An API gateway acts as the front door for all your backend services and systems. It receives requests from clients (internal or external users/applications), routes them to the appropriate internal services, and returns a response. By providing a single entry point, API gateways simplify how customers and partners access your services while maintaining security and control.

API gateway capabilities

> Security & Authentication

Enforce consistent access policies (e.g. Authorization and Authentication) and protect against threats or misuse (e.g. Rate Limiting).

> Traffic Management

Intelligently route and load-balance traffic across multiple services. Implements caching for enhanced performance.

> Monitoring & Analytics

Track the usage and performance of your API. Gateways often surface issues like high failure rates. Trends in API usage help you make informed product decisions.

Why use an API Gateway

> Centralized Security

Consistent security policies across all of your APIs, reducing the risk of a shadow API causing a security breach.

> Streamlined Access

Offers a unified interface to multiple services, making it easier for partners or customers to integrate with your platform.

> Enhanced Performance

Optimize traffic management and how data is cached and transferred to improve speed and reliability.

> Improved Developer Experience

A centralized system with built-in capabilities allows your engineering team to focus on developing features.

Considerations when choosing an API gateway

> Scalability & Performance

Can it handle your expected traffic and growth? Look at hosting options (e.g. Fully-managed vs On-premise) as part of this evaluation.

> Security & Compliance

Does it meet your industry's requirements and protect sensitive data? Look for SOC 2 Type 2 compliance in most cases.

> Ease of Integration

How well does it integrate with existing tools and services? Look for OpenAPI, GitOps, and custom code support to make integration simple for your engineers.