

Migrating to Ambassador Edge Stack

The **Modern Standard**
for Cloud-Native Teams



Trusted by developers at



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How an Envoy-based API Gateway Can **Modernize Your System** and **Save You Money**

If you are currently using an API gateway based on older or pre-cloud proxy technologies, now is the time to consider migrating to a modern solution to get access to new features, increased performance, and a reduction in resource requirements. Join thousands of organizations that have seen the benefits of migrating to an API Gateway based on Envoy Proxy, the new standard setter for cloud native features and performance. Ambassador Edge Stack (AES) is the leading Envoy-based, purpose-built API Gateway.



Ambassador makes it very easy for us to manage endpoints across all our regions worldwide and is able to seamlessly adapt and work with every region's 80 different endpoints, each with varying configuration requirements.

Nashon Steffen

Staff Infrastructure Development Engineer



Key Features of a Cloud Native API Gateway

Envoy Proxy is maintained and developed by a healthy open source ecosystem and a large number of organizations, including Ambassador Labs. Envoy Proxy was initially created by Lyft, with early contributions by leading cloud native companies like IBM, Google, Microsoft, and Red Hat.. This rich base of supporting companies gives the project incredible momentum and means it is always at the cutting edge of features.

Because AES is based on Envoy, we are the only API gateway that offers support for HTTP/3, and we will continue to stay ahead of the pack in terms of features.

Ambassador Edge Stack supports:



All HTTP protocols from HTTP/1 to HTTP/3, WebSockets, gRPC, and raw TCP connections



TLS termination, including automatic certificate provisioning using the ACME protocol and Let's Encrypt



Routing based on headers, path, host, parameter, and more



Rate limiting



Authentication using OAuth or SAML



Monitoring of Rate, Error, and Duration (RED) metrics using Prometheus or compatible systems

Hitless Reloads: Eliminate configuration downtime

AES can dynamically reconfigure itself without restarting or draining connections, a feature critical in a microservice-based architecture, in which configuration is constantly changing with new deployments and service updates, and where any form of gateway downtime is unacceptable. In gateways based on older proxy technologies this feature has been bolted on as a late addition or is locked behind expensive upgrades.

Decentralized Configuration: Enable platform teams and developers at any scale

AES' routing is configured via Kubernetes Custom Resource Definitions (CRDs) called Mappings. A platform team can manage the shared resources like host names and certificates, while developer teams can dynamically add and remove routing rules specific to their app, removing bottlenecks from the deployment process and increasing your organization's velocity.

Performance: Enjoy 5x improvements and save costs

Envoy is fast. Incredibly fast. With unencrypted traffic, AES' throughput of Requests Per Second (RPS) is up to 4.5x that of gateways based on older technologies. When the traffic is encrypted, it's up to 5x that of other gateways. That means that not only is your performance ceiling higher with AES, but that you can run it with fewer resources, saving critical room in your cloud budget.

Migrate to a Cloud-Native API Gateway Easily

Ambassador Edge Stack offers industry-leading features and performance. AES is based on a cutting-edge technology stack that will support your organization through it's digital transform and future growth into the cloud native ecosystem, while fully supporting existing systems.

Your team can [get started with a free trial](#).

Partner with the experts who've helped hundreds of other companies adopt Kubernetes, and let us help you get on a modern, Kubernetes-native API gateway.

Ready to get started? [Contact a specialist for a technical session](#).