HAProxy Enterprise Kubernetes Ingress Controller

The **HAProxy Enterprise Kubernetes Ingress Controller** is built to supercharge your Kubernetes environment by adding advanced TCP and HTTP routing that connects clients outside your Kubernetes cluster with containers running inside. Built on HAProxy Enterprise, the ingress controller adds an important layer of security with its integrated WAF and observability with its native Prometheus support. It is also backed by the authoritative experts at HAProxy Technologies.

**Purpose-built for Kubernetes**

- Designed for Kubernetes and used by leading companies.
- Powered by HAProxy Enterprise's legendary performance, with battle-hardened code capable of routing tens of thousands of requests per second.
- Supports HAProxy's robust load balancing algorithms including round-robin, least connections, URL hash, and more.
- Beefed up security with built-in TLS termination, rate limiting, IP safelists, and WAF.
- Best-in-class observability with verbose logs, a live stats webpage, and Prometheus-enabled metrics.
- Capable of sustaining traffic spikes with HAProxy's traffic overload protection.

**Ingress Controller Benchmarks**

Performance has never been more important than in a cloud-native world. Cloud-hosted resources cost money and a slow-loading application can cause a suboptimal ROI. Many organizations don’t tune their Kubernetes ingress controller and proxy until it’s absolutely necessary, and most users will typically run a default, out-of-the-box configuration.

We benchmarked five popular ingress controllers and put them head-to-head against each other with their default configurations.

HAProxy came out on top with the highest average requests per second and lowest latency, while maintaining the lowest CPU usage.

**Features at a glance**

- Layer 4 (TCP) and Layer 7 (HTTP) routing
- End-to-end HTTP/2 and gRPC
- HTTP and HTTPS
- No lost traffic during reloads
- Sticky sessions
- Whitelists for client IP addresses
- Rate limiting
- X-Forwarded-For and Proxy Protocol support
- Prometheus metrics
- Web Application Firewall with either ModSecurity or Zero-Trust mode
- Authoritative expert technical support