HAPROXY

G2 Leader in Load Balancing, DDoS Protection, WAF & Container Networking

Leader WINTER 2024 | High Performer Enterprise WINTER 2024 | Momentum Leader WINTER 2024 | Best Relationship WINTER 2024 | G2 ★★★★★
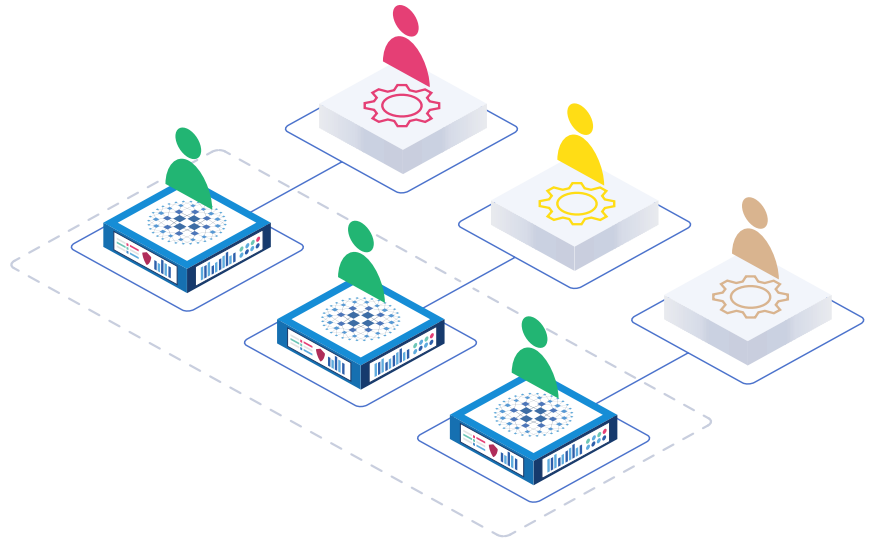
Load Balancing as a Service with HAProxy

Organizations that service the application delivery needs of multiple App teams often struggle to provide a solution that is simple, fast, and secure. Meanwhile, those App teams want managed load balancing they don't have to think about.

Load Balancing as a Service is a new architecture from HAProxy Technologies that makes things easier for central Ops teams and more efficient for App teams.
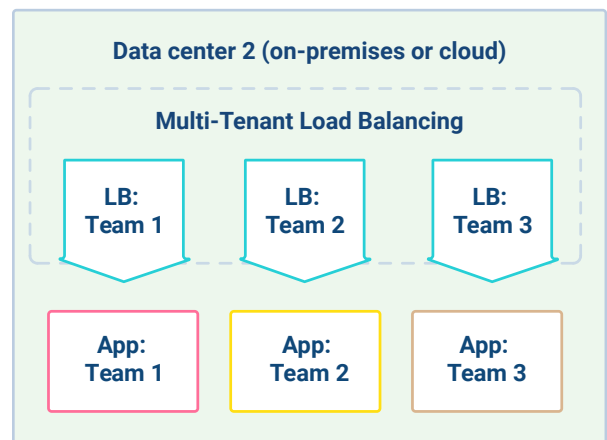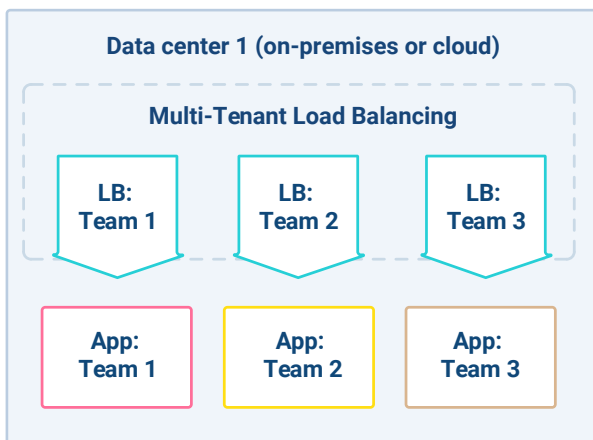
What is Load Balancing as a Service?

Load Balancing as a Service (LBaaS) describes an organizational structure, process, and technical architecture where a centrally managed and automated platform provides app-specific load balancers on-demand to other internal teams without requiring the client teams to manage any software or hardware.

Traditionally, the Ops team would update an existing load balancer appliance for every new request from an internal App team.
Alternatively, App teams would manage their own load balancers, introducing the inconsistencies and vulnerabilities of "shadow IT."

LBaaS makes things simpler and faster:

Data center 1 (on-premises or cloud)

Multi-Tenant Load Balancing

| LB: Team 1 | LB: Team 2 | LB: Team 3 |
| App: Team 1 | App: Team 2 | App: Team 3 |

Data center 2 (on-premises or cloud)

Multi-Tenant Load Balancing

| LB: Team 1 | LB: Team 2 | LB: Team 3 |
| App: Team 1 | App: Team 2 | App: Team 3 |

■ LBaaS ownership | ■ Individual teams ownership

1. App team requests a load balancer with an app-specific configuration using an API or UI.

2. LBaaS platform automatically provisions a new load balancer in any environment.

3. App team gets a dedicated load balancer, high availability, and a virtual IP without the operational burden.

4. When needs change, the LBaaS team easily removes old load balancers and creates new ones – no more updates.

Benefits of Load Balancing as a Service

Easy Administration

Centralized ownership of the load balancing layer by a single team provides simple, consistent, and secure administration.
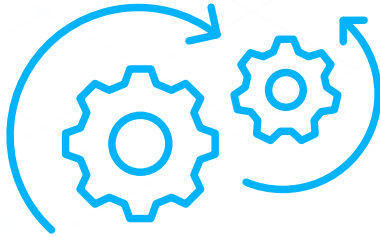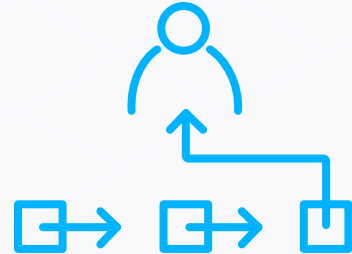
Automated Service

Controlled access and self-service automation allows app teams to request and deploy load balancers with compliant configuration instantly.

Efficient Operation

Immutable infrastructure and central management save app teams time, with low complexity, no updates, and no hardware management.

Secure Everything

Role-based access control safeguards your configuration, and consistent security modules in every deployment secures every app in every team.

What features do you need to implement Load Balancing as a Service?

1. Management

- Centralized management of infrastructure and configuration

- Robust RBAC model to enable self-service between app teams

- Configuration validation, backup, and restore

- Multiple modes of operation, including API, UI, and CLI

2. Automation

- Centralized automation with 100% REST API coverage

- Provisioning automation and self-service for app teams

- Pre-configured templates for most common application types

- Kubernetes load balancing and service discovery

3. Monitoring

- Centralized monitoring of every load balancer

- Collects all application traffic

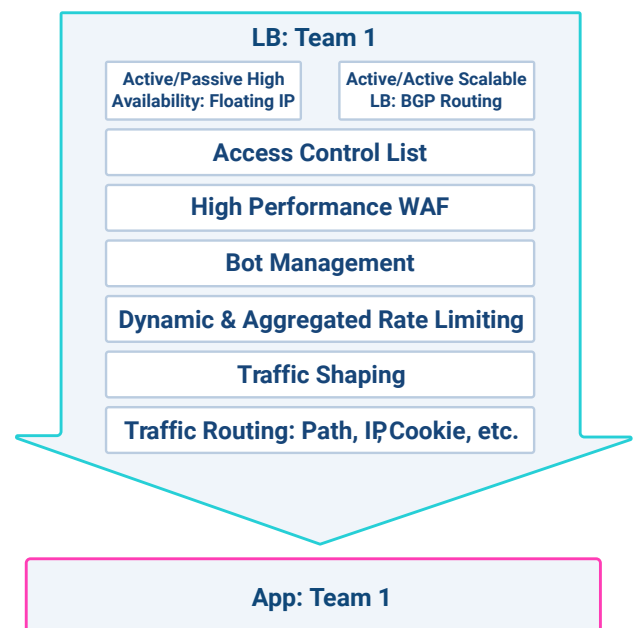- Portable logs and metrics via API

4. Flexible deployment

- Deployment models include on-premises, cloud, hybrid/multi-cloud

- Form factors include pure software load balancers, containers, and VMs

- Multi-tenancy to reduce infrastructure costs

5. High-performance load balancing

- HTTP and TCP load balancing

- Request routing and rewriting based on: Path, IP, VPC ID, Cookie, etc.

- Content rewriting

- TLS termination, with certificate provisioning, management, and renewal

- Active/passive high availability through Virtual IP service

- Active/active scaling through automated BGP routing

6. Multi-layered security

- High performance and scalable IP Access Control Lists (ACLs)

- Bot management

- Global dynamic rate limiting

- High-performance WAF

LB: Team 1

Active/Passive High Availability: Floating IP	Active/Active Scalable LB: BGP Routing

Access Control List

High Performance WAF

Bot Management

Dynamic & Aggregated Rate Limiting

Traffic Shaping

Traffic Routing: Path, IP, Cookie, etc.

App: Team 1

Why HAProxy for Load Balancing as a Service?

HAProxy Enterprise: fast and flexible software load balancer

- Scale your apps with consistent performance and reliability
- Deploy fast in all your app teams' environments
- Secure traffic and infrastructure for every application

HAProxy Fusion: simple, scalable, & secure centralized control plane
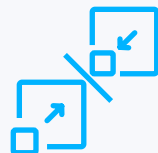
- Manage infrastructure, configuration, validation, backups, and teams
- Automate provisioning, configuring, and scaling
- Monitor every load balancer and all app traffic

Immutable infrastructure

Create and remove thousands of load balancers on-demand without maintaining appliances or hardware racks. No updates, no security patches, and no hardware refreshes.

Simple networking

Improve scalability by removing the complexities of networking in hardware appliances. No complicated routing between Ethernet interfaces, no SNAT pools; just the modern essentials.

Bundled security

Secure every app with multi-layered security built into every load balancer. No feature-gating, no per-user costs, and no cross-selling separate security products.
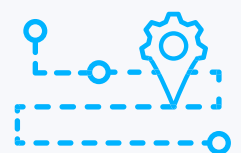
Transparent accounting

Track every minute of a service you provide to internal teams, making internal chargeback allocations straightforward. No over/under-charging, and no complex contracts.