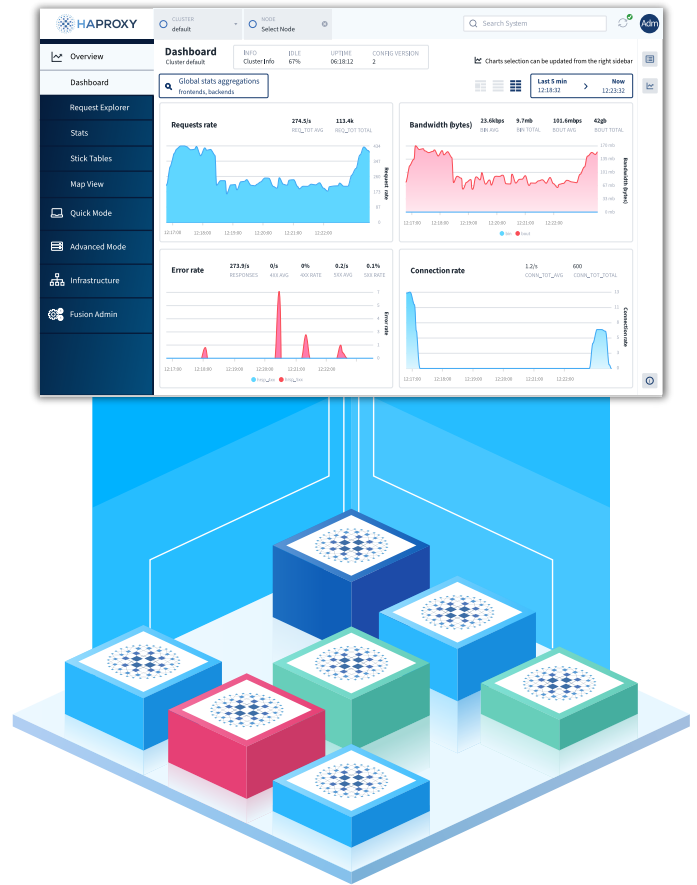
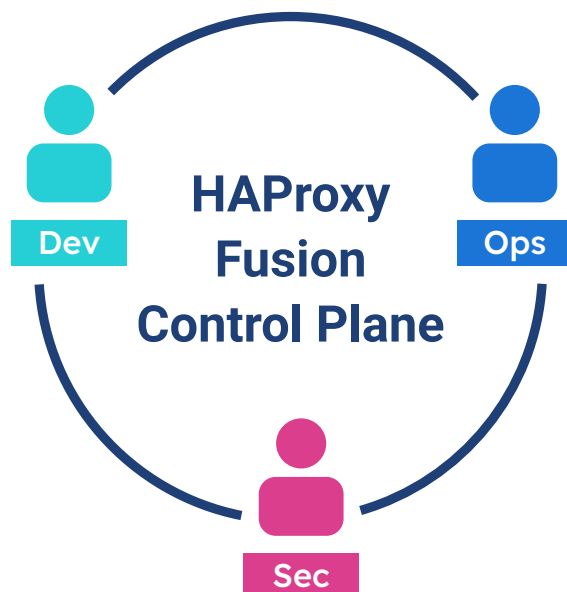


# HAProxy Fusion Control Plane

Manage all of your HAProxy Enterprise instances from a single, graphical interface or directly through its API.

To stay competitive, companies today must deliver software faster than ever before. Many have adopted a philosophy known as DevOps, which aims to break down barriers between development and operations teams to quickly identify bottlenecks in the end-to-end software delivery pipeline. While DevOps promotes tools that help automate, secure, and monitor steps in that pipeline, often those tools become the sole responsibility of a single group, diminishing the impact of DevOps.

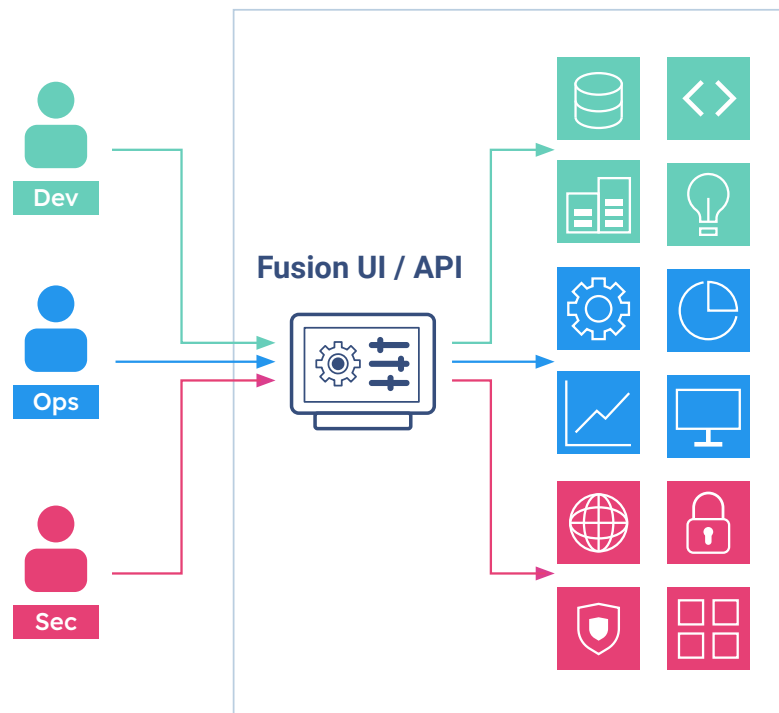


Load balancing is a conspicuous example. Load balancing is essential for exposing new applications on production IP addresses, but because it requires knowledge of the network, it nearly always falls upon a centralized Ops team to manage. Other teams must open a ticket when they need to load balance a new application.

This type of inertia can lead to Shadow IT, where team members bypass Ops completely and deploy infrastructure themselves in the cloud. This puts proper adherence to security and compliance policies at risk. What we need are solutions that serve all groups in ways that fit their unique goals.

## HAProxy Fusion Control Plane bridges the gap

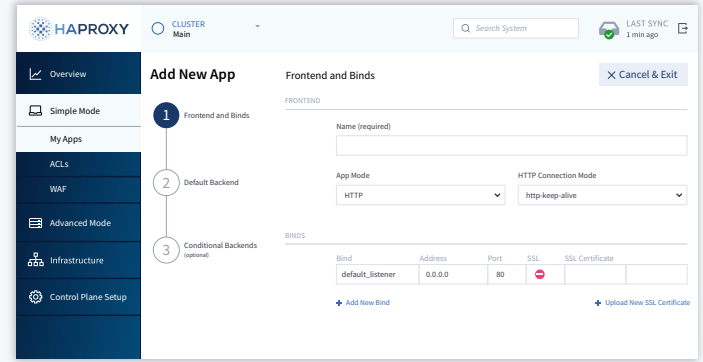
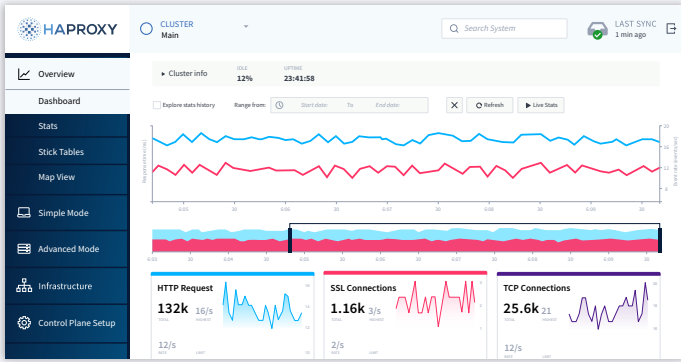
A rich GUI and open API empower teams to centrally manage, monitor, and automate fleets of HAProxy Enterprise load balancers.



**Dev teams** can route traffic to their applications without waiting on Ops, and they can integrate its API into continuous delivery pipeline.

**Security team** can configure the HAProxy Enterprise WAF and other security measures for every backend app, then quickly validate those configurations via API.

**Ops teams** can manage the structure of their load balancing tier, add load balancer instances, install SSL certificates, and tune performance settings. Plus, they can monitor logs and metrics.



## Fleet management

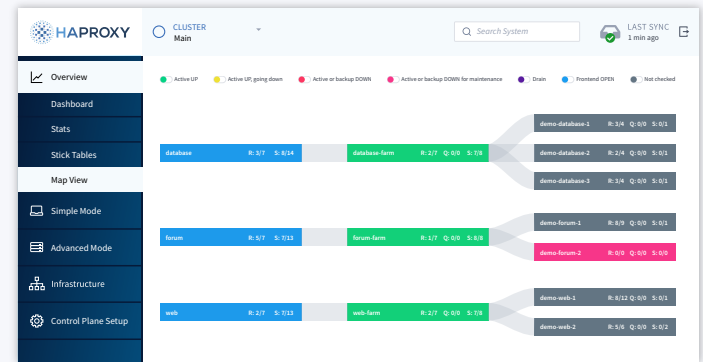
Connect to and manage HAProxy Enterprise instances using a centralized hub. You can group load balancers into clusters and assign them to different teams. Roles and policies are assigned to instances deployed on-premises or in the cloud.

## Self-service

Fusion gives your App developers Load Balancing as a Service. Delegate ownership over application delivery using fine-grained, role-based access control. Versioning ensures that multiple users can make updates safely.

The screenshot shows the 'Access Control' page with a table of roles and policies:

Role Name	Description	Users	Policies	Actions
Admin	Main administrator	AdminMain	super_user /application	[edit] [delete] [refresh]
Log in	Default log in role	Admin1	GET clusters/services/haproxy /application /info /summary	[edit] [delete] [refresh]
Security	Main security account	SecurityTeam	GET clusters/services/haproxy /info PUT clusters/services/haproxy	[edit] [delete] [refresh]
SecOperations	Daily security operations	SecOps	/application /info /summary	[edit] [delete] [refresh]
Log in backup	Temporary login	LoginBackup	GET clusters/services/haproxy	[edit] [delete] [refresh]



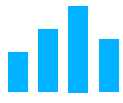
## First-class API

With an API at the heart of HAProxy Fusion, you can easily integrate CI/CD tools with your HAProxy Enterprise infrastructure. Leverage the same capabilities that support the user interface. Create new frontends, backends and servers programmatically while keeping the same access control safeguards.

## Security

Implement security measures quickly and consistently across your entire fleet of load balancers. The HAProxy Enterprise WAF, HAProxy Enterprise Bot Management Module, and Global Rate Limiting protect your applications from malicious behavior.

# HAProxy Fusion Control Plane Features



## Observability

- ▶ The **Map View** visualization shows how requests are being routed.
- ▶ **Live traffic statistics**, including response times, requests rates, error rates, and SSL connections, help you keep tabs on the health of the system.
- ▶ **Status indicators** alert you to the connected status of each load balancer instance.
- ▶ **Audit logging** gives you oversight over configuration changes.
- ▶ View **user-customized data** in the Request Explorer to tailor information to the specific needs of your application.
- ▶ **Notify scripts** in VRRP configuration for cloud-based elastic IPs send monitoring alerts when instances undergo failover.



## Better DevOps

- ▶ A **feature-rich API and CLI** empower developers to integrate load balancing into their workflows.
- ▶ **Role-based access control** permits changes within approved scopes only.
- ▶ Deliberate **workflows support** both Dev and Ops teams.



## High Performance Security

- ▶ The **HAProxy Enterprise WAF** detects and blocks malicious web attacks.
- ▶ **Flexible rate limiting** rules ensure fair usage of your applications.
- ▶ **HAProxy Enterprise Bot Management Module** rejects unwanted bots.
- ▶ Manage **SSL/TLS certificates**.
- ▶ Deploy in **air-gapped environments**.



## Centralized Management

- ▶ Deploy as a **single-server** or highly-available **multi-server setup**.
- ▶ Group load balancers into named **clusters** and **cluster groups** for easier maintenance.
- ▶ Sync configuration across a cluster with **built-in consistency checks**.
- ▶ **Replicate files** across clusters in a cluster group.
- ▶ Reuse configuration easily with **automation blueprints**.
- ▶ **Service discovery** for Kubernetes and Consul environments.
- ▶ Embedded **IP address management** stores and assigns IP addresses to new frontends.

## Technical specifications





Minimum specifications  
for a single server:

- 8 GB RAM
- 4-Core CPU @ 2.00 GHz or similar
- 40 GB of disk space

Recommended specifications  
for a single server:

- 8 GB of RAM
- 8-Core CPU @ 2.40 GHz or similar
- 256 GB of disk space

Supported operating systems:

-  CentOS **7**
-  Debian **9**
-  RedHat **7**
-  Ubuntu **18.04**