HAProxy Enterprise Edition

Software Load Balancer
& Advanced Application Delivery Controller

HAProxy Enterprise Edition (HAPEE) is a highly renowned and much used software based load balancer with over a million installations worldwide. HAPEE is enabled with features and functionalities that are highly advanced and used to protect and maintain enterprise systems globally.

HAPEE empowers network administrators with the flexibility and confidence to deliver websites and applications with high availability, performance and security at any scale and in any environment. All this and more, combined with a 20+ years pedigree, have ensured that organizations from banking to entertainment choose HAPEE as their #1 choice.

WHY YOU SHOULD USE HAPROXY ENTERPRISE EDITION

Robust, Proven Code base
HAPEE has a proven and highly reliable code base with over 20+ years of field usage. The software technology that underpins uses the very latest in security and load balancing technology.

Versatility
HAPEE runs in all environments, from bare metal, containers and virtual servers to onpremise data centers or public/private clouds. It integrates with popular DevOps and service discovery tools.

Advanced Security
Through mitigating attacks for top sites in the world, our powerful DDoS and anomalous behavior detection engine was born and constantly improves.

Expertise on Tap
The core technology that underpins HAPEE has been designed and built by a group of development engineers with established reputations in sectors including banking and financial network security.

Meant for the Enterprise
HAPEE is a true, enterprise grade security and load balancing software servicing over a million installations globally from finance to entertainment.

Reliable Performance
HAPEE is highly reliable and performance is equally matched, with a code base that has matured since the year 2000 and used under the most extreme and demanding circumstances.

Extensible Features
Robust core code allows for the native delivery of a wealth of features based on powerful configuration language.

Trusted Worldwide
HAProxy Enterprise Edition is used and trusted globally by tens of thousands of websites, service providers and corporations such as Amazon, Stripe, Instagram, Airbnb, Alibaba and many more.
HAProxy Enterprise Edition

Technical Specifications

Load Balancing

Comprehensive LB Methods
Round robin, URI, IP address, and other hashing methods supported for routing requests. These methods are overridable with cookies and stick tables to provide session persistence.

Advanced Routing Decisions
Sends requests to specific backends based on URL (or parts thereof), domain name, file extension, client IP address, health state of backends, number of active backend connections, SSL client certificate state, etc.

Stickiness/Persistence
Maintains users’ sessions based on TCP/IP information (client IP, port or TCP payload) or any property of the HTTP request (cookies, headers, URI, etc.).

Extensive ACL System
Make advanced decisions based on any TCP/IP information or HTTP attribute with full logical operator support.

LUA Scripting Support
Allows LUA scripts to provide information to ACL’s or generate and send responses.

Advanced Health Checks
Passive and active health checks increase flexibility when it comes to monitoring the health of backend servers. Agent checks provide advanced control allowing a server to set its own maximum connection limits and weight based on server load and can integrate with a centralized service for removing servers for maintenance/upgrades.

Slow Start
Slowly increases the rate of new sessions sent to a backend when it comes up instead of sending the normal weight all at once.

Slow Stop
Stops sending new requests to a backend, but still allows sticky sessions to continue to use that backend.

Traffic Overload Protection
Limits the maximum number of connections assigned to backends.

High Availability

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Application Acceleration

High Performance SSL/TLS
Terminates SSL/TLS on the HAProxy server, optionally establishing an SSL/TLS connection to the backend server.

Advanced SSL Algorithm Selection
Automatically picks the optimal certificate for a given client out of ECC and RSA.

HTTP/2 Support
Support for clients to communicate with the load balancer via the HTTP/2 protocol.

Multithreading
Splits processing across multiple threads while sharing the same memory space.

Small Object Caching
Small object caching is a handy feature for web application acceleration. Its main objective is to offload some of static content delivery from the application servers so they can perform their primary duty – delivering the application.

Compression
Compresses HTTP responses from backends before passing the response on to the client.

Geolocation Support
Allows for loading geolocation databases from multiple vendors into HAProxy for advanced request handling, routing, and for passing the information on to the application servers. Provides live updating of geolocation databases from a central location.

Device Detection
Gets information about a client by passing the user-agent string to one of HAProxy’s supported device detection databases.

Backend Connections Reduction
Uses idle connections to backends to service requests from multiple clients.

Secure Application-based DDoS Protection
Blocks requests from clients based on multiple metrics and arbitrary criteria, over a configurable time window.

Anomalous Behavior Protection
Combines multiple metrics about a client’s behavior into information for backends or to make routing/access decisions.
HAProxy Enterprise Edition

Technical Specifications

Security continued

Dynamic ACL Updates
Updates ACL, Map, or TLS ticket key files in memory normally loaded from disk during HAProxy startup during runtime.

Traffic Filtering
Uses ACLs to detect any condition in HTTP(S) traffic and route or block the request as desired.

Antibot Module
Sends JavaScript challenges to requests selected by ACL rules.

reCAPTCHA v2
Support for presenting clients who have exhibited anomalous traffic patterns with a Google reCAPTCHA v2 challenge.

Sanitize Module
Filters and verifies that HTTP header names and contents comply specifically with the HTTP specification.

Fingerprint Module
Generate a unique identifier based on a client request.

WAF Module
High performance Web Application Firewall that supports multiple modes including blacklist based signature support, whitelist only mode, and ModSecurity ruleset support.

Runtime API
Gives the ability to programmatically pull data from or make changes to HAProxy during runtime such as:
- Pulling statistics for graphing or monitoring for multiple tools
- Enabling/Disabling backends for maintenance without reloading
- Changing backend IP's/ports/weights
- Updating ACL, Map, or TLS ticket key files

DNS for Service Discovery
Dynamically scales the number of backend servers by querying the service registry over DNS. Maintains the IP address, port, and weight of the servers within HAProxy.

Server Templates
Enables the provisioning of multiple backend servers with a single server line to be filled in during runtime.

Extensive Logging
Logs information about requests via syslog; including http request information, reasons why the request failed to complete, request timing, and custom fields.

Administration

Update Module (LB and TLS)
Updates maps, ACLs and TLS ticket key files in memory automatically during runtime from any HTTP(S) server.

Real Time Dashboard
Provides a view of your services' health, rates, and load along with aggregation of stats across multiple instances. In addition, it facilitates administrative tasks such as enabling, disabling and draining backends.

Configuration API (CLI and REST)
Gives the ability to programmatically add, modify, or remove sections of your configuration over the command line or HTTP and keep services separated with multi tenancy support.

Stick Table Aggregator
Provides realtime aggregated values from stick tables across multiple processes or servers in a cluster which allows for realtime cluster-wide tracking.

SSO Module
Enables the implementation of SSO (Single Sign On) on a Microsoft Active Directory domain.

Support

Authoritative
The team which is authoritative on HAProxy

Knowledgeable
No need to worry about searching documentation again

Proactive
Proactive team will identify and resolve your issues before you even notice them

Support Levels

Premium Support
Hours: 24x7
- Critical Issue:
  - Target Response Time - 30 mins
- Moderate Issue:
  - Target Response Time - 2 days
- Informational Issue:
  - Target Response Time - 3 days

Communication:
- E-Mail, Phone or Web

Fast Updates
You will receive updates faster

Always Available
Premium 24/7 support available

Distribution Support
HAProxy compiles easily as well as integrates with the package manager in standard operating systems. Supported out of the box: CentOS 6/7, Debian GNU 7/8, Red Hat 6/7, Ubuntu 14.04/16.04.

Consultative Support
Prompt Maintenance and Updates

Business Support
Hours: 9am-6pm
- Critical Issue:
  - Target Response Time - 8 hours
- Communication:
  - E-Mail, Phone or Web

Prompt Maintenance and Updates

Support Levels

Premium Support

Critical Issue:
- Target Response Time - 30 mins

Moderate Issue:
- Target Response Time - 2 days

Informational Issue:
- Target Response Time - 3 days

Communication:
- E-Mail, Phone or Web
Licensing

Licensing HAPEE could not be easier. HAPEE is licensed on a per server basis, and is an annually paid subscription license.

There are no limits to the number of connections the HAPEE system can handle, as it is entirely based on the capabilities of your server hardware. For this reason we suggest that you discuss your requirements in full with us so we can suggest an appropriate server sizing.

In order to be totally reliable, we always suggest placing the HAPEE servers in a clustered format so any disasters can be accommodated without any downtime to your infrastructure access.

The software subscription license is available with Business Level Support or Premium Level Support. We strongly suggest that you opt for the Premium Level Support package as this will provide you with 24/7 access to support engineers.

Just a few of our users

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