

# Loadbalancer Enterprise

*The Engineer's choice for smarter application delivery*

Loadbalancer's intuitive Enterprise Application Delivery Controller (ADC) is designed to save time and money with a clever, not complex, WebUI.

Easily configure, deploy, manage, and maintain our Enterprise load balancer; reducing complexity and the risk of human error, for a difference you can see in just minutes. And with WAF and GSLB included straight out-of-the-box, there are no hidden costs – so the prices you see on our website are fully transparent.

## Your world, your way

We understand that everyone's network infrastructure is different, that's why we work within your constraints to get you the results you want, your way.

### Smarter spending

Unleash unmatched resilience.  
Save thousands and optimize your architecture with our powerful Enterprise load balancer and a per-application approach.

### No End-of-Life

We believe in true flexibility.  
That's why we never end-of-life our products, providing continuous support for all software versions, putting you back in control.

### Fully-featured

All straight out-of-the-box.  
Our appliance comes fully-featured, with WAF and GSLB as standard so there are no hidden add-ons.

### Personalized service

Maximize your ROI.  
Our experts are here to help accelerate problem-solving, and empower you to work smarter, not harder.

### Easy to use

A clever, not complex, solution.  
With the same easy-to-use WebUI across all platforms, our hardware, virtual and cloud load balancers are designed to make your life easier.

### Step-by-step guides

Deploy with confidence.  
Our application-specific deployment guides walk you through every detail, so you can optimize and supercharge your applications.

### Easy-access free trial

No need to talk to a human.  
Instantly download our free trial and stress-test our technical support at no cost throughout your trial.

### Proof of concept services

Get help with testing.  
Turn problems into solutions with customized implementation advice from the load balancing experts.

### Migration support

Migrate seamlessly to Loadbalancer.  
Our Professional Services team can help you simplify and migrate your configuration for a risk-free transition.

### No resource limitation

Dramatically reduce costs.  
Use as much VM resource, servers and clients as you like with our Global and Site Licenses, to avoid cost creep as you scale.

### Move platforms at will

Flexible migration at no extra cost.  
Enjoy the added flexibility of being able to migrate between Hypervisors and platforms at will with an active support contract and Freedom License.

### Development licenses

Add load balancers to your labs.  
Development or NFR licenses are available upon request for our partners for end-to-end testing.

# Features

*Work faster and achieve more*

## Advanced traffic management for Layer 4 and Layer 7

Our Enterprise load balancer operates at both Layer 4 and Layer 7, delivering ultra-responsive applications with efficient network-level traffic management and intelligent application-aware routing. Minimize latency, maximize performance, and ensure uninterrupted uptime with comprehensive scheduling options and health checks.

### General

- Server Load Balancing (SLB) for TCP/UDP based protocols
- TLS (SSL) offload
- Transparent caching for HTTP/HTTPS
- Compression of static and dynamic HTTP/HTTPS content
- HTTP/2 support
- Unlimited Virtual and Real Servers
- NAT-based forwarding
- Support for Direct Server Return (DSR) configurations
- Configurable SNAT support
- VLAN trunking (802.1Q)
- Link interface bonding (802.3ad)
- USGv6 certified
- IPv6 support for addressing and features
- IPv6 to IPv4 gateway/proxy using a NIST
- USGv6 network stack
- VLAN support
- IPV4 IPV6 addresses supported

### Scheduling and balancing

- Round robin
- Weighted round robin
- Least connection
- Weighted least connection
- Agent-based adaptive
- Chained failover (fixed weighting)
- Source-IP hash
- Layer 7 content switching
- Global Server Load Balancing (GSLB)

### Integration and automation

- Prometheus
- Grafana
- Syslog
- NTS
- Ansible
- Puppet
- Chef
- Teraform
- Health checks

### Aggregated health checks

- ICMP health checking
- Layer 7 checking against any target server
- Port
- Active/passive for high availability
- Stateful failover

### Platforms

- Hardware
- Dell, HPE, Supermicro, Lenovo, Baremetal
- Virtual
- VMWare, Hyper-V, KVM, Xen, Proxmox, Nutanix, RedHat.
- Cloud
- AWS, Azure, GCP, HPE Private Cloud.
- Session persistence

### Source IP (L4)

- TLS (SSL) SessionID (L4)
- HTTP/HTTPS browser-session (L7)
- HTTP/HTTPS WebClient-session (L7)
- RDP login ID (L7)
- Port Following for mixed HTTP/HTTPS sessions
- Session reconnection for Microsoft RDS
- Robust logging and reporting
- SNMP support Diagnostic shell with in-line tcpdump

### SSL/TLS features

- Configurable TLS (1.0, 1.1, 1.2, 1.3) and SSL (2.0, 3.0)
- Support for EV (Extended Validation) certificates
- OCSP certificate validation
- Server Name Identification (SNI) support
- Unlimited support for TLS (SSL) certificates
- Automated TLS (SSL) certificate chaining
- Certificate Signing Request (CSR) generation
- FIPS 140-2 Level 1
- STARTTLS mail protocols (POP3, SMTP, IMAP)
- Mutual TLS (mTLS)

### Security

- Allow/Deny list (Access Control list)
- IP address filtering
- WARP Tunnel support
- DDoS mitigation, including L7 rate-based attacks
- LDAP/radius authentication
- ISO27001:2022 compliant

### Administration

- Change auditing
- Web User Interface (WUI)
- SSH and physical console
- RESTful and PowerShell APIs
- Context based help (WUI)
- Real time display of performance and availability
- Application templates
- Remote syslog support
- Automated configuration backup
- Selective restore of configuration
- Connection draining

## Multi-site failover and resilience with GSLB

Achieve global uptime and resilience with our advanced Global Server Load Balancing (GSLB) solution. Dynamically distribute traffic across multiple regions, ensure high availability, and enable rapid failover to guarantee seamless and uninterrupted user experiences worldwide.

### General

- Direct-to-node
- Extension mechanisms for DNS
- External Dynamic Weight health checks
- Active-active/Active-passive high availability
- Active/active (n+1) scale-out clustering for up to 1.5Tbps throughput
- Global topologies

### Scheduling and balancing

- Round robin
- Weighted round robin
- Chained failover (fixed Weighting)
- Regional
- Real Server Load
- Location based
- Scale to 256 nodes per FQDN
- Use EDNS to direct client traffic

### Health checking and failover

- ICMP health checking of server farm machines
- Layer 4 TCP checking
- HTTP/HTTPS health check
- Active/active high availability

### Security

- Allow/Deny List (Access Control List)
- Updated reputation data daily
- DDoS mitigation
- Firewall filtering (full iptables scripting support)

## Protect against the OWASP Top 10 with our WAF

Shield your applications with our Web Application Firewall that defends against threats and vulnerabilities. With threat detection and customizable rules, our WAF ensures your applications remain secure, without compromising performance or reliability:

- Real-time application threat mitigation
- Updated reputation data daily
- Mitigates:
  - cookie tampering
  - cross site request forgery
  - cross site scripting
  - data loss prevention
  - SQL injection
- PCI-DSS Section 6.6 compliance
- [OWASP Top 10 Ruleset protection](#)

## Intrusion prevention

Enterprise can be integrated with other security software to detect and prevent malicious network activity before it reaches backend servers:

- Short compatible IPS
- Allow/Deny IP by address

# Manage all your load balancers from a single platform

All our Enterprise load balancers come with free access to our centralized management platform, the ADC Portal, to help you manage your entire estate. You can even manage the load balancers of our competitors from the ADC Portal, helping you regain control and visibility of the sprawl.

This groundbreaking platform provides more effective application delivery across on-prem, cloud, hybrid, and multi-cloud environments, with a single, consolidated view of all your load balancing assets, wherever they are located. Instantly see the operational status of all your ADCs, get a clearer picture by grouping your appliances using custom Namespaces and Tags, and fix and regain control of problems with remote access.

## General

- Single-window ADC dashboard
- Secure ADC connections
- Vendor-agnostic load balancer management
- Backup scheduling, automation, and secure storage
- Online updates, scheduling, automation, and workflows

## Account access

- Secure remote access (WARP)
- Secure Direct Access
- Advanced role-based access control (RBAC)
- Visibility of organisation teams and namespaces with customer tags and filters

## Security

- CVE security insights and monitoring
- Single sign-on (SSO) (G Suite, Azure AD, SAML)
- Two-factor authentication (SMS + APP)
- Audit log
- SAML

## SSL certificate lifecycle

- Centralized certificate management across all ADCs
- Expiry alerts and dashboard visibility
- Role-based access control (RBACs)
- Full audit logging of certificate actions

LOADBALANCER

PORTAL

Demo

Services

Search...

ADCs

Overview

List

Shuttle Management

ADCs

Add ADC

Search...

11 ADC connections used

ADC Name	Running Status	HA Status	Address	Port	Version	Namespace
LNF Prod 01			10.100.0.10	37076	8.7.3	DC 1
LNF Prod 02			198.51.100.5	42002	8.11	DC2
F5 BIG IP - GWM Print 01			198.51.100.6	54760	15.10	Data C1
F5 BIG IP - GWM Print 02			10.100.0.20	443	16.12	Data C2
F5 BIG IP - GWM Print 03			198.51.100.7	873	17.1.1	Data C3
vThunder NF UAT/Dev			198.51.100.5	18465	4.1.4	GB_PO9
NetScaler GWM PACS 01			203.0.113.100	3972	14.1	US_RG_01
GWM PACS 02			203.0.113.156	2762	8.8.1	UAE_B4
RCH Mail 01					8.5.9	AWS_IKE_Z
LoadMaster RCH Mail 02					7.2.560	GCP_LDN_L
RCH Legacy			203.0.113.10	9274	4.2.10	DC2

11 Total

New Version v8.91 available

# Hardware load balancers

*Stronger applications and smarter spending*

## Hardware technical specifications

Our appliances deliver exceptional performance across a wide range of critical applications, providing flexible solutions for organizations of all sizes, all the way up to 100GbE connectivity.



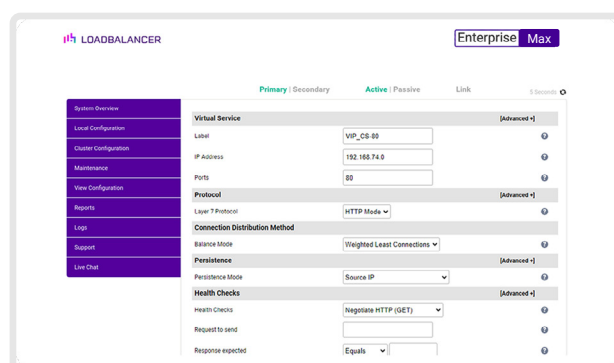
	Enterprise Prime	Enterprise Flex	Enterprise Max
<b>Throughput (L4/L7)</b>	4Gbps	48Gbps	90Gbps
<b>SSL max TPS</b>	10,306 TPS	19,584 TPS	30,059 TPS
<b>Servers (VIPs/RIPs)</b>	Unrestricted	Unrestricted	Unrestricted
<b>Connectivity</b>	1GbE	10/25GbE	25GbE or 100GbE
<b>GSLB</b>	✓	✓	✓
<b>WAF</b>	✓	✓	✓
<b>L7 requests per second</b>	300,000	600,000	1,200,000
<b>L4 connections per second</b>	150,000	300,000	600,000
<b>L4 HTTP requests per second</b>	252,684	1,234,455	2,747,412
<b>Maximum L4 concurrent connections</b>	15,600,000	31,200,000	62,400,000
<b>SSL TPS (1 key)</b>	7,671	15,883	22,374
<b>SSL TPS (2 keys)</b>	3,310	6,111	9,654
<b>SSL TPS (3 keys)</b>	10,306	19,584	30,059
<b>DICOM studies per year</b>	500,000	4,000,000	8,000,000
<b>Standard network adapters</b>	4x 1GbE	2x 1GbE + 2x 10/25GbE SFP	2x 1GbE + 2x 10/25GbE + 4 x 25 GbE SFP28 OR 2x 100GbE QSFP28
<b>Additional network adapter options</b>	n/a	2x 10/25GbE 2x 40GbE 2x 50GbE	4x 10/25GbE 4x 40GbE 4x 50GbE
<b>Remote console</b>	IPMI	iDRAC Enterprise	iDRAC Enterprise
<b>Chassis</b>	Supermicro 1U	Dell PowerEdge R360	Dell PowerEdge R450
<b>Processor</b>	Intel® Xeon® (4C/8T), Turbo (71W)	Intel® Xeon® (6C/12T), Turbo (95W)	Intel® Xeon® Gold (24C/48T), Turbo (165W)
<b>Memory</b>	8GB	32GB	64GB
<b>Hard drive</b>	SSD	HDD	HDD

	Enterprise Prime	Enterprise Flex	Enterprise Max
Hot-swap, redundant power supply	✗	✓	✓
DC power option	✓	✗	✗
Power cord	1x Rack Power Cord 2M	2x Rack Power Cord 2M	2x Rack Power Cord 2M
Power consumption	90/45W	76/46W	172/114W
Trusted platform module	N/A	Trusted Platform Module 2.0 V3	Trusted Platform Module 2.0 V3
Rack size	1U	1U	1U
RAID	N/A	No RAID for HDDs/SSDs (Mixed Drive Types Allowed)	No RAID for HDDs/SSDs (Mixed Drive Types Allowed)
RAM	8Gb	16Gb	32Gb
Storage	SSD	SAS	SAS
Redundant PSU	✗	✓	✓
Dimensions	44 x 41 x 4 cm	51 x 4 x 56cm	51 x 4 x 56cm
Weight	8 kg (17.6 lbs)	13.6 kg (30 lbs)	13.6 kg (30 lbs)
Storage temp	-40°C to 65°C (-104°F to 149°F)	-40°C to 65°C (-104°F to 149°F)	-40°C to 65°C (-104°F to 149°F)
Operation temp	10°C to 35°C (50°F to 95°F)	10°C to 35°C (50°F to 95°F)	10°C to 35°C (50°F to 95°F)
Warranty	Return to base 36 months	NBA Onsite Dell Warranty 60 months	NBA Onsite Dell Warranty 60 months
Next business day replacement	✗	✓	✓
Next business day onsite engineer	✗	✓	✓
2, 4 or 8 hour onsite response	✗	Optional	Optional

## Hardware licensing

Hardware license options:

- **Perpetual:** Includes the cost of the appliance only.
- **Freedom License:** The Freedom License gives you the peace of mind to migrate to virtual or cloud, at no extra cost, should you wish at any point in the future. Simply sign up for free and contact us when you're ready to migrate. That's it. No hassle, no catches.





# Virtual load balancers

*Clever but not complex*

## Virtual technical specifications

Our virtual appliances are some of the most affordable on the market, and come fully-featured with WAF and GSLB as standard, so there are no add-ons needed. Choose from our three virtual products, depending on your throughput needs, and if your requirements change seamlessly upgrade to the next product in the range:

	Enterprise VA Basic	Enterprise VA Prime	Enterprise VA Max
Throughput	Up to 400Mbps	Up to 4 Gbps	Unrestricted
SSL TPS	400 TPS	Unrestricted	Unrestricted
Servers (VIPs/RIPs)	Unrestricted	Unrestricted	Unrestricted
GSLB	✗	✓	✓
WAF	✗	✓	✓

## Supported platforms

Our virtual appliances are compatible with several popular hypervisors, allowing for easy deployment and management of their software on various virtualization platforms:

- VMware (ESXi and VirtualBox)
- Microsoft Hyper-v
- Nutanix
- Xen
- Proxmox
- KVM

## Virtual licensing

Loadbalancer offers some of the most competitive, unique virtual licensing options in the industry:

- **Subscription:** Includes the appliance and technical support (annual commitment minimum but with flexible billing cycles; monthly, quarterly or annually).
- **Perpetual:** Includes the cost of the appliance only.
- **Freedom License:** The Freedom License gives you the peace of mind to migrate to the cloud at no extra cost, should you wish at any point in the future. Simply sign up for free and contact us when you're ready to migrate. That's it. No hassle, no catches.
- **Global License and Site License:** This is a one-of-a-kind in the industry, offering outstanding value for money for those who have multiple deployments and want the flexibility to scale at will. Spin up as many ADCs as you like, at no extra cost. Use the Global License for any site globally within the same organization, or the Site License for a single site. Both offer unlimited virtual appliances.



# Cloud load balancers

*Bigger impact and better results*

## Cloud technical specifications

Our virtual load balancer is also available for use on all major public clouds — AWS, Azure and GCP. Select from three licensing models to suit your needs: annual, hourly or BYOL and get unlimited throughput (dependent on instance size).

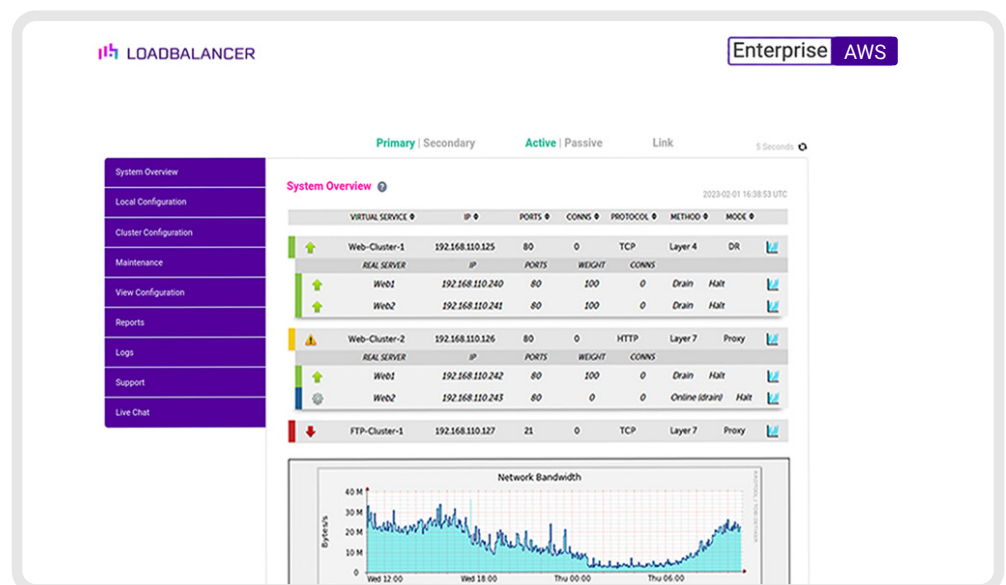


	Enterprise AWS	Enterprise Azure	Enterprise GCP
Throughput	Unrestricted	Unrestricted	Unrestricted
SSL TPS	Unrestricted	Unrestricted	Unrestricted
Servers	Unrestricted	Unrestricted	Unrestricted
GSLB	✓	✓	✓
WAF	✓	✓	✓

## Cloud licensing

Cloud payment options:

- **Hourly billing:** Includes the appliance and technical support (hourly or annual billing)
- **BYOL:** Buy the license from Loadbalancer and deploy on any instance size you want (Bring Your Own License)





# Consultative support

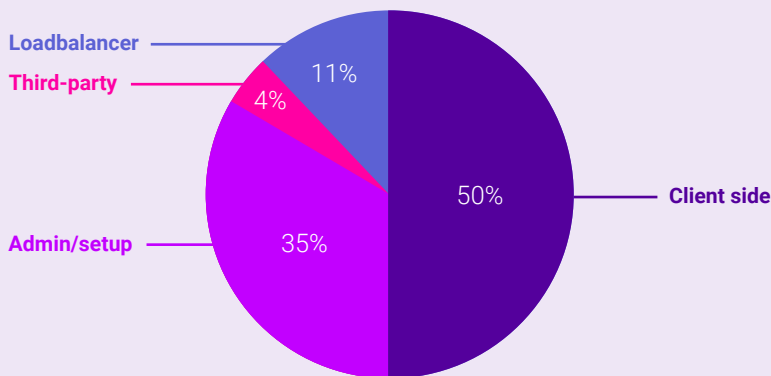
## *Support that extends beyond the appliance*

Our engineers are here to support anyone troubleshooting issues with their appliance; including third-party app vendors and end users. The goal is to help you get back on track as quickly as possible, so we won't stop supporting you if it turns out the issue isn't with the load balancer.

In fact, more than half of the support tickets we work on are for client-side network issues, working closely with the customer to resolve problems with their own infrastructure:

### We don't stop supporting you, when the issue isn't the load balancer

#### Support tickets by issue



#### Client-side 50%

More than half of the support tickets we help to resolve involve issues with our clients' own network, infrastructure or a third-party solution.

#### Admin/setup 35%

Support tickets involving setup, background advice and requests for documentation.

#### Loadbalancer 11%

An issue directly related to our products

#### Third-party 4%

So a support plan from Loadbalancer just isn't comparable to what other vendors might offer.

## What's included in your support package?

We understand how important it is that your applications never fail, which is why [our support is second to none](#). Our passionate networking experts are on hand to help 24 hours a day, 365 days a year, in your country and your time zone, regardless of which platform you choose.

Thanks to our unique support approach that extends beyond the appliance, our experienced technical engineers become extended members of your own team – always available should you need to leverage their expertise.





- Speak to a level 3 expert every time
- Unlimited requests
- Unlimited features and updates
- Unlimited security updates
- Priority case management
- 24/7 or business hours support
- Telephone, email, zoom and chat
- Infrastructure and 3rd party assistance
- Remote assistance

We've been at the heart of thousands of deployments across a wide variety of industries, all over the world, and we want you to be able to tap into that knowledge. For almost 20 years, our technical engineers have amassed a wealth of experience so they understand how to help you work within the complexities and constraints of your infrastructure, not just meet your requirements.

So if you want to augment your IT team with load balancing experts, you can be reassured we'll fix your problem, and help you achieve zero downtime, instead of querying your support contract, or laying blame elsewhere when our product isn't at fault.

## Service Level Agreement

The following agreement outlines the terms and conditions governing the support services provided by Loadbalancer to all our appliances:

Severity	Description	Time
<b>Priority 1</b> <i>Urgent</i> 	<b>Site down</b> - All network traffic has ceased, causing critical impact to your business.	1 hour
<b>Priority 2</b> <i>High</i> 	<b>Site at risk</b> - Primary unit has failed resulting in no redundancy. Site is at risk of going down.	4 hours
<b>Priority 3</b> <i>Medium</i> 	<b>Performance impaired</b> - Network traffic is extremely slow causing significant impact to your business.  <b>Performance degraded</b> - Network traffic is partially functional causing some applications to be unreachable.	8 hours
<b>Priority 4</b> <i>Low</i> 	<b>General assistance</b> - Questions regarding configurations "how to". Troubleshooting non-critical issue.  <b>Enhancement request</b> - Request for product functionality that is not currently part of the current product feature set.	Next business day

Please note, in 2024, our average response time (by a real human!) was less than 20 minutes; so we're with you at the drop of a hat, every step of the way. Please note this was 20 minutes for all cases, whether they were a site down or for general assistance.

Our SLA exists to guarantee a minimum response time, based on the issue experienced. We will always endeavour to respond much faster this.

For any issue escalation, please ask the person you are in contact with to escalate the case to a manager. Alternatively, you can email [info@loadbalancer.org](mailto:info@loadbalancer.org) with the details, and the matter will be dealt with accordingly.

## Professional services

Let our professional services team carry the load for you, maximising the value of your appliance, and minimizing disruption.

Get help with a seamless migration, customized design and deployment of your solution, a custom Core Rule Set for your WAF, or unpick and simplify complex configurations with one of our dedicated engineers.

[Contact our Sales team for more information.](#)

## Deployment guides

To learn more about how Loadbalancer's Enterprise Application Delivery Controller can be used to optimize your specific application, check out our [A-Z library of detailed, step-by-step deployment guides](#).

### Contact us

To learn more about Loadbalancer's Enterprise Application Delivery Controller, or for a quote, email [sales@loadbalancer.org](mailto:sales@loadbalancer.org).

