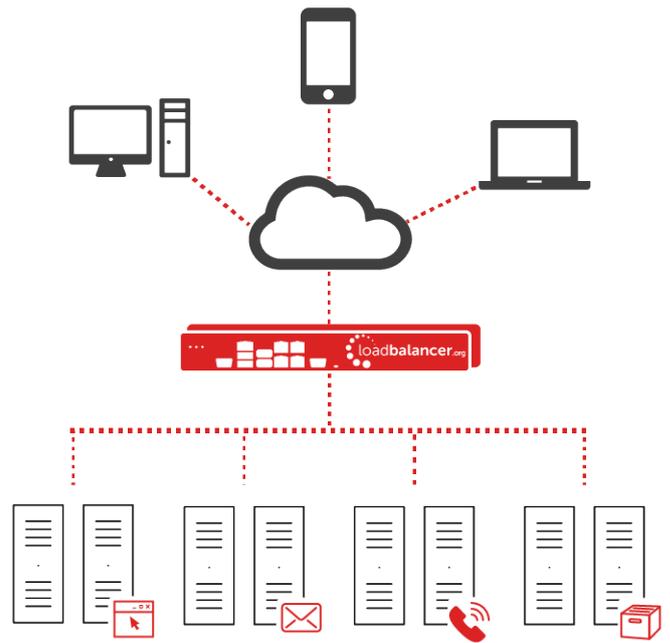




# Enterprise R20



## ENTERPRISE R20 DATASHEET

### Features

**High performance L4/L7 load balancing**  
3Gbps throughput, 66,000 HTTP RPS,  
15,600,000 maximum connections &  
6,000 SSL TPS

**Active/passive with seamless failover**  
Remove single point of failure by  
combining two Appliances as a clustered  
pair for high-availability and resilience

**Health checking**  
Constantly monitor the health of your  
servers and their applications, ensuring  
intelligent real-time traffic distribution

**Session persistence**  
Maintain users connections to specific  
servers based on various parameters,  
including Source IP & Cookie insertion

**Industry leading support**  
Direct access to our team of application  
delivery specialists, with 3 years hardware  
warranty as standard



The Enterprise R20 from Loadbalancer.org provides full infrastructure scalability. Offering 3Gbps throughput and over 6,000 SSL transaction per second (TPS), your load balancer is with you for the long haul. Whilst initially restricted to 4 servers in a cluster (and a maximum of 5 clusters) the seamless upgrade path ensures full scalability. This high performance application delivery controller (ADC) is certified for a range of Microsoft applications and comes with a built-in web application firewall (WAF) as standard.

With 8GB of RAM and Quad Core Intel® Xeon® CPU, the Enterprise R20 forms an essential component of your high-availability (HA) strategy, ensuring your critical line of business applications remain accessible 24/7.

With a range of support options, offering direct access to the industry-leading team of application delivery experts. Select from Business Hours or Premium 24/7 support, plus a 3 year hardware warranty as standard, we are dedicated to keeping your services available around the clock.

## Product Overview

Offering incredible power & performance - at entry level pricing. The Enterprise R20 is license restricted to 5 clusters, each with 4 back-end servers. You'll probably never need to upgrade the license, but in case you do, the transition to unrestricted is seamless, with no downtime or need to swap out your existing hardware.

## Hardware Platform

- 4 x 1Gbps full duplex Ethernet ports
- SSD Storage
- 8Gb DDR RAM
- Quad Core Intel Xeon CPU
- IPMI port as standard (remote boot and console)
- Local console access via VGA, USB, Serial & IPMI
- Remote console access via SSH & IPMI
- CE/FCC Certified, UL Listed, RoHS Compliant
- 200W ATX power supply
- Total BTU Heat Output: 1075

## Standard Features

- Server Load Balancing (SLB) for any TCP or UDP based protocol
- SSL Acceleration/Offload
- Layer 7 Content Switching
- This model is restricted to 20 real servers (5 VIPs \* 4 RIPs)
- No bandwidth, performance or feature limitations
- High performance Direct Routing (DSR, N-Path), TUN, NAT & SNAT
- Schedulers: Round Robin, Least Connection, Weighted Least Connection, Weighted Round Robin
- Dynamic Schedulers: Windows & Linux feedback agents, Custom HTTP feedback option
- Load balance almost ANY protocol i.e. HTTP, HTTPS, SMTP, POP3, IMAP, Terminal Server etc
- Link aggregation (802.3ad)
- VLAN Tagging (802.1Q)

## SSL

- Unlimited support for SSL Certificates
- Support for Third Party Certificates
- Automated SSL Certificate Chaining
- SSL Certificate Signing Request (CSR) Generation
- PFX upload and conversion
- Proxy protocol support
- PCI-ready SSL Implementation

## Performance

- Up to 3Gbps Throughput
- SSL Acceleration/Offload up to 6,316 TPS
- 66,272 http page GETs/second
- Up to 1.2Gbps L7 Throughput
- 15,600,000 Concurrent sessions

## L4/L7 Sticky (persistence)-

Connection persistence based on:

- Source IP address
  - SSL Session ID
  - Passive Cookie
  - Active Cookie (Insert)
  - RDP Cookie / Session Broker
  - X-forwarded for header
- Port following (Persistence on multiple combined ports)
- Multiple fallback options i.e. use source IP if no cookie found

## Security Functionality

- Fully integrated WAF (Web Application Firewall)
- OWASP top 10 protection
- Persistent White/Black List (Access Control List system)
- Firewall filtering (full iptables scripting support)
- Firewall lockdown wizard
- DDOS mitigation both at Layer 4 & 7
- Virtual patching
- HTTP & SYN Flood protection
- Block SQL Injection Attacks
- Prevent Cross Site Scripting (XSS)
- Stop Hackers Exploiting Software Vulnerabilities
- FIPS 140-2 Compliant
- PCI DSS Ready

## Health Checking and High Availability

- Application health checking for DNS, FTP, HTTP, HTTPS, IMAP, NNTP... and many more
- ICMP health checking of server farm machines
- Complex manually scripted health checks
- Automatic reconfiguration for defective real server machines
- Automatic replication of static & dynamic configuration from master to slave load balancer
- Stateful Failover (persistence table replication)
- One click secure clustered pair configuration

## Scheduling and Balancing Methods

- Round Robin
- Weighted Round Robin
- Least Connection
- Weighted Least Connection
- Agent-based Adaptive (Windows and Linux Agents)
- Layer 7 Content Switching
- Destination Hash for transparent proxy

## Administration

- Secure, SSH, HTTP and HTTPS for remote access administration
- Fully configurable using Web User Interface
- Easy start configuration and maintenance wizards
- WebUI-based Help Assistant
- Virtual Service Configurations can be edited and tuned on-the-fly
- Real time performance and availability displays
- Optionally configure console port for local administration
- Remotely scriptable Command Line Interface (LBCLI) Option
- SOAP interface to the LBCLI API
- Local and Remote syslogd support
- Selective restore of physical and Virtual Service data
- Support for connection draining or halting with or without persistence
- Software and Security updates available on & off-line
- WebUI log reporting with tabbed browser Support
- SNMP support for performance metrics
- Full root access to with a multitude of diagnostic tools tcpdump etc

## Warranty & Support Services

Hardware Warranty:

- 3 Years Next Business Day On-site Engineer included as standard

Support Options:

- Premium 24/7 Support - Unlimited 24/7 access to our Technical Support Engineers
- Business Hours Support - Unlimited support during business hours (8x5)