

# IP Load Balancer



## LB1470



The LB1470 Appliance Series is a family of Linux powered IP Application/Web Server Load Balancing and Content Switching appliances. These robust network appliances have the effect of making several application/web servers appear as one.

The LB1470 channels requests to the application/web servers using a variety of intelligent scheduling methods.

Traffic Management

Content switching

IP Server Load Balancing

Layer 3 - 7 Health Checking

Layer 4 - 7 Persistency Features

GUI Control Interface

60,000 HTTP page gets per sec

### Key Benefits

**High Availability** (24 x 7) - since applications are replicated across multiple machines, the loss of a single server does not result in a total loss of service for your customer.

**Improved Performance** - intelligent load balancing and content switching rules ensure that requests are directed to those servers in the farm that can most effectively handle them.

**Scalability** - servers can be transparently added to meet growing user demand. Upfront investments in server capacity, which may go unused, can be avoided.

**Increased Flexibility** - application servers can be taken down for maintenance. Server resources can be optimized ("shuffled") with no loss of service to the customer.

### Key Features

Server load balancing for TCP/UDP based protocols.

Load balancing of virus detection appliances.

Support of one and two-armed network topologies.

Direct server return (DSR) configurations for streaming applications.

Four static load balancing methods.

Agent based automatic adaptive load balancing with server API.

URL-based Content Switching.

SSL, URL, Cookie and source IP based persistency options.

Fault tolerance (optional active/hot-standby configurations).

Stateful failover of cookies and active TCP connections.

Health checking of server farm and services including HTTP, HTTPS, IMAP, POP3, SMTP, FTP, ICMP, Telnet, NNTP.

Automatic deconfiguration of defective server machines.

Firewall functionality / Packet Filtering.

Easy management through the included GUICC or through CLI, SNMP, remote syslogd.

Online upgrade of the LB1470 Appliance OS.



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### Load Balancers are available in two variants:

Basic: Layer 4 Load Balancer

Pro: Layer 4-7 Load Balancer with Content Switching

Both variants are available as a stand-alone appliance or as High-Availability, dual-system cluster configurations.

### The LB1470 allows you to intelligently manage your IP traffic:

Incoming IP requests are distributed intelligently across the server farm by the LB1470.

One LB1470 is able to intelligently balance up to 100 real servers, will register and indicate any loss of service, or physical server, then intelligently switch traffic to a working service or server.

#### Features

##### Layer 4 Load Balancing

Round robin  
Least connections  
Weighted least connections  
Weighted round robin  
Adaptive methods  
Arbitrary TCP and UDP-port Load Balancing

Basic Pro

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##### Layer 3 Health Checking

ICMP

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##### Layer 4 Health Checking

TCP, UDP

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##### Layer 5-7 Health Checking

HTTP, HTTPS (SSL)  
POP3, SMTP, IMAP, Telnet  
NNTP, FTP

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##### Clustering

High Availability configuration  
Active/standby support  
Configurable failover dampening  
Stateful failover of VIP  
Stateful failover of TCP connections  
Stateful failover of cookies

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##### Layer 4 Persistency Feature

Source IP-Address

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##### Layer 5-7 Persistency Features

URL  
Active cookie  
Persistent cookie  
Cookie hash  
Active cookie source  
Persistent cookie source  
Hostname hashing  
Persistent SSL-ID  
URL-Based Content Switch

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##### Basic Network Topologies

One-Armed  
Two-Armed

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#### (Features Continued)

##### Security

Syn-Flood Protection  
Full Denial of Service (DoS) Protection  
Provides high level of configurability for ACL rules  
High Speed Packet Processing Engine  
Network Address Translation (NAT) Support  
Port Forwarding (PAT) Support  
Connection Reaping

Basic Pro

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##### Management

SSH CLI  
Direct console CLI  
Optional Cisco CLI  
SNMP event traps  
SNMP Performance Metrics  
Remote syslogd support  
Single image view console  
Single image Java-UI for VS's  
Support for VS clusters of up to 5x2  
GUI Management  
GUI Performance Monitoring

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##### Performance Metrics

Concurrent Sessions per sec (Layer 4) 62.000  
Concurrent Sessions per sec (Layer 7) 40.000  
Real Servers 100  
Virtual Services per LB1470 30  
Concurrent Connections 500.000+  
http 1.1 page 'get's / sec. 60.000+ @ 1000Mbps  
Network Connectivity 2 x 100/1000Mbps

##### Miscellaneous

Support VLAN  
Online Upgradeability of Software

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Appliance Dimensions Standard 19" rack mountable 1U