



# ASCENLINK<sup>®</sup>

## The Intelligent WAN Load Balancer



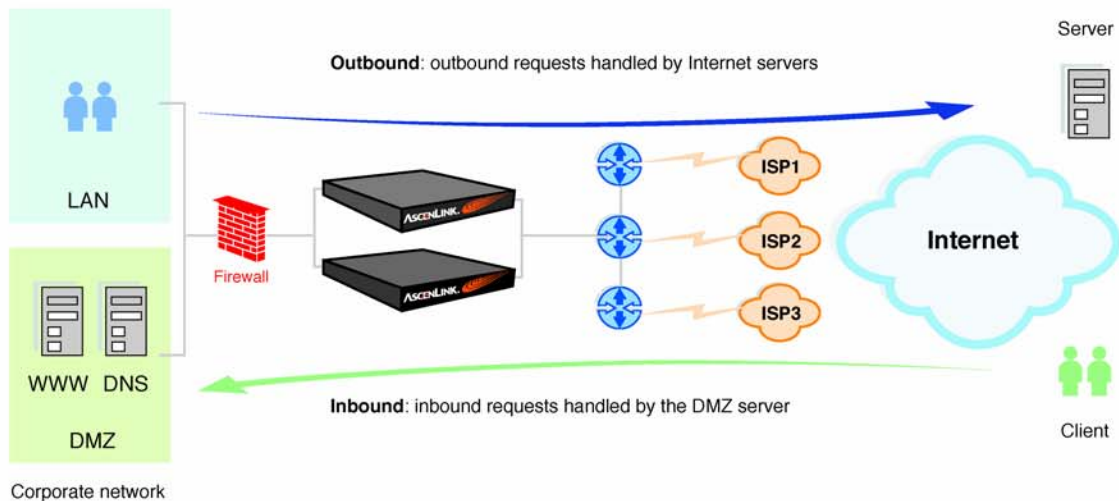
- Aggregate multiple leased and broadband lines
- Provide inbound and outbound traffic load balancing and fault tolerance
- Guarantee 7x24 web presence with a cost-effective multi-homing solution
- Optimize bandwidth utilization with built-in bandwidth management and QoS capabilities
- Block DoS attacks and support DMZ with a built-in firewall
- Reduce overall network cost through multiple WAN integration
- Multi-homing to achieve fault tolerance and load balancing of your web services, including VPNs



Today, fast and reliable Internet access is a basic requirement for any business, including small to medium sized businesses. Business with a single ISP line, however, runs the risk of business discontinuity should the line fail. AscenLink®, the Intelligent WAN Load Balancer seamlessly monitors and adjusts the availability and performance of multiple WAN links, providing fault tolerance and improved overall Internet connectivity.

Featuring the advanced AscenOS developed by AscenVision, AscenLink® provides:

1. **Enhanced Performance:** Faster data transfers come with more bandwidth. AscenLink® increases the bandwidth by trunking inexpensive broadband lines (xDSL and cable) and traditional leased lines together to form a single virtual WAN trunk.
2. **Improved Availability:** Intelligent WAN link health checks and fault tolerance mechanisms ensure reliable connections, while Bandwidth Management (BM) and Access Control Lists (ACL) optimize bandwidth utilization according to your business policies.
3. **Excellent Scalability:** The unique SwiftNAT™ Technology supports the dynamic translation of IP addresses on different ISP lines. In addition, SwiftDNS™'s "Multiple Public IP Pass-Through" capability can establish multiple pass-through connections for public IP addresses and route in-bound requests to the specified servers in the internal network. This enables drop-in deployment with the existing network with no change to the standing configuration. AscenLink® also supports the IEEE 802.1q standard, providing full integration with the existing 802.1q VLAN.
4. **More Efficient Management:** The intuitive multi-language Web-based user interface enables easy configuration, monitoring and management of the network.
5. **Lower Total Cost of Ownership:** AscenLink® helps you to achieve more with less. The multifunctional AscenLink® delivers an excellent price/performance ratio by integrating multiple critical network services into a single device. With AscenLink®, you can effectively reduce leased line expenses as well as total management costs.



### Outbound Load-Balancing

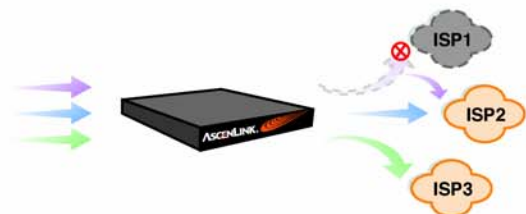
With real-time load sharing and load balancing, AscenLink's intelligent router engine directs each session or connection to the best available link. It also supports policy-based routing, persistent routing, and traffic scheduling to effectively translate your business policy into your network policy.



### Fault Tolerance

The network health check engine monitors the network around the clock and provides fail-over/fail-back functions.

1. **Fail-over:** Whenever a link fails or is unstable, traffic is automatically re-routed to other healthy and available links to ensure uninterrupted connectivity.
2. **Fail-back:** When the faulty link resumes functioning, on-line traffic is redistributed across all available connections to optimize the network performance.



### Inbound Load-Balancing

When external users request the Web server's IP address, SwiftDNS™ dynamically returns DNS responses according to the link quality and load-balances incoming traffic across the different ISP lines.



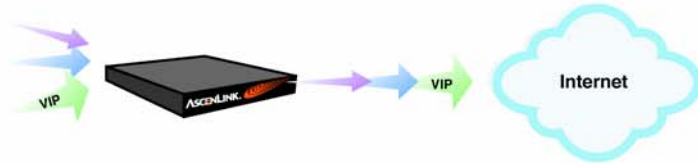
## Multihoming

Health check and SwiftDNS™ guarantee uninterrupted availability through dynamic DNS reconfiguration, which ensures that a response with a valid IP addresses is returned to an external user's request for a web server's IP address.



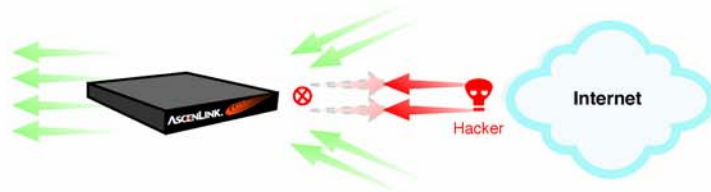
## Policy-Based Bandwidth Management

By filtering out unexpected traffic, AscenLink® optimizes bandwidth utilization and ensures the best transmission quality for the transfer of mission-critical data.



## DoS Protection

AscenLink®'s LAN, WAN and DMZ ports are all equipped with protection against DoS attacks such as SYN Flood and ICMP Vulnerability.



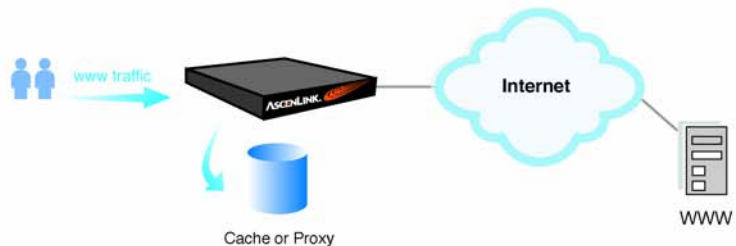
## Policy-Based Access Control List

Firewall access policies, are user definable and can be, based on source, destination, type of service, and IP address. They can be implemented in conjunction with a traffic scheduling policy.



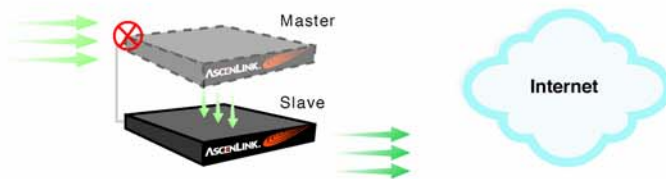
## Web Caching

AscenLink® can improve web access response times by re-directing Web traffic to cache/proxy servers. No expensive Layer 4 switches, WCCP routers, or client browser configuration is required.



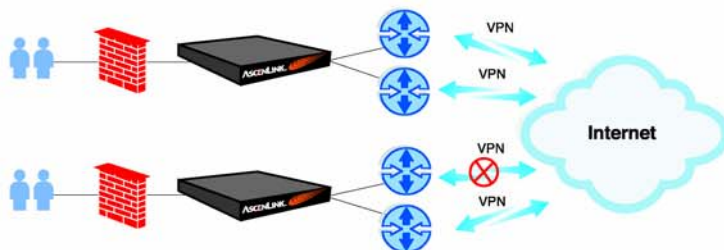
## High Availability

AscenLink® supports a master/slave structure for a timely contingency backup for hardware failure. Two AscenLink® devices can be deployed together as a master/slave pair, with the slave configured to duplicate exactly the master's configuration. Should the master fail, the slave automatically takes over to ensure the smooth transition and continuity of the entire network.



## VPN Load-balance and Fault Tolerance

Using advanced VPN load balancing and fault tolerance technology, two locations can simultaneously set-up multiple VPN connections, and increase the performance and bandwidth of the VPN connections between the two sites. When a WAN link fails, AscenLink® can automatically re-route the VPN tunnel via other healthy WAN link(s) inside the tunnel group, this ensures a non-stop VPN connection and achieves load balancing and fault-tolerance in the VPN network.



## Comprehensive Monitoring and Reporting

AscenLink® provides comprehensive log files for each major function, allowing you to check on network statistics or network bandwidth utilization, at a glance. The built-in real-time monitoring system provides short-term (by sec/min/hr) and long-term (by day/month) statistics for MIS personnel to be on top of the overall network status.



# AscenLink® Product Specification

Model	320	430	680	3820
Environments	Small Business and Branch Office	Medium Business and Branch Office	HQ / Large Enterprise (>10 WAN Links)	HQ / Large Schools / Service Providers
WAN Links	4	8	15	50
WAN Bandwidth	20 Mbps	40 Mbps	60 Mbps	250 Mbps
User Define Port	0	0	0	0
<b>Physical Connection Ports</b>				
10/100 Base - TX	4	5	5	3
10/100/1000 Base - TX	-	-	-	2
1000 Base - SX	-	-	-	2
<b>Load Balancing Algorithm</b>				
Fixed	0	0	0	0
Round - Robin by Weight	0	0	0	0
By Connection	0	0	0	0
Application	0	0	0	0
Round - Robin	0	0	0	0
Traffic	0	0	0	0
<b>Multihoming</b>				
Fault Tolerance	0	0	0	0
Inbound Load Balancing	0	0	0	0
User Defined Multihoming TTL	0	0	0	0
Multiple Domain	0	0	0	0
Build-in DNS Server	0	0	0	0
<b>Policy Bandwidth Management</b>				
Max. and Min. Bandwidth	0	0	0	0
QoS Priority	0	0	0	0
Source / Destination IP Address	0	0	0	0
Schedule	0	0	0	0
<b>Firewall / Access Control List</b>				
DoS Protection	0	0	0	0
Access Control	0	0	0	0
DMZ	0	0	0	0
NAT	0	0	0	0
VPN Pass Through	0	0	0	0
VPN Fault Tolerance	0	0	0	0
VPN Load Balancing	0	0	0	0
H .323 Support	0	0	0	0
PPPoE	0	0	0	0
LinkReport Support	0	0	0	0
Multiple Public IP Pass-Through	0	0	0	0
IEEE 802.1q VLAN	X	X	X	0
Persistent Routing	0	0	0	0
Web Cache Redirection	0	0	0	0
HA (High Availability)	X	0	0	0
Service Grouping / IP Grouping	0	0	0	0
Dial-on Demand Routing	0	0	0	0
Connection Limit	0	0	0	0
<b>Management</b>				
Web Admin / Https	0	0	0	0
SNMP	0	0	0	0
MRTG Support	0	0	0	0
Form Factor	1 U	1 U	1 U	2 U
Warranty	One Year	One Year	One Year	One Year

\* This specification is subject to changes without notification.

\* LinkReport™ is optional.

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\* For more information on AscenVision and product lines, you are cordially invited to visit our website at [www.ascenvision.com](http://www.ascenvision.com).

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**AscenVision Technology Inc.**

1600 Saratoga Avenue, # 403- 138, San Jose, CA 95129, USA

TEL: (+1) 408-705-1152 Fax: (+1) 408-850-1943

