

Nortel Networks

# Alteon Link Optimizer

*Fail-safe business continuity, network optimization, and security for multi-homing*

Enterprises are increasingly relying on Internet applications to enhance productivity and drive revenue. Demand on networks is escalating at a time when IT organizations are under constant pressure to do more with less. Ensuring a network is optimized for application performance and provides fail-safe business continuity is not only critical to an enterprise's success, but can also save money. Highly available WAN (intranet and Internet) links help enterprises achieve these goals. Multi-homing (multiple WAN links) is the traditional solution to provide highly available WAN connections. Multi-homing can be very complicated to implement and easily lead to over-provisioning, idle resources, and wasted capital. To combat these challenges, Nortel Networks Alteon Link Optimizer is designed to simplify multi-homing and optimize multiple WAN links for application performance, scalability, and cost-effectiveness while also providing a first line of security for network assets. With both Fast Ethernet and Gigabit Ethernet models available, enterprises can choose a model best suited to meet their network requirements for maximum ROI.

## Key features and benefits

The Alteon Link Optimizer provides a number of significant features and benefits for enterprises:

- **Enables fail-safe business continuity by efficiently load balancing multiple WAN links and providing link failover.** The Alteon Link Optimizer enables highly available network connections by utilizing intelligent traffic management and health checking to measure link conditions and upstream routers. It identifies the best WAN link to route both incoming and

outbound traffic based on business policies and network conditions. It also protects applications against WAN or Internet link failure, with sub-second detection and failover. Constant link monitoring helps ensure availability, bypassing unhealthy links when distributing new sessions and automatically re-enrolling them upon service restoration. Intelligent application health checking builds integrity across the entire data path.

- **Improves business productivity and simplifies operations by optimizing WAN links for application performance.**

The Alteon Link Optimizer greatly simplifies the deployment of multi-homing by providing link persistency, address management, and DNS support. It negates the need to implement a more complicated border gateway protocol (BGP) solution because it does not require an autonomous system number (ASN) for multi-homing. Utilizing a full set of load balancing and health checking algorithms along with bandwidth rate limiting, applications and client access receive the network resources needed to maximize productivity. Allowing previously idled backup WAN links or trunked combinations of less expensive WAN links to carry traffic can greatly reduce the expense and enhance the availability of network connections.

- **Protects applications and networks via multi-layer security.** The Alteon Link Optimizer provides the first line of network defense by utilizing sophisticated denial of service and application abuse protection, port mirroring, access lists, filtering, and Intrusion-Detection System load balancing.



- **Scales business applications and network capacity efficiently without downtime.** The Alteon Link Optimizer supports graceful scalability of WAN link capacity by allowing IT administrators to add additional capacity without service interruption. Alteon Link Optimizers support high-availability architectures by removing single points of network failure with support for VRRP active-active, active-standby, and hot standby configurations.
- **Maximizes return on IT investment.** The Alteon Link Optimizer allows enterprises to use existing infrastructure more efficiently, simplify network design, provide security and scalability, and adjust the network quickly to meet rapidly changing business requirements. As a result, enterprises can reduce infrastructure and operating expenses, maximizing return on investment of network and data center assets. In addition, with a software upgrade Alteon Link Optimizers can be extended to full Alteon Web Switch functionality (Server load balancing, VPN load balancing, etc.).

For additional detail on the Alteon Link Optimizer, please refer to the resources available at [www.nortelnetworks.com/alteon](http://www.nortelnetworks.com/alteon).

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## Alteon Link Optimizer Models

### Alteon Link Optimizer 143

- 10/100Base-T Mbps ports: 8
- 1000Base-SX Mbps ports: 1
- Total ports: 9

### Alteon Link Optimizer 150

- 10/100 Base-T Mbps ports: 8
- 1000 Base-SX Mbps ports: 9
- Total ports: 9

## Technical specifications— Physical and operational

### Technical specifications

- Concurrent sessions: 336,000
- Sessions per second: > 24,000 with zero packet loss (real-world performance)
- IP routing interfaces: 256
- Virtual server support: 256
- Policy filters: 224
- VLANs: 246
- Default gateways: 250
- Trunk groups: 4
- Switch capacity: 8Gbps
- Height: 3.47 inches (2-RU)
- Depth: 18.00 inches
- Width: 17.00 inches

### Network protocol and standards compatibility

- 10Base-T/100Base-TX
- 1000Base-SX (IEEE 802.3z)
- Spanning Tree (IEEE 802.1d)
- Logical Link Control (IEEE 802.2)
- Flow Control (IEEE 802.3x)
- VLANs (IEEE 802.1Q)
- Frame Tagging (IEEE 802.1Q) on all ports when VLANs enabled
- RIPv1
- TFTP (RFC 783)
- BootP (RFC 1542) ; BootP (RFC 951)
- SNMP support: RFC 1213 MIB-II, RFC 1493 Bridge MIB, RFC 1398 Ethernet-like MIB, Alteon Enterprise MIB
- Telnet (RFC 854)
- EtherChannel-compatible trunking
- IP-based trunking

### Power

#### Auto-ranging power supply:

100-240 VAC @ 3 Amps, 50-60 Hz

#### Maximum power consumption:

90 Watts

### Environmental

#### Temperature:

0° to 40° C (+32° to +104° F)

#### Relative humidity:

5 - 85% non-condensing

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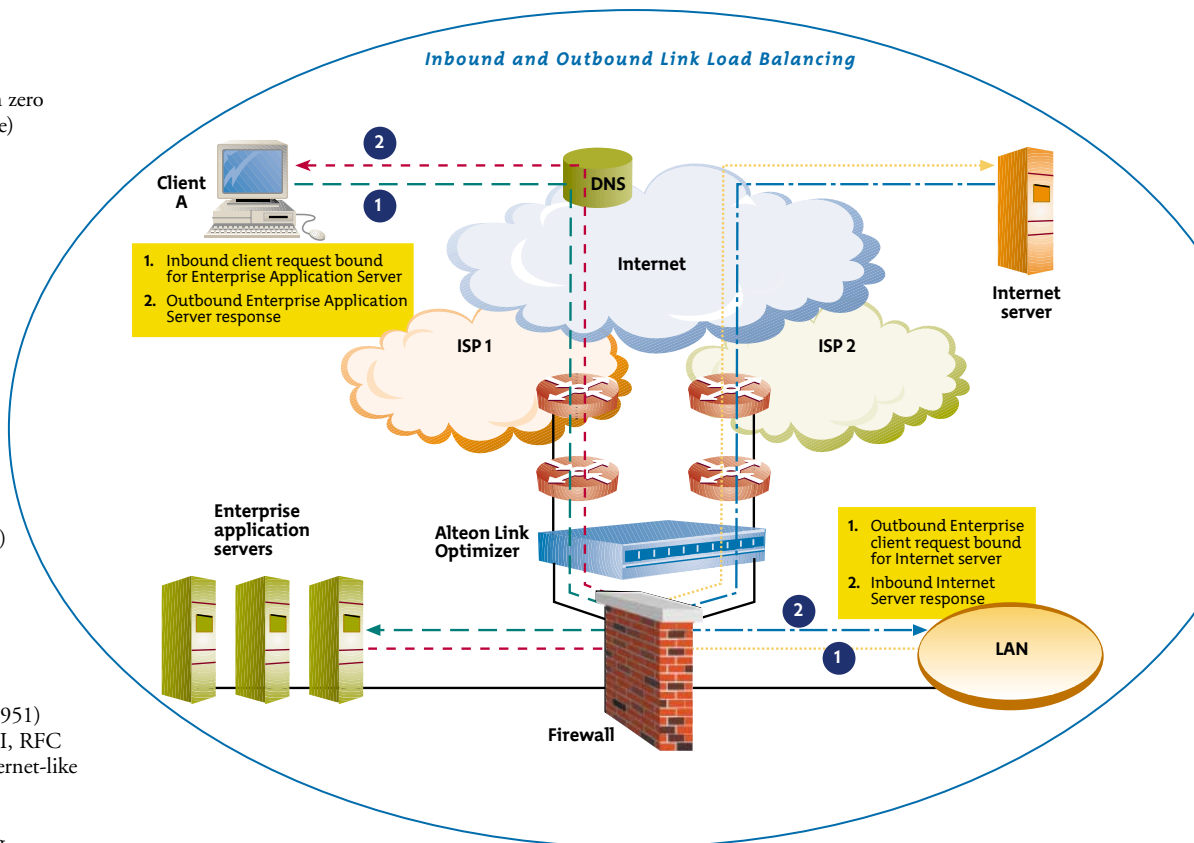
## Certifications

### EMC (Electromagnetic requirements)

- CISPR 22/CISPR 24 (International)
- FCC, CFR 47 Part 15, Class A (USA)
- CSA CSO3 Class A (Canada)
- VCCI Class A (Japan)
- EN 55022/EN 55024 (with required subtest) (Europe)
- AS/NZ 3548 (Australia/New Zealand)
- CNS 13438 (Taiwan)
- MIC (Korea)

## Safety

- IEC 60950 (International)
- National Deviation per CB Member Countries to IEC 60950
- UL 1950 (USA)
- CSA 22.2, No. 950 (Canada)
- EN 60950 (Europe)
- NOM-D19-SCFI - 1998 (Mexico)
- IEC 60950 with deviations (Argentina)
- IEC 60950 with deviations (Chile)



# NORTEL NETWORKS™

Nortel Networks is an industry leader and innovator focused on transforming how the world communicates and exchanges information. The company is supplying its service provider and enterprise customers with communications technology and infrastructure to enable value-added IP data, voice and multimedia services spanning Metro and Enterprise Networks, Wireless and Enterprise Networks, and Optical Long Haul Networks. As a global company, Nortel Networks does business in more than 150 countries. More information about Nortel Networks can be found on the web at:

[www.nortelnetworks.com](http://www.nortelnetworks.com)

For more information, contact your Nortel Networks representative, or call 1-800-4 NORTEL or 1-800-466-7835 from anywhere in North America.

GSA Schedule GS-35F-0140L  
1-888-GSA-NTEL

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