

Integrated ServiceDirector™

iSD - SSL ACCELERATOR

The Alteon integrated ServiceDirector (iSD) is an innovative service delivery platform designed to provide a variety of value-added traffic management applications that further extend the performance, scalability and flexibility of advanced Web switching infrastructures. Targeted at Web hosters, application service providers, content and eCommerce companies, Alteon iSD products intelligently speed application and content delivery by offloading compute-intensive functions from servers. Purpose-built to perform processing tasks with long duty-cycles that would otherwise bog down network performance, the iSD seamlessly integrates with Alteon Web switches to offer the best of Web switching and IP appliance technologies. First in this family, the Alteon iSD-SSL intelligently accelerates secure eCommerce transactions by offloading Secure Sockets Layer (SSL) processing from local servers without imposing delays on other traffic in the same data path.

FEATURES

- Processes up to 12,000 SSL sessions per second on a single Web switch
- Processes SSL transactions 5 to 250 times faster than an HTTPS server
- Hardware offload for compute-intensive secure key exchange
- Maintains session context between HTTP and HTTP-S
- Content-switching services for secure SSL sessions
- Shopping-cart persistence without server reconfiguration or waste of VIP addresses
- Integrated, secured management
- Scalable to 32 load balancing iSDs per Web switch for performance and redundancy
- Rack-mountable 1U high unit
- Single 10/100 Mbps copper or 1,000 Mbps fiber link from iSD to Web switch
- Attach to Web switch directly or across a local broadcast domain
- Supports SSL v2.0 and 3.0

www.alteonwebsystems.com

Scalable SSL Front-End Offloads Tired Secure Web Servers

Working in concert with Alteon Web switches, the iSD-SSL offers a scalable platform that maximizes secure eCommerce performance and extends Web OS content-intelligent traffic management services to encrypted traffic. Attached via a single 10, 100 or 1,000 Mbps Ethernet link, the Alteon Web switch transparently redirects all SSL-encrypted requests to the iSD-SSL for processing. The iSD-SSL terminates each client HTTP-S session, performs hardware-assisted key exchange with the client and establishes a HTTP session to the chosen Web server. On the return path, the iSD-SSL encrypts the server response according to the negotiated encryption rules and forwards it to the requesting client using the established, secure HTTP-S session. Up to 32 iSD-SSL units can be load balanced transparently by an Alteon Web switch to form a super-fast, scalable and fault-tolerant SSL front-end for traffic-intensive eCommerce sites.

Industry's Highest Performing SSL Processing Engine

Relieving Web servers of processing-intensive SSL key exchange and encryption/decryption functions, an Alteon Web switch paired with one or more iSD-SSL units can process 400 to 12,000 SSL sessions per second, which is 5 to 250 times as many transactions as an HTTP-S server can handle. The iSD-SSL frees up server resources for application processing and maximizes installed server investment.

Content-intelligent Switching for Secured Web Sessions

Since the iSD-SSL renders encrypted sessions visible to the Web switch, Alteon's Web OS content-intelligent services, involving the inspection and parsing of HTTP headers, cookies and Uniform Resource Locators (URLs), can now be applied to secure Web traffic. This enables eCommerce operators to distribute secure Web sessions to specific Web servers based on user attributes such as geography, language, the user's browser device, or priority; as well as by the content type requested, such as static versus dynamic content. With the iSD-SSL, hosters and application service providers can now offer value-added, content-intelligent bandwidth metering and QoS services to their eCommerce and enterprise customers.

Hassle-Free Shopping-Cart Persistence

By peering into the encrypted portion of an eCommerce transaction, the Alteon Web switch can now use HTTP cookies to "glue" both HTTP and HTTP-S connections from the same user to the same Web server. This solves the widespread eCommerce



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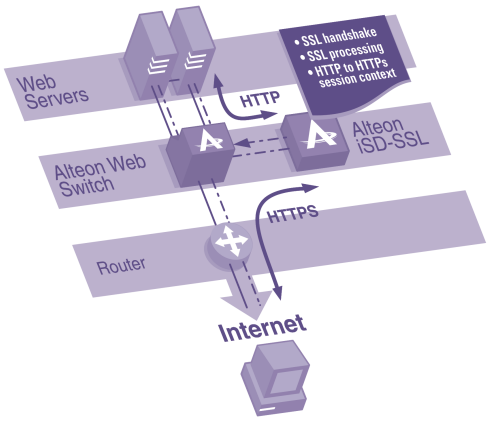
iSD-SSL ACCELERATOR

Part #	Product
700203	iSD-SSL Accelerator, 1000BASE-SX
700204	iSD-SSL Accelerator, 10/100BASET-TX

problem of lost shopping carts which are often caused when a proxy changes a user's IP address during a secure payment session. Terminating the SSL session using the iSD-SSL is far simpler and more reliable than other methods of achieving shopping-cart persistence, which involve manual Web server reconfigurations or the squandering of valuable public IP addresses. In the same way, SSL termination provides reliable persistence for sites that previously used the SSL session ID for persistence, despite frequent browser software SSL session timeouts.

Non-Intrusive Integration

Unlike traditional IP appliances that must be located directly in the data path, Alteon iSD products are non-intrusive to existing network topologies. Attached directly or across a local broadcast domain to a Web switch, the Alteon iSD appears to the Web switch as another transparent server, allowing all Web OS traffic management services, including load balancing, filtering, network address translation, policy redirection, automatic failover, and intelligent, scriptable server healthchecks, to be configured for one or a group of iSDs.



Seamless, Secure Management

Operation and management of the Alteon iSD-SSL is performed seamlessly through the Web OS secured management interface on the Alteon Web switch. A load-sharing Alteon iSD cluster is put on a VLAN with private addressing and can be monitored through the Web switch's SNMP services. To ensure secured access, administrators can restrict iSD management to only the Web switch interface. Consolidated management allows operators to integrate Alteon iSD products into their infrastructure in a graceful, non-disruptive manner.

S P E C I F I C A T I O N S

10BASE-T/100BASE-TX Port

10/100 full or half-duplex (auto-negotiation) with RJ-45 connections for UTP ports

RS-232C Console

DB-9 serial connection, female DCE interface for out-of-band management

1000BASE-SX Port

Full-duplex Gigabit Ethernet with SC fiber connector

Security Algorithms Supported

RC2, RC4, DES, 3DES, IDEA, MD5, SHA1

Environmental

Operating
– Temperature 0 to 50° C
– Humidity 5% to 85% @ 40° C (non-condensing)

Power
– Auto-ranging supply: 90-265 VAC@ 47-65 Hz
– Power consumption: 250W-AC +5V/25A, +12V/10, -12V/0.5A, -5V/0.5A

Certifications

Emissions: US – FCC 47 CFR Part 15; Canada – ICES-003; Europe – CISPR22; CE Mark to EN55022/EN50082
Safety: UL 1950, CSA C22.2 No. 950, CE Mark EN60950, IEC 950

Dimensions

Width: 17.00 inches (43.2 cm)
Depth: 18.00 inches (45.7 cm)
Height: 1.6 inches (4 cm)
Weight: 9 lbs (4.1 kg)
(Standard 19" EIA rack or wall mountable)

MTBF

>50,000 hours

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