TippingPoint_1500S_SSL_Appliance

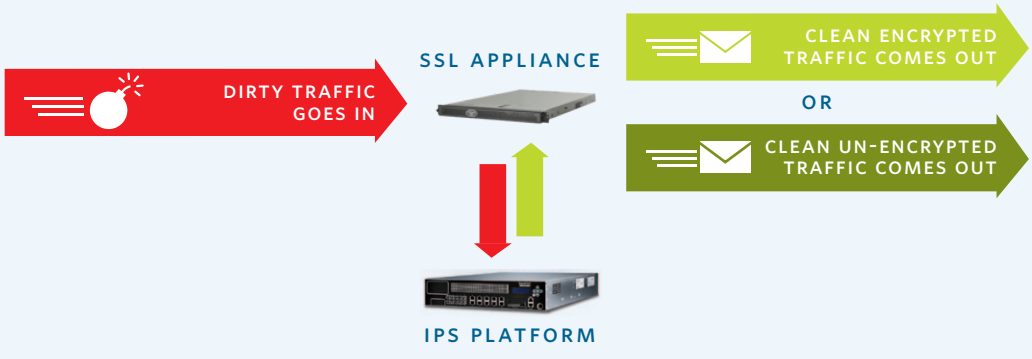
The TippingPoint SSL Appliance provides hardware accelerated Secure Sockets Layer (SSL) offloading and bridging to enable high-performance IPS inspection of SSL encrypted traffic increasing security coverage in next-generation data centers. This easy-to-use SSL Appliance helps prevent encrypted attacks from compromising Web servers and Web applications and helps enterprises address compliance requirements without impacting the performance or availability of the network.

Increased_Application_and_Server_Security

Next generation data centers are experiencing tremendous growth in the number of Web applications and the amount of Web traffic. Recent reports show that Web application vulnerabilities and the associated attacks on these vulnerabilities are the fastest growing threats to large enterprises. At the same time, an increasing amount of sensitive data—from passwords to credit card numbers—is flowing between Web servers and users, which can be easily snooped on over the wire or wirelessly with freely available tools.

As a result, enterprises are increasingly turning to SSL encryption to ensure the privacy and security of their Web traffic and intrusion prevention systems (IPS) platforms to proactively block attacks on the data center. The TippingPoint SSL Appliance, together with the IPS Platform, protects the entire attack surface of the data center including networking equipment, server operating

TippingPoint's_SSL_Appliance



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systems, enterprise data center applications and Web applications.

The SSL Appliance provides high-performance, highly scalable SSL offloading and bridging for these next-generation data center environments. This enables high-performance IPS inspection of SSL encrypted traffic to prevent encrypted attacks from compromising Web servers and Web applications without impacting the performance or availability of the network.

Supports_Advanced_Encryption_Standards

The TippingPoint SSL Appliance supports multiple advanced encryption standards including AES, RC4, DES and 3DES encryption algorithms providing the most secure SSL encryption on the market.

High-Performance,_Transparent_SSL_Off-Loading_and_Bridging

The TippingPoint SSL Appliance provides high-performance, hardware accelerated SSL decryption and encryption capabilities suitable for deployment in high bandwidth critical network environments. In addition, the SSL Appliance is transparent to the network, like TippingPoint's IPS Platforms, eliminating the need for costly reconfiguration of the network, servers or clients.

In addition, the SSL Appliance can be deployed in both SSL off-loading and bridging configurations. **SSL offloading** relieves Web servers of the processing burden of decrypting and encrypting SSL traffic from Web browsers. The processing is offloaded to the SSL Appliance specifically to perform SSL acceleration and termination. **SSL bridging** occurs when the SSL Appliance is located at the edge of the data center and decrypts SSL traffic for IPS Platform inspection and then re-encrypts the traffic before sending it on to the Web server. SSL bridging can be useful when there are security concerns about unencrypted traffic traversing the internal network. SSL off-loading offers higher overall throughput than SSL bridging.

Carrier_Class_Reliability

When it comes to deployment of security solutions in critical parts of the network such as the data center, maintaining business continuity or up-time is the first priority. TippingPoint products are known in the industry for being designed to deliver carrier-class reliability with built-in high-availability features and redundancy deployment options.

The SSL Appliance is designed to deliver this same level of reliability including dual hot-swappable power supplies and built-in Zero Power High Availability (ZPHA) Bypass on all network ports. The ZPHA Bypass feature ensures the SSL Appliance will fail-open or fail-closed, depending on customer configuration, in the event of a loss of power. In addition, the SSL Appliance provides IPS bypass when an IPS link down state is detected and network link down synchronization to propagate network failures allowing network failover systems to deploy.

Contributes_to_Regulatory_Compliance_Efforts

TippingPoint solutions can be a critical component in any IT compliance program. Organizations need solutions that help them enforce security policy on network traffic flows including encrypted traffic flows. The TippingPoint SSL Appliance is a component of the overall IPS solution that demonstrates to auditors that the network is protected from the latest threats.

As part of the overall IPS solution, the SSL Appliance enables high-performance IPS inspection of SSL encrypted flows without compromising any aspect of enterprise or government-regulated compliance efforts, and contributes to the requirement that encrypted traffic used for privacy protection be fully inspected for malicious content.

TippingPoint_1500S_SSL_Appliance

In the face of these stringent security policies and other regulatory demands, TippingPoint solutions, including the SSL Appliance, provide automated enforcement of network security policies for both encrypted and unencrypted traffic flows. TippingPoint automates network protection from malicious attacks, provides attack isolation and network discovery of vulnerable devices, and enables traffic shaping to support critical applications and infrastructure.

In addition, the TippingPoint IPS solution may provide a "compensating control" where a requirement is not specifically satisfied with other solutions or processes.

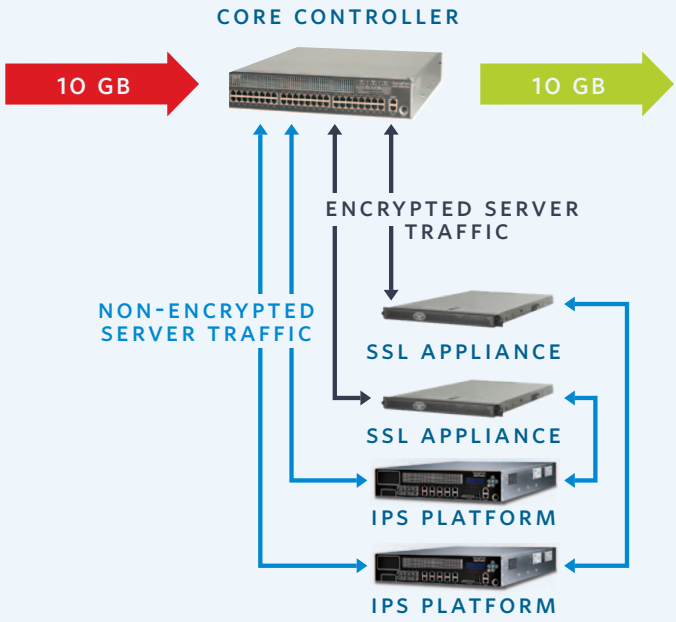
Minimizes_Overall_Security_OPEX

In addition to improving IT compliance efforts, the TippingPoint SSL Appliance also contributes to reducing overall security operating expenses (OPEX). When used for SSL off-loading, the SSL Appliance offloads computationally intensive SSL decryption and encryption, reducing server processor utilization significantly. Since the SSL Appliance is transparent to the network, it eliminates the need for costly reconfiguration of network elements, clients and servers; and when deployed with the IPS solution, it helps minimize the risk of server and application compromises from attacks within SSL encrypted flows on the network. Finally, using the SSL Appliance with the IPS Platform allows organizations to separately optimize the SSL decryption capacity and IPS inspection capacity, as opposed to an integrated "do-it-all" device.

Easy-To-Use_SSL_Off-Loading_and_Key_Management

The SSL Appliance provides easy-to-use Web-based management making administration of the solution simple and minimizing IT configuration and management demands. Policy-based control provides the ability to determine which SSL encrypted flows should be decrypted for

Highly_Scalable_IPS_Solutions_for_Data_Center_Environments



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inspection purposes and which should not. To ensure administrators can monitor the SSL Appliance, logs can be configured to trigger alerts to notify designated support personnel via e-mail immediately.

The SSL Appliance can reduce SSL management and costs by consolidating private key storage and SSL certificate management. The SSL Appliance also provides encrypted key storage and hardware tamper detection to detect when the chassis has been opened or a potential security breach has occurred even when powered off.

Highly_Scalable_for_Data_Center_Environments

In highly critical, high-performing network environments, the SSL Appliance can be deployed with the TippingPoint Core Controller solution to provide highly scalable, redundant SSL off-loading and SSL bridging capabilities for inspection of encrypted network traffic.

In this scenario, organizations can migrate their communications to SSL using secure ciphers with virtually no network bottlenecks or application performance penalty. The TippingPoint Core Controller solution allows organizations to add capacity as needed creating a "pay as you grow" security model including SSL inspection capacity.

1500S Technical Specifications

Performance – Pass Through

- Inspection Throughput: N/A
- Network Throughput: up to 2 Gbps[1]
- Typical Latency: <80 microseconds
- Total Sessions: 2,000,000
- Connections per Second: 50,000

Performance – SSL

- SSL Throughput: 1 Gpbs / 500 Mbps[2]
- SSL Total Sessions: 32,000 / 16,000[2]
- SSL Connections per Second: 5,000 / 2,500[2]

1. Actual throughput depends on traffic mix
2. Performance data for 1500S is based on 2 types of traffic: SSL decrypt / SSL decrypt and re-encrypt

Hardware Specifications

- Scalability: 8x10/100/1000 BaseT copper ports (2 segments)
- Power-AC:
  - 100-240 VAC universal, 50-60 Hz
  - 220W, 751 BTU/hr
- Power-Optional DC: Not available

Physical Dimensions

- Height (in): 2.75 in.
- Height (cm): 6.985 cm.
- Width (in): 17.00 in.
- Width (cm): 46.75 cm.
- Depth (in): 21.50 in.
- Depth (cm): 59.125 cm.
- Weight (lb): 21 lbs.
- Weight (kg): 9.4 kg.

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