Third-Largest European Bank Partners with Radware to Solve Encrypted Traffic-Processing Woes

THE CHALLENGES
Due to a dramatic increase in encrypted traffic, this financial services firm needed to improve its ability to process inbound encrypted traffic to safeguard its applications and enhance the quality of experience for customers.

THE SOLUTION
Radware Alteon was implemented in four data centers. Alteon is a next-generation ADC that provides best-of-breed application delivery and enhanced SSL traffic processing.

WHY RADWARE
During test simulations that used actual network traffic loads, Alteon surpassed the competition in performance, including connections per second and throughput levels.

BENEFITS
Alteon has allowed the bank to process higher volumes of inbound encrypted traffic without creating application latency.

This financial institution is the third-largest bank in Europe with over 16,500 offices and 250,000 employees. With a presence in over 12 countries, this bank has more than 86 million retail clients and two million corporate clients and is a longtime Radware customer that relies on Alteon for its application delivery needs.

THE CHALLENGES

Due to the increased reliance on applications, the demand to improve the quality of experience for customers and to safeguard data was critical. In recent years, this financial services company has seen a dramatic increase in the level of encrypted traffic. Ninety percent of the bank's inbound network traffic is now encrypted, and as a result, network traffic processing loads have increased exponentially due to stronger encryption ciphers.

To keep their applications secure, banks will traditionally rely on web application firewalls (WAFs); however, this bank's WAF provider did not have the capacity required to decrypt, inspect and re-encrypt large volumes of traffic. Moreover, using a WAF for encrypted traffic inspection will

often result in increased latency, negatively impacting application performance. The bank had three major technical issues affecting its business that had to be solved.

> The capacity to handle high volumes of inbound encrypted traffic and concurrent connections per second. This volume of traffic was slowing the bank's network infrastructure and creating application latency.

> The ability to work with global ciphers and adapt to new encryption technology. Since it is a global financial institution, the bank needed to process traffic from anywhere in the world. The new solution would have to support new encryption protocols, including TLS 1.0 through 1.3, and have enough resources to process traffic without creating application latency.

> Enough processing power to accept traffic, decrypt it, inspect it and then re-encrypt it leveraging a low-level cypher. This was required because the bank's WAF solution could not handle the connections per second and traffic throughput levels when higher-level encryption protocols were used.

THE SOLUTION

With its technical requirements defined, the bank went to market and began evaluating a series of vendors that provide SSL offload solutions, including F5 Networks and Citrix. Ultimately, Radware's Alteon application delivery controller (ADC) solution was selected as the winner. Alteon is a next-generation ADC that provides best-of-breed application delivery capabilities and SSL performance that supports all encryption protocols. During test simulations that used actual network traffic loads, Alteon surpassed the competition in performance, including connections per second and throughput levels.

The final solution was the implementation of eight Alteon ADCs in three data centers, with a fourth data center serving as a failover center. The Alteons were implemented in front of the bank's WAF to offload encrypted traffic and ensure accurate and timely processing.

BENEFITS

The implementation of Radware Alteon has allowed the financial services company to improve the quality of experience for customers and application performance. Alteon is able to process inbound encrypted traffic using diverse encryption algorithms without creating application latency. The bank is confident that it has implemented an ADC solution that will support new encryption protocols and technologies as they become available.