Leading Financial Institution Turns to IP Appliance Multi-Core Security Platforms to Meet Performance and Traffic Requirements

This leading international financial services organization, headquartered in Australia, serves millions of individual and business customers every day. The bank provides a comprehensive and integrated range of financial products and services, including retail, business, and corporate banking. These services encompass innovative wealth management, insurance services, institutional banking, and capital market services such as debt and risk management and investment products for corporate and institutional customers.

THE CHALLENGE

With its network traffic rapidly growing and more services being brought online, this major international financial services organization recognized the need for a more robust network security solution. IT managers determined that the bank’s perimeter security was insufficient, and that the bank required multiple tiers of security to properly protect the internal core network and server infrastructure behind its firewalls.

Additionally, the evaluation of the bank’s existing technology revealed that the general-use server running the bank’s secure platform was inadequate. With CPU loads running at 99 percent during peak operations, it was clear that the current system would not meet the bank’s future performance demands.

“As we increasingly rely on third-party organizations to handle critical back-end processing for the bank, our IT department is essentially becoming an internal service provider for the entire organization,” explained the bank’s IT security manager. “It is incumbent upon IT to make sure these third-party organizations are able to access the information they need in order to meet the bank’s stringent requirements. That is why the performance and reliability of our platforms is so important.”
THE CHECK POINT SOLUTION
To address its critical network and traffic concerns the bank re-architected its infrastructure with a modular and flexible network security solution. Specifically, Check Point IP2450 multi-core security gateways were chosen because they offer the bank add-on scalability, resilience, and hardware-based redundancy.

Four IP2450 multi-core firewalls, running Check Point software and incorporating four add-on Accelerated Data Path (ADP) service modules, were installed to provide optimum performance and to meet the bank’s stringent latency demands today and well into the future.

IP2450 is a next-generation security appliance well suited for the multigigabit throughput requirements of the bank. Using a two-rack-unit form factor, IP2450 features two quad-core Intel CPUs and supports multi-core and multiprocessing business security applications. Additionally, the IP2450 security platform is purpose built to run Check Point SecureXL™ and Check Point CoreXL software to further improve security performance.

High port density ADP service modules meet the bank’s evolving network-traffic demands. Working in conjunction with IP2450 security appliances, workloads can be effectively offloaded from the main CPU onto ADP service modules to increase performance significantly. This “appliance within an appliance” ADP architecture functions similarly to a network co-processor, freeing up resources and delivering substantial efficiencies.

THE BENEFITS
Since its implementation of Check Point IP2450 platforms with ADP technology, the bank has been able to triple performance over its prior solution—without the need for load balancing between several hardware units. ADP service modules offer increased small-packet performance from 800 Mbps up to 4.5 Gbps, IMIX from 4.3 Gbps up to 16.25 Gbps, and reduced latency from 100 usec to less than 40 usec. Improved throughput with the ADP modules has maximized the likelihood that internal processors are not overtaxed. Additionally, IP2450 platforms are scalable to meet the bank’s future needs.

“A major factor in choosing IP Appliances for this infrastructure upgrade was our prior experience with their expert security solutions team and the exceptional support track record they’ve established,” added the bank’s IT security manager. “The solid reliability IP Appliances offer and their unique modular and cost-effective approach with their multi-core architecture reassured us that we were making the right decision. The level of dependability—from a product and service standpoint—delivered is essential for our business.”

In addition, the bank’s IT security manager cited product functionality, an exceptional price/performance ratio, and ease of operation as key differentiators for the IP Appliances.