

## PACCESS Accelerates Web Traffic with Juniper Networks

**Organization:**

PACCESS

**Industry:**

Packaging, materials sourcing and supply chain operation

**Challenge:**

Increase utilization of existing bandwidth, reduce application latency and enable traffic prioritization without increasing bandwidth costs

**Solution:**

Juniper Networks WXC application acceleration platform

**Benefits:**

- Increased bandwidth by 50%
- Reduced application latency by 60%
- Cost savings and fast ROI within six months

PACCESS is a global service company focused on helping customers improve their packaging, materials sourcing and supply chain operations. With expertise in packaging design, procurement, materials management, logistics, distribution and order fulfillment, PACCESS conceives, builds and delivers solutions through a bundle of integrated products and services for companies with complex business processes across a global landscape.

From its corporate headquarters in Portland, Oregon and offices in China, Indonesia, Thailand, Taiwan, Turkey, Switzerland, India and Vietnam, PACCESS has progressively expanded the scope of its business services with a vision to assemble, connect and synchronize raw material vendors, finished product manufacturers and global brands into an integrated value chain.

With an international presence, the network plays an important role in facilitating communications across the company and its business units. Files are shared across the network and around the world and the company's network must keep pace in an environment where data capacity doubles every year and bandwidth remains costly, particularly in Asia. The company's Shenzhen, China location relied on a 512K frame relay connection that was having trouble handling the large graphics files it exchanged with headquarters, but increasing bandwidth to improve application performance and relieve traffic congestion would have been costly. Upgrading another location's 128K connection would have doubled frame relay costs.

"In several of our worldwide locations users were experiencing application latency of up to three seconds," explains Nina Palludan, Vice President of Information Technology. "With virtual teams located around the world, it is imperative that we have a cost-effective solution that reduces network traffic, accelerates applications and reduces latency."

With file sharing applications that include large PDF and CAD files that take an enormous amount of time to send across the network, as well as worldwide Windows services that require synchronous operations, PACCESS was experiencing significant traffic across the network. The network became so congested, e-mail and graphics files were starting to affect the performance of

business-critical enterprise applications such as Oracle. PACCESS needed a cost-effective approach for optimizing WAN performance.

“We needed to optimize bandwidth and prioritize traffic,” says Jim Trappe, network administrator at PACCESS. “By increasing utilization of our existing bandwidth we could save costs and improve application performance. The Juniper Networks WXC platform enables us to do that.”

## The Solution

When looking for an application acceleration solution, PACCESS had two requirements. They needed to improve utilization of existing bandwidth and have the ability to prioritize traffic. Once these requirements were set, Juniper Networks was the only vendor they considered.

With network demands doubling every year, PACCESS realized the importance of selecting application acceleration products that would not only meet their needs this year, but also in years to come. PACCESS selected and installed a Juniper Networks WXC 500 application acceleration platform in its Portland headquarters and additional WXC 250 platforms in three offices in Asia.

The Juniper Networks WXC application acceleration platform provides a scalable approach to accelerating application delivery over the WAN. Based on the integrated WX framework, which delivers all the elements needed to accelerate applications and optimize WAN performance, the WXC platforms help PACCESS more efficiently utilize existing bandwidth, improve application response times, maximize WAN investments and control and prioritize key applications.

The WXC 250, which includes a 40 GB hard drive and scales from 128 Kbps to 2 Mbps and the WXC 500, which features a 500 GB hard drive and scales from 512 Kbps to 20 Mbps, support Juniper’s unique Network Sequence Caching technology, which dramatically speeds the transfer of large files by eliminating repetitive data sequences from files being sent across the WAN. The hard-drive storage supplies the capacity needed to store long data sequences for long periods of time, enabling up to 100-fold increases in WAN capacity.

The WXC’s are also improving application performance by providing QoS and other bandwidth-management features. This enables Paccess to prioritize application traffic and ensure that business-critical operations are always completed quickly and accurately, regardless of how much traffic is on the WAN.

“The technical expertise we received from Juniper Networks, as well as superb global support, helped us get the WXC platform up and running quickly,” explains Trappe.

WXC platforms can be installed and configured quickly and easily using a Web-based wizard. Configuration can also be fully automated using the WX operating system (WXOS™) and WX Central Management System™ (WX CMS™) software. PACCESS simply defined centralized configuration templates so that when remote WXC platforms boot up, they retrieve a network address, locate the WX CMS server through the domain name service (DNS), download their configuration file and begin operation.

## The Benefits

With the Juniper Networks WXC application acceleration platform, PACCESS was able to solve its bandwidth and application performance issues while avoiding the considerable expense associated with upgrading bandwidth.

“Since installing the Juniper application acceleration solution, the results have been dramatic,” notes Palludan. “We immediately saw an increase of more than 50 percent in our network bandwidth and our increased ability to prioritize application traffic has contributed to the success of the solution.”

In addition to improved bandwidth, application latency has significantly decreased by 60 percent. What used to take two seconds now takes less than a second due to a 30 to 50 percent file compression, saving users valuable time. PACCESS has also experienced other benefits associated with file compression, including improved mirror caching and the ability to use Quality of Service (QoS) to prioritize network traffic.

Given the cost savings associated with eliminating the need to upgrade bandwidth, as well as the improved performance and reduced application latency for our applications, PACCESS found it easy to cost justify the new WXC platform. Within eight months of installing the Juniper Networks WXC units, PACCESS has seen dramatic ROI.



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