

Global distributor assures network uptime and voice service quality with intelligent, business-driven SD-WAN platform

Westcon-Comstor gains up to tenfold increase in available bandwidth, and boosts application performance while reducing MPLS dependence with Unity EdgeConnect

With more than 20,000 reseller partners around the world, Westcon-Comstor is a powerhouse in the distribution of category-leading security, collaboration, networking, and data center IT solutions. The company provides a full range of consultancy, logistical support, and deployment services to help its partners move industry-leading products into the hands of customers across Europe, the Middle East, Africa, and the Asia-Pacific region.

To meet the needs of its reseller partners, Westcon-Comstor relies primarily on an SAP suite of enterprise resource planning (ERP) applications running in its New York data center. Remote offices and warehouses access these applications through Citrix application delivery, or in some instances using SAP fat client technology. Previously, access was across a single MPLS link, and the lack of network redundancy became a big problem.



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If an MPLS link experienced an outage, the affected office had to go through the Citrix Portal to access the ERP applications, which resulted in poor performance. With the adoption of Office 365 and SIP trunking for voice, the company also needed an efficient way to provide reliable direct internet access from its global offices. And the high cost of MPLS was an ongoing financial pain point.

To find a solution, Westcon-Comstor did not have to look far. As a distributor for Silver Peak, Westcon-Comstor is well staffed with experts in software-defined wide-area-network (SD-WAN) technology. However, Silver Peak was not the automatic choice for the company's own SD-WAN. The IT team did its due diligence and evaluated several other SD-WAN vendors. But in the end, the Silver Peak <u>Unity EdgeConnect™</u> SD-WAN edge platform proved the best choice.



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Infrastructure Operations, Westcon-Comstor

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active links to maximize utilization of all available bandwidth. We needed to assure WAN uptime and quality of voice services, and that's what Silver Peak delivered."



Michael Soler, Senior Infrastructure Manager at Westcon-Comstor, adds, "The most pivotal part of our decision was regarding voice. When we tested EdgeConnect, we set up path conditioning and had a great success story with voice. There were no issues."

Consolidating the WAN edge for greater efficiency

Currently, Westcon-Comstor has deployed physical EdgeConnect appliances at 27 sites. This includes high-availability redundant pairs in 21 of its larger office and warehouse locations, three single-node appliances in smaller offices, and three in the company's data centers—two in the primary data center and one at a backup site. In addition, Westcon-Comstor deployed four virtual EdgeConnect appliances in Microsoft Azure where IT performs Microsoft Active Directory authentication for smaller offices.

By building an SD-WAN on the EdgeConnect platform, Westcon-Comstor has been able to reduce dependence on MPLS. Today, most locations are terminated with redundant Dedicated Internet Access (DIA) or broadband links, while the remaining MPLS circuits are paired with a DIA or broadband link. Dual links at all sites are bonded to maximize bandwidth utilization and uptime. The IT team has built four business intent overlays to optimize traffic flow based on business need, leveraging advanced

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capabilities such as **path conditioning**, quality of service, and **dynamic path control** to ensure efficient, high-quality application performance.

Westcon-Comstor also takes full advantage of the stateful, zone-based firewall built into the EdgeConnect platform to provide its office locations with secure local internet breakout to Office 365. In smaller sites, the company relies solely on the unified EdgeConnect firewall to secure internet access, while in larger office locations and for traffic back to the data center, the EdgeConnect platform is service chained with next generation firewalls for additional traffic inspection.

"The intelligence EdgeConnect brings to the table gives us the confidence to break out internet traffic locally," says Pinjala. "We get lower latency that way,

and reduce congestion of traffic going back to the data center, delivering the highest quality of experience to our users."

Soler also sees the opportunity to retire traditional edge routers by using the intelligent routing interoperability within the EdgeConnect platform to further consolidate and simplify the WAN edge. And the IT team has begun implementing the optional Unity Boost™ WAN optimization performance pack to accelerate key applications

traffic. While the team is still evaluating where to apply Boost, they are initially targeting SAP fat client and HTTPS traffic, and see additional opportunities to optimize remote office file server access back to the data center.

Increased application performance and WAN uptime

With its move to SD-WAN enabling greater use of internet connectivity, Westcon-Comstor has increased network throughput dramatically. While in the past, many offices were lucky to have 20 Mbps of throughput on MPLS, today most have

dual 100 Mbps broadband or DIA links, effectively increasing available bandwidth tenfold.

The addition of Boost has also led directly to higher application performance and faster file transfers. Overall, application performance has improved substantially, while the time to copy a typical 500 MB file has shrunk from 14 minutes to just 11 seconds.

The ability to use dual links simultaneously, with sub-millisecond failover between them, provides the added value of improved WAN uptime. To illustrate this point, Soler tells of an incident that occurred at Westcon-Comstor's office in Johannesburg, South Africa. "We had a routing problem on one of the links and it went into alarm. In the past, this would have created a lot of headaches. Instead, business went on as usual with no impact on the users."

Another important benefit to IT is the increased visibility into traffic flows provided through the centralized management interface of Unity Orchestrator™. Soler points out that visibility was sorely lacking in the past when Westcon-Comstor depended on its carriers for network reports. But now, he has detailed, real-time insights into all WAN traffic.

"The amount of visibility Orchestrator provides is beyond anything we've ever had," he asserts. "It

makes a big difference when you can see directly what's happening on your network, where traffic is originating at the client level, what applications are optimized or not, and wrapping all that into a single pane of glass. Having that insight to troubleshoot is amazing. Orchestrator is very intuitive—it makes getting details from all the flows and troubleshooting so much easier. That helps us in IT keep the business running more smoothly."

For more information on Silver Peak and our solutions, please visit: silver-peak.com



Customer

Westcon-Comstor is a value-added distributor of category-leading IT solutions. Through its Westcon business, the company offers world-class security, collaboration, infrastructure, and unified communications solutions with a global network of specialty partners. Westcon-Comstor teams create unique programs and provide exceptional financial and technical support to accelerate the business of their partners. The company has a presence in 80 countries around the world, providing a local point of contact and efficient logistical services with the resources of a global enterprise.

Challenge

Westcon-Comstor needed to build greater assurance of WAN availability and improve performance for critical applications like SAP ERP, VoIP, and Office 365 while reducing dependence on costly MPLS.

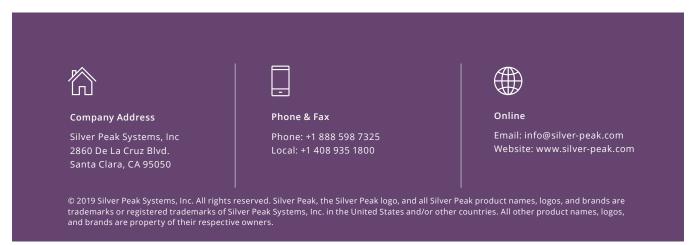
Solution

Westcon-Comstor deployed physical EdgeConnect SD-WAN appliances at 27 global offices and warehouse locations around the world, as well as four virtual EdgeConnect SD-WAN appliances in two regional Microsoft Azure clouds. The EdgeConnect SD-WAN edge platform enabled the company to replace MPLS in most sites with 100

percent broadband, bonding dual links at every site. In addition, Westcon-Comstor implemented the optional Unity Boost WAN optimization performance pack to accelerate key applications and file services. The EdgeConnect platform is also service chained with next-generation firewalls to inspect and verify WAN traffic into and out of the company's data center.

Results

- Gained up to tenfold increase in available bandwidth
- Increased application performance substantially with Boost
- Accelerated large file transfers from 14 minutes to 11 seconds at select sites
- Enabled secure local internet breakout for more efficient, lower-latency access to Office 365
- Delivered high quality of service and assured uptime for VoIP system
- Established foundation for retiring conventional edge routers
- Simplified troubleshooting with detailed, real-time insights into traffic flows
- Assured vital access to business applications and services to maintain high end-user productivity



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