

Simplifying Critical Infrastructure for the Leading Digital Security Enterprise

With offices distributed across the globe, DigiCert protects the world's top brands, including 89% of Fortune 500 companies. As a public key infrastructure (PKI) provider, certificate authority (CA), and trusted third party, the organization's networking capabilities are crucial to both internal and customerfacing operations. DigiCert demands a high level of security and reliability, as identity authentication requires adequate connectivity between digital services in order to keep data protected.

The Challenge

The company's critical network infrastructure was beyond complex.

At each data center and branch location, the stack consisted of many devices from various vendors, all providing separate functions such as security, out-of-band access, and failover connectivity. These were in addition to essential routers, servers, switches, and other appliances. Managing the stack was cumbersome due to unique systems and interfaces. And because these devices each had their own limitations, time-consuming workarounds became commonplace in the enterprise's network support efforts.

In short, DigiCert needed a solution that would make their critical infrastructure streamlined and simple to manage, while adding resilience to minimize downtime. They required a solution that could:

- Replace as many components as possible (at least two systems)
- Offer redundancy to connected devices
- Slash response times and Mean Time to Innocence (MTTI)
- Improve availability through reliable 4G/LTE cellular failover

With security as a top priority, the centerpiece for this implementation would be none other than Palo Alto Networks, whose cybersecurity offerings have been trusted worldwide since 2005.

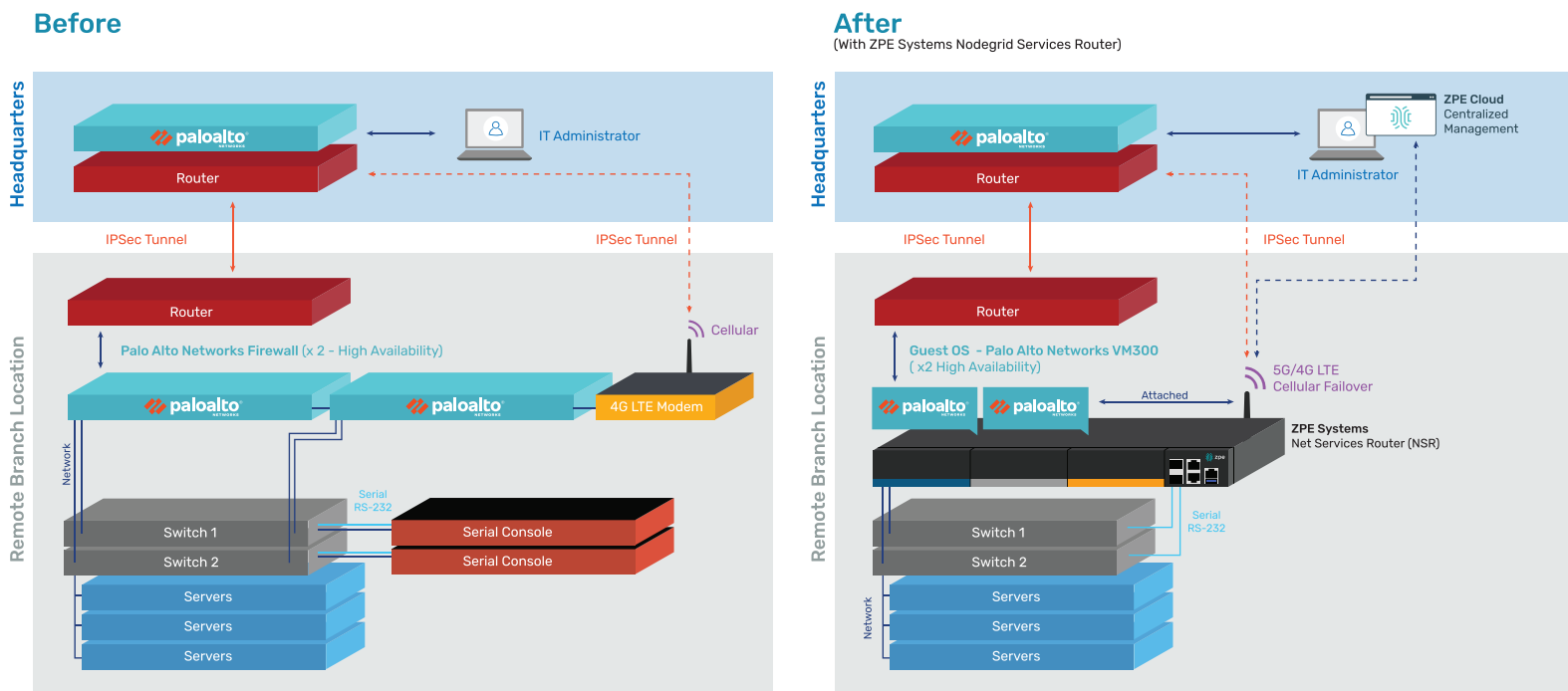
The Solution

From the Nodegrid SR family of devices, DigiCert deployed the Net SR (NSR) to meet their demands at both the data center and branch. The NSR significantly reduced their stack at each location, while also providing out-of-band access redundancy.

From a security standpoint, it was all possible thanks to Palo Alto's VM-300 virtualized next-gen firewall (NGFW), which was deployed directly on the NSR to replace several physical firewall devices. The VM-300's robust features, such as its threat-detecting IPS engine, dynamic routing capabilities, and support for redundancy, provided the critical security and availability for the solution.

In addition, DigiCert uses a range of Palo Alto offerings for complete network protection. The NSR with VM-300 fit into their overall security plan, as it accommodated safe routing to every termination point. All traffic coming through the NSR, including VPN connections, benefitted from Palo Alto's proven defenses, from virtualized threat prevention to versatile, multi-gig-throughput firewalls.

The NSR became the primary out-of-band solution to provide in-depth remote management, and also served as an ISP for additional failover backup.



Before deploying Nodegrid, DigiCert required dedicated devices for functions like firewall, out-of-band, and cellular failover. Nodegrid allowed them to virtualize and consolidate all these into one Net SR device, for space savings and streamlined management.

DigiCert tied everything together by deploying ZPE Cloud, which provided in-depth remote management capabilities. ZPE Cloud let their teams provide off-site support to all their data center and branch locations using secure, VPN-less access.

The Results

In the data center, the combined NSR and VM-300 solution cut DigiCert's stack by consolidating the capabilities of several physical devices into one, including:

- 2x firewall appliances
- 1x out-of-band access appliance
- 1x cellular failover appliance

In each branch location, the combined Nodegrid solution consolidated two devices into one, including:

- 1x out-of-band access appliance
- 1x cellular failover appliance

With ZPE Cloud, all of these critical data center and branch functions could be controlled from anywhere using a single, unified interface. Support teams could simply log into ZPE Cloud using their web browser, and gain secure remote access to their entire Nodegrid infrastructure and connected devices.

The Benefits

Aside from having a significantly reduced footprint, DigiCert benefitted from simplified infrastructure management and more streamlined network control. Implementing Nodegrid's consolidated and powerful NSR meant:

- Energy and space savings, with 4-to-1 device reduction
- 50% fewer man-hours with centralized access and control
- Fewer points of failure using consolidated devices
- 100% uptime with redundant failover and remote out-of-band via 4G/LTE
- Instant response times and improved MTTI
- Streamlined workflows with automation and orchestration

“For us, security is second to none, so we needed a solution to integrate completely with our Palo Alto setup. The Nodegrid Net SR and ZPE Cloud fit perfectly. We can host third-party apps, tailor our network as needed, and control many functions using a single interface. Best of all, there’s no compromise regarding security. The NSR with VM-300 keeps all traffic safe and works seamlessly with the rest of our Palo Alto solutions.”

—Aaron Lott, Network Engineer, DigiCert

Because Nodegrid devices are modular and can directly host third-party applications, the solution also provides flexibility and peace of mind going forward. As future business needs call for change, the company can adapt accordingly by adding modules and deploying virtualized functions – without increasing the physical size of their stack.

The result is an all-in-one solution offering more visibility and control of critical network infrastructure, complete with the world-class security only Palo Alto Networks can provide.

You can join our list of satisfied customers like DigiCert. Simply call or visit our website to schedule your Nodegrid demo today.

