



St. John's Health Protects Private Cloud with VMware Security and Load Balancing

[St. John's Health](#) is the sole healthcare system in Jackson Hole, Wyoming. It offers comprehensive healthcare for the Teton County area through its hospital, several outpatient medical clinics and a senior living community with skilled nursing and memory care capabilities.

Industry

Healthcare

VMware footprint

- VMware® vDefend™ Distributed Firewall
- VMware Avi™ Load Balancer

St. John's Health has built a reputation for trusted healthcare for over a century. When it wanted to bolster its security posture with a Zero Trust approach, the IT team sought security and load-balancing solutions from VMware by Broadcom. VMware vDefend Distributed Firewall arms the team with micro-segmentation capabilities and a single pane of glass for visibility to manage protection across all virtualized workloads. VMware Avi Load Balancer simplifies St. John Health's load balancing operations and fortifies security protection with its web application firewall capabilities.

Providing top-notch healthcare while protecting patient trust

Residents of Teton County, Wyoming and visitors to the area's famed recreation areas count on St. John's Health for comprehensive healthcare services. The sole healthcare system in Jackson Hole, it operates a 120-bed facility featuring a hospital, inpatient rehabilitation, memory care and skilled nursing.

With 805 employees, St. John's Health ensures that people can conveniently access high-quality healthcare within their own community. The healthcare system's accolades include the #1 ranking in Wyoming on the Newsweek list for Best-In-State Hospitals 2024 and above-average patient experience ratings on Healthgrades, leading to multiple awards for Outstanding Patient Experience.

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Tyler Wertenbruch, IT Technical Manager, St. John's Health



Setting a Zero Trust strategy to bolster security posture

Like all healthcare organizations, St. John's Health needs to protect personal and confidential information related to its business, employees and patients. "We want to be able to serve our patients with the highest level of care. Part of that is making sure that the community can trust us to be good stewards of sensitive information," says Tyler Wertenbruch, IT technical manager, St. John's Health.

The organization wanted to better ensure that its IT infrastructure supported its mission for providing exceptional care 24x7. When St. John's Health sought to bolster its security posture with a Zero Trust approach, it selected the VMware vDefend security solution.

"VMware offered a holistic approach at the infrastructure level with vDefend versus just a point solution or endpoint-led technology. This is essential to helping ensure the high availability our clinical applications require," says Wertenbruch.

Warding off threats with VMware vDefend Distributed Firewall

With an environment already 95% virtualized using VMware solutions, it made sense for St. John's Health to add VMware vDefend Distributed Firewall, which integrates natively to inspect network traffic and combat threats. The highly scalable, distributed solution gives the IT team a single pane of glass to manage protection across its virtualized workloads with macro- and micro-segmentation.

For example, the application that the hospital uses for continuous heart monitoring in its ICU needs to be available for cardiac patients receiving round-the-clock care. The vDefend Distributed Firewall helps ensure that this critical telemetry data flows uninterrupted. "We don't want to allow any misconfiguration or other issue in one environment to have an impact on the rest of our services and vice versa," says Wertenbruch. "With the VMware vDefend solution, we have a single dashboard for applying policies to protect all those workloads and make sure that our critical clinical care applications work smoothly."

When St. John's Health needed to protect the virtual desktop infrastructure (VDI) environment used by 95% of its employees, vDefend Distributed Firewall enabled the IT team to easily implement east-west and north-south protections. "Applying two foundational rules across our VDI environment required a core focused effort, but not hours of tedious work. I don't believe there's another product out there that could have helped us do that so efficiently and effectively," Wertenbruch says.

The IT team completed penetration testing to prove how well the firewall performs. "We gained a great deal of confidence in how we safeguard our systems," says Wertenbruch.

The firewall solution gives the team visibility into application behavior and how data routes across its environment. "Visibility into all of our applications is one of the most important capabilities we can have," says Wertenbruch. "VMware vDefend products give us greater visibility into our workloads, allow us to troubleshoot issues quickly and help us make sure that we're only allowing certain information to go where it's needed to support patient care."

Fortified load balancing with VMware Avi Load Balancer

St. John's Health deployed Avi Load Balancer due to vulnerability concerns with the prior load balancing product it used. "The tool was easy to use. We spent a little more than six hours implementing it for all of the workloads that we were balancing," Wertenbruch says.



The team values the web application firewall capabilities of Avi Load Balancer for use with legacy applications. “Some older clinical applications are not up to modern security standards, so we use the web access firewall features of Avi Load Balancer to specify a higher level of encryption,” says Wertenbruch.

The solution streamlines St. John Health’s load balancing operations. “Avi Load Balancer has helped us improve our security posture while providing our applications in a cleaner and more efficient manner,” says Wertenbruch. “VMware Avi Load Balancer easily meets our needs. It scales well for our requirements. It provides tremendous visibility and capability for our teams and we’re looking forward to implementing it further in our environment,” Wertenbruch says.

Looking ahead

The hospital recently overhauled its system that enables clinicians to call for staff assistance and other requests from patient rooms. “That’s a critical communication and life safety system that we need to protect. Putting vDefend Distributed Firewall around that environment so that it will continue to operate as expected while shielding against threats has been a really positive experience,” Wertenbruch says.

Wertenbruch is enthusiastic about VMware vDefend Advanced Threat Prevention for its even more sophisticated Intrusion Detection/Prevention System (IDS/IPS), malware prevention, Network Traffic Analysis (NTA) and Network

Detection and Response capabilities. “The multiple layers for detecting anomalies and preventing malicious activity are really powerful and align with our vision. Integration with VMware Cloud Foundation for cohesive interactions and service-based deployments, all from one toolset, streamlines how we manage it all,” says Wertenbruch.

“By making sure our clinical applications are protected and always available, we enable our clinicians to spend more time focusing on the patient while advancing St. John’s Health’s reputation as a trusted partner with the community,” he says.

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