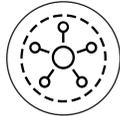
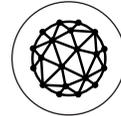




Improved security and connection speeds



Operational efficiency with a centrally managed network



Faster mesh connectivity for mobile dentistry vehicles



High availability for critical healthcare data

Streamlining Management and Improving Healthcare Delivery Across Nearly 200 Sites

VMware SD-WAN provides simplified, standardized environment for diverse healthcare demands

Like most businesses, today's healthcare organizations are increasingly connected. They rely on infrastructure to keep their business and administrative services running smoothly, so providers can focus more on patients. When top Dental Service Organization (DSO) InterDent experienced issues with its outdated WAN, they needed to take action to keep nearly 200 sites running smoothly.

"We have added many dental offices in our organization through affiliations and de novos over the past decade, so we had a very diverse mix of interconnectivity devices at those sites," said Bernard Piccione, CIO of InterDent. When Piccione started two years ago, the organization had a mix of legacy connectivity technologies and plain old telephone service (POTS) lines. "I think we had every vendor out there who made switches and routers. We supported offices running on their own phone systems, and an aging unified communications platform with two call centers."

Struggling with a complex environment, unpredictable administrative demands, and inconsistent service, InterDent needed a solution that was simpler to manage and provided the performance, security, and scalability its healthcare providers needed.

"We had to manage each circuit for each clinic in each location. Having a rotating mix of practice managers and providers meant that we occasionally lacked visibility into each practice," said Piccione. "We were experiencing a lot of downtime as well, which needed to change to meet future advancements in dental technologies."

InterDent considered several technology partners. They chose Mosaic NetworX, an innovative provider that delivers fully managed SD-WANaaS with diverse Internet

InterDent

InterDent Service Corporation, a leading dental service organization provides full-service business and administrative support to dental practices so that the dentists can focus on the delivery of high-quality clinical care and patient satisfaction. The firm has roughly 3,000 employees and supports nearly 500 dentists at almost 200 practice locations and mobile sites.

INDUSTRY

Healthcare

HEADQUARTERS

Inglewood, CA



ABOUT THE PARTNER

Mosaic NetworX is a U.S.-based managed service provider specializing in digital transformation for global enterprises. Mosaic NetworX delivers a triad of IT strategic services including global network aggregation, SD-WAN as-a-Service, and cybersecurity and professional services, all delivered in a highly orchestrated, single-vendor solution.

VMWARE FOOTPRINT

VMware SD-WAN

connectivity, backed by a strategic plan for deployment. “InterDent reviewed several providers before selecting Mosaic. We presented a fully managed solution including diverse network, SD-WAN, wireless 4G backup, and cloud-based security all under one managed platform. Disciplined discovery work enabled us to create a design plan that met their technical needs and project timelines,” said Peter Herschkorn, Vice President of Strategic Alliances at Mosaic NetworX.



VMware SD-WAN supports healthcare offices and mobile sites

To standardize and simplify its WAN infrastructure across all its sites, InterDent migrated to a VMware SD-WAN solution.

“We have deployed 192 VMware SD-WAN Edge devices, as well as a VMware SD-WAN Edge configured in High Availability mode in our main data center,” said Piccione. “We have three major hubs in Inglewood, California, Vancouver, Washington, and Salem, Oregon, as well as supporting three call centers.”

Most of InterDent’s sites now leverage dual broadband connections and dedicated Internet access (DIA), although select locations employ dedicated Internet access and single circuit links. The firm also employs LTE for backup failover support for VoIP calls, and satellite microwave and fixed wireless technology at a few remote sites. The VMware SD-WAN solution quickly enabled InterDent to apply a flexible, standardized architecture that could support all its diverse communication needs.

“We have eliminated all POTS lines, including lines for credit card, fax, and alarm systems, which provided a significant return on investment,” said Piccione. When COVID-19 shut down all but essential and emergency services, leaving many office locations temporarily closed, “We were able to accomplish two years’ worth of upgrades in a year with my dedicated IT teams and partners. We also migrated 22 offices to our VoIP system, and as part of the initiative, we upgraded and standardized on Cisco Meraki LAN switches in each office and are in the process of incorporating Wi-Fi. We have one standard build for every location now.”

Mosaic NetworX ensured rapid, dependable deployment through its proven best practices. “Unlike many providers who simply ship out edge devices and ask the customer to plug them in and

configure them, the Mosaic White Glove process is to ship the edges to us first and pre-configure them before deployment,” said Herschkorn. “This ensures seamless activation at the customer site.”

VMware SD-WAN also enables InterDent to support mobile clinics to better serve more patients in more remote locations. As a provider for the state-managed Oregon Health Plan, they take specially equipped vans with VMware SD-WAN Edge 610 to schools and rural areas to provide free and low-cost dental services.

To provide more advanced dental services for these underserved areas, “We’re building an innovative mobile tiny house with multiple dental chairs for patients,” said Piccione. With more space than a van, the tiny house can also support some basic medical care such as diabetes tests as InterDent helps pioneer medical-dental integration. “We’re using the same VMware SD-WAN architecture. We are leveraging the mesh network, which is essential for us, and we’re not running traffic back to the data center,” said Piccione.

“Prior to migrating to VMware SD-WAN, we lost significant productivity as well as revenue because of legacy connectivity technology and local outages. The new solution has dramatically reduced downtime.”

BERNARD PICCIONE
CIO, INTERDENT

Improving security to protect patient privacy

HIPAA and other industry regulations are always top of mind for healthcare organizations. The SD-WAN architecture, together with Zscaler cloud security, enables the firm to support a more scalable, secure infrastructure.

“Prior to SD-WAN, we used a hub-and-spoke model,” said Piccione. “We had firewalls in our data center, and everything from Internet connectivity to internal VPN connectivity came back to our data center. That is difficult to scale for nearly 200 locations and also meet our future growth aspirations, especially with applications like 3D imaging that create large file sizes. With Zscaler coupled with our VMware firewalls, we’ve actually been able to manage all local security because we’re offloading Internet traffic at the local office,” said Piccione. “Our solution is more scalable and secure.”

Streamlining management and freeing up staff

Migrating to VMware SD-WAN has enabled InterDent to gain improved management and visibility, to apply more control over WAN and troubleshoot issues faster.

“At a high level, the visualization and the proactive alerting has been transformational for us, as well as preventing issues,” said Piccione. “We can create rules to ensure the newly deployed bandwidth meets the needs of our digital transformation efforts.” This backbone is essential as InterDent deploys digital I/O scanners, pilots cone-beam computed tomography (CBCT) systems, and expands the teledentistry model as they continue to innovate the entire business. Piccione added that “We are delighted that IT can be an enabler with the best technology to provide lifelong service to our patient base. We have achieved exponential IT operational benefits, as well as obviously technical benefits for the entire organization.”

In the past, if a circuit failed, InterDent had to contact the local provider’s technical teams to work with legacy connectivity technology vendors and coordinate troubleshooting with practice managers, regional clinics, and other stakeholders.

“Now we have a solution that is completely seamless and integrated, so my teams are now focused on the initiatives that are business value driven and not just connectivity,” said Piccione.

If an issue should arise, Mosaic NetworX stands ready to step in and provide expert technical support. “We have our own in-house NOC that is available on 24x7x365 basis,” said Herschkorn. “They’re responsive and technically proficient in all Mosaic services. Our customers can always reach a live person, and we have an escalation path through our head of engineering and technology to company executives.”

Looking ahead

InterDent is consistently growing, evolving, and advancing in dental technologies. The VMware SD-WAN solution provides a scalable platform that can easily accommodate new business needs.

“We are in the process of adding many new practices,” said Piccione. “We are considering additional affiliations and de novos. VMware SD-WAN will enable us to grow to support these business growth opportunities.”

The flexibility of SD-WAN also enables InterDent to keep pace with changing technology demands, so it can improve its applications and continue to meet client expectations.

“Going forward, we will need more scalable bandwidth to deploy new applications and services to another data center, and perhaps cloud services like AWS for our next iteration of our practice management,” said Piccione. “With T1 lines, we couldn’t do that because of bandwidth limitations, as well as security issues and other concerns. I believe in being proactive—I’d rather have fire preventers versus firefighters. The SD-WAN solution we deployed enables us to make our organization more scalable, secure and reliable in supporting our dedicated team members and most importantly our patients.”

