

Jason H Ta DMD Dental Office Case Study

Crowning Dental Office with Blazing Fast Network

When Dr. Ta took over this dental office, he found that everything in the office was outdated and consumer grade. With budgets tight and no IT resources, Dr. Ta decided to upgrade with high-performance SMB Solutions from Linksys.

Client Name Jason H Ta DMD
Industry Medical
Location Lawndale, CA



The Situation

When Dr. Ta took over this dental office in Lawndale CA, he came to find that everything in the office was outdated. The networking equipment were all consumer grade while the practice management software and computers were completely aged.

With budgets tight and no IT resources, he looked towards SMB Solutions from Linksys to help update his network infrastructure. This would allow him to support the latest technologies while keeping everything protected, compliant and most of all, affordable.

The Objective

Find a networking solution that would enable better and faster connectivity, around the office, that would improve daily tasks and processes.

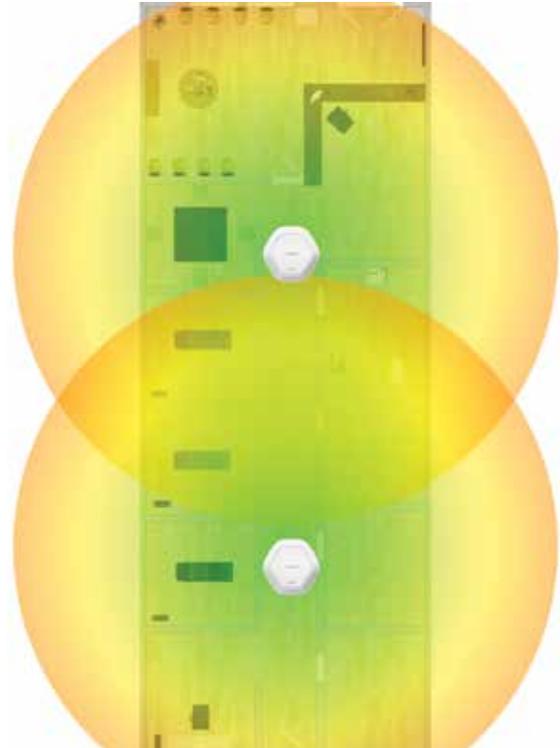
The Challenge

Taking over the office from a previous owner, Dr. Ta found that the business network was running off of a consumer 802.11n WiFi router. The WiFi didn't reach all corners of the office and WiFi surveillance cameras were not reaching back to the NVR because of the spotty coverage. Workstations were running Windows XP which is no longer supported by Microsoft. The practice management software was also dated, with no options of Cloud backup. Dr. Ta quickly realized that his whole network infrastructure needed to be updated. The best time to do so was now, before the office goes full force into marketing and acquiring new clients.

Office Network



Office Floor Plan



The Solution

Linksys collaborated directly with Dr. Ta to come up with the best networking infrastructure for his office. Our first priority was to install a Linksys LRT224 VPN Router which supports Gigabit speeds and VLANs so we can keep surveillance cameras, workstations, Point of Sales systems and guest clients completely separated from each other. VPN support will allow secure remote access in case of emergencies and Dual WAN Redundancy will allow for a future option to expand to a backup service provider if needed.

Our next priority was to add VLAN aware Smart Switches (LGS308 and LGS308P) to maintain the network separation for different device/client groups. We chose a LGS308P for the Power over Ethernet capability so we could deploy the access points on the ceiling without needing to hire a costly electrician to install an additional power outlet. Data and Power is carried on the same CAT5E cable which is very convenient for AP installs.

Lastly, we deployed the LAPAC1750C 3x3 802.11ac Cloud Managed AP solution as it provided the best value and met all the needs of the office. With VLAN Tagging, a Wireless SSID could be created just for Surveillance Cameras to ensure that traffic would be kept separate from others. We then created a Guest Wireless network with our Captive Portal feature with Terms of Service page to serve guests internet access while they wait for their appointments. Wireless Client Isolation was enabled to make sure guests are safe from threats and attacks between their devices.

We also set a Bandwidth Limits and a Max Number of Clients per Wireless SSID to prevent any abuse that could occur. The Linksys Cloud Manager provides AP configuration and monitoring even a novice could understand, with no yearly License Fees!

¹Free for up to 5 years. Licensing fees may apply after that.

Conclusion

Taking the dental office out of the stone ages and modernizing it to Gigabit speeds and 802.11ac wireless has produced a faster more reliable office network. This will allow Dr. Ta to use any Practice Management and Imaging Software with ease, especially any Cloud based software that needs a reliable connection to the internet. Modern technologies like business grade VoIP are now a viable option for cost savings compared to traditional phone lines. Guests will also enjoy a secure and free Guest WiFi which will help raise customer satisfaction scores overall. s important, office staff will experience the faster speeds allowing them to be more productive and happy to get their work done with their new updated network.