

A Strategic Shift from a Legacy Security & Networking Vendor to flexiWAN - Modernizing the Network of a California Regional Bank

Introduction

In the world of banking, a highly secure, reliable, and efficient network isn't just a convenience; it's a necessity. A prominent US bank, serving customers across many of their branches and managing data via two pivotal data centers, found itself facing recurrent challenges with its existing SD-WAN networking solution offered by a world security leader. This study chronicles the bank's journey from a problematic network system to a dynamic and effective one that demanded immediate attention.

What was not working with the existing solution

At the core of the bank's digital operations was its reliance on a security first well known solution that added SD-WAN as an afterthought to its product. As time progressed, what was once a seamless experience began to manifest disruptive patterns. Critical to the bank's operations was the uninterrupted flow of data and communication, and this was where the issues began to surface.

Traffic drops became more than a sporadic anomaly. The bank witnessed consistent, unpredictable interruptions that began to hamper essential functions. With the nature of banking services being real-time and precision-centric, these disruptions translated to tangible challenges, such as delays in transaction processing, phone communication, and service outages that affected both clients and internal stakeholders. In an environment where timely communication can be the difference between successful transactions or missed opportunities, this was untenable.

Recognizing the gravity of the issue, the bank reached out to the vendor, expecting expert troubleshooting and a swift resolution. After intensive diagnostics and multiple troubleshooting sessions, the vendor's team was, unfortunately, unable to pinpoint the exact cause of the traffic drops or provide a definitive solution. This unexpected outcome, paired with the persistence and



unpredictability of the disruptions, highlighted the necessity for the bank to reconsider its foundational networking solution.

The Search for a New solution

Amidst the challenges with the existing system, the bank's Director of IT recognized the pressing need for an alternative, robust solution. While VeloCloud initially presented itself as an alternative, the financial implications of adopting such a system made it a less attractive option for the institution.

In his research for a viable solution, the Director of IT discovered flexiWAN. Intrigued by its potential, he spearheaded a Proof of Concept (PoC) with the flexiWAN team. Offering a SaaS based option with a free trial allowed him to get his first impression of flexiWAN and only then work internally on budget for the next phases. This proactive approach was met with an equally collaborative response from flexiWAN. flexiWAN sales team quickly organized a series of calls to provide a foundational understanding of the solution. To further enhance the bank's familiarity with the system, flexiWAN's engineering team stepped in, offering a mix of in-depth demos, interactive discussions, and hands-on sessions. This comprehensive introduction ensured that the bank had a clear and detailed grasp of flexiWAN's capabilities.

Another potential solution, pfSense, also came under review. However, its inherent complexity and non-SD WAN nature made it less appealing, especially when compared with the promising features and support offered by flexiWAN.

Switching to flexiWAN: The Right Move

After a careful evaluation of its features and advantages, the bank decided to make the switch to flexiWAN. There were multiple reasons why flexiWAN was a perfect fit:

Hardware Vendor Agnostic

Unlike the existing solution used and several other commonly used systems that enforce specific locked down hardware, often limited in features and performance only by the software, flexiWAN's hardware vendor agnostic nature offered the bank freedom. One of the standout features of flexiWAN is its ability to operate irrespective of the hardware brand. This hardware vendor agnostic approach was particularly beneficial for the bank. Historically, in their bid to address the issues of the previous solution, the bank had ventured into third-party solutions such as pfSense. As a result, they had already invested in networking hardware compatible with a range of software solutions.



Affordability and Flexibility in Deployment

A significant aspect of flexiWAN's affordability stemmed from its versatile deployment options. Notably, flexiWAN offers its solution as Software as a Service (SaaS), in addition to dedicated and self-hosted alternatives. The cloud-hosted management system provided by the SaaS model proved to be especially advantageous for the bank. It allowed them to commence with a low-cost Proof of Concept (PoC), negating substantial upfront investments. This low-barrier to entry, complemented by the promising results during the PoC phase, further bolstered the bank's confidence in flexiWAN.

As the bank's experience with the solution deepened, they found the transition from the SaaS-based PoC to a full-blown production environment to be seamless. This scalability, combined with financial efficiency, made flexiWAN a holistic and compelling solution for the bank's networking needs.

Ease of Use and Management

One of the primary attractions of flexiWAN was its user-friendliness. The bank's IT department found it straightforward to deploy, manage, and troubleshoot. Given the previous challenges they faced with their previous solution, this was a refreshing change.

Ensuring Robust Security

The bank, being a financial institution, had a non-negotiable need for impeccable security. Post-flexiWAN implementation, the bank proactively initiated an exhaustive security audit. They used Tenable Nessus for an internal security assessment, and additionally, a third-party team of penetration testers was brought in to evaluate the network's vulnerabilities. In both instances, flexiWAN stood the test and was deemed highly secure, adhering to all necessary industry standards and best practices. This further solidified the bank's confidence in their decision to move to flexiWAN.

Current Impacts and Forward Outlook

With flexiWAN in place, the bank noticed significant improvements. The consistent and reliable connectivity between its branches and data centers fortified its operations. This transformation also allowed the bank's IT team to divert its resources towards innovation and optimizing the technological framework.



Diagram of flexiWAN deployment at the bank

Every bank establishes connections to both data centers and its other branches, guaranteeing redundancy in both links and tunnels. This approach ensures that in case of a failure in one path, there is always an alternative route available to maintain the network's reliability. To safeguard the confidentiality and integrity of the bank's data as it moves between branches and data centers, each tunnel is fortified with encryption. This encryption acts as a secure envelope, keeping the data protected from unauthorized access during transmission. Furthermore, flexiWAN is deployed at both the branches and the data centers. This deployment enhances the network's flexibility and control, allowing for optimized performance and increased security measures. By integrating flexiWAN, the bank benefits from advanced networking features such as centralized management, improved visibility into the network, and the ability to adapt to changing network requirements efficiently.

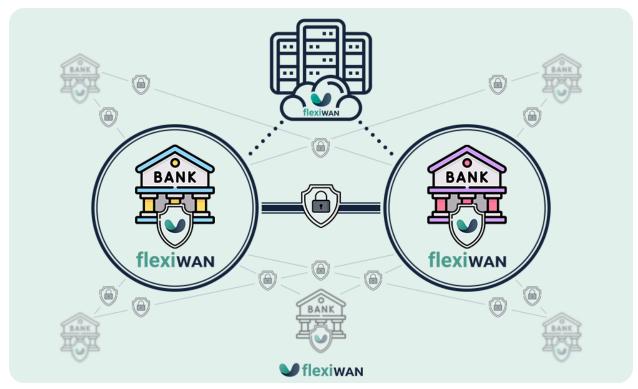


Figure: A full mesh connection between the branches and each branch connects to the data center.



Conclusion: Embracing Change, Reaping Rewards

In the ever-evolving landscape of banking technology, strategic foresight is pivotal. The bank, under the vigilant eye of its Director of IT, recognized the challenges posed by its existing system and proactively sought out a robust alternative. This endeavor led to the discovery of the flexiWAN SD-WAN solution that promised a harmonious blend of efficiency, flexibility, and cost-effectiveness.

The bank's willingness to explore and test new technological waters with flexiWAN has since proven to be a game-changing decision. Not only has flexiWAN addressed the operational challenges the bank previously faced, but it has also introduced a plethora of benefits. Its vendor-agnostic nature allowed the bank to seamlessly integrate with existing hardware, ensuring a cost-effective and smooth transition. The intuitive design of flexiWAN ensure ease of use, further reducing the learning curve for the bank's IT team.

The comprehensive support offered by flexiWAN, from initial sales discussions to detailed engineering demos, POC, and production deployment, reaffirmed the bank's decision. This collaborative engagement instilled confidence, ensuring that the bank was not just adopting a new solution, but was also entering into a supportive partnership.

Ultimately, the bank's journey with flexiWAN stands as a testament to the significance of adaptability in the face of challenges. The proactive approach of its Director of IT, combined with the bank's willingness to embrace change, has led to a strategic partnership with flexiWAN, one that has greatly enhanced operational efficiency and fortified its digital infrastructure for future growth. The bank's experience underscores the adage: the right technological choices, made at the right time, can serve as powerful catalysts for organizational growth and success.