Commercial Bank Modernizes for Better Business Continuity

The client

The client is a commercial bank based in the Southern U.S. that has serviced businesses and entrepreneurs for more than two decades. The bank manages more than $30 billion in assets and has been recognized as a best bank by the FDIC and SNL Financial.

The challenge: Legacy infrastructure, audit failures, and no clear roadmap forward

Banks are in the business of being reliable, trustworthy, and unshakable. But this doesn’t mean being resistant to change. Herein lies a difficult balance to attain.

With a poor Disaster Recovery (DR) architecture and aging infrastructure, the bank had failed numerous audits over the past few years and were nowhere near meeting a security and compliance certification they aimed to hold. There were clearly issues in network performance and configuration, based on the company’s frequent outages and longer-than-average downtimes.

While some members of the bank’s IT and business leadership were proponents of modernization and cloud adoption, others were not. As a financial institution, they not only need to uphold their reputation as deserving of their customers’ business but maintain compliance with federal regulations for data privacy and security. The path forward was contested and unclear. They needed an expert, external partner to advise on which changes they should make and how.

Insight provided:
- Workload alignment using SnapStart discovery engine
- Extensive design services for a stable, modern IT environment
- Solution with four new data centers and self-healing architecture
- Configuration using an automation engine

Insight services:
- Consulting Services
- Solution design and implementation
- Migration services
The solution: Modern, self-healing architecture that would meet the bank's diverse needs

As the bank had reached a sort of fever pitch with IT issues in multiple areas, the Insight team urged them to begin at square one: with workload alignment. To perform a rapid scan and analysis of the assets and dependencies within their IT environment, we used our SnapStart discovery engine and proven methodology. This preliminary work was the foundation for our recommendations going forward, which were largely that moving to the cloud did not seem to be a favorable decision for the bank, though other modernization efforts would certainly be worth it.

Over the course of several months, we continued to collect data points from the bank’s security team, disaster recovery and business continuity team, infrastructure team, and application owners regarding their existing architecture and key objectives. Using this information, we produced design deliverables and blueprints in the bank’s templates that could be routed through the bank’s approval processes.

The solution included:

- **Standing up and migrating to four new data centers**, each with roughly 200TB of capacity and all-flash storage, including a new location that could support secure cloud deployment if and when it makes sense for the bank.

- **Build out of a self-healing architecture** with a 40GB network, VMware NSX®, and other software-based components.

- **Implementation of a new, modular Dell™ server architecture** to replace out-of-support servers, as well as modern appliances from NetApp, Rubrik, Gigamon, Cisco, and Palo Alto Networks.

Our solution architect teams used an Infrastructure as Code (IaC) approach to stand up much of the new architecture even before the physical data center spaces were available. Using Ansible®, we were able to reduce manual inputs, improve consistency across configurations, and offer more transparency for the bank’s IT teams into our processes.

The benefits: Better speed, scalability, agility, and security with appropriate risk and cost controls

The bank now benefits from an active-active data center architecture that, as one of the bank’s IT administrators said, “takes the ‘fail’ out of ‘failover.’” Previously, the bank could failover and fail back when needed, but it was an unreliable and sluggish process at best. Today, their self-healing architecture fails over and back without any human intervention.

All-flash storage, software-defined networking, and IaC have provided the client with modern advantages, without the increased risk and cost issues they would currently face were they to deploy cloud platforms. All data center components are properly configured and easy to support.

Our work with the bank also produced an unanticipated benefit. With a new data center architecture, the bank drew the attention of another regional bank seeking an acquisition target. By the time the purchase is complete, our client will have a fully implemented data center that may just be running their new parent company as well.