Industry
Healthcare

Location
Johnson City, Tennessee

Key Challenges
- *Facilitating a merger by consolidating five complex data centers into two*
- *Re-architecting and configuring data center networks to support a smooth transition*
- *Demonstrating the business value of moving to Software Defined Networking (SDN)*

Business Benefits
- *Maintaining competitive advantage by utilizing cutting edge technology*
- *Increase automation to save time, money, and manpower*
- *Build a foundation for increased automation, security, and network responsiveness and resilience*

Ballad Health Case Study

Conquering the Unknown: BTA prepares Ballad Health for the rapidly advancing world of Software Defined Networks (SDN)

Business Technology Architects:
The experts at Business Technology Architects are uniquely both architects and engineers who have turned their years of experience into a proven methodology for technology adoption. BTA specializes in helping companies implement complex technology in an efficient, straightforward manner. BTA is a leader and Cisco Digital System Integrator (DSI) Partner to help companies move to SDN. They have implemented Cisco ACI for more than 500 enterprises throughout North America.

Ballad Health:
Ballad Health is the leading integrated healthcare delivery system serving Northeast TN and Southwest VA. With over 250 clinics and 21 hospitals all connected to their network, Ballad Health relies heavily on IT. Their IT requirements include supporting patient care, employee productivity, and their core business applications. IT is critically important for patient care, securely sharing information and to ensure and maintain an industry-leading service.

Challenges/Objectives:
After the 2018 merger of Mountain State Health Alliance and Wellmont Health Systems, there was a strategic initiative and federally & state mandated requirement to support common EMR and patient care. With a $200 million investment into a common information system platform, Ballad Health needed to show the efficiency of a combined organization's services vs. individual and separate capabilities.

BTA was engaged to facilitate the data center consolidation, a daunting challenge with an aggressive deadline. Each organization was using different, incompatible, or obsolete systems, and Ballad Health originally used five different data centers with thousands of endpoints. Without a stable and manageable network, there is no way to run applications or be a successful business. So, the first task was to consolidate into two data centers, and rework almost every layer to integrate them.

Additionally, there was a difficult decision to be made regarding moving toward a more current SDN approach or sticking with the legacy system Ballad Health's engineers were familiar and confident in. Pam Austin, CIO, make the point that "this was a monumental task. In my career I don't know of any healthcare system that's consolidated five data centers to two with this many endpoints and that much work to do in less than a year. Hats off to the planning and teamwork that made this a reality."

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> - Pam Austin
>   CIO, Ballad Health

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>
> - McCoy Davidson
>   IT Director, Ballad Health

Solution:

There is seldom an opportunity to rebuild a data center network, i.e., to start with a blank page. BTA was brought in to move Ballad Health from their legacy network configuration to a software defined platform. IT leadership knew this was the right direction to move in, putting them ahead of the curve in the healthcare industry, increasing speed in deploying applications to meet the needs of the healthcare system, and gaining the ability to segment the network with a policy driven solution. However, BTA was not sure how best to move forward.

As BTA came in to deliver these services, senior engineers at BTA and Ballad Health held multiple meetings to create an environment of trust and to make sure the entire team was on board with the plan's direction. Ballad senior engineers originally viewed the move to SDN as too large of a risk, but BTA's approach and plan using the BTA S.I.M.P.L.E. process set a definitive timeline for success focused on the right architecture, migration priorities, and education and mentoring. The joint team took the necessary steps to deliver a solution everyone bought into. This included the Cisco configuration, recommendations to reduce cost, and testing different architectures to land on the right solution that properly aligned to the company mission.

Business Outcomes:

As a result of the newly configured network, all endpoints in the Ballad Health system can efficiently communicate, and the organization overall can meet their business objectives.

BTA implemented ACI a year ago in January, and Ballad migrated successfully and on time in the midst of a global pandemic. "BTA instilled trust. We had faith in their approach, and in fact this project had the least bumps of any complex technology implementation we've done. There really were not any significant problems across the board, it just worked. That's a testament right there," said McCoy Davidson, IT director. With the foundation built and trajectory toward realizing the full benefits of SDN ahead, Ballad Health is already benefiting from increased performance and automation. There is no longer a need for a manual "finger-on-the-trigger" 24/7, which saves money, time, and reduces stress on the IT organization.

Going forward, BTA continues to assist Ballad Health fully realize the benefits of a software-centric network. This includes macro and micro segmentation for network security and resilience, and further lowering operating costs while scaling. After implementation BTA offers managed services to ensure all migration elements are completed and the network is fully optimized.

BTA is committed to guiding companies into mastering new technology to enhance business operations. To learn more about Business Technology Architects or see how the BTA Ensure service helps upkeep and optimize existing Cisco ACI installations, view the links below.

Learn more   BTA Ensure

BalladHealth