Transforming Healthcare

CASE STUDY | THE NEW JERSEY HEALTHCARE SYSTEM

Optimizing Networks and the Power to Innovate

The healthcare industry is at the crossroads of two massive developments: widespread governmental reform and an unprecedented opportunity to leverage cutting edge technology. In the wake of these converging forces, many organizations face a major struggle to realize promised technology benefits.

As they sift through an oversaturated landscape, what differentiates those who succeed in delivering the most powerful networks and communications?

This case study sheds light on key success drivers by investigating the challenges and triumphs experienced by one of the largest nonprofit health care systems in New Jersey.

THE CHALLENGE

Boasting a highly dynamic user ecosystem, the organization faced critical strain on its existing network.

"Two things kept us up at night. Delivering higher bandwidth at a lower cost. Gaining access to routes that would deliver the performance we need."

- IT Director of a major New Jersey nonprofit healthcare system

THE TEAM IDENTIFIED THREE KEY PRIORITIES:

Create a private network to connect 50 locations throughout the state of New Jersey.

Design a fully diverse hub-and-spoke configuration between doctors' offices, hospitals and colocation facilities.

Upgrade bandwidth at each facility from legacy T1 and DS3 connections more robust 10mb and 100mb circuits.

THE SOLUTION

With concerns about the limitations of an off-the-shelf network solution, the organization opted to explore a purpose-built configuration. This decision enabled the organization to maximize the advantages of their network by leveraging a mix of best-in-class technologies and routes delivered through a single responsible provider.

Partnering with premier data transport solutions provider, Hudson Fiber Network (HFN), the organization was able to gain important insights into their current design. HFN evaluated the existing infrastructure and identified ways to build diversity and redundancy using different routes.

HFN then fully customized the network by leveraging diverse carrier local loops throughout the state and converging them into HFN Points of Presence (PoPs) located throughout the area. Deploying a complete Layer 2 private network with the ability to easily scale, the solution also incorporated Wireless 4G out of band management backup on each of the remote edge devices for added layers of support and monitoring.

Finally, the solution provided higher levels of control by enabling the organization to manage and change their Quality of Service (QoS) within their own internal network, without reliance on the carrier.

BENEFITS

- Completely redundant network with any-to-any connectivity
- 10x increase in bandwidth across all locations vs. previous network architecture.
- 19% decrease in overall network costs
- Internal QoS management on the customer side not previously available
- Carrier diversity through customized route design and building entrances.
- Future-proof for long-term growth without major upgrade

LAYER - 2 PRIVATE NETWORK