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## CASE STUDY

# Major Regional Hospital Ensures Future Growth with Core Network Upgrade

## Overview

A major regional hospital was challenged with numerous core network issues that were affecting growth, performance, and technical vision. They had limited and inefficient bandwidth capacity for storage, voice, and wireless systems. In addition, the lack of redundancy put the hospital's critical applications and user workloads at risk. Multiple switches necessary for core services had clear policy instantiation or extended convergence times. Last, multiple stacks caused topology sprawl and increased troubleshooting time and operational maintenance.

## Solution

Blue Mantis analyzed the existing hardware and topology, as well as business drivers and IT objectives, and recommended, designed, and implemented a core network solution. The solution centralized services such as routing, access controls, and switch aggregation, and increased total throughput capability at the backplane and uplinks. Blue Mantis network engineers successfully simplified the network topology while also accounting for future growth for port density and bandwidth capacity to ensure the solution would work for the client long-term.

## Business Outcomes

### Long-Term Solution

The solution future proofed hospital expenditures and ensured scalability by creating a topology with expanded bandwidth capacity design.

### Reduced Risk & Network Disruption

The solution reduced risk by adding data and power redundancy for all switches and ports in the new stack. The solution also created a centralized point for security policy instantiation and network access control. Last, it gave the hospital the ability to add new switches with a range of port types without disruption to production.

### Improved Performance & Increased Uptime

The solution simplified troubleshooting and maintenance with topology simplification through a consolidated core. The customer also experienced improved performance with a large capacity backplane and increased uptime with redundant systems.

## At a Glance

### Challenges

- Lack of redundancy put critical applications at risk
- Multiple switches caused lack of delegated roles, no clear policy instantiation
- Multiple stacks caused topology sprawl and increased troubleshooting time

### Benefits

- Reduced risk with data and power redundancy for all switches and ports
- Centralized security policy instantiation: NAC
- Simplified maintenance with topology simplification

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"The client had outgrown their core network infrastructure which affected growth and performance and put critical applications and user workloads at risk. The solution that we implemented not only solved for the current issues the hospital was struggling with but also future proofed expenditures so the new core network infrastructure could keep pace with planned corporate growth goals."

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