



# Technology Assessment Solution Spotlight

## Network Infrastructure Assessment



Customer: Large Pediatric Healthcare System

Location: Northeast Ohio

### Business Need

The new CIO of this customer, a Northeast Ohio pediatric healthcare system, was unsure of the current state of the organization's network infrastructure. A comprehensive network infrastructure assessment was needed for an IT environment that supported more than 3,000 employees and included a main campus, two large medical buildings, a regional hospital and approximately 20 physician sites.

An additional driver for the assessment was the plan to deploy a new EMR (electronic medical records) system. The overall health of the network infrastructure needed to be verified before this major project was launched.

The IT department wanted to engage a partner that could bring an objective, outside perspective and perform a professional assessment with an eye towards three major end goals:

1. Attain a significantly higher level of network uptime and availability
2. Weigh the current overall state against best practices
3. Develop a three-year strategic plan, including a concrete budget, to optimize the environment.

### Solution

MCPc was eventually chosen to execute the assessment, based both on the existing relationship established through previous Cisco network projects and the strength of MCPc's project proposal.

The resulting assessment was a collaborative effort between a 10-person team of MCPc engineers, solution consultants and project managers, and the organization's IT infrastructure staff. Over a 10-week period, in-depth assessments were performed for the network routers and switches, unified communications, SMARTnet, call center, wireless, operations, and disaster readiness and recovery.

The MCPc team used a variety of methods to gain an accurate snapshot of the hospital's network infrastructure. On-site staff interviews were conducted, visits were made to the network sites of several key locations and all technology platforms were remotely accessed to gather critical network intelligence. Automated methods were used to extract further data and gather performance statistics from the network. MCPc also engaged appropriate technology partners — RISC Networks and Cameo Solutions — to analyze certain portions of the data that was collected.

An assessment of this scale typically requires a deep dive into the client's data assets. Throughout the engagement, MCPc staff involved in the project signed confidentiality agreements and did everything necessary to ensure all relevant data would be made available for analysis without compromising its security.

The MCPc team took a holistic approach to the assessment that didn't silo technologies, focusing instead on how they all interconnect. Priorities were broken down to help the client understand what needed to be addressed immediately and what issues should be part of a long-term strategic plan.



### Highlights

The new CIO of a large pediatric healthcare system needed to assess the current state of a network infrastructure supporting more than 3,000 end users. MCPc executed an assessment that immediately addressed urgent infrastructure shortfalls, sought improvements in network uptime and availability, instilled best practices and provided the basis for a three-year strategic plan for improvement.

### Benefits

- A detailed evaluation of the infrastructure from an objective, expert perspective
- Specific remedies prescribed to address immediate infrastructure shortfalls
- Consultation for developing a three-year strategic plan to evolve the environment



## Results

A detailed report was produced that summarized the findings for each component of the environment that was assessed and recommended adjustments in process, configuration or equipment where necessary. A performance scorecard was delivered on 29 key aspects of the network infrastructure, each measured against best-practice standards, and specific remedies were prescribed for any shortfalls.



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Recommendations were given for staff development, including suggestions for the creation of new positions to more effectively meet the needs of the environment. A disaster readiness and recovery protocol was provided that covered all hardware and component categories, data backups, unified communications, and the WAN and LAN.

Finally, an outline was provided for a three-year strategic plan that addresses immediate critical needs in the first year, implements an architectural plan in the second year, and finalizes and re-assesses the architecture in the third year.

The organization now has a detailed, objective picture of the current state of its network infrastructure, including clear prescriptions for potential problem areas and a roadmap for evolving their IT strategy over the next few years.

Immediate actions have already been put into motion as a direct result of the assessment findings, including an upgrade to core switches, an addition of redundant WAN routers and new NAM appliances — all being implemented in collaboration with MCPc.

If your organization has not performed a recent IT assessment, MCPc can deliver a detailed snapshot — focusing on the entire environment or specific aspects of it — that addresses both strategic and technical considerations.



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