

CASE STUDY



Leading Healthcare Network Realizes Faster Performance, Increased Operational Efficiencies and Lower Costs with Future-Proof IT Infrastructure from PEAK Resources

Overview

A large, renowned healthcare network that serves hundreds of thousands of patients each year across dozens of hospitals and affiliate healthcare facilities wanted to improve the quality and consistency of patient and bedside care, and better support their clinical staff in delivering critical medical services. In order to deliver on that promise, they first needed to address a core foundational issue that was standing in their way: old back-end technology that was inadequately supporting their existing health record system, Epic Software.

The antiquated hardware was becoming increasingly costly, inefficient and impractical. This triggered the need for a complete infrastructure retool—but one that took their complex IT requirements into account for a solution that would meet their current needs and support future goals, all while keeping costs down.

Challenge

The healthcare provider uses Epic Software to access, organize, store and share electronic medical records. However, the dated back-end technology was creating operational inefficiencies with an ever-present threat of costly outages. And because unplanned downtime costs healthcare organizations an average of \$7,900 per minute per incident*, the client recognized an urgent need to revamp their infrastructure with more reliable technology.

To minimize investment, as well as disruption to users, they required a solution that would integrate as much of their existing Cisco technology as possible with new, more flexible, future-proof technology—a feat that required a highly customized approach and advanced IT expertise.

Ultimately, they wanted a technology solution that would deliver superior operational efficiency while also supporting their vision of a front-end cloud-based application that could be seamlessly accessed by clinicians across the network—anywhere, anytime, from any device. With the existing technology they had in place, their lofty goals could not be achieved.

Solution

With multi-layered IT requirements, concerns over cost outlay and a tight timeframe, the healthcare provider selected PEAK Resources for their extensive expertise in delivering customized solutions that addressed specific and complex requirements.

The PEAK engineering team began with a complete audit of the existing technology to identify which assets were not only still relevant but would also support a flexible front end-solution. They evaluated a range of consumption scenarios (both on-premises and cloud-based/hyper-scalar) for discrete elements of the solution, presenting the most viable scenarios to the client at each pivotal decision point along the way. They factored in data center team impact, existing skill sets of staff, financial implications and resulting operational efficiencies.

With that, PEAK engineers identified the 'best of the existing technology to carry forward and repurposed elements that had previously made their legacy solution arduous. They proceeded to architect a solution that incorporated the old Cisco technology with a new Cisco UCS, Cisco Intersight, to bridge the gap between the infrastructure and applications, and Cisco SmartNet for IT support.

Results

The new solution improved the application delivery for their existing Epic SaaS while maximizing resources and lowering costs. More specifically, the solution delivered:

- 100% increase in memory
- 2X the density of users
- A 20% reduction in their technology footprint, driving CapEx and OPEX down
- A much more versatile platform that positioned the client for future hybrid cloud solutions

From an operations standpoint, the more reliable technology now delivers a highly consistent user experience with improved uptime, higher resiliency and a reduced likelihood of costly outages. Additionally, by taking a highly customized approach to repurposing their existing setup, the new solution offers familiar functionality to users who would have otherwise needed to learn new skills to operate the technology.

What's more, this robust new solution positions the organization for future growth at each tier of the resulting infrastructure, while supporting critical performance requirements for a more efficient, cloud-based front-end application that will enable healthcare professionals to deliver superior patient care.

Go Beyond with PEAK



peakresources.com

1-800-925-PEAK

About PEAK Resources

PEAK Resources is an innovative technology and systems integrator focused on the next generation of Data Center designs. We are experienced technologists who help clients align business drivers and requirements to the right solutions and services.

We have deep knowledge of the contemporary data center landscape including traditional (on-prem), cloud, hybrid, converged, and hyperconverged architectures. We combine this with a diverse set of core offerings that include architecture, integration, implementation, management, and just-in-time logistics.

Established in 1991, PEAK is proud to be the most awarded technology solutions provider in the Rocky Mountain Region.



FOUNDED IN 1991

* McCann, Erin. (2013). Data center outages come with whopping \$8K per minute price tag. Healthcare IT News.