



## Case Study

# University Health System

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### THE CLIENT

University Health System is a network of two large teaching hospital locations in the Louisiana cities of Shreveport and Monroe. The hospital upholds a strong commitment to state-of-the-art treatment and clinical research. University Health Shreveport is one of only six hospitals associated with St. Jude's Children's Research Hospital.

As both a hospital and teaching institution, University Health handles large amounts of sensitive data, including protected health information (PHI), student and patient billing records, and business data.



## The Challenge

University Health uses EPIC for its electronic medical record (EMR) system, with a Citrix presentation layer. Also, the hospital had two storage platforms, including EMC Isolon and Dell Compellent the virtualized compute platform.

The challenge the hospital was facing was that it wanted to establish an environment for EMR management that was separate from its storage network infrastructure. This meant establishing a new data center within the building. Space was not an issue; the hospital had a room available for re-purposing. However, this space would need to be emptied and retrofitted, which would be expensive and labor intensive.

It quickly became apparent that creating an infrastructure within the facility would be problematic for other reasons, as well. For one, there were logistical and technological challenges in physically moving the equipment that housed the EMR. Even then, the facility would not meet the scalability and redundancy requirements for data center best practices. Additionally, there were too few IT personnel available to complete a project of this scale.

With network-performance bottlenecks affecting the system and regulatory compliance issues to consider, it was clear that an alternative was needed.

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## The Solution

At the same time that University Health was dealing with this issue, Venyu was constructing a Tier 3 Data Center in downtown Shreveport. To the hospital, it did not make sense to spend so much time and money to establish an on-premise facility with a Tier 3 Data Center being constructed practically in the hospital's backyard.

Further, University Health realized that by moving into the data center, they could also enlist Venyu as a professional services provider. This way, they could use VENYU to design and carry out the move.

Planning the transfer took many hours of business discovery. For the project to be a success, the hospital staff had to carefully lay out requirements, and VENYU had to be sure to ask the right questions. Clarity was essential, and at several points in the process, hospital leaders were even invited to tour the Tier 3 Data Center as it was being built.

Ultimately, a project groundwork was developed that included three parts. The first step of the process will involve establishing an additional

10-gig circuit between the hospital and the data center. The second part will include professional services and colocation, with VENYU technicians moving five racks of infrastructure into the new Tier 3 Data Center.

The third part of the project will involve building a new infrastructure based on the Citrix Platform that would establish scalability. A proof-of-concept for this platform has already been developed for this platform. When the system is completed in 2017, it will not only be able to handle the hospital's own medical records, but also used to re-sell EPIC MR services to third parties.

## Outcomes

With the project framework developed, work will begin in 2017. Once completed, a successful project will save University Health time and money by not having to establish an in-house data center. Further, the ability to scale into the cloud means that network performance bottlenecks will no longer be an issue.

University Health was impressed with how VENYU was able to address the problems of University Health Systems and create a project plan. The hospital has gone so far as to write VENYU into its own business plan. At the 2016 IT Symposium in New Orleans, University Health gave a presentation explaining the benefits of partnership with VENYU citing the partner's capacity for complicated, large-scale projects.

### TOP FOUR BENEFITS:

- Cost savings from not having to establish in-house infrastructure
- Removal of network bottlenecks
- Meet compliance standards for facility and security
- Reduced burden on IT staff to manage hardware infrastructure

