Mercy Memorial Hospital System had just a few months to migrate its entire outsourced data center to an in-house environment. Using PlateSpin Migrate, the hospital met its aggressive migration deadline while achieving a consolidation ratio of 18:1.

> Overview
Founded in 1929, Mercy Memorial Hospital System (MMHS) is comprised of a 238-bed, full-service community hospital, as well as a skilled nursing and rehabilitation center, ambulatory surgery center, outpatient physical rehabilitation center, hospice care, home care, durable medical equipment service, outpatient satellite offices and retail pharmacies. The organization, which serves Monroe County as well as the eastern section of Lenawee County and Northwest Ohio, has more than 1,600 employees.

> Challenge
To modernize its IT environment, MMHS wanted to replace many aging servers and update several mission-critical applications. Modernization would also help the hospital prepare the back-end systems for upcoming government-issued healthcare IT requirements.

The hospital decided to move its data center from an outsourced model to an in-house model and needed to complete the migration in just a few months. The organization also wanted to migrate many of its older servers to a virtualized environment to take advantage of high availability. Above all, the migration needed to happen with minimal downtime, as any disruption to critical systems could negatively impact patient care.

“PlateSpin Migrate has really enabled us to transform our data center. The solution paid for itself several times over with our ability to complete the migration in such a short time and with minimal downtime.”

Erik Mynster, IT Operations Manager, Mercy Memorial Hospital System
Solution

Working with C/D/H, a Novell Platinum Partner, MMHS selected PlateSpin Migrate to move its servers to an in-house virtualized environment.

"PlateSpin offered the best features and the most migration options," said Eric Mynster, IT Operations Manager at Mercy Memorial Hospital System. "It was the perfect solution for us because C/D/H was able to perform the conversions remotely, without having to physically access the outsourced data center. Most important, virtualizing our servers resulted in downtime measuring minutes instead of days."

The hospital used PlateSpin Migrate to convert 100 servers from its outsourced vendor to its in-house data center — more than half of these servers were physical-to-virtual conversions. PlateSpin allowed C/D/H to effectively virtualize the servers ahead of time by remotely capturing the server images with USB storage, then running them through a synchronization process and bringing them live as the offsite servers were powered down.

"The biggest advantage and differentiator of PlateSpin Migrate is the ability to do a virtual-to-physical migration in case of a performance issue," said Jason L. Cooper, consultant at C/D/H. "This functionality provided a safety net and actually allowed us to virtualize more systems."

C/D/H and the hospital IT staff finished the project within an aggressive timeline, migrating all of its servers in 30 days, with 80 percent of them performed in one weekend.

"We moved most of our servers with mission-critical patient applications in a single day to minimize that amount of downtime for our nursing systems," said Mynster. "In fact, the only significant downtime we experienced was for servers not virtualized. We are aware of similar migration projects at other hospitals that caused several days of downtime."

Using VMware ESX, the team virtualized more than half of its existing servers, creating nearly 80 virtual machines (servers) on just eight physical servers. The hospital uses VMware VMotion, VMware High Availability and VMware Distributed Resource Scheduler to take full advantage of its new virtualization environment.
“Virtualization gives MMHS a lot more room to grow,” said Craig Eidelman, consultant at C/D/H. “More important, we have a solid disaster recovery plan. We have essentially eliminated any downtime potential as a result of hardware failure.”

PlateSpin Migrate is now an essential tool for the hospital’s data center, as the IT staff can now quickly perform server conversions without incurring any downtime.

“C/D/H has been a great fit for our organization and was absolutely critical to the success of this project,” said Mynster. “They played a significant role in the technical planning and preparation, as well as the migration itself. They really understood our environment and where we wanted to go. Their expertise was a huge advantage.”

> Results

Using PlateSpin Migrate, MMHS completed its data center migration project in just a few months, successfully meeting its aggressive deadline. By moving to a virtualized, in-house environment, the hospital has achieved a consolidation ratio of 18:1 and has reduced data center total cost of ownership by 30 percent over a three year period.

The high availability of a virtualized environment has dramatically increased system performance. In addition, the IT staff can now quickly create as many virtual servers as needed to respond to changing business needs, as well as future government requirements.

“PlateSpin Migrate has really enabled us to transform our data center,” said Mynster. “The solution paid for itself several times over with our ability to complete the migration in such a short time and with minimal downtime.”