

# HEALTHCARE SOLUTIONS

As technology transforms healthcare, a well-designed flow of data can make a tremendous difference that leads to better patient outcomes and greater efficiencies. It's important to engage a services provider with deep expertise in the unique requirements of the healthcare field. Here's how IBM Premier Business Partner Mainline helped three different healthcare organizations...



**Customer:** Integrated Healthcare Network  
**Headquarters:** Mid-Atlantic U.S.  
**Employees:** 11,000

## BENEFITS

- Easier storage administration because a single interface can manage multivendor storage systems
- Increased storage utilization by combining multivendor arrays into single, virtualized storage pool
- Faster backups due to increased storage performance

## THE BUSINESS CHALLENGE

An integrated healthcare network in the mid-Atlantic region of the U.S. serves more than a million residents in multiple counties. It includes 600 physicians and 1,100 licensed beds at 200 practice sites. To run the latest version of Epic electronic medical records (EMR) software, the healthcare network needed to upgrade servers and replace storage that was nearing end of life.

The IT team also wanted to simplify the management of multiple storage systems from different vendors. Each system had to be managed with vendor-specific tools, and this increased cost and complexity.



**Customer:** Provider of services for health plans  
**Headquarters:** Southeastern U.S.  
**Employees:** 800

## BENEFITS

- Twice as many virtual desktops/agents supported with only a 25% increase in IT costs
- 55% more processing power at only 20% more cost, due to mainframe cost efficiency
- 60% estimated licensing savings by virtualizing with IBM z/VM vs. VMware
- Faster storage I/O, as IBM Easy Tier feature moves frequently accessed data to the fastest drives, and the added performance boosts scalability

## THE BUSINESS CHALLENGE

This customer provides services to health plans offered by dozens of leading insurance companies and associations, serving almost two million people nationwide. Soon, millions more consumers will seek healthcare plans online through new State Health Insurance Exchanges mandated by passage of the Affordable Healthcare Act. To support rapid growth, the customer needed to scale services easily and cost-efficiently.



**Customer:** Leading healthcare system in a southern state  
**Headquarters:** Southeastern U.S.  
**Employees:** 9,000+

## BENEFITS

- Integrated remote mirroring across multiple storage systems is projected to:
  - reduce storage management time
  - enable disaster recovery to come back in house for savings
- 10% licensing savings projected over three years for remote mirroring, with doubled capacity and new capabilities included

## THE BUSINESS CHALLENGE

This customer serves healthcare patients, with a focus on the underserved, through a statewide network of hospitals, clinics, physicians, and housing for the elderly. An information system is the critical link between all facilities, and in order to reduce costs, the customer asked Mainline for help on a five-year plan to bring replication for disaster recovery back in house. Instead of replicating data to a third-party co-location site for disaster recovery, the customer wants to be able to replicate data to another hospital in its own network.

## THE SOLUTION

The healthcare network evaluated proposals from several major technology vendors and chose a solution from Mainline and IBM. One reason was that part of Mainline's solution, IBM SmartCloud Virtual Storage Center software, can turn storage systems from multiple vendors into a single, virtualized pool of storage. Virtual Storage Center also enables performance, availability and capacity utilization of the network's multivendor storage to be managed from a single interface, saving time.

Another reason for the choice was that the Mainline solution includes software, servers and storage from a single vendor (IBM), supported by a single partner, Mainline. This further simplifies the environment. The choice was made easier by the fact that Epic uses IBM servers and storage to test the limits of its software.

## THE RESULT

The Mainline solution enables faster failover and enhanced disaster recovery because the Metro Mirror feature of IBM SmartCloud Virtual Storage Center automatically copies data between IBM System Storage DS8870 subsystems at two different sites. Mainline also recommended installing two clustered IBM Power 780 servers in the main data center to run Epic, with the ability to fail the application over to an IBM Power 750 server at the remote site, if necessary. Backups to tape, which were exceeding the backup window in the prior environment, now fit in the window easily, due to increased storage performance. They are allowed to see. Mainline is now a trusted partner, and has been tasked with establishing an Analytics Center of Excellence.

## THE SOLUTION

Mainline advised the customer to keep the performance and scalability of a mainframe while reducing mainframe operating costs by transitioning to IBM Linux on System z. Mainline further reduced costs by having the customer process new transactions on a Linux-based IBM BladeCenter platform, while using the mainframe to host historical data. IBM WebSphere MQ serves as a single, universal messaging backbone, integrating all systems with speed and reliability. Mainline is also providing IBM Rational solutions to streamline application development, and IBM Tivoli Storage Manager to enable data to be backed up to virtual tape cartridges and replicated at the same time to a disaster recovery center 2,000 miles away. This strategy minimizes tape costs and enhancing resiliency.

## THE RESULT

Using the Mainline-designed solution, the customer has added 1,000 desktops to its customer care centers, doubling the number of desktops and agents available to support customers, yet raising infrastructure costs only by 25 percent. Because data is growing by as much as 10 terabytes a month, Mainline introduced the customer to IBM Easy Tier, an IBM storage feature that moves frequently accessed data to the fastest drives, keeping performance high while minimizing the number of new drives that must be purchased. Mainline showed the customer how to add 55 percent more processing power on the mainframe at only 20 percent higher IT costs. And the Mainline solution will enable the customer to achieve a projected licensing savings of as much as 60 percent by virtualizing with the IBM z/VM hypervisor instead of VMware. The end result is competitive advantage in the fast-growing health services marketplace.

## THE SOLUTION

For about a decade, Mainline has been helping the customer with about 60 percent of its IT infrastructure needs. Seeking to work with as few vendors as possible, the customer turns to Mainline for its depth and breadth of expertise across multiple platforms, from hardware to software to disciplines such as virtualization and business analytics.

The customer already had an IBM SAN Volume Controller (SVC) license, enabling multiple storage arrays to be joined into a single pool of virtualized storage for streamlined management. The license has an optional remote mirroring capability, and the customer wanted to turn it on. Mainline recommended that customer update its license instead to IBM SmartCloud Virtual Storage Center, enabling remote mirroring with added benefits

## THE RESULT

The customer saves 10 percent in licensing and maintenance costs over a three-year licensing period, while doubling the amount of base data that can be mirrored remotely. Mainline also showed the customer that the Metro Mirror function of IBM SmartCloud Virtual Storage Center enables a unified replication strategy. The solution centrally pools data on the customer's five IBM Storwize V7000 systems and an IBM XIV Storage System and replicates it to a remote site—a simpler approach than using replication technology native to each storage system. The solution includes added reporting and efficiency tools in Tivoli Storage Productivity Center and streamlined snapshot management from Tivoli Storage FlashCopy Manager—all for 10 percent less than the customer would have paid for fewer capabilities and less capacity.

---

For more information, call your Mainline account representative or call Mainline directly at 866.490.MAIN(6246).

---

Mainline Information Systems is a trademark of Mainline Information Systems, Inc. © Mainline Information Systems, 2012

This document contains business information that has been developed and/or compiled by Mainline Information Systems, Inc. The information contained herein is therefore proprietary to Mainline and should not be altered, manipulated, copied, reproduced, or used for any commercial purposes without Mainline's express written permission.

All other companies, products, service names, or product names are trademarks, registered trademarks or service marks of their respective owners.

