About The Client

The client is a leading integrated healthcare delivery system serving a large number of residents and visitors in the area it operates. The client’s network includes its flagship hospital, a regional medical center, three urgent care facilities, and a multi-specialty practice with an adequate number of providers delivering services in several locations. This includes a cancer center, a center for women’s health and numerous freestanding outpatient facilities providing wound care, radiology, lab, endoscopy and physical therapy services.

Legacy Challenges

In 2017, the client’s IT team joined with CareTech to deploy system replication for their user environment including their onsite Cerner systems (supporting RHO) and interface engine, the Meditech Laboratory/Radiology/Billing/ADT system, PACS, and the support systems behind those applications. More than a hundred systems occupying 107TB were soon being replicated to CareTech’s disaster recovery environment with an RPO under a minute. The applications were delivered back to the client’s users over the Internet through Citrix Netscalers. In order to build confidence in the overall DR and BCS plan, testing ensued on various systems to validate recovery and functionality at the DR site. Individual Windows and Linux systems were tested and confirmed valid until only one system remained. The client runs two platforms within their Meditech environment, MAGIC and Client/Server. The applications running on MAGIC (Laboratory, ADT, Billing/AR) were recovered and validated. The application (Radiology) running the Client/Server platform failed the database integrity checks used to validate the database. This was a blow to the DR effort since any one system that could not be recovered could jeopardize the entire recovery effort.

CareTech – The Company’s Unanimous Choice

Need For Disaster Recovery

The client is taking disaster recovery seriously and has teamed up with CareTech Solutions (CTS) to create a recovery site far from the coastline area it operates from as it could be affected by hurricanes and other seasonal storms. The recovery site was located in a place considered to be one of the safest areas in North America with regard to natural disasters.
Future-Proof Recovery Design

The client and CareTech gathered the information about the supporting environment of the providers and the replication process and proceeded to brainstorm a solution. What resulted was a product that ensures the replication creates a consistent copy of the database at a regular interval. This new process uses built in Meditech tools to quiesce the Meditech database so it can be put in a consistent and recoverable state at the replication site. The groups, Bridgehead, Zerto, and Meditech validated the solution, ensuring integrity in the replication images.

With confidence and validation behind them, a full environment test was scheduled in the recovery location. With assistance from Cerner, the client was able to validate a complete failover of their computing environment with Cerner EMR functionality at the CareTech recovery site in under a day. It took under four hours to bring the entire environment on line at the CareTech recovery center. Application analysts from across the environment were all able to login remotely and validate the protected applications using common systems in the recovery environment as though they were at their regular workstations.

This is a solution that can be used by any hospital running Meditech in a virtualized environment. It can give an RPO potentially down to minutes for an entire environment and provide protection from a variety of potential issues in your computing.

The list of applications recovered include Meditech MAGIC and Client/Server, Allscripts ED and Professional, Fuji PACS, MS Exchange 2010, GE MUSE EKG, GE Centricity Perinatal, Medical Records by Image Works, Abbot Lab, Mosaiq, Picis, Soarian Interface and Critical Care, and more.

The CareTech team has the ability to protect any fully virtualized environment using Zerto. We also can provide protection for bare metal systems with other tools and capabilities. It is fulfilling being able to create these solutions for our clients, and hope to continue doing more in the future.