THE CUSTOMER

The Clinton – Macomb Public Library is a suburban library system in Michigan. They service nearly 150,000 cardholders from three sites across two townships—one main location and two branches.

THE CHALLENGE

The library's environment consisted of more than 200 public and staff workstations as well as four racks of physical servers and a few Citrix hosts. Using only physical servers made every process time, space and labor-intensive; even more disconcerting, there was no failover, redundancy or backup. Fortunately, they were reaching the replacement point for many of their servers. They had started down the road to virtualization but needed help and a "trusted advisor".

THE GOALS

The library's IT staff was looking to streamline their processes, improve efficiency and conserve space by moving away from their completely physical model. In addition, they wanted to virtualize their Integrated Library System and implement a future-proof solution that allowed for flexibility as well as providing protection in the event of a disaster.

THE SOLUTION

The evolution started with purchasing a VMware license, beefing up Citrix hosts with significantly more LAN capabilities, adding fiber switches, and implementing virtual-to-virtual (V2V) and physical-to-virtual (PtoV) conversions. As a valued trusted advisor, InaCOMP, has helped the institution with many projects including moving to more scalable servers, implementing a virtual failover, inter-site and off-site backup solution, adding storage and updating VMware. In addition, they've provided public PCs for catalog stations and installed a wireless AC Cisco network in the brand new south campus building—taking the library from two wireless routers to six enterprise-grade access points that cover every inch of the campus including the parking lot, so customers can go online even when the library is closed.

THE RESULTS

Aaron Green, IT Manager, describes the transformation as night and day. They're extremely pleased with the enormous efficiencies, plus enjoy the peace of mind that comes from knowing they're prepared for any disaster. Aaron says they never could've handled the current volume with the old infrastructure—the south branch doubled in size and quadrupled in capacity. Today they have the flexibility to build, clone, test and adjust with ease and speed. In the past, making configuration changes required them to install a server, update and copy files. Now it's almost instantaneous. Recently when a voicemail server broke, instead of having to rebuild, reconfigure and move things around they were able to restore the most recent snapshot. They were up and running in just five minutes. The cost savings has been significant. In addition to freeing up plenty of space, they've reduced their power overhead radically as a result of going from 18 physical servers and more than ten UPSs to just two UPSs using their existing equipment.