

Career Quest Learning Centers Saves Time and Money with Providence Thin Client Technology

Career Quest – A Leader in Post-Secondary Education

Since 1995, Career Quest Learning Centers has provided fresh opportunities for mid-Michigan adults seeking a new direction or a career upgrade. With a focus on the health care and business industries, graduates from Career Quest’s “post-secondary education” programs find employment as medical assistants, patient care technicians, certified nurse’s aides, administrative office professionals, and IT technicians. Complimenting Career Quest’s educational programs and hands-on job training are financial aid services and a unique career placement service that provides one-on-one assistance to help move students from graduation into a career.

Technology has played a primary role in Career Quest’s operations from the very beginning. Computers are in use in every office and classroom, and technology is present in every step of the student’s experience. This begins with online assessments and financial aid submissions, and continues with Microsoft Office products and medical software that are used heavily in many curriculums. Instructors, the Registrar’s office, and Student Services all use software and databases to manage students, grades, and the scheduling of classes and classrooms. Technology connects the entire organization, from students to faculty to the corporate offices.



By 2009 Career Quest had added a second location in Jackson, MI, and moved their Lansing operations into a new 28,000 square foot campus. But success also brought along its share of IT headaches. Until 2010, Career Quest operated without a formal IT staff, relying instead on the expertise of the company’s teachers. With a fleet of over 400 computers, a complex network infrastructure, an average of 500 students per semester, and 95 staff and faculty members at Career Quest’s two campuses, the decision to open a third location in early 2011 presented a daunting challenge to “newly minted” IT Manager Rich Lockhart.

“We had two campuses worth of technology that had been neglected for several years,” says Rich, “and trying to build a new campus was really, really tough. It was like somebody dropped a bomb.”

“Providence recognized that I had my hands full already, and they stepped right up to the plate and took over.”
- Rich Lockhart, IT Manager
Career Quest
Learning Centers

Here to Help

Rich turned to Providence Consulting. Career Quest had recently signed a TechCare agreement with Providence to cover the company's server infrastructure, and Rich had a feeling that Providence would be the right choice for a partner in this new project.

"I indicated that I was in a tough spot," he says. The corporate planners at Career Quest were depending on Rich for a ground-up design. "They said, 'Here's an architectural plan, here's an electrical plan... you've got three months to get it done.'"

Providence stepped up to the plate and took over. "Jeff Dettloff made the Kalamazoo campus his full time, number one priority," says Rich. "From the planning of where to put the network drops, to which projectors to use, to how and where the wires were going to be run. He planned out what we needed for the desktop set-ups right down to the number of power strips, network cables, and power cords. The level of service was impressive."

The Thin Client Solution

Being dependent on older, out of the box computers meant Rich was dealing with a host of problems. Traditional PC's are stand-alone machines, containing within their case all of the resources necessary to perform the functions they are called upon to do. For an individual user this makes sense, but within an organization like an office or school, dozens or even hundreds of individual desktops can be a liability. Aside from the obvious problem of squeezing large desktop PC's into limited workspace, and the noise and heat such machines can create, maintaining a fleet of desktop machines requires a lot of time and energy.

Building the new campus from the ground-up gave Career Quest an opportunity to explore concepts that would afford greater flexibility while trimming costs.

"We had no way to ensure that all the machines were uniform in nature," says Rich. "Plus, if we wanted to upgrade a piece of software we had to run an installation file on each individual PC. Windows, Adobe, Java, any other software, must all be done on an individual basis, which takes a lot of time and a lot of manpower. On top of this, you have to find a way to schedule all that time. Our school operates from 8 in the morning until 10 at night, Monday through Friday, so there's not a lot of time to get work like this done unless you're planning on working through the midnight hours."



Providence recommended that Career Quest consider investing in a different type of computer and network infrastructure: Thin Clients. Thin Clients neatly sidestep these issues with a small package that leaves the "heavy lifting" of processing to an external server.

While only a fraction of the size of a traditional desktop "box," a Thin Client gives the user an identical experience, while working from a "virtual desktop" that is created and hosted in the server room but controlled from his Thin Client. This means that all processing and all software is centralized, greatly minimizing the amount of time required to configure, secure, and maintain an organization's computers.



Jeff Dettloff is the founder, president, and "Chief Problem Solver" at Providence Consulting. Starting as a one-man business in 2004, Jeff has steadily grown the company through a customer-first approach and superior service.

Outside of the office, Jeff invests his free time giving back to the community through service in the Rotary Club of Lansing, the Capital Area IT Council, and as an active member of Lansing's Mount Hope Church.



Devon IT TC5c Compact Thin Client

"The TC5c compact thin client combines the powerful, industry-leading Intel® Atom™ n270 processor and 945GSE/ICH7-M chipset.

The small Intel® Atom™ processor is renowned for its graphics performance. Users benefit from the TC5c compact thin client's powerful user experience, as it is capable of streaming video, rich media content, and multiple applications."

- Learn more about Devon IT Thin Client Hardware at www.devonit.com

This centralized infrastructure nearly makes concern over security, viruses, and malware a thing of the past. Rich says, "If students were to download something from the internet, or put something from a USB stick onto our system, the antivirus that runs on the main infrastructure in the back should take care of it."



"Plus," he goes on, "with the way that Providence has structured things with virtual servers, if something does get through and causes a serious problem, we simply restore an image from backup. Providence can remotely spill all the functions over to a new server, rebuild the one that's having the problem, and then put things right back. Since everything is centralized, it is a lot easier to deal with."

Another benefit of Thin Clients is that each user's desktop is portable and moves with them when they log in at a different location. Since their applications and files are centrally stored on the server, users can work from any machine, anywhere in the organization, and have the same experience. This means no more worrying about a machine crashing and losing data. No more back-ups or copying files onto a USB stick to move them between machines. It's all right there on the server.

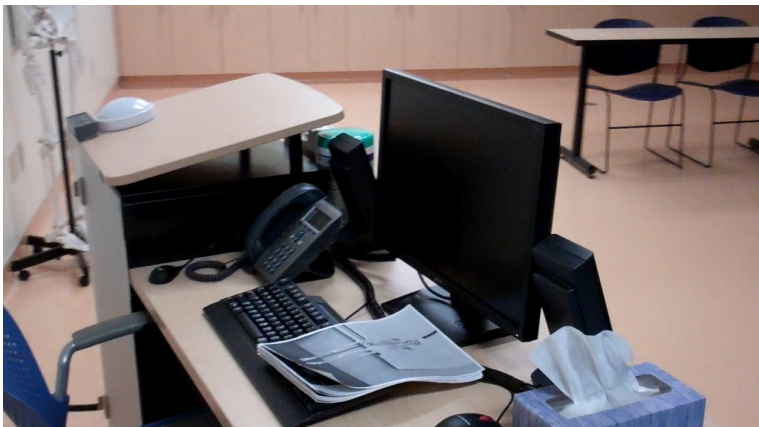
Business Benefits

In today's tight economic times, any technology decision is ultimately going to be driven by dollars and cents. This is where Thin Client infrastructure really shines. The initial cost is a little steeper than for a traditional desktop environment, but the investment pays for itself in saved time and convenience.

"The machines themselves run about half as much as a regular PC," says Rich, "but you're spending additional funds on a beefed-up server with gobs of RAM and the ability to host multiple terminal sessions – hundreds of terminal sessions – at the same time. Because of that, the Thin Clients cost a little more to implement up front," he continues, "but they eliminate the costs associated with supporting individual PC's since all the processing power that normally happens in the box next to the student's leg is pushed to the server. This reduces maintenance costs and increases the amount of uptime on a per-student PC. There are real savings in the amount of time and labor that it would take to upgrade and maintain those systems."

"Let's say I needed to upgrade the Lansing campus from Office 2003 to Office 2010. I would have to organize a team, and we would have to physically touch every single desktop computer. I would have to schedule that on a weekend to work around the class schedules. For the 150 student computers that we have, that would take an eight hour day with a team of four."

"With the new Thin Clients in the Kalamazoo office, I call Providence and say, 'we have to upgrade to Office 2010.' I get a call back in half an hour, 'Okay. You're upgraded.' The time that it takes to upgrade a desktop infrastructure environment is the time that it takes to upgrade each computer, times however many computers you have. The time it takes on a Thin Client infrastructure is the time it takes to upgrade the server. And that's it."



In The Classroom

The Thin Client infrastructure gets rave reviews from students and teachers. “The students love the tiny little devices that sit on the desk,” says Rich. “They love the speed of those devices, and they love that they can plug in headphones or a USB stick.”

“I sat down and logged in as a student to see what their

experience was like,” Rich continues. “It was fast and reliable. Start a program, and it’s ten times quicker than a desktop. Your USB stick pops right up. All the processing takes place on that super-powerful server, so it’s just passing back the screenshots and the data information. Man is it quick.”

The instructors love them too. The speed and reliability of the technology means more efficient use of classroom time when compared to the older campuses with traditional desktops.

Rich explains, “A computer might have a little bit of spyware on it, or maybe there’s something wrong with Microsoft Office, or maybe it’s just six years old and has had 2000 students cycle through it. It’s getting tired. If two computers are running slow like that, and you’re teaching a class of 28, the whole class is waiting on those two people to bring up their applications. But with the Thin Clients, when teachers ask the students to open an application or use the Internet, it’s right there.”

Providence went to great lengths to ensure a clean, streamlined appearance and flexible configuration with the new systems. Each Thin Client classroom is comprised of rows of two-machine desks, or “units,” that allow for quick changes or moves to another location.

“A room might be scheduled for 25 students this term, but next term it might only be scheduled for 12,” says Rich. “If you have 32 Thin Clients in that room, you can take half of those and pop them into a different classroom. Each desk unit has two Thin Clients, two monitors, a power strip, and a couple of network patch cables, so you just disconnect the cables and move them. It’s more adaptable, more flexible, and it’s really quick and easy. We’re able to achieve and expand with a small number of units.”

“The corporate guys love it,” he goes on. “Providence wired up the Thin Clients so that all the wires and cables are hidden. Anything that is showing is wrapped in wire loom. It makes your classroom look clean. And I have to attribute all this to the way that Jeff Dettloff thought about turning the desks into units.”

Licensing

Managing software licensing for large organizations can be a time-consuming hassle, but Providence offered some unexpected assistance.

“When we first met with Providence I was trying to make sure that we were fully licensed in all the Microsoft products that we were using at our campus,” Rich says, “and Providence helped us to take advantage of academic pricing.

“I had communicated with another vendor that offered licensing,” Rich continues, “and that vendor never once mentioned a Campus Agreement to me. That salesperson only wanted to get as much cash as he could for this licensing.”

Established in 2004, **Providence Consulting** is one of Mid-Michigan’s leading providers of Technology Infrastructure and Information System Security goods and services. Our clients range in size from small businesses to larger organizations having multiple sites. Providence partners with IBM, Microsoft, HP, Symantec, and other premier IT manufacturers to design, plan, deploy and support integrated technology solutions for business and governmental organizations.

Headquartered in downtown Lansing, Michigan, Providence is committed to Helping People, Solving Problems, and Making Technology Easier!

“With the help of Softchoice Corporation, Providence drafted a Microsoft Campus Agreement License, which cost a few thousand bucks. Without that, the same number of licenses would have cost us thirty to forty thousand dollars. All the work, all the planning and coordination that Providence put into that was free of charge. It just goes to speak again for the fact that Providence is all about their customers, and not about the dollar.”

The Providence Difference – “Making Tech Easier”

“When you’re making a decision relating to IT,” Rich says, “you need to make sure that you’re accounting for all the perks plus all the drawbacks of the technology that you’re deciding on. I want to be told the things that I don’t think to ask about. If you’re unaware of something and you make a decision, that could come back to bite you. I don’t want there to be any surprises as we move forward. With Providence that’s what I get.”

“Providence took a really hard look at our current infrastructure and the way that we were set up,” he continues. “The time that they took to analyze what we were doing and how we were doing it was far beyond anything that we’ve ever received from any other vendors. That was the trigger that made me say Providence is the company that I want to be dealing with, and they haven’t let me down.”

In closing, Rich says, “I feel that Providence is looking out for our needs better than any other vendor possibly could. It doesn’t feel like it’s about the money, it feels like it’s about the customer and about what’s best for that customer. It speaks volumes about the fact that they want us to succeed, and in turn, when we succeed, Providence is going to succeed.”

How can Providence
Make Tech Easier
for you?

Contact us by phone at
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Or by email at
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Visit Providence
on the Web:
www.MakingTechEasy.com

