

Public Library Utilizes IP Communications to Enhance Patron Experience

Johnson County Public Library teams with Matrix Integration to Improve Patron Experience.

Executive Summary
<p>Johnson County Public Library</p> <ul style="list-style-type: none"> ▪ Government ▪ Franklin, Indiana ▪ 5 locations in Johnson County ▪ Over 100,000 patrons <p>Business Challenges</p> <ul style="list-style-type: none"> ▪ Standardization of desktops with centralized control ▪ Meeting the demand from patrons needing to access the internet ▪ Network components reaching end of life, prompting support issues ▪ Minimizing the number of network servers allowing for faster back up recovery time
<ul style="list-style-type: none"> ▪ 5 AXIS 216MFD network cameras ▪ HP switching infrastructure including: HP dc7000 series and HP DL38x series ▪ ASA5510 firewall ▪ HP MSL5026 Tape Library
<p>Business Results</p> <ul style="list-style-type: none"> ▪ Library staff can easily self-manage one voice/data network. ▪ Patrons can gain high speed wireless access. ▪ Patrons can be seamlessly be transferred with library network via phone. ▪ Improved Parton safety within the need for increased staff. ▪ Library is positioned to be become a community gathering space.

Johnson County Public Library (JCPL), with 5 locations in the 2nd fastest growing county in Indiana, currently serves over 100,000 residents. JCPL recently overcame disparate voice and data systems by implementing an overarching solution across their five locations including a new library in Trafalgar. The complete solution was designed and implemented by Matrix Integration.

The biggest challenge has been keeping up with the needs of a growing population with controlled resources and funding.



To keep pace with the population growth, JCPL needed more physical library space and an increase in their network connectivity to efficiently meet the bandwidth needs of the community. "We all joked at the library, 'make sure you get all your work done before school gets out!' because we were using 110% percent of our bandwidth after school," said Beverly Martin, Director of Johnson County Public Library.

To better serve the community, a 900 square foot library was recently replaced with a new state-of-the art 20,000 square foot facility. As is the case with many public libraries, JCPL faced budget limitations making it difficult to add additional staff. The question became how to effectively use technology to improve patron experience while keeping overhead in check.

Management of the infrastructure was becoming chaotic and confusing, due to the five branches operating on different voice and data infrastructures. “Every time a new employee came on board we had to go to our provider and request the change which would sometimes take a few days,” said Beverly.

JCPL wanted the library’s desktops to be controlled centrally and be standardized across all five locations. By normalizing the desktops and using the same programs and operating systems, staff would have the ability to move from building to building and do so seamlessly. A centralized solution would also let JCPL staff perform maintenance and upgrades more consistently, ensuring that the network was running smoothly for patrons.

The patrons see the JCPL as a resource for education, so they needed to have access to educational information standardized across their branches. Their goal was to offer the same level of service at every branch, regardless of which branch a patron called for information. “Taking care of the patrons and making sure they have easy access to information is huge. Patrons are requiring more from an information access point,” said Beverly.

Furthermore, the demand for workstations and wireless accessibility from the library’s clientele had increased four times from the previous year. “The only way we could meet that demand would be to have them bring in their own hardware. We are trying to make the library a community gathering space”, said Beverly.

Being cognizant of the fact that JCPL didn’t have the internal resources in their IT department, or the resources to bring someone in full-time, they started looking for outside sources with the expertise and chose Matrix Integration. With past experience working within the public sector, Matrix Integration understood the budget challenge that faced JCPL. “A non-profit organization looking to upgrade new technology typically has to work with a fixed budget and deal with increasing patron demands,” says Nathan Stallings, Government Account Manager of Matrix Integration.

“Matrix Integration has always listened to what our needs are and what solution would look best down the road both economically and for service. The whole team has been remarkable in my mind as they stood by us. I see Matrix as another member of our IT Team.”

- Beverly Martin, Director of Johnson County Public Library

“Matrix Integration was an easy choice. We felt confident in what we were doing to enhance the experience for our patrons and we knew that Matrix would provide the ongoing support we needed.” said Beverly. The first challenge was to address the lack of bandwidth to support the increasing demands of the Patrons accessing the internet. The Matrix solution was to first implement a high-speed data connectivity throughout the JCPL network.

The second challenge was planning for the new library location. “Matrix worked with our electrical engineers to craft drawings and helped design where network drops would be needed to suit the needs of the patrons. I really felt this was above and beyond,” said



Beverly. "Many times technology gets left out of the build and we need to retrofit. We said, 'here's what needs to happen from a voice and data standpoint'. We didn't want to leave technology out of the picture," said Nathan.

With the need for increased bandwidth and a new location going online it made sense to seriously consider IP Telephony. By implementing a high speed data network it provided the foundation to realize the benefits of a converged voice and data solution. Matrix educated JCPL in converged networks and how a single phone and data network can save them money by decreasing the management costs and ultimately enhancing the patron's experience. "In order to have a seamless network, the other locations needed to upgrade their existing infrastructure so that it would support a unified communication solution enterprise-wide," said Nathan.

"They are educators and at the end of the day they need to make access to information and educational materials uniform across their different branches. When you call in, the location you connect with initially will be the right one. The experience is the same at each library. For example, with IP Telephony if the expertise you're looking for is housed at a different location, you could be switched without knowing the difference," said Nathan.

Matrix Integration designed a solution and deployed best of breed products for the Johnson County Public Library including over 100 PCs for staff and patrons, a redundant Cisco Unified Communications System with Unity Connection Voice Mail, AXIS Communications 216MFD network video surveillance cameras, HP ProCurve 5400zl series Gigabit POE switches and HP dc7000 series business desktops and HP DL38x series servers. The final solution also included a multitude of Liebert on-line UPS systems, a Cisco ASA5510 security firewall and an HP MSL5026 tape library. The configuration was rounded out with a number of HP LaserJet 4250N network printers, infrastructure cabling for new Trafalgar location and HP ProCurve wireless access points at each of the five locations.

The entire Matrix team, from pre-sales to the engineers, went on-site to each location to conduct network readiness assessments and minimize any unforeseen challenges. They provided JCPL with a technology map outlining what would be needed to complete both the new location and upgrades for the other four locations. "I see Matrix as another member of our IT Team. I don't think we could be doing what we are doing without them," said Beverly.

By implementing these solutions JCPL has already experienced numerous benefits.

The centralized management system with IP Telephony has minimized the need for JCPL to hire additional staff. "This system allows us to do simple things like changing the name on the telephone. No longer do we have to go to our provider," said Beverly. The data and communication systems (which support the backend library system) are linked together, which standardizes the check-in process across the sites.

High-speed wireless access has enabled patrons to bring their own hardware into the library which has helped alleviate the demand for additional library PC hardware, which is used primarily for gaining access to the internet. "Our goal was to get better and faster connectivity. The wireless fit in nicely with the goal of making the library a community gathering place by creating a very comfortable place to sit in a chair by the fireplace," said Beverly.

The IP surveillance solution was the perfect fit for the new Trafalgar location, given that it replaced the need to hire more staff, while actually improving patron safety. "Now, a



few staff members from a central point can see what's going on in a very large space improving the safety of our patrons and our staff," said Beverly.

Matrix also helped standardize the PC and server hardware, thus minimizing staff needs and design complexity. If the staff moves from building to building all the computers will be the same. Desktop upgrades are no longer a nightmare and can be done remotely instead of physically having to go to every computer. "No longer do we have to go out and touch every machine. It makes it easier to try things out system wide rather than load on individual machines. We added a level of refinement," said Beverly.

Matrix also designed and implemented a data center battery backup solution at the main data center to minimize downtime and loss of critical data, with extended runtime modules to meet minimum runtime of 30 minutes. The consolidated tape backup solution combines backups from multiple servers to a single tape solution, ultimately saving JCPL management time and money.

For More Information

To find out more about Matrix Integration For more information visit:
www.matrixintegration.com

This customer story is based on information provided by the Johnson County Public Library and describes how that particular organization benefits from Matrix Integration solutions. Many factors may have contributed to the results and benefits described; Matrix Integration does not guarantee comparable results elsewhere.