



Pasco County

Pasco County is Florida's premier county for balanced economic growth, environmental sustainability, and first-class services.

The County administration's mission is to provide excellent customer service to its citizens in a lean, efficient and accountable manner.

Background

Home to approximately 475,000 residents, Tampa Bay-area Pasco County provides technical services and support – including server functionality and telephony/communication needs – to approximately 4,000 users ranging from emergency personnel to government officials. Pasco County's continued IT growth and dependence, coupled with the budget constraints of a taxpayer-funded entity, led to a need for a cost-effective and highly-available data center update.

Case Summary

Location Pasco County, Fla.

Products/Services

- Emerson Network Power's SmartRow infrastructure solution

Critical Need Update the data center environment to align with increasing IT needs and a limited budget, while maintaining safety and availability.

Results

- Achieved savings of 60 percent over a traditional computer room by implementing the SmartRow offering
- Saved \$80,000 in installation costs, completing the project within four months (bid to deployment)
- Reduced potential fire suppression system costs by \$28,000
- Raised IT productivity as a result of the solution's remote monitoring system
- Created a data center where people could work safely and comfortably due to the SmartRow offering's internal fire suppression system and low noise factor

The Situation

As Pasco County experienced increased IT growth through server virtualization and other applications, the facility sought to upgrade its data center operations by adding a reliable backup system that could provide high availability, accommodate capacity growth and reduce its taxpayer-driven bottom line.



Pasco County's new data center requirements included:

- Greater cooling capacity to support the implementation of blade servers
- Increased power redundancy to provide the availability needed in a backup system
- Room-neutral design, to utilize an existing space that lacked IT-grade cooling and fire suppression
- High-security features to support PCI compliance for credit card transactions
- Personnel-friendly application, with internal fire suppression and low noise

"As far as IT operations and growth are concerned, Pasco County is making leaps and bounds toward newer technology going virtual in our server space, and moving away from mainframe," said Todd Bayley, technical architect for Pasco County's IT department. "Virtualization of desktops and servers coupled with right-sizing are in the future. A flexible, greener data center space and reduced capacity were top priorities for us."

The Solution

After soliciting bids from multiple vendors, the IT department worked with Computer Support Products, a local Emerson Network Power data center design expert, to determine the right solution for Pasco County's needs.

The IT department found that the SmartRow infrastructure solution, part of the Smart Solutions family from Emerson Network Power, aligned with the facility's IT challenges and offered the cost savings Pasco County was seeking.

"We found the SmartRow offering to be a much more affordable system aimed at the small to medium sized-business category," said Bayley. "We saw significant cost savings from utilizing the Liebert cooling and UPS systems inside the racking system, as well as the interchangeability of the components and the serviceability of the entire solution – all significant factors in our decision."



Pasco County created a data center where people could work safely and comfortably due to the SmartRow offering's internal fire suppression system and low noise factor.

Specific characteristics – like built-in remote monitoring and the convenience and flexibility of interoperable components made the SmartRow offering more cost-effective than competitive solutions.

Its redundant rack power configuration with dual UPS systems and PDUs, coupled with temperature sensors to regulate cooling, made the SmartRow approach nearly maintenance-free. This enabled Pasco County to reduce the amount of time spent on break/fix events and to redeploy IT personnel to higher level activities.

Much of the cost savings that Pasco County gained with the SmartRow infrastructure came from the ability to implement it without expensive room upgrades, such as adding a raised floor, upgrading the fire suppression system or installing dedicated cooling. The solution's self-contained fire suppression system gave Pasco County the peace of mind that its personnel would be protected from a potential fire suppression system activation while working in the same space as the computer equipment.

Furthermore, the simple, rapid deployment of the SmartRow offering allowed Pasco County to easily add backup to its data center.

The Results

As part of the Smart Solutions family, the SmartRow offering provided Pasco County with significant advantages in terms of greater IT control, systems interoperability, economy and efficiency.

“Using the SmartRow approach, we did not have to sacrifice availability, and we gained efficiency, so we found that the SmartRow offering gave us the best of both worlds,” said Bayley.

The IT department gained greater control over its environment through built-in monitoring and a KVM over IP system that enables personnel to remotely track and adjust equipment operating parameters, preventing costly downtime and reducing the amount of time spent monitoring and managing the system. Security controls also were improved, with lockable cabinets and contact closures.

Together, monitoring and security features enabled Pasco County to meet stringent PCI security standards.

Interoperability of the system’s components – from hardware to software to servicing – also drove economies and efficiencies.

By integrating cooling, power management, monitoring and control technologies and security features in a self-contained solution, the SmartRow offering reduced costs and significantly increased efficiencies compared to using disparate room-based systems that may not effectively operate together.

The SmartRow offering also offered savings by helping Pasco County avoid heavy investments in room upgrades typically required for new IT environments. No additional cooling, fire suppression, raised flooring or ramping were needed to deploy the system. Pasco County saved 60 percent over the potential cost of converting the room to meet IT requirements. Installation cost savings amounted to \$80,000, and the integrated fire suppression system saved \$25,000.



“We saw significant cost savings from utilizing the Liebert cooling and UPS systems inside the racking system, as well as the interchangeability of the components and the serviceability of the entire solution – all significant factors in our decision.”

Todd Bayley, technical architect for Pasco County’s IT department



“The SmartRow offering has enabled us to set up the system, set our operating conditions within it and forget it. And it’s not a set it and forget it mentality – it’s an install it, equip it, allow it to run, and we can focus and concentrate our efforts on other business aspects.”

Todd Bayley, technical architect for Pasco County’s IT department

The Smart Row infrastructure also provided higher operational efficiencies. The enclosed cooling system operates with greater energy efficiency because of higher input air temperatures, increasing the capacity of the overall system. Its use of patented Digital Scroll technology also increases efficiency because it constantly matches cooling to load changes, reducing wear and tear on the compressor and fans. As a result, air filters don't have to be replaced as often.

Plus, service costs for the integrated cooling system were lower than for perimeter cooling had a conventional data center had been deployed.

All of these advantages will drive down ongoing energy, servicing and maintenance costs.

Another important efficiency came in the form of higher IT productivity. Personnel could spend less time monitoring and managing the system, and could focus their efforts on higher value activities.

“The SmartRow offering has enabled us to set up the system, set our operating conditions within it and forget it,” said Bayley. “And it’s not a ‘set it and forget it’ mentality – it’s an install it, equip it, allow it to run, and we can focus and concentrate our efforts on other business aspects.”

For more information on Smart Solutions offerings from Emerson Network Power, visit www.liebert.com. For more information about Pasco County, visit www.pascocountyfl.net.



Much of the 60 percent in cost savings that Pasco County gained by deploying SmartRow infrastructure came from the ability to implement it without expensive room upgrades, such as adding a raised floor, upgrading the fire suppression system and installing dedicated cooling.



The SmartRow offering enhanced IT personnel efficiency, thanks to its integrated monitoring system.

Emerson Network Power.

The global leader in enabling Business-Critical Continuity™.

EmersonNetworkPower.com

- AC Power
- Embedded Computing
- Outside Plant
- Racks & Integrated Cabinets
- Connectivity
- Embedded Power
- Power Switching & Control
- Services
- DC Power
- Infrastructure Management & Monitoring
- Precision Cooling
- Surge Protection

While every precaution has been taken to ensure accuracy and completeness in this literature, Liebert Corporation assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions. Specifications subject to change without notice. © 2011 Liebert Corporation. All rights reserved throughout the world. Trademarks or registered trademarks are property of their respective owners. ® Liebert and the Liebert logo are registered trademarks of the Liebert Corporation. Business-Critical Continuity, Emerson Network Power and the Emerson Network Power logo are trademarks and service marks of Emerson Electric Co. © 2011 Emerson Electric Co. CH-00021 (01/11)