

# Rockford Public Schools transforms IT infrastructure with Nutanix partnership

## About

**Industry:** GOV-SLED

**Employees:** 5,000

**Geo:** Americas

**Website:** [www.rps205.com](http://www.rps205.com)

### Products:

- [AHV Virtualization](#)
- [Nutanix Cloud Infrastructure \(NCI\)](#)
- [Nutanix Cloud Manager \(NCM\)](#)
- [Nutanix Unified Storage \(NUS\)](#)
- [Prism](#)

## Ready to get Hands-On?

Take a Test Drive

## Boosting IT efficiency and student success with Nutanix Cloud Platform

### Business Need/Overview

Rockford Public Schools (RPS) serves over 27,766 students across 42 buildings with a dedicated staff of 5,000. The IT department, consisting of 12 infrastructure team members and over 50 IT professionals, manages the district's critical systems. Their primary goal is to ensure 99.99% uptime, providing continuous access to essential educational tools and administrative systems. As part of this initiative, RPS is undergoing a complete data center overhaul, aiming to replace aging infrastructure to support their academic, administrative, and video surveillance workloads.

The RPS team, led by Matt Johnson, Director of IT Security, and Brett Smith, Senior Systems Engineer, engaged Nutanix to support the build-out of their new data center and modernize their IT environment, ensuring seamless operations for students and staff alike.

### Key Results

#### 99.99% uptime

Ensuring that critical systems are always available to students and staff.

#### Enhanced disaster recovery

With a sub-15-minute recovery time, minimizing disruptions in the event of a system failure.

#### Cost and time savings

Simplified budgeting and management by integrating all systems into Nutanix's unified cloud platform.

#### Adaptive capacity

The ability to add nodes and scale resources as needed, improving future planning and resource allocation.

“As the Chief Information Officer, I'm excited about moving to a cloud platform that uses hyperconverged infrastructure (HCI) as the foundation because it will transform our IT operations. Nutanix HCI integrates compute, storage, and networking into a single, software-defined platform, simplifying management and reducing complexity. This shift can lead to significant cost savings, improved performance, and enhanced scalability, allowing our IT team to focus on strategic initiatives rather than routine maintenance. Additionally, Nutanix's robust security features, built-in redundancy, and high availability ensure our systems are resilient and reliable. The centralized management interface further streamlines operations, boosting efficiency and productivity. Embracing Nutanix Cloud Platform and HCI positions Rockford Public Schools for future growth and innovation, maximizing our infrastructure ROI.

Jason Barthel,  
Chief Information Officer

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## Challenge

Rockford Public Schools (RPS) faced significant challenges managing their aging IT infrastructure, consisting of multiple systems from five vendors. The outdated environment was difficult to maintain, leading to issues such as air conditioning problems, networking inefficiencies, and unpredictability in hardware replacements. These challenges made it harder to deliver the 99.99% uptime required for critical systems, directly impacting student education and staff operations.

Matt Johnson, Director of IT Security, explained, "We were dealing with aging systems that were difficult to manage because it was end of life, and budgeting for replacement of these servers that were all purchased at different windows of their life cycles created unnecessary complications for our budget. It's a lot of work to manage those systems and to continue to implement new features. We just didn't have the capacity to manage separate storage and infrastructure systems."

Johnson further explained, "At the end of the day, it's about providing greater availability of systems to students. If a teacher can't look up a student's IEP [Individualized Education Program] inside of our student information system, then that student isn't getting the equal access to education that they deserve. If the business system is down, the teachers teaching the students aren't getting paid. If we can't look up bus schedules, that impacts student safety. If the video management system is unavailable, student safety is impacted as well. Keyless access – if any of our systems are down, door locks will continue to function, but it's important to have access to those systems at all times." These combined challenges emphasized the need for a complete solution that could provide smooth management, maintain system accessibility, and support the district's vital operations, all while focusing on student safety and success.

## Solution

Rockford Public Schools (RPS) adopted Nutanix Cloud Platform to address these challenges, allowing them to consolidate multiple systems into a single, unified platform. Nutanix's solutions, including Nutanix Cloud Infrastructure (NCI), Nutanix Cloud Manager (NCM), and Nutanix Unified Storage (NUS), provided RPS with the tools to manage computing, storage, and networking through a streamlined interface.

The deployment included 125 virtual servers, which host essential workloads such as business information systems, student information systems, and video surveillance. Nutanix's AHV for virtualization and Prism offered a centralized viewpoint, allowing the IT team to easily manage their infrastructure, reducing complexity and time spent on maintenance.

Additionally, Nutanix's advanced features, like Nutanix Flow for micro-segmentation and enhanced security. Disaster recovery capabilities allowed RPS to improve uptime, with sub-15-minute recovery times in case of failures. Unified Storage for video surveillance, along with Veeam backups for business continuity, further ensured the resilience of the district's operations.

"Usually you're talking 5 or 6 different vendors that I have to manage, work with, worry about stuff going end of life. Being able to just go to one saves a lot of time and management time on not having to worry about stuff going to end of life. So the management side of it's much easier. It's much faster. We can better predict future costs," stated Smith.

"As a relatively new Systems Admin, the wholesale move to the Nutanix ecosystem has been a great opportunity to expand my skill set and gain valuable experience. We've even seen firsthand lately how the hyperconverged infrastructure of Nutanix and the built-in failover systems can provide superior resiliency and uptime for our various information systems, minimizing potential impact to the student experience downstream," added Justin Thompson, Systems Administrator.

## Customer Outcome

### Increased system uptime

The transition to Nutanix has dramatically improved system reliability, with RPS now maintaining 99.99% uptime across their critical systems. This ensures that essential tools and resources for students and staff are consistently available, minimizing disruptions. Smith explained, "With Nutanix, it's a lot less time, management, and more uptime when it's all under one roof."

#### **Improved disaster recovery**

With Nutanix's built-in disaster recovery capabilities, RPS can recover from potential system failures in under 15 minutes. This rapid failover ensures the district can quickly restore service without major disruptions. "Nutanix helped us to understand that it was possible to run a site that could flip over and have that sub-15 min recovery time or close to," stated Johnson.

#### **Simplified management and scalability**

By consolidating multiple vendors into a single, unified platform, Nutanix has made system management significantly easier for RPS. The district can quickly scale its infrastructure as needed, adding nodes and resources without complicated vendor interactions. "It's much easier for us to predict future costs and plan for upgrades," noted Smith. "Now, when someone needs more resources, we can simply add nodes to the existing environment, and we're up and running within a couple of weeks."

#### **Cost efficiency and budget predictability**

The Nutanix solution has streamlined RPS budgeting by eliminating the complexities of managing multiple vendor contracts and unpredictable hardware replacements. The district has realized significant cost savings, freeing up resources for other initiatives. "When we originally went to the CFO and discussed this project and went over the features, how this would impact students, and how this would help students we were also able to show cost savings across the board on this, and it was pretty clear at that point that Nutanix was the direction we wanted to go in," stated Johnson.

### **Next Steps**

RPS is exploring AI and machine learning to enhance educational outcomes and improve operational efficiency. The district is considering on-premises AI solutions to provide greater control over data privacy, particularly concerning student information. Nutanix's flexible infrastructure will allow RPS to integrate new technologies seamlessly as the district continues to grow and innovate.

"AI is another big piece, helping us look to the future. The versatility with Nutanix allows us to implement more hardware, and running something on-prem for AI is probably in the future for education. We like the ability to easily add a node with GPUs or more hardware and tie it into the Nutanix cluster—it just seems pretty easy to do," concluded Johnson.

# NUTANIX

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