

# MDECA Makes The Grade with Flash from Pure Storage

BOOSTS SQL PERFORMANCE AND IMPROVES IT ACROSS ENTIRE ORGANIZATION

## The Challenge: Improve System Availability for Districts Serving Over 80,000 Students

The Metropolitan Dayton Educational Cooperative Association (MDECA), a member of the Ohio Education Computer Network, is an Information Technology Center that provides technology-related services to K-12 schools in Darke, Miami and Montgomery Counties, and to Fairborn City School District in Greene County of Ohio. The association strives to bring the latest and best technology to the schools it serves.

After the mechanical disk-based SAN failed and put MDECA at risk of losing valuable school and student data, the IT team began to look for other vendor options that would ensure long-term data availability.

"I don't like throwing money away on old technology. If I was going to invest in something, I wanted to get something that would last," said Chris Knodel, Application Support Manager at MDECA.

The FlashArray has quite simply made everything better.

Chris Knodel  
Application Support Manager

## The Answer: FlashArray Maximizes Storage Efficiency and Utilization with Native Enterprise-class Features

MDECA utilizes Microsoft SQL 2012 to store all student records including demographics, contact information and report cards from Kindergarten to graduation. The IT team was looking for a solution that could ensure long term data availability along with increased performance capabilities. After determining that flash would be the ideal solution for the organization's environment, the IT team selected the Pure Storage FlashArray because it was specifically built from the bottom up to support flash. Moreover, unlike the other solutions that were being evaluated, data deduplication and compression are built-in offerings of the FlashArray so MDECA did not have to pay extra for those features.

Soon after deployment, the Pure Storage FlashArray was supporting all IT use cases across the entire IT infrastructure. Mass updates to the SQL databases that previously stalled and slowed down the entire system now run faster and more efficiently, and all updates occur without issues.

## The Solution: Faster Performance Capabilities Enable MDECA To Expand its Technical Services Offering to Schools

Previously, running a report for a building of 600 middle school students would take 15-20 minutes and slow the entire system down, causing users to be timed out of computers. With the FlashArray the whole report can be processed in five seconds. "It takes longer to open the report in Word than it does for the report to run," said Knodel.

One of the added benefits that MDECA has experienced is the simplicity of the management interface and the speed with which the IT team can manage storage. Unlike the old array that required 45 minutes to create a drive and present it to the host server, the Pure Storage FlashArray can produce two 4TB drives and present it to the host within 5-10 seconds. Knodel added, "What used to take me up to an hour now takes me minutes."

In addition, MDECA is taking advantage of data reduction rates of 5.5:1 for its SQL database, equaling a total use of only 900GBs of the 4TB system. With the increased capacity and performance, MDECA is able to expand their technical support services to more K-12 schools in the area.



### SOLUTION

- Replaced mechanical disk-based SAN with Pure Storage FA-320
- Supporting more than 80,000 students in 94 districts
- Utilizes Microsoft SQL 2012 database to run student reports

### PERFORMANCE IMPROVEMENT

- 5.5:1 data reduction
- Processing time from 45 minutes to 10 seconds
- Significantly faster SQL report run times (5 seconds instead of 20 minutes)
- Ability to support vastly more school district IT requirements

### IMPROVED SQL REPORT PROCESSING

