Bringing education into the digital age

Manteca Unified School District enhances education for teachers and students by connecting classrooms with Cisco® network solutions.

“By staying in front of technology, we can leverage tools that make our kids globally competitive.”

- Jason Messer, Superintendent, Manteca Unified School District

Technical literacy is becoming increasingly important in the modern global economy. But for many schools, delivering and maintaining the necessary infrastructure can be costly.

Challenges

- Meet Common Core state standards for digital curriculum
- Enable students and teachers with technology skills
- Support tens of thousands of concurrent connections

Nestled in California’s Central Valley, an area with a strong agricultural economy and fast-growing population, Manteca Unified School District (MUSD) serves more than 23,500 students across 32 campuses. After years of cuts to school budgets, MUSD students were in danger of falling behind.

“We received one-time funds from the state to reinvest back in schools,” says superintendent Jason Messer. “Using cutting-edge technology, we believed we could help students leap ahead and gain a competitive edge for the global age.”

MUSD created the Going Digital initiative. But first, schools needed to completely overhaul their network infrastructure. With a timeline of only 9 months, MUSD needed a robust, standard network infrastructure that could be deployed quickly with the help of top partners, including AMS.NET, KMM Services, and Vanden Bos Electric. The new network would also need to support MUSD’s vision of Software defined networking (SDN) to take advantage of future innovation and Internet of Everything. The school district turned to Cisco and solutions from the Internet of Everything to help make its vision of transforming to a digital institution a reality.

Case Study | Manteca Unified School District

Size: 23,500 Employees  Location: Central California  Industry: Education
A Cisco Software-Defined Network helps enable a modern learning environment for students and teachers across 32 schools.

Investing in the future
MUSD explored many wireless solutions, but Cisco combined reliability with cutting-edge technologies, like support for 802.11ac next-generation wireless standards, 40 Gigabit Ethernet and software defined networking. “Cisco allows us to explore emerging technologies without needing to make further expensive investments in our infrastructure,” says director of IT Colby Clark. “Moving to a SDN architecture will help us reduce costs as we employ new and emerging technologies to advance our digital curriculum.”

Digitizing the learning environment
“The biggest impact on learning will always be quality teaching,” says Dr. Cheryl Meeker, senior director of Elementary Education. “But Cisco’s connected networking solutions give teachers the freedom to connect students with experiences outside the classroom walls.”

Building centralized management systems
Cisco network management solutions bring together data that helps MUSD track down lost devices, view usage statistics, and dive down into an individual user’s connection from a central location.

“If an access point goes down, that affects instructional time,” says Ungel Mamon, network supervisor, MUSD. “Cisco gives us the visibility to spot and solve problems quickly to keep classrooms running.”

Solutions
- Delivered performance and investment protection with architecture based on Cisco Nexus® 9000 switches
- Installed Cisco wireless access points to support tens of thousands of devices

Students can compete against classmates in digital quiz games or learn to use 3D printers.
Continuing to grow

“With the digital classroom, we’ve provided students with innovative learning experiences like connecting with scientists over video to help them build satellites that we’ll be launching into space,” says Messer. “We could have never considered that before.”

Building on the existing network, MUSD plans to continue adding new technologies, including a physical security system. “The Cisco network is robust and scalable enough to support almost anything we want to do for years in the future,” says Clark.

For more information about Manteca Unified School District’s Going Digital initiative, visit its website: http://www.mantecausd.net/goingdigital.

Products & Services

Routing and Switching
- Cisco Nexus 9000 Series Switches
- Cisco Catalyst® 6500 Series Virtual Switching System
- Cisco Catalyst 2960–X Series Switches
- Cisco Aggregation Services Routers
- Cisco ME 3600X Series Ethernet Access Switches

Wireless
- Cisco Aironet 3700 Series Access Points
- Cisco Wireless Services Module

Network Management
- Cisco Prime™ Infrastructure
- Cisco Identity Services Engine
- Cisco Mobility Services Engine

Security
- Cisco ASA 5585–X Adaptive Security Appliance

Voice and IP Communications
- Cisco Unified Communications Manager