

Schools Gain Immediate and Long-Term Savings from Secure VDI

Trend Micro™ Enterprise Security for Endpoints automatically adjusts security to extend protection to virtual desktops.

“Our secure VDI platform makes it easier and less time-consuming to manage endpoints... we can make better use of our existing staff and actually improve the level of service we provide.”

—Jay Cawley, Director of Technology, Morgan County Schools

EXECUTIVE SUMMARY

Customer Name: Morgan County Schools
Industry: K12 Education
Location: Madison, Georgia
Web site: www.morgan.k12.ga.us
Number of Employees: 500

CHALLENGE:

- Increase levels of service provided to students and staff, without increasing the technology team staff
- Minimize the time required to support desktop systems
- Give end users fast access to technology advancements
- Provide a safe, secure environment, appropriate for students of all ages

SOLUTION:

- Introduce virtual desktop infrastructure (VDI), secured by Trend Micro Enterprise Security for Endpoints

BUSINESS RESULTS:

- Less time required to provision new desktop systems (simplicity of a single virtual image)
- Faster updates and changes
- Improved services by reallocating resources previously focused on desktop management
- Optimized performance for security scans and security updates, with virtualization-aware security solution
- Simplicity of a single security solution for both virtual and physical desktops

Challenge

The Morgan County School system near Atlanta, Georgia creatively leverages technology to help teachers and staff fully engage students and deliver the best possible education experiences. Keeping up with technology trends and advancements has helped the relatively small school system protect its investments in infrastructure, while minimizing the cost of ownership. For example, a few years ago the schools introduced virtualization to consolidate servers.

When Morgan County Schools started planning for a laptop/desktop PC refresh cycle, virtualization was again considered as a potential way to simplify the management of systems and user sessions.

“Since we are a small school system, we do some things differently,” explained Jay Cawley, director of technology for Morgan County Schools. “For example, when we replace PCs, we do it all at once. VDI [virtual desktop infrastructure] was gaining maturity, so we thought that it might be an option for us. We definitely did not want to invest in traditional desktop systems if there was a more cost-effective solution.”

To fully evaluate the challenges relating to VDI, the school system had help from its technology partner, LogicsOne. The main goal was to ensure a safe, improved user experience while simplifying management.

Solution

When an in-depth proof of concept did not reveal any roadblocks, Morgan County Schools moved ahead with the introduction of a VMware View™ platform for VDI.

“Many of our clients have been enjoying the benefits of VDI for years now, and many more like Morgan County are making the switch,” said Kenyon Hensler, the senior virtualization consultant at LogicsOne that has been assisting the school system with its deployment. “In cases like this, when the main driver is the reduction of complexity, VMware View gives them immediate returns with the ease of management.”

Prior to the move to VDI, Morgan County Schools were using Trend Micro Enterprise Security for Endpoints to protect students and staff. The Trend Micro™ OfficeScan™ product, the cornerstone of the Enterprise Security for Endpoints solution, is the first agent-based endpoint security offering with true virtualization awareness.

“The transition to VDI was easy with OfficeScan,” said Hensler. “The new plug-in reduced scan times from 15 minutes to 30 seconds per virtual machine. The Trend Micro solution is virtualization-aware; scans are serialized such that they do not kill the host server.”

“In a physical environment, security scans occur on the physical endpoints; with VDI, all of the scans are processed in the data center, on the VDI hypervisors,” explained Cawley. “It is extremely important that virtual desktop scans are carried out one at a time instead of all at once, so that they don’t degrade performance on the host. Trend Micro Enterprise Security for Endpoints is a good fit—it automatically adjusts to the differences in a virtual environment to minimize impact on performance.”

Trend Micro Enterprise Security products and services are powered by the Trend Micro™ Smart Protection Network™ infrastructure that delivers advanced protection from the cloud. Threats are blocked in real-time, before they reach the campus network or students. The bulk of ever-growing pattern files are kept on a central scan server rather than individual endpoints, keeping the agent footprint small and reducing the need for frequent updates.

Results

Today, Morgan County Schools has virtualized the vast majority of its student-used PCs.

The introduction of our VMware VDI platform has gone very smoothly,” said Cawley. “Trend Micro is the first to market with a VDI-aware endpoint security product, which made it an easy choice for us. They had exactly what we needed, when we needed it.

“We have achieved our goals, without a doubt. Our secure VDI platform makes it easier and less time-consuming to manage endpoints. With our budget situation, we knew we couldn’t grow our staff this year. But now, we can make better use of our existing staff and actually improve the level of service we provide.”

For the students and staff, the virtual desktops provide a better experience. Each person’s desktop is accessible from any system on the campus, and everyone can take full advantage of the new faster computers. “When we roll out applications or change applications, VDI allows us to do that almost instantaneously,” said Cawley. “The new thin clients will also give us long-term cost savings, since their average lifespan will be seven to eight years instead of only three or four years for traditional desktop PCs.”

“VMware and Trend Micro technologies give schools and other cost-conscious organizations a viable VDI solution, and allow resource-limited IT groups to better deploy and manage secure desktops,” said Hensler. “The centralized model offers many benefits, and Trend Micro’s virtual-aware security solution lets the school system get the best possible performance levels and consolidation ratios on its servers.”

“The transition to VDI was easy with OfficeScan. The new plug-in reduced scan times from 15 minutes to 30 seconds per virtual machine.”

—Kenyon Hensler, Senior Virtualization Consultant, LogicsOne
(technology consultant for the school system)

DEPLOYMENT ENVIRONMENT

4 campuses, serving 3,300 students
2,000 PCs and laptops

Applications: 14 physical servers
(35 VMware ESX virtual machines)

Desktop sessions: VMware View 4.6,
with 12 VDI session hosts

(2 servers, 3 connection brokers, and
1 security server for VDI)

Security: Trend Micro Enterprise Security
for Endpoints

Company Profile

Morgan County is proud of the excellent reputation that its schools enjoy throughout the state and is committed to continual improvement. The Board of Education strives to ensure that all students succeed in their learning and personal development by offering a system characterized by extensive community and parental involvement, quality resources, an exemplary staff, a safe and caring environment, and a challenging, personalized educational program encompassing advanced technology. Morgan County Schools have received numerous awards, including the governor’s Silver Award for 2007 Single Statewide Accountability.

Partner Profile

Since 2004, LogicsOne has delivered virtualization professional services to Fortune 500 and SMB clients from its company headquarters in Atlanta, Georgia. With a sharp focus on virtualization technologies, LogicsOne has developed a field-proven delivery approach that aligns technology to customers’ requirements. Organizations experiencing LogicsOne’s continuous-evolution approach to virtualization have realized significant cost-savings advantages, accelerated adoption cycles, and advanced their business and IT objectives.

Trend Micro Security

- Trend Micro Enterprise Security for Endpoints
<http://us.trendmicro.com/us/products/enterprise/security-for-endpoints/index.html>

Trend Micro Enabling Technology

- Trend Micro Smart Protection Network
<http://us.trendmicro.com/us/trendwatch/core-technologies/smart-protection-network/>



© 2011 Trend Micro Incorporated. All rights reserved. All Trend Micro company, product and service names and slogans are trademarks or registered trademarks of Trend Micro Incorporated. Other names and marks are the property of their respective owners.
CS_MORGAN_ESE_VDI_APR2011

www.trendmicro.com