



BLDD Architects Enables Real-Time Collaboration in Secure Environment with Integrated Solutions from VMware and Bitdefender

INDUSTRY

Architectural services

LOCATION

Decatur, Illinois

KEY CHALLENGES

- Enabling remote collaboration on graphic-intensive applications
- Overcoming LAN limitations to keep project teams tightly aligned across multiple offices
- Implementing more stringent security to protect the company's proprietary data

SOLUTION

VMware Horizon View software delivers remote desktop capabilities to users across multiple offices, and the seamless integration of VMware vShield Endpoint with Bitdefender SVE provides optimized performance and threat protection.

BLDD Architects employs 80 people across five offices. With architects collaborating remotely on graphics-intensive building information modeling (BIM) files, the company needed a virtualization solution that would enable high-performance computing while bolstering security. By virtualizing desktops with VMware® Horizon View™ software and securing data with the VMware vShield Endpoint™ solution integrated with the powerful antivirus capabilities of Bitdefender Security for Virtualized Environments (SVE), BLDD achieved richer collaboration between project teams, more flexibility for IT staff, and far greater peace of mind.

BLDD Architects is a midsize architectural firm with a rich history and an exciting future. Founded in 1929, the company has evolved into a thriving operation with 80 employees across five offices in Illinois and Iowa. Today, BLDD specializes in delivering first-rate design for clients in education, healthcare, local government, and faith-based organizations.

The Challenge

When Dan Reynolds began working at BLDD in 2008, he didn't think that virtualization would enter the picture. "I figured we could manage just fine without a virtualized environment," says the senior system administrator. "But as I saw the organization in action, I slowly began to change my mind."

The biggest challenge, Reynolds explains, was the distribution of BLDD offices across five locations in the upper Midwest. "In many cases, a project would be managed here in Decatur but a key player would be in another office," he says. "We use Autodesk Revit in our design work, and that's a very graphics-intensive application. We simply didn't have the LAN capacity to make the application run remotely."

Reynolds attempted to solve the problem a few different ways, to little effect. "At first I tried to align remote teams across multiple

offices by replicating data back and forth, but our LAN still couldn't keep up with our BIM software," he says. "Finally, I realized that we needed to virtualize. I was familiar with the available technologies from my experience at a previous employer, so I began experimenting with different approaches to help our teams collaborate more effectively."

Collaboration wasn't the only concern for Reynolds. He also wanted to implement tighter security across the BLDD network, helping protect the company's proprietary information. "With information coming from multiple sources—clients, contractors, and partners—we were always at risk of getting hit with a virus," he says. "The recent rash of PDF viruses was especially worrisome, but our graphics-heavy workload made the majority of antivirus solutions unworkable. I simply didn't trust that a conventional solution could provide adequate protection without being too obtrusive."

BUSINESS BENEFITS

- Achieved seamless integration between Bitdefender Security for Virtualized Environments and VMware vShield software, allowing BLDD to maintain the highest levels of protection with very little effort
- Enabled greater collaboration between project teams while minimizing travel expenses
- Simplified a large number of complex tasks for IT staff, bringing more flexibility and efficiency to the BLDD environment

The Solution

For Reynolds, the big breakthrough began with a small discovery. "I found out that one of my colleagues was using free VMware Player™ software to set up desktops in other offices," he says. "That was a way for him to stretch his limited resources. I thought it was a great idea, but obviously not a long-term or large-scale solution."

Reynolds began expanding on his colleague's idea by virtualizing a handful of BLDD desktops on more advanced software. "First I tried running a free version of the VMware ESXi™ hypervisor in conjunction with Windows Remote Desktop," he says. "That was definitely an improvement, but it didn't offer the level of functionality that we needed. Shortly after that, we began serious discussions about VMware Horizon View."

With the Horizon View solution, Reynolds was able to deliver far more sophisticated remote desktop capabilities, giving end users a personalized, high-fidelity experience across multiple sessions and devices. "I virtualized all of the production desktops in all five offices, and I upgraded everything from a 32-bit system to the 64-bit version of Windows 7," he says. "Now, thanks to virtualization, all of our data lives in Decatur. Files aren't scattered all over the place. Everyone has excellent access to the information they need. An architect can walk into a client's office and open a Revit file remotely, and team members can be confident that they're always on the same page."

As for security, Reynolds was intrigued by the agentless architecture of the vShield Endpoint solution because he wanted to minimize the performance impact of securing his virtual environment. Given his focus on maintaining high performance in a graphics-intensive environment, he decided to go with an anti-malware solution integrated with vShield Endpoint. "I looked at a number of security vendors, and the one that immediately rose to the top was Bitdefender Security for Virtualized Environments," he says. "They were incredibly responsive from the moment I contacted them, and they continue to provide us with personalized, high-touch service. Best of all, the price of their

product was very reasonable. I was impressed from the get-go."

Reynolds was particularly pleased with the tight integration between Bitdefender SVE and vShield Endpoint software. "The Bitdefender solution works through vShield, so it doesn't affect the performance of our desktops," he says. "Our users' work doesn't get interrupted, and I can maintain the highest levels of protection with very little effort. The upgrades are especially great. The vShield console sends me an upgrade notice, and I can update the software without needing to reboot the host. There's no disruption whatsoever."

Business Benefits

The VMware solution enables greater collaboration between project teams while minimizing travel expenses. "Our project teams can spend more time in their home offices, whether they're in Bloomington (Illinois) or Davenport (Iowa)," says Reynolds. "And when we have external consultants on a project, I can give them access to our VMware server, set appropriate restrictions, and enable them to work on the same model as everyone else."

Enhanced collaboration means that teams can align their visions more closely to deliver a better product. "The whole process is streamlined," says Reynolds. "Not too long ago, we would split a project in half so that people could work on it in separate locations. At the end of the project, when we merged everyone's work into a single file, we would inevitably run into problems. Some document elements simply wouldn't work, and we would need to resolve those issues before presenting to the client. With virtualization, none of that is necessary. We can keep everyone working on the same document for the entire length of the project."

With the powerful combination of the VMware solution and Bitdefender SVE, Reynolds's job is just a little bit easier. "In fact, it's a lot easier," he says. "Security for Virtualized Environments is so seamless that I literally don't think about it. As for VMware Horizon View, the solution just works. I can copy one machine, take off what I want, clean it up, and repackage it. If somebody wants to test something, I set

VMWARE CASE STUDY

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Dan Reynolds
Senior Systems Administrator
BLDD Architects

VMWARE FOOTPRINT

- VMware® Horizon View™
- VMware® vShield Endpoint™

APPLICATIONS VIRTUALIZED

- Autodesk Revit

PLATFORM

- Microsoft Windows 7

up a test virtual machine, then we roll those changes up into other machines. Everything is more flexible and efficient, and it all runs on incredibly low-profile technology. We couldn’t be more pleased.”

Looking Ahead

For Reynolds, the next step is building greater redundancy into the BLDD system. “Now we just need to make sure that we have a disaster-recovery strategy in place,” he says. “For us, that means establishing failover capabilities in our Chicago office, so if anything happens in Decatur we won’t experience any disruptions. And I’m quite certain that VMware will play a key role in making that vision a reality.”

