



## VMware ACE Data Encryption Protects Valuable Client Data for Baker Hill

### Baker Hill Uses VMware ACE to Create Secure Desktop Environment for Employees Working with Client Data

#### RESULTS

- Ensure protection of valuable client information by encryption of data
- Create isolated, tamper-resistant, copy-protected environments with rules-based network access
- Use Virtual Rights Management for authentication, encryption and copy protection of ACE environments
- Control access to hardware devices such as CD writers, USB drives, SCSI interfaces
- Use Altiris Client Management Suite for comprehensive management capabilities

#### The Need for Security

For more than two decades, Baker Hill has been focused on the banking industry, delivering solutions that address business process needs and working as a trusted advisor to its banking clients. More than 1,200 financial institutions rely on Baker Hill's relationship management, credit origination and portfolio risk management solutions as their enabling technologies.

Working with financial institutions, Baker Hill often handles private financial information. For example, in order to work on a client's database, a bank might provide Baker Hill with a copy of its database so that a Baker Hill employee can convert it using tools installed on his or her laptop. "We were very concerned about having a client's private data on our equipment. What if that equipment were stolen? How easily could someone get at that data?" says Eric Beasley, senior network administrator for Baker Hill.

Beasley had been working with New Age Technologies to implement a VMware virtual infrastructure for server consolidation and management, so they asked New Age to help them address encrypting data on their laptops. New Age pointed them to VMware ACE, which would allow Beasley to set up secure environments in virtual machines known as "assured computing environments" for employees. Virtual Rights Management (VRM) technology would also centralize copy protection and encryption policies.

"Using VMware ACE, Baker Hill can encrypt and protect client data on their PCs," says Michael Paynter, virtualization practice manager for New Age Technologies. "We were able to show Baker Hill that they could use ACE to create an environment that would provide the tools the employees need to do their work, but the environment would be encrypted; if their laptops are stolen, the information is protected."

#### Meeting Multiple Needs

When evaluating solutions, Baker Hill also considered disk encryption for data on the notebook drives. "The cost was just a few dollars per unit different from what ACE would cost," Beasley says. "But the conversion process itself would take a considerable amount of time for laptops, depending on the amount of data there was to encrypt. It also didn't address the ability of a user to use a USB ThumbDrive, a rewritable CD or DVD drive, or a network like gmail to transfer data from the laptop to another means that would not be encrypted."

VMware ACE's virtual rights management allows Baker Hill to create rules specialized to its needs, including rules-based access, authentication, encryption and copy protection of the entire ACE environment, and access to hardware devices such as CD writers, USB drives, and SCSI interfaces. "VMware ACE gives Baker Hill team members the ability to create policies that would protect the data, while allowing them to transfer it when needed," Paynter says.

**"Using VMware ACE, our employees have the tools they need to do their jobs, and they can work in a secure environment that is easily managed. As a result, we are able to provide the best solutions for our clients, without risking security to enterprise or client data."**

—Eric Beasley  
Senior Network Administrator  
Baker Hill



#### VMWARE ACE AT WORK

- VMware ACE IBM ThinkPad T40s
- Host operating system: Microsoft® Windows® XP
- Guest operating system: Windows XP
- Applications running on ACE include: Pervasive PSQL, Baker Hill OnePoint business Relationship Management solution

With VMware ACE on a laptop, Baker Hill can create policies preventing the virtual machine from accessing the USB port, or the rewritable CD or DVD drives on the laptop. "We can also create network policies so that a virtual machine, when on the Baker Hill network, can only connect to specific servers. We could eventually encrypt data when those laptops are on our file servers as well, so that data can only be transferred between the laptop and the areas on the network where we are employing the encryption. We can also prevent the virtual machines from accessing the Internet."

#### Comprehensive Desktop Management with Altiris Client Management

For years, Baker Hill has used Altiris® Client Management Suite™ for desktop and systems management. Client Management Suite is an easy-to-use system management solution that helps reduce the total cost of ownership for desktops, notebooks and handheld devices. Developed for IT professionals who manage computing devices on a regular basis, the suite enables administrators to deploy, manage, migrate and troubleshoot systems and applications, whether they are physical or virtual.

Baker Hill is able to use Client Management Suite to manage desktop environments on VMware ACE virtual machines in addition to physical machines. VMware ACE management allows them to instantly provision secure desktop environments in virtual machines, instead of needing to procure hardware. "We can use the virtual machine packages created by VMware ACE, and run them on our current hardware, without needing to overwrite the existing system on that hardware," Beasley says. "The virtual machines are seen as any other desktop computer, so we can then use the Altiris solution to manage the environments."

Client Management Suite gives Baker Hill inventory management and software usage tracking capabilities, for example, as well as the ability to deploy patches and updates to systems. It also includes tools for desktop system migration.

"Using VMware ACE along with Altiris Client Management Suite gives Baker Hill a comprehensive solution for management and protection of enterprise data and systems," says James Strayer, Altiris director of product management. "The two solutions provide enhanced desktop lifecycle management, from provisioning, to centralized management and updates, to retirement and migration of the desktop environment."

Beasley adds, "VMware ACE and Altiris Client Management Suite give us the tools we need to efficiently provide and manage secure desktop environments for our clients and employees. The two solutions used together allow us to simplify management and provisioning, reduce our costs and increase security."

#### The Bottom Line: Better Client Service

The ultimate result, Beasley says, is better client service. "Using VMware ACE, our employees have the tools they need to do their jobs, and they can work in a secure environment that is easily managed," he explains. "As a result, we are able to provide the best solutions for our clients, without risking security to enterprise or client data."

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