



## Case Study

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### Key Benefits:

- Cut time spent setting up training rooms from eight hours to less than five minutes
- Enabled a single employee to perform tasks that used to require two IT personnel
- Improved security at the desktop with stateless devices
- Optimized existing server and virtual machine infrastructure
- Extended lifecycle of the desktop client

Based in Indiana, Baker Hill is an Experian company ([www.experian.com](http://www.experian.com)). Experian is a global leader in providing information, analytical and marketing services to organizations and consumers to help manage the risk and reward of commercial and financial decisions. Baker Hill delivers products and solutions that address business process needs and works as a trusted adviser to its financial services clients. Baker Hill understands sales, lending and portfolio management processes; knows how to implement technology to enable those processes and has a long history of client success from which to mine best practices. More than 1,200 financial institutions and credit grantors in all industry segments have drawn on Baker Hill’s business and process expertise and have chosen its relationship management, credit origination and portfolio risk-management solutions as their enabling technologies.

With Baker Hill’s continued success and growth have come new challenges, especially for its information technology (IT) department which found itself facing management and time constraints. With a wide-range of servers and network appliances to manage, the IT department at Baker Hill spent much of its time dealing with compatibility conflicts between servers and

software updates. In an effort to reduce the time spent managing its data center, Baker Hill deployed server virtualization with VMware ESX.

In addition to streamlining server management, the IT department also sought to decrease the amount of time spent managing desktops and setting up training rooms. The use of traditional PCs made set-up fairly time consuming – demanding a significant portion of the workday.

“We wanted more flexibility in our training rooms,” said Nathan Pingel, network manager at Baker Hill. “With VMware, we were able to be more proactive by reducing the time spent reactively managing the servers. And, as our server virtualization deployment became more mature, we started looking at ways to extend the benefits of virtualization. We realized that desktop virtualization could reduce the time spent managing desktops. Additionally, desktop virtualization looked like it would achieve our need for more physical space on desks by providing a smaller desktop form factor.”

## Selecting the Perfect Desktop Solution

Baker Hill first learned about Pano Logic and the Pano solution’s ability to consolidate desktop PCs using server-based virtualization from Michael Paynter, the owner and managing partner of Tier3 Technologies, an IT consulting and services company. Paynter first saw the Pano solution at VMworld in September 2007. Prior to deploying Pano, Baker Hill looked into replacing its HP Slimline PCs with devices that had a small footprint size and with which Baker Hill staff could use their existing keyboard, monitor and other peripherals.

In addition to traditional PCs, Baker Hill looked at thin clients. But, in the end, the Baker Hill

team liked the stateless nature of the Pano Devices. After testing in its environment,

Baker Hill deployed Pano in October 2008 in its training room.

“Since I first learned about Pano, I’ve found it to be an easy-to-implement and easy-to-use desktop virtualization solution,” said Paynter. “Tier3’s goal has always been to find the right solution for our customers, but we also have a longer term initiative to provide more green technology solutions. Pano Devices fulfill this goal by only consuming three watts at the desktop, a fraction of what a traditional PC consumes. Pano’s approach also provides a number of management

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## Pano Delivers IT Time Savings

One of the most significant benefits of deploying Pano in the Baker Hill training room has been time-savings in desktop deployment, configuration and administration. To prepare

for each training session, IT used to spend four to eight hours setting up desktops. With Pano, set-up now takes one person from the IT department less than five minutes, increasing the amount of time the IT department can devote to other key initiatives.

“Before the Pano solution our training room could take a half to a full day for two people to deploy,” said Pingel. “The amount of equipment we have to maintain compared to the number of IT staff, meant everyone had a tight

timetable. None of us could afford to spend up to eight hours at a time setting up a room while also attending to our other duties. Now, we can instantly change something in the training room from one day to the next without worrying about how much time it will take. We needed a way to make the process a lot faster and the Pano virtual desktops did just that.”

The Pano consolidated desktops have also increased IT staff productivity and configuration flexibility for Baker Hill. Before deploying the Pano Devices, Baker Hill trainers relayed their software updates to the IT department rather than implementing the changes themselves. Now trainers can make software updates directly through VMware vCenter Server, which has dramatically decreased the amount of time spent by the IT department reconfiguring PCs.

“With all of the software updates that need to be made every day, a significant portion of the IT department’s time was spent receiving

these updates from trainers and implementing them,” noted Pingel. “However, with the

centralized management that the Pano solution offers, the trainers are now able to go directly into VMware vCenter Server to make software updates. That has freed us up to work on other projects and has made updating easier for the trainers. Additionally, the fact that the Pano Device has no fans or movable parts has made the room much quieter for training sessions.”

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## **Desktop Security and Ease of Use**

Another benefit Baker Hill has experienced from Pano’s approach to consolidated desktops is increased control over security. USB devices can be one of the greatest security risks in organizations, but, with Pano Devices, IT has the ability to centrally control USB ports to ensure data security. USB access can be linked to a desktop or a user and IT can either give or deny access based on these two factors. Furthermore, Pano solution moves all of the software and memory off the desktop to the server, so the device itself never stores confidential data.

“The security aspect of the Pano Device is another key benefit. It is a solid state device which carries no data or memory whatsoever, and is completely useless without the server,” said Pingel. “I like the fact that if the device was misplaced we wouldn’t have to worry because no information could be retrieved from it.”

Baker Hill also experienced end-user satisfaction with the Pano solution, noting that operation of the Windows desktop using the new Pano Devices is the same as with a traditional PC. Once online, the user's actions are encrypted and sent to the servers running virtualized desktop OSes over a standard Ethernet local area network. The send-transit-response cycle is quick enough so that users do not notice that a local PC is not in use – providing a complete and native Windows experience. Storing the virtual desktops' data on server drives in the data center also means that users are able to reboot to recover or even replace corrupted virtual desktops without any danger of losing data.

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