DOMINO'S PIZZA
Thin client solution adds security, cuts costs for pizza giant

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HP customer case study: Domino's chooses HP thin clients to secure credit card information while saving franchises thousands

Industry: Foodservice

Objective:
Improve security of in-store workstations to comply with new Payment Card Industry requirements
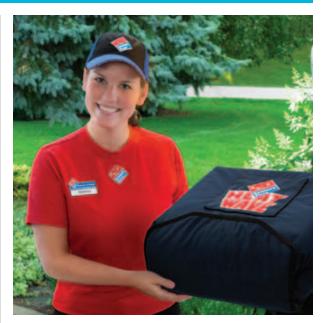
Approach:
Domino's Pizza has standardized its in-store workstations on HP thin clients.

IT improvements:
- Improved security—no customer data on thin clients that are disconnected
- Easier central administration for proprietary POS system
- Fast, easy workstation deployment

Business benefits:
- Cost lowered by approximately $400 per workstation (average of more than $2,400 per store)
- Longer expected hardware life

Domino's Pizza, headquartered in Ann Arbor, Mich., became the leader in the pizza delivery business by promising customers they will have their pizza in 30 minutes. To deliver on that promise, the company depends on a sophisticated, internally developed point-of-sale system called Domino's Pulse. Domino's Pulse is accessed through HP thin clients.

"Our HP thin clients provide a highly secure, durable, low-cost front end for our point-of-sale system," explains Wayne Pederson, Vice President for Information Systems at Domino's. "They're definitely a better fit for our store environments, and they're saving our franchises thousands of dollars."

Thin clients power pizza delivery
Like most corporate success stories, Domino's started out small—with just one store—in 1960. Today, there are thousands of Domino's stores. The company

delivered 400 million pizzas last year. That's more than one pizza for every man, woman and child in the United States.

All those orders start with a phone call. And the employee taking the phone call in every Domino's store uses Domino's Pulse. Domino's Pulse, available through HP thin clients, powers the order-taking stations, kitchen pizza-making stations, and the dispatch station where the order is assigned to a delivery driver.

Pulse didn't start out running on HP thin clients, of course. Most stores were opened with "rich" clients throughout. The impetus for change came with new Payment Card Industry (PCI) regulations on how credit card information can be handled, stored, encrypted and passed along the Internet.

"Any place that you store credit card data has to be secure," Pederson notes. "One of the things that thin clients afford us is the security of knowing that there's no way to store personal customer information on the workstation itself. So if someone pulls the plug out of the wall and walks away with one of our thin clients, there won't be any customer data on it." Switching out the workstations in every store is no small task, of course. So Domino's looked for the most efficient and cost-effective solution available.

It soon settled on HP thin clients running the Linux operating system, customized with a standard Domino's image. The thin clients come straight from the factory with the customized image installed, courtesy of HP Factory Express. Domino's has installed more than 12,000 thin clients in some 2,500 franchise stores. Moving forward, the company will be buying HP t5545 Thin Clients for Domino's corporate stores and eventually for international locations.

"We expect to get a significantly longer lifecycle from HP thin clients. By the time we get to the third year, where a traditional workstation is close to end-of-life, the thin clients should be going strong. I'm expecting to get five years or more life out of the thin clients because they don't have any moving parts."
Wayne Pederson, Vice President for Information Systems, Domino's Pizza

Longer lifecycle, lower cost
HP thin clients represent a major cost savings for Domino's. Each thin client saves a store roughly $400 in initial hardware cost and the average store has six workstations, for an average per store savings of approximately $2,400. And that's just the initial cost.

"We also expect to get a significantly longer lifecycle from HP thin clients," says Pederson. "In any environment, you would expect a thin client to last longer. But in our stores the difference seems to be magnified."

"Thin clients are so easy to deploy that store operators now simply keep a spare on hand. If they have to install one, they can be up and running 10 minutes later."
Wayne Pederson, Vice President for Information Systems, Domino's Pizza

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The difference is a result of the challenging store environment. A typical Domino's store has corn meal and other aerosolized food ingredients circulating throughout the work area, Pederson notes. Those ingredients tend to be drawn in by the cooling fan of most workstations, causing overheating and eventually hardware failures. But thin clients have no hard drives or cooling fans to be fouled by corn meal or other contaminants.

The proof is in the pudding. Pederson says, "Domino's was expecting the thin clients to be exceptionally reliable. Actual performance has been even higher than the IT staff expected."

Thin clients provide other benefits too. They use roughly a quarter of the power of Domino's previous workstations, which translates directly to bottom-line savings for the store.

"Our commodity costs for cheese and other food products have been going up recently so that margins in the pizza industry last year were the worst they've ever been," Pederson notes. "Cutting any cost, including the cost of power, is a welcome savings."

Easier to manage
Better manageability translates to further cost savings. Pederson notes that there are fewer things to troubleshoot on a thin client—most notably, applications. Those are all provided by an in-store virtual machine using Microsoft Windows Server® 2003 running through VMware Server. Microsoft Windows Terminal Services and Remote Desktop Protocol are used to serve applications. So applications can't get permanently corrupted by something happening on the thin client. If there is a problem at the user end, employees can simply reboot the thin client. The time required to troubleshoot workstations by Domino's centralized help desk has been cut by more than half.

Thin clients are so easy to deploy that store operators now simply keep a spare on hand. "If they have to install one, they can be up and running 10 minutes later," Pederson says. When the NCAA Final Four basketball tournament came to town, store owners simply brought in extra thin clients and expanded their order-taking capacity in an hour or so.

"HP thin clients give us a cost-effective, in-store solution that keeps franchises happy and productive. We're looking ahead, as we always do, to expansion and growth. HP thin clients will be an important part of our future."
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Maintenance is far easier for the corporate parent too. In the past, every time Domino's had a new release of the Domino's Pulse POS system, the software had to be sent to every workstation for installation.

Customer solution at a glance

Now, Domino's updates the central server and that's all the stores require.

Domino's in-store thin clients typically are equipped with a PS/2 keyboard complete with credit card swipe reader, a USB or PS/2 mouse, receipt printer and touch-screen monitor. For stores with exceptionally large kitchens, the kitchen-based thin client can be connected to dual monitors.

"HP thin clients give us a cost-effective, in-store solution that keeps franchises happy and productive," says Pederson. "We're looking ahead, as we always do, to expansion and growth. HP thin clients will be an important part of our future."

Contact the HP Reference2Win Program, 866-REF-3734, for more information.

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