Manufacturer Lowers OPEX with Secure Zero Clients and Virtual Desktops

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AT A GLANCE

Situation
- Equipment manufacturing, foodservice industry
- Milwaukee, Wisconsin (headquarters); Sturgeon Bay, Wisconsin (main manufacturing facility); Suzhou, China (secondary manufacturing facility); Kowloon, Hong Kong (sales office)
- 470 employees

Challenges
- Performance, for seamless end user experiences
- Broad use cases, which span offices and wireless factory floor environments
- Remote management, for in-state and out-of-country factories

Solution
- Teradici® PCoIP® Zero Clients
- Teradici PCoIP Software Clients and Remote Workstation Cards
- Teradici PCoIP Management Console

Results
- Efficiency: A small IT organization deployed and now supports VDI and zero clients
- Power reduction: Lower-power endpoints lowered utility bills
- Productivity boosts: End users and IT waste less time on endpoint issues
- Agility: Employees can work from anywhere, and are on a faster path to new technology

Since 1950, Hatco Corporation has been a leader in the foodservice industry. The company’s portfolio includes equipment that improves efficiency, reliability and profits; all Hatco products handle the rugged demands of foodservice operations. In May of 2007, the employees of Hatco assumed 100 percent beneficial ownership of the company.
The technology team at Hatco had a clear vision for the company’s virtual desktop infrastructure (VDI). The goals were clear, but the small IT organization faced some major obstacles. A pilot test had been carried out, with PC endpoints configured as thin clients within the VMware environment. The old hardware was holding them back, with poor performance for the remote desktop sessions. Testing continued with the purchase of some new thin clients. Performance was better, but deployment and configuration were still too labor intensive. To make VDI work at Hatco, the IT team needed to overcome three main obstacles:

- Client performance had to give all of the employees, including the service and customer support call centers, the performance that they expected from traditional PCs.
- Remote management of the company’s Wisconsin factory as well as the smaller manufacturing site in China called for visibility and control from central IT desktops. Ease of deployment and support was especially critical to protect manufacturing continuity, and was also necessary to equip a small IT team to support all of the company’s desktops.
- Some legacy applications could only be supported on older systems, which had to somehow be integrated with the new VDI architecture.

Reseaching endpoint alternatives led to the discovery of PCoIP Zero Clients equipped with Teradici technology. “We wanted to move forward with VDI, but everything had to be right,” said Aaron Bolthouse, Manager, IT Infrastructure, at Hatco.

“The thin clients we tried were too slow, and there were too many infrastructure considerations. They just didn’t work in our environments. I did some more research and came across Teradici PCoIP technology. We purchased a zero client to try it out. I downloaded the Teradici Management Console and had our first zero client installed and a VMware session running on it in just a couple hours. The performance was great. At that point, we liked the zero clients enough to buy a case and we have been buying them ever since.”

Compared to the previous evaluations of thin clients, the new PCoIP zero clients were different in many ways. They operate without a local CPU, operating system, or storage – with a single chip that decodes the PCoIP transmissions and outputs pixels on the screen. “The Teradici PCoIP clients are inexpensive, and from the start they just worked and worked well,” said Bolthouse. “There has rarely been a need for any problem resolution with them. They were 180-degrees different, compared to the thin clients we had tried.”

The first 20 zero clients went into the service call center at Hatco a couple years ago. After that, IT replaced all desktop PCs with zero clients. Today, Hatco operates with a mixture of Tera1 and Tera2 endpoints. “The first zero clients we deployed are still working fine – Teradici solutions don’t require us to replace older endpoints and we now have a total of more than 200 zero clients across all of our sites,” said Bolthouse.

“Our main manufacturing site is completely wireless, throughout the 460,000 square foot facility. With VDI and Teradici zero clients, we can remotely manage it all flawlessly.”

AARON BOLTHOUSE
MANAGER – IT INFRASTRUCTURE
HATCO CORPORATION
The PCoIP zero clients and the VDI deployment support all of Hatco’s operations, which span offices, kiosks, and factory floor endpoints. The central IT organization also supports zero clients that have been deployed at the company’s factory in China. The few PCs that remain in use at Hatco have been equipped with Teradici software clients to give them easy access to remotely hosted sessions.

"From my desk, I support 40 local zero clients, another 150 in our remote factory, and 18 at our site in China," said Bolthouse. "Teradici Management Console makes it easy to manage VDI remotely – it has all the functionality I need."

**The adoption of zero clients continues to lower operating costs for Hatco.**

The savings started from the first, with simpler deployment and configuration requirements making it faster to introduce the new endpoints. "Compared to standard PCs, I spend 50 percent less time setting up zero clients," said Bolthouse. "Management Console streamlines the entire deployment and configuration process. For the users, they just plug in a zero client, and they are ready to go. And VDI gives them a desktop that can go anywhere they go."

In the Hatco factory, zero clients are now fully integrated into the company’s WiFi network. "Our main manufacturing site is completely wireless, throughout the 460,000 square foot facility," said Bolthouse. "With VDI and Teradici zero clients, we can remotely manage it all flawlessly. In China, we have a smaller factory that produces a different product line for the Asia markets. I manage both of the sites from my desk in Milwaukee."

IT spends much less time supporting endpoints, and the small IT team has been able to broaden its scope and become more project focused. Zero clients have also resulted in less downtime for employees. "In the past, a user’s work was interrupted for troubleshooting. Now, an employee can just go to another zero client if we have any VDI or endpoint issue. There is no lost work for the employees, and much less of my time for endpoint support. Overall, zero clients have allowed us to move technology forward at a much faster pace."

Each zero client also delivers power savings for Hatco. The 35-watt endpoints, as replacements for 400 to 600-watt PCs, have yielded close to $2000 per month savings in the U.S. factory alone.

"VDI was a big change for everyone," said Bolthouse. "Once an employee gets used to it, they love it, especially the zero clients. Now they come in each day and instead of starting up a PC and then going to get coffee while they wait for start-up, everything is just there. Boom. In seven or eight seconds they are working."

"Zero clients and VDI add a lot of value to our company. And Teradici’s technology, compared to previous protocols, is leaps and bounds ahead. We can give our employees encrypted and secure access to our servers and workstations in a way that is very versatile and flexible for our business. Those qualities are what our users were looking for in our technological investments. It has been wonderful to introduce PCoIP solutions throughout Hatco."