

Bridging the time zones

METRO Cash & Carry activates the Intel® vPro™ platform to manage its point-of-sale machines remotely without local staff support



“The best thing about the Intel® vPro™ platform is that it enables unattended operation. Different time zones were a big challenge for us in the past. Now we just need a machine to be connected to the network and we can update it.”

*Dieter Hegemann,
Senior Consultant,
METRO SYSTEMS*

To operate effectively, a retail or wholesale company needs to make sure that the prices at the till are consistent and accurate. METRO Cash & Carry, an international leader in self-service wholesale, is activating the Intel® vPro™ platform on its point-of-sale systems to make it easier to update the software and data on them remotely. Previously, updates performed by METRO's IT subsidiary METRO SYSTEMS often required assistance from local staff who were working in different time zones and were not always available when updates were needed.

Challenges

- **Software updates.** METRO Cash & Carry needed to be able to update its point-of-sale systems worldwide from its operations center without the need for help from on-site shop staff.
- **Power up.** METRO Cash & Carry needed to be able to power up machines remotely if they were switched off, so they could be updated with new software or business data.
- **Remote access.** METRO Cash & Carry needed to be able to see error messages when point-of-sale systems weren't updating as expected.

Solutions

- **Activating the Intel vPro platform.** METRO Cash & Carry is activating the Intel vPro platform in its fleet so the company's IT operations team can remotely manage and update machines, even when they are switched off.
- **Upgraded hardware.** METRO Cash & Carry is updating its older machines to new hardware featuring the 4th generation Intel® Core i5™ vPro™ processor, enhancing security and enabling METRO SYSTEMS to access the machines with a remote desktop.

Technology Results

- **Remote management.** METRO SYSTEMS will be able to remotely power up, reboot, update and manage the machines in the METRO Cash & Carry stores worldwide.

Business Value

- **Time saved.** According to their internal tests, the operations team can save the equivalent of several days per month with more effective remote management of the machines, and will also avoid the rework associated with machines using old data.
- **Customer experience.** Ensuring that data and software on the point-of-sale machines are accurate and complete will ensure that customers have a smooth buying experience.
- **Energy saved.** Depending on local operations, point-of-sale machines may no longer need to be switched on all the time because they can be remotely powered up prior to an update.

Trading in the world marketplace

When a customer approaches a point-of-sale machine at one of METRO Cash & Carry's stores, it's essential that it is up to date with current prices and the customer database. That's quite a challenge given that METRO Cash & Carry has over 750 self-service wholesale stores in 28 countries across Europe and Asia. With a headcount of 120,000 employees worldwide, the wholesale company achieved sales of around €31 billion (\$42.45 billion) in the financial year 2012/2013 (pro forma). METRO Cash & Carry is a sales division of METRO GROUP.

The METRO Cash & Carry stores use point-of-sale (POS) systems, including the Wincor Nixdorf BEETLE/M-II plus*, based on the Intel Core

i5 vPro processor. They will run Microsoft Windows® Embedded POSReady 7, a version of Windows optimized for POS devices, together with METRO Cash & Carry's software, MPOS*.

It's essential that these machines have the latest data as the working day begins. "Prices change on a regular basis," says Dieter Hegemann, senior consultant for METRO's IT subsidiary METRO SYSTEMS. "In total, we have 21 million customers all over the globe and we know all our customers by name, identified by an ID card. Our master data is updated every night, so it's important that we have this latest information on hand when customers make a purchase. Many other things must be updated too, such as discounting schemes."

Ensuring machines can be updated improves the end customer experience

The POS machines are managed and maintained remotely from the METRO SYSTEMS operation center. To enable software upgrades and data updates to be performed at any time, the machines were never switched off. "If a machine is accidentally turned off, we have to call the local staff to get help," says Hegemann. "It's time consuming to find someone who can get into the store out of hours and do exactly what we need. It can lead to delays in getting the machine started if no technical staff are available. We don't want to have to find someone in a foreign store to be able to do the right thing. Our operations people should only need a machine to be connected to the network."

Activating the Intel vPro platform

METRO Cash & Carry decided to activate the Intel vPro platform built into its point-of-sale machines, and to replace older machines with new terminals based on the 4th generation Intel Core i5 vPro processor. The Intel vPro platform enables remote and local monitoring, remediation, and repair of PCs and workstations, including when they are not switched on and when the operating system is not available. Once the activation process has been completed, the Intel vPro platform will be available on all of METRO Cash & Carry's POS machines.

The activation process is based on Windows PE, a minimal operating system built on the

Windows Vista kernel that is used to prepare a computer for an operating system installation. The activation process is automated and can be carried out remotely, as long as the machine is switched on.

"Activating the Intel vPro platform will enable our team to reboot machines remotely without the support of anyone in the store," says Hegemann.

To manage the machines, METRO SYSTEMS is using an important element of the Intel vPro Platform, Intel® Active Management Technology (Intel® AMT). Before it used Intel AMT, METRO SYSTEMS needed to update part of the machine's BIOS.

Reaping the rewards

"The best thing about the Intel vPro platform is that it enables unattended operation," says Hegemann. "That was a big deal for us. Different time zones were a big challenge for us in the past. Now we just need a machine to be connected to the network and we can update it without local support. Our centralized operations team expects its job to get easier and much more productive."

While the older machines only enable remote operators to interact with the machine using text commands, the replacement machines enable the operations team to use the remote desktop features of Microsoft System Center Configuration Manager* (SCCM*) 2012. "If somebody is using the machine in the store, the remote desktop enables them to see that someone is working remotely on the machine too," says Hegemann. "If we can't fix a machine using an automated process, we can use the remote desktop to see error messages and screenshot them for error reporting. This helps us to understand what's going on much better."

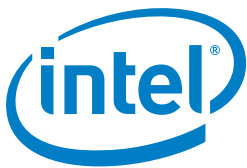
Lessons Learned

Hegemann points out how the Intel® vPro™ platform can help to manage embedded devices. "When we heard about the Intel vPro platform, we could immediately see how it could be the solution for many of the challenges we have in our operations," he says. "We had heard about it for managing desktop computers, but we were surprised that we could use it for our embedded devices in the store. That's where our real challenges lie."

As a result of activating the Intel vPro platform, METRO Cash & Carry will be able to enhance system security, and make it easier for the operations team to deliver the latest software and data updates.

In the future, METRO Cash & Carry is looking at changing its business practice so that machines are switched off when they're not required, which they hope will result in significant energy savings. Using the Intel vPro platform, METRO Cash & Carry will be able to switch machines on remotely in time for them to update before the working day begins.

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