



Solution Brief

N-central*

Intel® vPro™ Technology

N-able Technologies N-central* and PCs with Intel® vPro™ Technology



Company	N-able Technologies, Inc., founded in 2000, is a market leader in delivering technology and training that transforms service organizations into managed service providers (MSPs).
Business Challenge	Deliver profitable, managed services for remote monitoring and management of PCs, servers, and IT systems to increase MSP service opportunities and revenue margins.
Technology Solution	N-central*
Enhanced By	Intel® vPro™ technology

Remotely discovering and monitoring PCs, regardless of power state, for a new level of managed services

There is an important shift taking place in the managed service provider (MSP) community from selling hardware to delivering hardware as a service. MSPs increasingly want to provide PCs to customers, not as a capital expense, but as the foundation for a cost-effective managed-service program.

N-able Technologies, an industry leader in MSP small- and medium-sized business (SMB) markets, has been working with Intel to enhance the depth and breadth of managed services and create new opportunities for MSPs to explore. This is an on-going relationship that will help N-able Technologies deliver increasingly capable solutions. Currently, these solutions focus on the N-able Technologies management solution, N-central.*



N-central is taking advantage of the new hardware-based capabilities that are built into PCs with Intel® vPro™ technology. The new capabilities allow N-central to remotely access PCs even if PC power is off or the operating system (OS) is down. This allows N-central to significantly improve remote device discovery, hardware asset inventory, off-hours maintenance, and other processes and tasks. For MSPs, the combination of N-central and PCs with Intel vPro technology makes it easier to improve labor utilization, optimize IT processes, improve management coverage for all PCs, and improve revenue margins.

Today's challenge

One of the primary challenges in the SMB environment is acquiring consistent and accurate information about PCs at a customer site. Right now, MSP management systems often cannot communicate with or remotely manage PCs that are powered off, whose OS is inoperative, or whose management agents are missing.

The result is that many tasks, such as asset inventory, monitoring, maintenance, and updates, must be performed during regular business hours. For other tasks, a field technician must be dispatched for a costly and time-consuming on-site visit. The cost to customers is increased interruptions to business, and longer service processes. For MSPs, there is a critical need to improve the efficiencies of these tasks.

The solution: N-central* and Intel® vPro™ technology

N-central is now taking advantage of the remote management capabilities embedded in PCs with Intel vPro technology to provide a new level of Web-based management processes for MSPs. The new, hardware-based capabilities include an "always-available" communication channel, remote power-up capability, and access to hardware asset information, BIOS configuration information, and the system's unique ID.

An authorized MSP technician can now use N-central to manage these PCs even if PC power is off, the OS is not responding, or software agents are disabled or not yet installed. This will help MSPs gain greater visibility of the customer network, perform more work from the service center, increase automation for IT tasks, and shift more work off-hours. In turn, this will help MSPs set up more consistent, predictable streams of revenue when servicing SMB sites.

Remotely finding PCs more consistently and accurately

Service providers have traditionally faced many challenges in adding new customers to a remote-service model. A key step in setting up managed services is performing the typical multiple, iterative network polls that are currently necessary to remotely discover as many PCs as possible. The second step is configuring

devices for communication and management through the MSP agent (or probe). Third, the customer site must then be repeatedly polled to make sure that all devices have been discovered and are indeed under MSP control.

N-central is improving this process significantly by taking advantage of the "always-available" communication channel in PCs with Intel vPro technology. This channel runs outside the OS and uses the TCP/IP stack in the system's firmware. Because it doesn't use the software stack in the OS, it is independent of the state of the OS. As long as the PC is connected to a power source and plugged into the network, these PCs can respond to the N-central agent anytime.

N-central can now remotely discover these PCs on the first poll. Extended monitoring can also be more complete, since N-central can maintain visibility of these devices, not just during initial service setup, but throughout the PCs life cycle. This will help MSPs provision systems faster, establish more comprehensive monitoring, and stabilize customer service plans more quickly.

Monitoring and tracking hardware assets more accurately

One of the challenges in servicing PCs remotely is getting accurate asset information for devices. Today, when PCs are powered down or their OS is not responding, the MSP agent cannot usually retrieve hardware information from the PC. Instead, MSPs must wait for the system to be powered back on in order to poll the device. This makes it difficult to perform automated and off-hours asset tracking, maintenance, and other tasks. For MSPs, there is always a concern that some PCs are undiscovered and not being managed.

N-central is now significantly improving hardware asset tracking by making use of the nonvolatile memory built into PCs with Intel vPro technology. These PCs automatically update their hardware asset information every time they go through power-on self-test (POST). That hardware information is then stored in the persistent, tamper-resistant nonvolatile space, along with the PC's configuration information and the system's unique ID.

N-central can now remotely and automatically upload the system ID, BIOS settings, and hardware asset inventory of these PCs, regardless of system power state or the state of the OS. For example, N-central can now regularly monitor these PCs even off-hours in order to note changes, such as a hardware failure or the addition of memory. This helps MSPs ensure a consistent user environment, which helps reduce service costs, improve maintenance efficiencies, and make upgrade planning easier. Since N-central features include correlation of warranty, lease, and other life-cycle metrics, the improved inventory process can also help MSPs deliver improved depreciation planning, upgrade planning, and other consulting services.

OS-agnostic hardware inventories — even if the PC is powered off

In today's service environment, inventory methods are based on the information reported by the system's OS, such as Windows* Management Interface (WMI) reports. The traditional challenge with this approach is that non-Windows operating systems do not necessarily provide the same ability to acquire asset information as a Windows OS provides.

When managing PCs with Intel vPro technology, the N-central agent can access hardware information regardless of the OS type, not just the OS state. This gives MSPs a new, more accurate inventory process for PCs configured for Novell*, Linux*, and other OS environments. MSPs can now offer customers homogenous discovery and inventory processes, regardless of PC platform.

Remotely powering up PCs to receive an update

MSPs cannot usually update a PC that is powered down. Instead, the MSP typically waits until the next time the user powers up the system to install the updates — an approach that can cost workers precious business time. MSPs might also make a field visit to power up the PC and perform the update on-site — a costly process for both customer and MSP.

N-central is now taking advantage of the new, hardware-based remote power-up capability built into PCs with Intel vPro technology to improve many update and upgrade processes. This capability allows N-central to power up, power down, and power cycle a PC from the remote service center. N-central can now remotely poll the PC for its power state, power it up if it was off, install a software update, and power the system back down to the state in which the user left it: on, off, hibernating, or sleeping.

This capability allows N-central to offer MSPs another layer of security against malicious attacks. For example, if N-central detects an attack on a perimeter device (such as a firewall),

SOLUTION BENEFITS

- **Effective discovery even for PCs that are powered off or whose OS is not responding**
- **More accurate asset inventories with persistent, "always-available" information**
- **Enhanced monitoring of PCs through an improved remote communication channel**
- **Increased automation for discovery, monitoring, and maintenance processes**

N-central can remotely and automatically power down the PCs until a resolution is found or the malicious attack is over. MSPs can now offer customers increased security, improved user uptime, and minimized data loss from hackers, viruses, worms, and other security threats.

Improving automation and off-hours maintenance

N-central is also taking advantage of the new remote power-up capability to improve automation of many maintenance processes. For example, a technician can now use an N-central script to remotely power up a machine, perform disk defragmentation, backups or other maintenance tasks, and then return the PC to its previous power state — without leaving the service center.

This will help MSPs improve automation and efficiencies for many tasks. In addition, because maintenance is no longer dependent on the power state of the machine, technicians can use N-central to shift more work off-hours, when it won't interrupt the customer's business. The result is increased uptime for customers and improved process efficiencies for MSPs.

Summary

Effective management services are based on the ability to achieve remote, global visibility of the customer environment. With N-central and Intel vPro technology, MSPs gain a new level of visibility into customer sites, and a deeper ability to remotely manage customer machines. MSPs can now monitor and manage even PCs that are powered down or whose OS is inoperative. In addition, the combination of N-central and Intel vPro technology makes it easier to automate more processes and perform more work off-hours. This gives MSPs a new way to provide hardware as a service, not a capital expense. Ultimately, this can help MSPs provide more efficient, consistent services and significantly increase revenue margins.

For more information

PCs with Intel vPro technology give IT administrators critical, hardware-based security and manageability capabilities not available in software-only solutions. When provisioned with third-party software, these PCs can be managed directly from the management console, regardless of their power state or the health of their OS.¹

For more information about Intel vPro technology, visit
www.intel.com/vpro

For more information about N-able Technologies N-central solution, visit
www.n-able.com

¹PCs with Intel® vPro™ technology include Intel® Active Management Technology (Intel® AMT). Intel AMT requires the computer to have an Intel AMT-enabled chipset, network hardware and software, connection with a power source, and a network connection.

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