



Novell ZENworks* and Intel® Active Management Technology

Company	Novell, Inc. is a leading provider of information solutions that deliver secure identity management, Web-application development and cross-platform networking services, all supported by strategic consulting and professional services. Novell's vision of one Net—a world without information boundaries—helps customers realize the value of their information securely and economically.
Business Challenge	Retain machine identification (ID) through hardware upgrades and failures, to speed up system recovery and to automate rebuilds.
Technology Solution	Novell ZENworks*
Enabled By	Intel® Active Management Technology (Intel® AMT)

Enhancing System Recovery and Automating the Reprovisioning Process with Persistent Machine ID

Intel® Active Management Technology (Intel® AMT) enables out-of-band (OOB) communication with devices, and offers persistent, nonvolatile memory for storing important information needed for efficient system recovery. Used with Intel AMT-enabled systems, Novell ZENworks* helps automate powerful policy-driven control for rebuilding systems where drive failures or upgrades occur. Information technology (IT) departments will now be able to speed up drive replacement and re-imaging, increase departmental efficiency, reduce down time for users, and reduce the overall burden of upgrading, repairing and recovering systems.

Today's Challenge

System recovery in today's computing environments can be complex. Software projects can be managed by different teams or individuals, and changes to systems can come at any time. Organizing and deploying updates can be a logistics challenge. Also, many enterprises have a time limit for problem resolution. Unfortunately, the hardware and software information required for an efficient rebuild—data traditionally stored on the hard drive—is lost when the hard drive is replaced. The result is a tedious rebuild.

The Solution: Novell ZENworks and Intel® AMT

Now ZENworks, used with Intel AMT-enabled systems, lets IT technicians accurately identify machines that have had physical drive replacements, regardless of the state of the machine's operating system (OS). Even when a machine has a new, unformatted hard drive, ZENworks can now instantly and accurately identify the device and begin the appropriate automated rebuild. Used with Intel AMT-enabled systems, ZENworks offers a significant improvement in the overall automation of recovery processes.

For example, if a system fails due to a problem with the hard drive and the drive must physically be replaced, traditionally, the IT technician must manually identify an image for that device and restore each of the previously installed applications and data. ZENworks improves that traditional process by rebuilding the machine automatically—if it knows the identity of the machine. The problem is that, before Intel AMT capabilities, the identity of the machine was lost when the drive was replaced.

Intel AMT solves this problem by providing ZENworks with nonvolatile memory in which to store the unique machine identity. ZENworks can now access the machine ID, not only while a hard drive is inoperable, but also after the drive is replaced.

Additionally, ZENworks automatically identifies the machine and provides the appropriate image during a system rebuild. This includes restoring the right personality of the platform, as well as system settings, group policies, security settings, and so forth.

ZENworks used with Intel AMT-enabled systems dramatically reduces the time it takes to rebuild a system, reducing the costs of maintaining the corporation's systems, and increasing both IT and end-user productivity.

Improving Upgrades

Another hurdle in deploying applications is making sure that each system meets the minimum hardware requirements for a software installation.

For example, a ZENworks inventory scan might indicate that ten systems in an engineering department need to be upgraded with larger hard drives before the systems can be migrated from one OS to another.

Because Intel AMT enables OOB communications and persistent ID of the platforms, ZENworks can begin re-imaging those ten upgraded systems immediately, as soon as the hard drives are replaced and before any agents or the OS is installed. For Intel AMT-enabled systems, ZENworks now makes the entire drive upgrade process more efficient.

Summary

The key to system recovery and repurposing is minimizing the time it takes to restore a system and get users back up and running. Intel AMT enables both OOB communication and persistent machine ID, to add a powerful level of pre-boot functionality to ZENworks, as well as another layer of security for preserving the identity of a machine.

Intel AMT capabilities also enable better re-imaging for system hardware recovery and upgrades. These new hardware-based capabilities allow this enhanced re-imaging to come under ZENworks' powerful policy-driven control.

Drive recovery improvements are only the first of many feature-rich enhancements to come from the integration of Intel AMT with ZENworks.

Solution Benefits

Accelerate system recovery after hardware disasters.

Access managed machine ID information, even when a system is inoperable or powered down.

Accurately identify machines in a pre-boot environment to automate policy-driven control of system rebuilds.

For More Information

Intel AMT enables software vendors to deliver both enhanced and new IT solutions that make network management easier and reduce the overall cost of managing computing environments.

For more information about Intel AMT, visit www.intel.com/go/iamt

For more information about Novell ZENworks, visit www.novell.com/zenworks

