Computer Associates Unicenter* and Intel® Active Management Technology

Company	Computer Associates International, Inc. (CA), one of the largest management software companies, provides powerful applications, such as Unicenter* Network and Systems Management (Unicenter NSM), for total infrastructure management to optimize the performance, availability and efficiency of Information Technology (IT) environments.
Business Challenge	Manage devices and collect detailed hardware and event data even when systems are inoperable or powered down.
Technology Solution	Unicenter Network and Systems Management
Enabled By	Intel® Active Management Technology (Intel® AMT)

Improving IT Efficiency by Offering Enhanced Discover, Heal and Protect Capabilities

Computer Associates International, Inc. (CA) has been working with Intel to enable Unicenter* Network and Systems Management (Unicenter NSM) to take advantage of Intel® Active Management Technology (Intel® AMT), offering customers the ability to discover, heal and protect IT assets, even when an operating system (OS) is inoperable or a device is powered down. Enterprises using Unicenter NSM and deploying systems with Intel AMT will achieve more efficient platform management with reduced IT operating costs.

Today's Challenge

One of the biggest issues in managing today's IT infrastructure is ensuring the availability and performance of critical business applications, by proactively identifying problems within the underlying networks, systems, databases and applications. One aspect of this issue is that, before Intel AMT, it wasn't possible to access detailed hardware information—such as events, traps and component states—for systems that had crashed, hung, or were powered down. Also, there was no secure and reliable mechanism to remotely power up, power down, reboot, or access hardware information for devices. Intel AMT now enables Unicenter NSM to provide enhanced management of network devices with functions that discover, heal and protect systems, regardless of the health and state of the platform.

The Solution: Unicenter NSM and Intel® AMT

The first step in ensuring the availability of critical business applications is to discover the applications, databases, systems and networks that make up the underlying IT infrastructure. Unicenter NSM automatically discovers, classifies and creates a baseline for performance for all the infrastructure elements that are on the network. Intel AMT enhances this ability by enabling Unicenter NSM to discover, classify and monitor systems regardless of their power or OS state.

For example, in a typical scenario, an enterprise might have several hundred computers on a network. On any given day, ten of those computers could be powered down because users are off-site or away from their desks. With Intel AMT, the ten powered-down systems are discovered during NSM's routine scans because, even in their powered-down state, the Intel AMT-enabled systems respond to the discovery process of Unicenter NSM.

Powerful Alerting and Event Management

Unicenter NSM also monitors infrastructures and automatically detects issues that may affect the availability and performance of applications. Events are correlated, the root causes of problems are identified and, when possible, potential problems are automatically self-healed before they affect end users. If Unicenter NSM cannot automatically resolve the issue, it facilitates the process by opening a trouble ticket and sending an alert to the appropriate technician with the details of the problem.

Intel AMT will enhance the powerful event-management system of Unicenter NSM by providing alerts related to system hardware events—alerts that were not possible to access before Intel AMT became available. Now Unicenter NSM can receive alerts about temperature, fan speed, case intrusions, power supply voltage levels, hardware failures, lock-ups (blue screens), system boot failures and other critical events.

For example, a power supply voltage might be approaching a critical threshold. Unicenter NSM can now detect that hardware event and remotely acquire detailed information, such as process states, keyboard function as well as other metrics and SNMP traps from sensors designed into the platform. Unicenter NSM then logs the alerts based on defined business rules. A few minutes later, if the computer crashes, a trouble ticket can be automatically opened in Unicenter* Service Plus Service Desk, providing details about the system failure.

Before Intel AMT, a help technician would have been dispatched to the computer to diagnose and repair the problem. Now technicians can look at the detailed logs of Unicenter NSM to see that, for example, the voltage level rose suddenly just before the crash, and that over thirty applications had been open when the system went down. The solution here may be as simple as a reboot.

With Intel AMT capabilities, technicians will be able to fix more problems remotely from administrative consoles, using Serial over LAN (SOL) or integrated drive electronics (IDE) redirection to boot the system off a LAN-based image rather than from the user's hard drive. Once the system is powered up again, the technician can then use Unicenter* Software Delivery to install any applications or updates, and Desktop DNA* to restore any user files and settings corrupted by the crash.

Enhanced Security and Protection

Intel AMT will also enhance the powerful security protection capabilities of Unicenter by ensuring security on systems that are powered down or inoperable. For example, during a routine patch update, discovery of ten powered-down machines tells Unicenter NSM to use Unicenter Service Plus Service Desk to send an alert to the IT technician. While other Unicenter solutions perform the automated update for the systems that are powered up, the technician can take advantage of the Intel AMT remote-control features, and use Unicenter NSM to remotely power up the systems that are off. The technician can update those systems remotely, then power them down again, restoring them to the state in which users had left them.

Summary

The Intel AMT platform technology complements Unicenter NSM, but Unicenter NSM is just the first of the CA solutions to take advantage of Intel AMT. CA is already looking at ways to implement remote management for off-hour job scheduling, software delivery, asset management (including desktop and server management), disaster recovery and security for enhanced on-demand management and on-demand computing.

Solution Benefits
Enhanced discovery of powered-down or inoperable systems.
Quicker problem resolution using out-of-band communication with network devices.
Improved efficiency of remote diagnostics with enhanced system event logging and alerting.
Enhanced security threat protection.

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 Unicenter NSM, visit
www.ca.com/nsm