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ACCELERATING THE TRANSITION TO MICROSOFT WINDOWS 7 WITH DELL CLIENT MANAGEMENT TOOLS

By Travis Zhao

A comprehensive suite of management tools and utilities helps organizations expedite the transition to the Microsoft® Windows® 7 OS on Dell™ client systems. These exceptional resources are designed to simplify assessment, deployment, and monitoring in addition to facilitating ongoing life cycle management of Dell platforms.

Selecting the most efficient deployment method is a top concern for IT organizations planning their move to Microsoft Windows 7. To that end, Dell offers open, flexible client management tools and services that help reduce the complexity and cost of a Windows 7 migration. The comprehensive solution set includes multiple levels of tools, services, and capabilities designed to address the specific management needs of diverse organizations—ranging from basic, built-in functionality for do-it-yourself Dell client management to Dell management software for large client computing environments and integration with comprehensive third-party management solutions (see Figure 1). Organizations can also take advantage of a range of Dell Services offerings that were developed based on Dell's firsthand experience deploying Windows 7 throughout its own global organization using patent-pending Dell deployment methodologies.

USING BUILT-IN FUNCTIONALITY AND LOCAL CLIENT TOOLS

Dell client systems take advantage of a range of technologies and utilities to enable the basic monitoring and configuration at the core of client management. System Management BIOS (SMBIOS) support makes information about Dell client systems available to administrators. Dell OpenManage™ Client Instrumentation (OMCI) allows IT managers to perform basic management

tasks, such as accessing information about client systems and monitoring their status.

The Dell Client Configuration Utility (DCCU), which runs locally on client systems, allows administrators to modify BIOS configurations and update BIOS firmware. It also creates executable files that can be distributed to multiple systems. Select Dell client systems are available with either Intel® vPro™ processor technology or Broadcom TruManage, which provides out-of-band client access, hardware alerting, setup, and provisioning features. Both Intel vPro technology and Broadcom TruManage allow administrators to access a Dell client system even if its OS is down.

Streamlined management with Dell downloads

The complimentary Dell Client Configuration Toolkit (CCTK) provides a command line-based scripting utility that runs on client systems to allow BIOS configuration changes. Administrators can script their BIOS configuration changes and then either execute those scripts during imaging or distribute the scripts using the existing infrastructure for configuration management.

Dell Client System Update (DCSU) is a local tool that allows authorized users to scan BIOS and driver revisions on a local system using a graphical user interface (GUI). It then compares that information to BIOS and driver updates on the Dell support Web site and recommends required updates. Dell Client Driver Pack

	Tools and utilities	Dell management tools	Partner management tools
Out-of-band remote access	Intel vPro and Broadcom TruManage	Dell Management Console for Clients (complimentary download) and Dell KACE systems management appliances	Microsoft System Center and LANDesk Management Suite
Hardware updates	Dell Update Packages (for BIOSs and drivers) and Dell Client System Update		Microsoft System Center Configuration Manager and LANDesk software
BIOS configuration	Dell Client Configuration Toolkit and Dell Client Configuration Utility		
Hardware monitoring and inventory	Dell OpenManage Client Instrumentation		Dell Client Management Pack for Microsoft System Center Operations Manager and LANDesk software
Deployment	Dell Client Driver Pack CAB files	Dell Client Management Plus and Dell Client Management Suite (fee-based downloads) and Dell KACE systems management appliances	Dell Client Deployment Pack for Microsoft System Center Configuration Manager
Backup and recovery	Dell Backup and Recovery Manager		Microsoft System Center and LANDesk software
Software distribution, patch management, software usage metering, asset management, and power management			

Figure 1. Client management tools and utilities for Windows 7 migrations

CAB files, also available as complimentary downloads, provide simple file directories with the driver files required for Dell OptiPlex™ desktops, Dell Latitude™ laptops, and Dell Precision™ workstations.

Dell software for Windows 7 migration

Built-in functionality and local tools can assist administrators with a Windows 7 migration. First, administrators can use OMCI and the DCSU tool to verify that the client components and software are ready for Windows 7. For example, BIOS settings may need to be changed to set up a Trusted Platform Module (TPM) for the Windows 7 BitLocker™ security feature.

Downloading the Dell .cab file with plug-and-play drivers for the specific platform helps significantly simplify the image deployment process by avoiding the need to search the Web for the appropriate drivers. Administrators can also download the DCCU tool to script BIOS configurations, and then run the script to make the changes. Building on these capabilities, administrators can automate the Windows 7 migration process using the tools of their choice. For small deployments of just a few clients, the Dell Upgrade Assistant can help guide users through the Windows 7 installation process in a simple and thorough fashion.

CENTRALIZING TASKS WITH THE DELL MANAGEMENT CONSOLE

For organizations managing a growing number of client systems or looking to integrate the management of desktop and laptop systems within the overall IT infrastructure, the Dell Management Console Powered by Altiris™ from Symantec™ provides a comprehensive framework. Organizations can use the Dell Management Console to centralize, remotely control, and automate tasks like OS deployment and updating through a single GUI (see Figure 2). The console integrates with underlying Dell instrumentation, and can automatically download and distribute instrumentation not already on the client systems.

Reduced costs with an incremental, phased approach

The Dell Management Console offers basic centralized hardware management and the ability to use plug-in solutions to support advanced functionality. The Dell Management Console for Clients (formerly Dell Client Manager) is a complimentary download that provides basic centralized hardware management, including discovery and inventory of client systems, one-to-many BIOS updates, power management, and client hardware health monitoring. The download also provides

basic out-of-band management with Intel vPro and Broadcom TruManage support. The Altiris Deployment Solution™ for Dell Thin Clients plug-in is another complimentary download that adds advanced software tools for thin-client management of the Dell OptiPlex FX160.

Dell Client Management Plus is a fee-based module that adds software management capabilities such as migration of user data and settings, automated deployment, client software distribution, advanced out-of-band support, and inventory of OS and software configuration settings. Dell Client Management Suite is a fee-based module that adds advanced software management tools, including OS patching, software license metering, remote control of clients over a LAN, and enforcement of system configuration and software policies.

The Dell Management Console and Windows 7 migration

The Dell Management Console for Clients allows administrators to discover and inventory client systems and distribute BIOS updates and configuration in a one-to-many fashion before migrating to Windows 7. With the addition of Dell Client Management Plus, administrators can use the Dell Management Console for

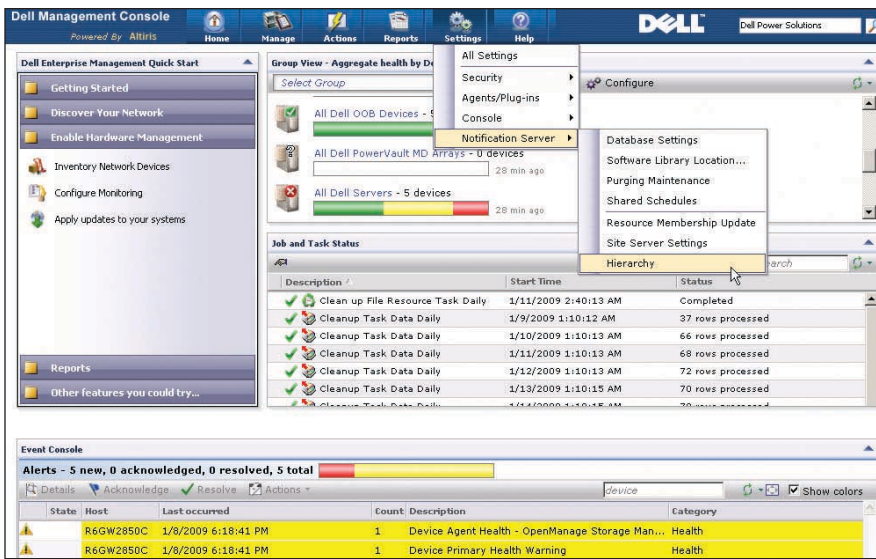


Figure 2. Dell Management Console GUI for centralized management of clients, including Windows 7 deployments

automated deployment of Windows 7, including allocation of drivers and distribution of images to networked clients.

Dell KACE management appliances

With Dell’s planned acquisition of leading systems management appliance company KACE, the Dell KACE family of products provides a cost-effective, “pay as you grow” management approach for organizations, educational institutions, and state and local governments. Designed for ease of installation and use, Dell KACE appliances can be particularly effective in organizations where limited resources require IT staff members to perform multiple roles. Incorporating hardware, software, and OS management capabilities, these appliances can help significantly simplify Windows 7 migration tasks.

BENEFITING FROM THIRD-PARTY INTEGRATION

To unify comprehensive management functionality, Dell has integrated its tools with management solutions from a broad range of partners, including Microsoft, Symantec, and LANDesk. By leveraging OMCI and other Dell enablement technologies, IT administrators have the flexibility to build management functionality in step with size and organizational requirements.

Organizations implementing the Dell Management Console have a natural progression path through the various client management modules. For Windows 7, administrators can take advantage of Altiris Deployment Solution integration in Dell Client Management Plus and Dell Client Management Suite to automate bare-metal Dell client configuration and deployment across the organization.

Alternatively, organizations use Dell tools to leverage their existing Microsoft System Center Configuration Manager (SCCM) and System Center Operations Manager (SCOM) deployments. Dell offers three Microsoft System Center extensions for Dell client management: the Dell Client Management Pack for monitoring clients through SCOM, the Dell Client Deployment Pack for OS and application deployment through SCCM, and the Dell Business Client Update Catalog for driver and BIOS updates through SCCM.

Administrators can use the Dell Client Deployment Pack and Dell Business Client Update Catalog together with SCCM to automate the bare-metal configuration and deployment of Windows 7 organization-wide. The Dell Business Client Update Catalog is designed to automatically download and update Dell client BIOSs and drivers through SCCM.

SIMPLIFYING CLIENT MANAGEMENT FOR WINDOWS 7 MIGRATIONS

A key goal for Dell is to provide open manageability that enables administrators to use the most suitable tools for their organizations’ size and needs regardless of client hardware platform. Dell helps simplify the task by providing several client management options that do not force organizations into a proprietary paradigm. As a result, organizations can optimize return on investment whether they prefer to manage client systems themselves, use a Dell management approach, or continue using an existing management infrastructure.

In addition, many organizations aiming to capitalize on technology advancements in Microsoft Windows 7 can benefit from Dell’s firsthand experience in deploying Windows 7 through its own global operation by taking advantage of Dell deployment methodologies and Dell Services options. By engaging early in the Windows 7 development cycle, Dell has gained key insights into the new OS, particularly as it functions together with advanced Dell client technologies for Windows 7 migration and management.

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