

# LANDesk Server Manager:

## Simplified Proactive Management of Dell PowerEdge Servers

LANDesk® Server Manager allows administrators to instantly assess server health and can help keep systems available and running at high performance levels. Its built-in awareness of management attributes specific to Dell™ PowerEdge™ servers and Dell Remote Access Controllers, integration with the Dell OpenManage™ suite, and ability to aggregate Dell-specific patch content can help simplify management and maintenance of Dell server environments.

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For both small businesses and large enterprises with complex network infrastructures, server health and availability drive productivity and success, and increased pressure on IT personnel to ensure server uptime means that having the tools to proactively understand, manage, and protect server health has become critical.

The award-winning<sup>1</sup> LANDesk Server Manager not only delivers a comprehensive arsenal of powerful yet simple-to-use tools for centralized server management in heterogeneous environments, but can also help simplify proactive management of Dell server environments. LANDesk Server Manager provides built-in awareness of management attributes specific to Dell PowerEdge servers and Dell Remote Access Controllers (DRACs), integrates with the Dell OpenManage suite, and aggregates Dell-specific patch content for review and download.

LANDesk Server Manager allows administrators to actively monitor Dell hardware and the software running on it for performance, health, operating status, and configuration changes from a centralized management console. Using data from Common Information Model (CIM), Intelligent Platform Management Interface (IPMI), custom application-specific integrated circuits, and other methods, LANDesk Server Manager provides a complete picture of PowerEdge server health and performance. Easy access to troubleshooting tools can help improve efficiency and effectiveness when finding and fixing problems. To enable administrators to proactively manage, protect, update, and maintain PowerEdge servers for optimal performance and availability, LANDesk Server Manager provides centralized change and configuration management tools—including inventory discovery, vulnerability

<sup>1</sup> "eWEEK Labs Picks the Top Products of 2005" by eWEEK Labs in eWEEK, December 19, 2005, [www.eweek.com/article2/0,1895,1901684,00.asp](http://www.eweek.com/article2/0,1895,1901684,00.asp).

scanning, patch management, asset management, software distribution, OS imaging, Preboot Execution Environment (PXE) boot, and remote control. Through the LANDesk Server Manager customizable report-generation tools, administrators can easily access and use historical and real-time server data to facilitate trend analysis, capacity planning, and business process management.

### Extensive, automated patch management

Staying current on driver and software updates and the latest vulnerabilities and patches, and deploying them to servers, should not be a full-time job. LANDesk Server Manager can help simplify and reduce the time spent on software update and patch management efforts. For example, server-specific patch management tools (see Figure 1) allow administrators to stay updated on patches and vulnerabilities while also enabling them to control what level of automated deployment and remediation makes the most sense for their environment.

To prepare administrators for new and emerging security and performance threats, LANDesk mines content servers and catalogs from trusted industry sources—including Dell—daily for the latest patches and updates. To help verify that the patches install as intended, a team of LANDesk engineers validates every patch that is made accessible from the LANDesk security database. The patch engineering team performs basic conflict-checking and patch-dependency analysis and provides installation notes to help administrators plan remediation efforts.

To provide extensive control over the management and deployment of updates specific to PowerEdge servers (such as firmware, BIOS, and driver patches), LANDesk Server Manager takes advantage of the interfaces exposed by the Dell Partner Development Kit. The vulnerability scanner in LANDesk Server Manager works in concert with the Dell inventory scanner to extract critical information from all Dell servers, such as firmware revision levels, and then matches that information against the latest updates published by Dell. LANDesk Server Manager can then provide information about the latest software updates, vulnerabilities, and patches applicable to PowerEdge servers at any time.

One of the most powerful and time-saving capabilities of LANDesk Server Manager is its ability to aggregate updates specific to the Dell servers distributed throughout an enterprise. This aggregation allows administrators to centrally manage and deploy necessary patches to all servers at once, rather than on a one-to-one basis. It also enables administrators to delay deployment until they have had a chance to sufficiently test the patch in a nonproduction environment. Once ready, administrators can schedule the patch to be deployed in a manner and time frame that best fits their organization's unique needs.

The ability to detect and aggregate patches, centrally manage them, and automate their deployment according to administrators'

needs and schedules is not limited to Dell-specific updates. LANDesk Server Manager provides this same capability for all the updates and patches that PowerEdge servers require for the operating systems and software applications running on those servers.

### Out-of-band management using IPMI

In spite of the best proactive management efforts, servers can still fail unexpectedly. The health dashboard and customizable health alerts and handlers in LANDesk Server Manager can provide administrators with information about server problems quickly—before end users start contacting administrators. LANDesk Server Manager also enhances administrators' ability to remotely troubleshoot any DRAC-equipped PowerEdge server that fails. Because the inventory manager in LANDesk Server Manager works with Dell OpenManage to gather DRAC-specific information, administrators can use the LANDesk Server Manager Web console to view the events, notices, and warnings recorded in the DRAC logs and DRAC trace logs without ever needing to launch a DRAC session. The console also provides direct access to remotely launch DRAC sessions, giving administrators comprehensive remote access to the DRAC functionality provided by Dell.

The management capabilities for these DRAC-equipped servers increase dramatically when administrators also use the out-of-band IPMI support included in LANDesk Server Manager. Most PowerEdge servers are equipped with more than 100 on-board sensor devices and chips. The deep IPMI support enables LANDesk Server Manager to display data from these sensors and allows administrators to quickly and remotely receive sensor alerts for all DRAC-equipped PowerEdge servers.

For example, from the LANDesk Server Manager console, administrators can use IPMI out-of-band management to check the status of the servers' IPMI-supported sensors for disconnected cables, removed hardware, chassis intrusion, and similar

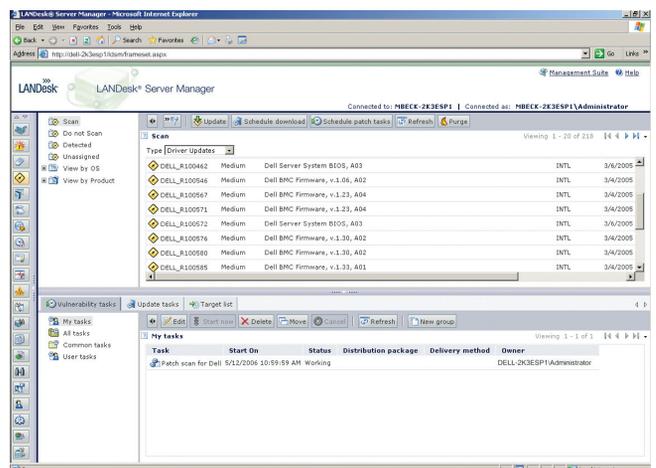


Figure 1. Viewing available Dell updates with LANDesk Server Manager

problems. The console provides access to the IPMI system event log, which shows a history of IPMI-related events that occurred on the device, such as the watchdog timer causing a power cycle or a general chassis intrusion. Administrators can also remotely power cycle a server, look at its BIOS settings for problems or conflicts, and make any necessary changes, as well as remotely configure the DRAC or the IPMI-compliant baseboard management controller, including settings for watchdog timers, power configuration, users, passwords, LAN configuration, and Serial Over LAN configuration.

Combining the performance monitoring, vulnerability scanning, change management, OS imaging, and patch management capabilities of LANDesk Server Administrator with its IPMI out-of-band management features enables administrators to proactively manage servers, helps reduce many of the problems that can affect server health and availability, and enhances administrators' ability to quickly bring servers back online.

### Integration with Dell OpenManage

Not only does LANDesk Server Manager work with Dell OpenManage to let administrators manage DRAC sessions, but the LANDesk Server Manager Web console also provides access to the server management capabilities offered by Dell OpenManage. By virtue of this interaction, LANDesk Server Manager gathers data on all Dell OpenManage-supported components, presenting through the console a customized view of Dell-specific attributes such as the Dell service tags and Dell OpenManage versions on PowerEdge servers (see Figure 2). It also provides the ability to remotely manage and configure RAID devices.

In addition to the Dell-specific management capabilities provided by Dell OpenManage, the intuitive and easy-to-use LANDesk Server Manager Web console provides access to the comprehensive set of enterprise server management capabilities offered by LANDesk Server Manager, such as performance monitoring, asset management, vulnerability scanning, license monitoring, OS provisioning, and centralized configuration management. Because it is Web based, this console can provide anytime, anyplace remote server management, which can also help simplify and optimize IT efforts and lower total cost of ownership.

### Informative reports for enhanced decision making

All administrators need intelligent tools to help them be proactive, interpret server data, and enhance overall decision-making capabilities. Through the LANDesk Server Manager console, administrators can generate a wide array of customizable and predefined reports that help facilitate decision-making efforts. By using the LANDesk Server Manager ad hoc query engine, administrators can quickly create a report to provide immediate information on any aspect of a server stored in the application's open standards database (Oracle®,

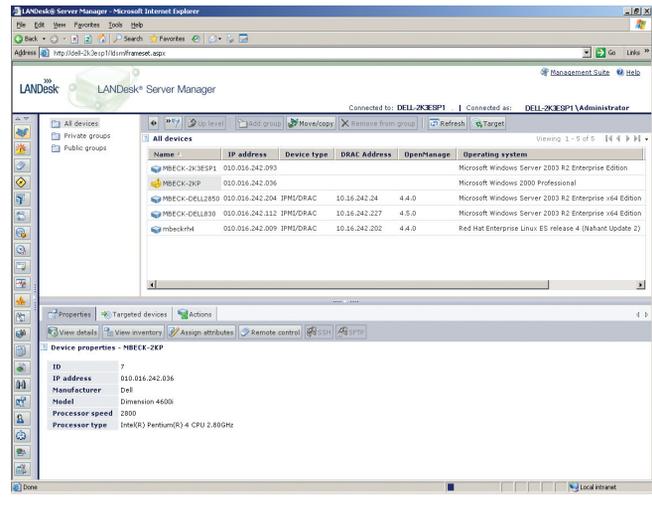


Figure 2. Viewing Dell devices with LANDesk Server Manager

Microsoft® SQL Server™, or Microsoft Data Engine databases). Administrators can even create a report that details the history of changes on any given server to facilitate configuration and change management efforts.

Besides enabling administrators to create their own reports, LANDesk Server Manager includes a variety of predefined reports that address many common systems management situations, such as hardware refresh planning and capacity planning. Included in this extensive array of reports are Dell-specific reports that display information about all PowerEdge servers in an environment, such as firmware revision levels, Dell OpenManage versions, the presence of DRACs, and more.

### Interoperability through open standards

The integration of Dell and LANDesk products can help enterprises improve server utilization, provide the data to support informed decisions, and simplify IT management efforts. In addition to creating the active integration between LANDesk Server Manager and Dell OpenManage, Dell and LANDesk work together through their shared partner alliances with industry leaders such as Microsoft, Intel, Novell, LSI Logic, and Avocent.

Dell and LANDesk also actively support open standards and nonproprietary management schemes. Their shared support for industry standards such as IPMI, CIM, Intel® Active Management Technology, Systems Management Architecture for Server Hardware (SMASH), Web Services for Management (WS-Management), and Web-Based Enterprise Management (WBEM), as well as joint participation in the Distributed Management Task Force, help advance the progress of interoperability, reliability, and performance in enterprise server environments. 

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