



White Paper
**Intel® Server Management
Products**
Small to Midsize Business IT

Intel® Server Essentials

Making IT Easy for Small and Midsize Businesses

Small and midsize businesses (SMBs) face complex IT challenges similar to those of large enterprises, but often without the large budget or staff of IT specialists. Intel® Server Essentials offers software and hardware solutions that:

- Make it easy to set up and maintain a reliable and secure IT infrastructure
- Reduce the cost and time of managing servers, desktops, and applications
- Keep businesses running 24/7

The IT Challenge

Businesses of all sizes want to upgrade their technology and automate processes so they can reduce costs and increase productivity. However, getting new systems set up can be a real hassle, especially for SMBs that have:

- Small or part-time IT staff
- Limited budgets for software and hardware expenditures
- Low tolerance, time, and expertise for complicated IT solutions

Keeping pace with required changes while ensuring that systems perform optimally and remain secure can be overwhelming. Intel has a solution: software and hardware packages that are designed for small and midsize companies to fit their budget and address their specific challenges. Intel® Server Essentials simplifies management of the whole network and streamlines the full range of IT activities—from building and setting up servers to managing the IT environment—all from a single console.

Intel® Server Essentials has the Answer

The family of Intel Server Essentials solutions, available with Intel® Server Products, includes:

- **Intel® Server Deployment Toolkit 2.0 (CD)** – with Intel® Deployment Assistant and other system utilities and drivers
- **Intel® System Management Software 2.0 (CDs)** – with Microsoft® System Center Essentials 2007, Intel® Server Management Pack for Microsoft® Windows, and other system utilities
- **Intel® Remote Management Module 2 (Intel® RMM2)** – an optional accessory available for selected Intel Server Products



Figure 1. Intel® Server Essentials 2.0 ships with all Intel® Server Products to streamline the building, deployment, and management of servers and clients



Figure 2. Intel® Deployment Assistant speeds server setup

Intel® Server Essentials Benefits

Intel Server Essentials improves security, reduces costs, and helps businesses move from reactive to proactive management of their systems. A mix of hardware and software enables secure remote management and monitoring of servers, clients, and applications from virtually any location—in a way that an IT generalist can understand without attending weeks of tool-specific training.

With Intel Server Essentials, businesses can:

- Lower costs by making server setup, maintenance, and repair easy
- Reduce service calls and application outages and eliminate travel time and costs for troubleshooting problems
- Improve IT infrastructure reliability, stability, and security with rapid application and patch deployment
- Have peace of mind at a glance with automated daily health reports and alerts that give administrators the information they need to address problems proactively, before they affect services and end-user productivity

According to a recent IDC study, businesses that adopted automated server management tools saved on average \$300 USD per PC per year in IT labor costs, increased service levels, and improved business flexibility.¹ Intel Server Essentials enables even small IT departments to adhere to these practices and save money.

Fast Setup with Intel® Server Deployment Toolkit 2.0

Each Intel® Server Board ships with the Intel® Server Deployment Toolkit 2.0 CD, which streamlines server setup and configuration. This toolkit includes the Intel® Deployment Assistant and additional configuration utilities.

Intel® Deployment Assistant

Intel Deployment Assistant reduces the complexity and time associated with setting up Intel® servers. Server deployment time is often cut by an hour or more per system, and even more time can be saved when using the cloning feature to deploy identical servers.

The wizard automatically locates and retrieves the latest drivers, BIOS, and firmware updates. It steps through questions allowing the user to quickly configure the server via automatic recognition of server hardware, minimal reboots and an automated unattended OS installation.

Table 1. Features and Benefits of Intel® Deployment Assistant

Features	Benefits
Wizard-based user interface	Reduces complexity while providing comprehensive guidance in the deployment of Intel® servers.
Automatic detection of server configuration and components	Eliminates steps and saves time by detecting key configuration information, including BIOS, LAN, and server management settings, and updating your system.
Load configuration profiles for identical servers	Reduces redundant tasks by saving and loading configuration settings from one server to identical servers.
Wizard-guided RAID configuration	Configures RAID from a single console with simple, step-by-step instructions.
Automatic detection of available software updates	Minimizes uncertainty by automatically locating the latest drivers, firmware and BIOS from the Internet, corporate network, or USB sources.
Unattended OS installation	Saves time—simply answer configuration questions, choose the drivers to include, and pop in the operating system CD.

Other Utilities

Intel provides an extensive set of tools for multiple operating systems to aid in configuration and maintenance of Intel servers. A portion of the utilities are found on the Intel Server Essentials CDs and all are available at www.intel.com/go/servermanagement.

Simplify with Intel® System Management Software 2.0

With 70 percent of IT costs tied to management and monitoring and only 30 percent tied to the cost of installation, centralizing and automating network or IT management tasks lowers management costs and enables scalability.

Each Intel server board ships with a copy of Intel® System Management Software 2.0, a comprehensive software suite designed to ease management of the entire IT environment through a single, unified console.

Included with this powerful set of applications is Microsoft System Center Essentials* 2007 (Essentials* 2007), a new management solution in the System Center family of products designed to specifically address IT management for small to midsize businesses with up to 30 servers and 500 clients. More than just a dashboard with data, the Essentials 2007 console provides expert knowledge for solving problems, tools for streamlining daily activities, and reports and tips that help IT staff efficiently monitor and maintain network health and security.

Intel System Management Software 2.0 also comes with Intel® Server Management Pack for Windows*. This hardware management pack complements Essentials 2007 with specific support of Intel server features—enabling maximum control and monitoring of these servers.

Microsoft System Center Essentials* 2007

With Essentials 2007, IT staffers at small and midsize businesses are no longer slowed down by using more than one application to get the IT management job done.

Through a single console, Essentials 2007 unifies:

- Problem detection and troubleshooting for all aspects of the network
- Service-level monitoring of business critical applications like e-mail
- Asset tracking and reporting for simple, up to the minute inventory information
- Security updates and patching of the OS, applications, and hardware
- Remote software distribution and installation of applications on servers and clients

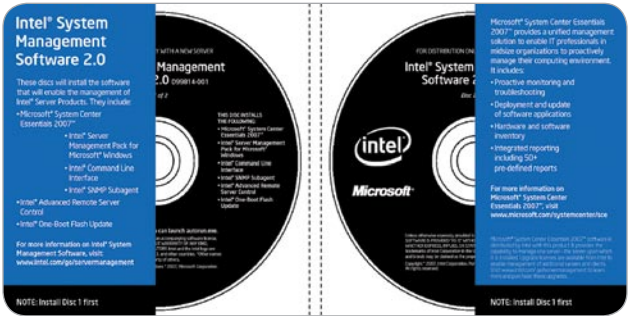


Figure 3. Intel® System Management Software 2.0 makes IT management easy

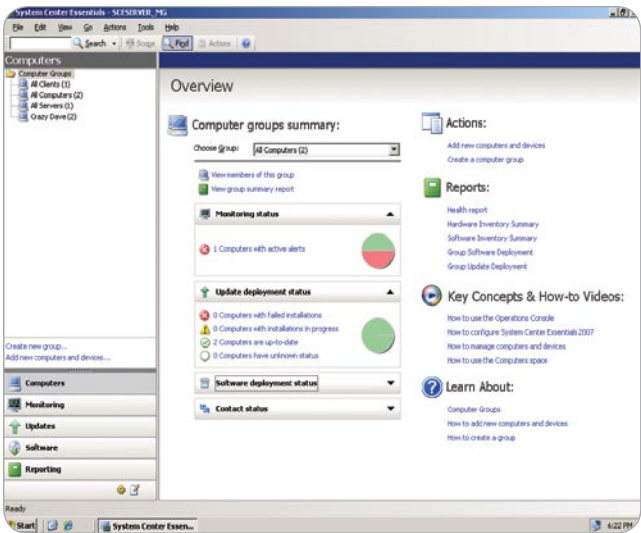


Figure 4. Microsoft System Center Essentials* 2007 unifies IT management in one console

Table 2. Intel® System Management Software 2.0

Features	Benefits
Single, easy-to-use console	Increases productivity and saves time by centralizing tasks on a single console to manage servers, clients and other IT assets.
Proactive management	Identifies problems before they impact end users; provides expert knowledge when problems occur; reduces troubleshooting time and helps get systems up and running quickly.
Automated hardware and software inventories	Improves asset planning, management, and compliance through automated hardware and software inventories.
Automated updates, alerts and reports	Lowest risks and reduces downtime with an easy-to-use interface that automatically monitors software and hardware components and alerts administrators of critical issues.
Wizards and templates	Saves time and reduces confusion with built-in intelligence provided by wizards and templates that simplify tasks.
Online training videos and context-sensitive help	Provides training and help on demand—no need to schedule and attend classes.

Table 3. Features and Benefits of the Optional Intel® Remote Management Module 2

Features	Benefits
Virtual presence	Extends the reach and control of your server with remote power management (on/off/reboot), virtual media redirection, and full remote access (KVM).
Proactive monitoring of system health	Reduces downtime by enabling administrators to recognize emerging trends and address problems before they impact services.
Dedicated network connection	Provides security by segmenting management traffic onto a dedicated network connection and supports industry standards including SMASH-CLP and WS-MAN.
Secure, embedded Web server	Connects administrators to remote servers over a secure SSL connection to monitor system health and perform a variety of maintenance tasks.



Figure 5. Intel® Remote Management Module 2 provides remote control of servers from any local mouse, keyboard, and monitor (KVM)—any place in the world, anytime.

This unified experience increases productivity and reduces costs because IT staff can save time by performing a broad set of daily and maintenance tasks from a single console. Reports, alerts, and automated patches help keep the IT environment up-to-date and more secure.

Intel® Server Management Pack for Windows

Intel Server Management Pack for Windows, a hardware management pack for Intel servers, enables administrators to efficiently monitor chassis and baseboard sensors including temperature, fan status, and voltage levels through an integrated management console. It works seamlessly with Essentials 2007 providing the best possible monitoring of overall system health with the technical details that help keep the server hardware healthy and stable.

Take Control with Intel® Remote Management Module 2

Visiting a server to fix a problem costs seven times as much as a remote resolution. Intel® Remote Management Module 2 (Intel® RMM2), an optional accessory available for selected Intel Server Products,³ streamlines administration and reduces mean-time-to-repair by removing time and distance barriers. It provides secure, BIOS-level access and control of servers and other IT devices from any local mouse, keyboard, and monitor (KVM)—any place in the world, anytime.

Intel RMM2 saves time at every stage of the server lifecycle by allowing remote completion

of tasks from initial server setup, on-going production monitoring and troubleshooting, to server recovery and maintenance. With USB media redirection, IT staff can load operating systems and other software on remote machines from storage devices attached to their local machine.

Intel RMM2 reduces server downtime by allowing administrators to proactively monitor system health and recognize emerging trends. Troubleshooting and repair can be performed from one console—no more getting stuck across town when a problem occurs and fighting traffic to restart a system.

Like all Intel Server Product accessories, Intel RMM2 is easy to install and use; and it's accessible from any web browser with built-in security to give full access to only those who need it.

Conclusion

Intel Server Essentials provides comprehensive, flexible, secure solutions for small and midsize businesses that address the IT challenges faced on a daily basis. Intel Server Essentials boosts IT efficiency by employing centralized consoles, automated and consolidated tasks, and an easy-to-use interface across all phases of the server lifecycle: build, deploy, and manage. Thanks to Intel Server Essentials, businesses of any size can do more with less.

For more information on **Intel Server Management Products**, visit www.intel.com/go/servermanagement

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¹ International Data Corporation (IDC). Optimizing Infrastructure: The Relationship between IT Labor Costs and Best Practices for Systems Management Server (January 2007).

² Microsoft System Center Essentials 2007, Single Server Edition ships with Intel Server Essentials at no additional charge. The Single Server Edition supports system management for one server - the server upon which it is installed. The Single Server Edition does not include client licenses. Essentials 2007 Single Server edition can be upgraded to the Small Network Edition (5 servers, 15 clients) or Standard Edition (10 servers, 50 clients) by purchasing an upgrade. Please visit <http://shop.intel.com> and visit the "Software" section to learn more and purchase the upgrades.

³ Compatible with Intel® Server Boards S5000PAL/S5000XAL/S5000PSL/S5000XSL and Intel® Server Systems SR1500AL/SR1550AL/SR2500ALBRP/SR2500ALLX/SR1550ALSAS/SR1500ALSAS and S7000SFC4UR/S700FC4UR/SR1560SF.

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