Preparing for LANDesk Management Suite V9.0

System Requirements

Description

This document discusses the details that will help you prepare for LANDesk V9.0.

LANDesk Management Suite 9.0 is full of new and powerful changes that can you better manage the device in your environment.

Some new features include:

- Integrating with Avocent Management Platform (AMP) to provide a more robust and granular interface to Role-based administration.
- A new and more powerful Reporting engine
- A new and more powerful Software License Monitoring tools
- Hardware Independent Imaging
- Agent support for Windows 7
- Support for the Core/Console on 64-bit platforms

Are you ready for LANDesk Management Suite 9.0?

There can be one server or multiple servers in each Management Suite environment.

The following are common components:

- Core Server(s)
- Database Server(s)
- Agents workstations
- Remote 32 bit Consoles
- Management Gateway(s)

Depending on the size of your environment, you may have some or all of these.

There are two key elements to every server: Hardware and Software. This document will help you decide if you need, or maybe just want, to upgrade one, the other, or both.

Is your Core Server Software ready for LANDesk Management Suite 9.0?

There are many different pieces of software that are required for Management Suite, such as the server operating system, a database system, and other prerequisites. The following is a look at the supported software for LANDesk Management Suite 9.0.

Supported Operating Systems for the Core Server

The Core Server in Management Suite 9.0 will support the following operating systems:

Windows Server 2008 R2

- Microsoft Windows Server 2008 R2 Standard (64-bit x64) Edition
- Microsoft Windows Server 2008 R2 Enterprise (64-bit x64) Edition\

Important: Windows Server 2008 R2 is currently only supported when used with a Microsoft SQL database.

Windows Server 2003

- Microsoft Windows Server 2003, Standard Edition (32-bit x86) with Service Pack 2
- Microsoft Windows Server 2003, Enterprise Edition (32-bit x86) with Service Pack 2
- Microsoft Windows Server 2003 R2 Standard Edition (32-bit x86) with Service Pack 2
- Microsoft Windows Server 2003 R2 Enterprise Edition (32-Bit x86) with Service Pack 2

Important: Upgrading the Core Server's Operating System over the top of an existing Operating System is not supported. For example, if the current Core Server's operating system is on Windows 2000 Server, you cannot upgrade over the top to Windows 2003 Server. You must back up the current Core Server's data then fdisk, format, and reinstall with the supported Operating System. Then install LANDesk Management Suite 9.0 and restore necessary from backup.

Supported Database Systems

The following are support database systems for LANDesk Management Suite 9.0.

Important: The SQL Server should be running on a 64-bit operating system to accommodate the memory requirements and should have 1 GB for the operating system and 1-2 MB of memory for each node. For example, if the Core Server is handling 7,000 nodes, the SQL server should have a minimum of 8 GB of RAM (1 GB for the OS and 7 GB for the 7,000 nodes), but for optimal performance, it should have 10 to 14 GB of RAM.

Microsoft SQL Server

- Microsoft SQL Server 2005 Express Edition (Free for use for up to 4 GB of data.)
- Microsoft SQL Server 2005 Standard Edition
- Microsoft SQL Server 2005 Enterprise Edition
- Microsoft SQL Server 2008 Express Edition (Free for use for up to 4 GB of data.)
- Microsoft SQL Server 2008 Standard Edition
- Microsoft SQL Server 2008 Enterprise Edition

Note: MSDE is no longer supported. If the Core Server is using an MSDE database, the database system will be upgraded to Microsoft SQL Server 2005 Express Edition by doing in-place upgraded the Management Suite 9.0 installation.

Important: Microsoft SQL Express 2005 and Microsoft SQL Express 2008 both have a 4 Gigabyte limitation. If this limitation is reached, the Core Server will stop functioning properly and the database

will no longer be able to write more data. It is possible that each agent could use as much as 2-4 megabyte or more so be careful to monitor the disk usage and upgrade to a full version of SQL prior to reaching the 4 gigabyte limit.

Oracle Database Server

- Oracle Database 10g Express Edition (Free for use for up to 4 GB of data.)
- Oracle Database 10g Standard Edition
- Oracle Database 10g Enterprise Edition
- Oracle Database 11g Standard Edition
- Oracle Database 11g Enterprise Edition

Important: Oracle Database 10g Express Edition has a 4 Gigabyte limitation. If this limitation is reached, the Core Server will stop functioning properly and the database will no longer be able to write more data. It is possible that each agent could use as much as 2-4 megabyte or more so be careful to monitor the disk usage and upgrade to a full version of SQL prior to reaching the 4 gigabyte limit.

Is your hardware ready for LANDesk Management Suite 9.0?

Hardware recommendations are tied into the amount of nodes a Core Server is managing. The following are hardware recommendations based on node count, broken down into common amounts of nodes. This assumes that all LANDesk features are used. Many environments could have lower hardware recommendations if not using all features.

Minimum Hardware Requirements vs. Recommended Hardware Configurations

Minimum hardware requirements are based on the requirements for software to install and the OS to operate. LANDesk can operate on minimum hardware requirements as per the OS vendor.

Recommended Hardware Configurations are designed to not only install the software but to provide a satisfactory user experience.

LANDesk Management Suite can run on minimum hardware requirements but the recommended hardware configurations that are provided in this document allow the installation to not only install, but also to support all functions of LANDesk while providing a level of performance that customers have reported as satisfactory. The hardware specifications published are based on real world customer environments and customer feedback on the performance and functionality.

Hardware Recommendations Based on Node Count

Up to 750 Devices - All Management Suite Services Hosted on One Server

- Intel Xeon Dual Core 32-bit or 64-bit processor
- 4 GB of RAM
- 100/1000 Megabit Network adapter
- 72 GB of free disk space on 10K RPM or faster drives or arrays.
- The recommended drive configuration is at least two drives or arrays

- One drive or array for the Operating System, the LANDesk Management Suite application, and the database application
- One drive or array for the database and database logs

750 to 1,500 Devices - All Management Suite Services Hosted on One Server

- Intel Xeon Quad Core 32-bit or 64-bit processor (preferably two physical Xeon Quad Core processors)
- 4 GB of RAM
- 1 Gigabit Network adapter
- 72 GB of free disk space on 10K RPM or faster drives or arrays

A Core Server that is at 750 to 1,500 nodes and is running all LANDesk features may see some read/write slowness on drives if the operating system, the LANDesk management suite application, the database application, the database, and the database logs are all on the same drive or array. Tuning may be needed. The server hosting such a full-featured configuration is recommended to have three drive arrays on separate spindles (physical disks) to prevent resource issues. The following drive configuration should be implemented.

- One drive or array for the Operating System
- One drive or array for the LANDesk Management Suite application and the database application
- One drive or array for the database and database logs

1,500 to 3,000 Devices - All Management Suite Services Hosted on One Server

- Dual (two physical processors) Intel Xeon Quad Core 64-bit processors
- 6-10 GB or more of RAM (4 GB for the OS and LANDesk services, plus 1 MB per node for the database. For RAM to spare, get 10 GB.)
- 1 Gigabit Network adapter
- 3 drives or arrays with 72 GB of free disk space per array on 15K RPM or faster drives
  A Core Server that is at 1,500 to 3,000 nodes and is running all LANDesk features may see some read/write slowness on drives if the operating system, the LANDesk management suite application, the database application, the database, and the database logs are all on the same drive or array. Tuning may be needed. The server hosting such a full-featured configuration is recommended to have three drive arrays on separate spindles (physical disks) to prevent resource issues. The following drive configuration should be implemented.
  - One array for the Operating System, Raid 0, 1, 5 or faster.
  - Management Suite software should be installed to an array in RAID 0, 5, 10 or an equivalent/faster technology
  - One array for the database and database logs, RAID 0, RAID 5, or RAID 10 or an equivalent/faster technology

3,000 to 5,000 Devices - Core and Database on Separate Servers

Server 1 - The Core Server

- Two physical Intel Xeon Quad Core 32-bit or 64-bit processors
- 4 GB of RAM
- 1 Gigabit network adapter
- Two arrays of 72 GB of free disk space per array on 15K RPM or faster drives
  - The Operating System array should be RAID 0 or 1 or an equivalent/faster technology

- Management Suite software should be installed to an array in RAID 0, 5, or 10 or an equivalent/faster technology

Server 2 - The Database Server

- Two physical Intel Xeon Quad Core 64-bit processors
- 4 GB to 10 GB of RAM (1 GB for the OS, plus 1 MB per node. So 3,000 nodes should have at least 4 GB, but 5,000 nodes should have at least 6 GB. For RAM to spare, get 10 GB.)
- One gigabit network adapter (The Core and Database should have a Gigabit connection to each other.)
- Three arrays of 72 GB of free disk space per array on 15K RPM or faster drives
  - The Operating System array should be RAID 0 or 1 or an equivalent/faster technology
  - One array for the database, RAID 0, RAID 5, or RAID 10 or an equivalent/faster technology
  - One array for the database logs, RAID 0 or an equivalent/faster technology

5,000 to 8,000 Devices - Core and Database on Separate Servers

Server 1 - The Core Server

- Quad (four physical processors) Intel Xeon Quad Core 64-bit processors
- 4 GB of RAM or more
- One gigabit network adapter (The Core and Database should have a gigabit connection to each other.)
- Two arrays of 72 GB of free disk space per array on 15K RPM or faster drives
  - The Operating System array should be RAID 1 or an equivalent/faster technology
  - Management Suite software should be installed to an array in RAID 0, 5, or 10 or an equivalent/faster technology

Server 2 - Database Server

- Quad (four physical processors) Intel Xeon Quad Core 64-bit processors
- 6 to 12 GB of RAM (1 GB for the OS, plus 1 MB per node. So 5,000 nodes should have at least 6 GB. 8,000 nodes should have at least 9 GB. For RAM to spare, get 12 GB.)
- One gigabit network adapter (The Core and Database should have a gigabit connection to each other.)
- SQL 2005 or 2008 Enterprise, or Oracle 10g or 11g
- Three arrays of 72 GB of free disk space per array on 15K RPM or faster drives
- The Operating System array should be RAID 1 or an equivalent/faster technology
  - One array for the database, RAID 0, RAID 5, or RAID 10 or an equivalent/faster technology
  - One array for the database logs, RAID 0,1, or 5 or an equivalent/faster technology

8,000 to 12,000 Devices - Core and Database on Separate Servers

Important: For LANDesk Management Suite installations of this size, further tuning assistance from LANDesk Professional Services or from a valued Expert Solution Provider (ESP) may be required.

Server 1 - The Core Server

- Four physical processors, Intel Xeon Quad Core 64-bit processors
- 4 to 8 GB of RAM
- One gigabit network adapter
- Two arrays of 72 GB of free disk space per array on 15K RPM or faster drives
  - The Operating System array should be RAID 1 or an equivalent/faster technology
  - Management Suite software should be installed to an array in RAID 0, 5, or 10 or an equivalent/faster technology

Server 2 - Database Server

- Quad (four physical processors) Intel Xeon Quad Core 64-bit processors
- 10 to 18 GB of RAM (1 GB for the OS, plus 1 MB per node. So 8,000 nodes should have at least 9 GB. 12,000 nodes should have at least 13 GB. For RAM to spare, get 18 GB.)
- One gigabit network adapter (The Core and Database should have a gigabit connection to each other.)
- SQL 2005 or 2008 Enterprise, or Oracle 10g or 11g
- Three arrays of 72 GB of free disk space per array on 15K RPM or faster drives
- The Operating System array should be RAID 1 or an equivalent/faster technology
    - One array for the database should be four or more disks configured in a RAID 0, RAID 5, or RAID 10 or an equivalent/faster technology
    - One array for the database logs, RAID 0,1, or 5 or an equivalent/faster technology

12,000 to 16,000 Devices - Core and Database on Separate Servers

Important: For LANDesk Management Suite installations of this size, further tuning assistance from LANDesk Professional Services or from a valued Expert Solution Provider (ESP) may be required.

Server 1 - The Core Server

- Four physical processors, Intel Xeon Quad Core 64-bit processors
- 6 to 8 GB of RAM
- One gigabit network adapter
- Two arrays of 72 GB of free disk space per array on 15K RPM or faster drives
    - The Operating System array should be RAID 1 or an equivalent/faster technology
    - Management Suite software should be installed to an array in RAID 0, 5, or 10 or an equivalent/faster technology

Server 2 - Database Server

- Quad (four physical processors) Intel Xeon Quad Core 64-bit processors
- 12 to 24 GB of RAM (1 GB for the OS, plus 1 MB per node. So 8,000 nodes should have at least 13 GB. 12,000 nodes should have at least 13 GB. For RAM to spare, get 24 GB.)
- One gigabit network adapter (The Core and Database should have a gigabit connection to each other.)
- SQL 2005 or 2008 Enterprise, or Oracle 10g or 11g
- Three arrays of 72 GB of free disk space per array on 15K RPM or faster drives
- The Operating System array should be RAID 1 or an equivalent/faster technology
    - One array for the database should be four or more disks configured in a RAID 0, RAID 5, or RAID 10 or an equivalent/faster technology
    - One array for the database logs, RAID 0,1, or 5 or an equivalent/faster technology

More than 16,000 - Core and Database on Separate Servers

Important: For LANDesk Management Suite installations of this size, further tuning assistance from LANDesk Professional Services or from a valued Expert Solution Provider (ESP) will be required.

On Which Platforms Will the Remote Console Install in LANDesk Management Suite 9.0?

The Remote Console can be installed to the same platforms as the Core Server (because it is installed with the Core Server) and also the following platforms. In the previous version there was a prerequisite check for the operating system when installing the Console. This has been removed.

Windows XP

- Microsoft Windows XP Professional 32-bit with SP2 or SP3
- Microsoft Windows XP Professional 64-bit Edition with SP2 or SP3

Windows Vista

- Windows Vista Ultimate 32-bit with SP1 or SP2
- Windows Vista Business 32-bit with SP1 or SP2
- Windows Vista Enterprise 32-bit with SP1 or SP2
- Windows Vista Ultimate 64-bit Edition with SP1 or SP2
- Windows Vista Business 64-bit Edition with SP1 or SP2
- Windows Vista Enterprise 64-bit Edition with SP1 or SP2

Windows 7

Note: We are working getting the console ready for Windows 7, but it may not be ready until SP1.

- Windows 7 Ultimate 32-bit
- Windows 7 Business 32-bit
- Windows 7 Enterprise 32-bit
- Windows 7 Ultimate 64-bit Edition
- Windows 7 Business 64-bit Edition
- Windows 7 Enterprise 64-bit Edition

On Which Platforms Will the Agent Install in LANDesk Management Suite 9.0?

Windows Platforms

Windows 2000

- Microsoft Windows 2000 Professional SP4
- Microsoft Windows 2000 Server SP4
- Microsoft Small Business Server 2000 SP4

Windows XP

- Microsoft Windows XP Professional 32-bit with SP2 or SP3
- Microsoft Windows XP Professional 64-bit Edition with SP2 or SP3

Windows Vista

- Windows Vista Ultimate 32-bit with SP1 or SP2
- Windows Vista Business 32-bit with SP1 or SP2
- Windows Vista Enterprise 32-bit with SP1 or SP2
- Windows Vista Ultimate 64-bit Edition with SP1 or SP2
- Windows Vista Business 64-bit Edition with SP1 or SP2
- Windows Vista Enterprise 64-bit Edition with SP1 or SP2

Windows 2003

- Windows Server 2003 SP2
- Windows Server 2003 R2/SP2
- Windows Server 2003 SP2 x64
- Windows Server 2003 R2/SP2 x64

Windows 2008

- Windows Server 2008 Enterprise SP2
- Windows Server 2008 Standard
- Windows Web Server 2008
- Windows Server 2008 Datacenter
- Windows Server 2008 R2 Standard (64-bit x64) Edition
- Windows Server 2008 R2 Enterprise (64-bit x64) Edition

Windows 7

- Windows 7 Ultimate 32-bit
- Windows 7 Business 32-bit
- Windows 7 Enterprise 32-bit
- Windows 7 Ultimate 64-bit Edition
- Windows 7 Business 64-bit Edition
- Windows 7 Enterprise 64-bit Edition

Apple Macintosh Platforms

Intel-based

Note: We are working getting the agent on OS X 10.6 Snow Leopard, but it may not be ready until SP1.

- OS X 10.5 Leopard
- OS X 10.4 Tiger
- OS X 10.3 Panther

Power PC

- OS X 10.5 Leopard
- OS X 10.4 Tiger
- OS X 10.3 Panther

Linux/Unix Platforms

Red Hat

- Red Hat Enterprise Linux 3
- Red Hat Enterprise Linux 4
- Red Hat Enterprise Linux 5

SUSE

- SUSE Linux Enterprise 9
- SUSE Linux Enterprise 10

Ubuntu

- Ubuntu 8
- Ubuntu 9

HP-UX

- HP-UX 11
- HP-UX 11i