



Lenovo ToolsCenter Suite Readme

Version 10.1



Lenovo ToolsCenter Suite Readme

Version 10.1

Note

Before using this information and the product it supports, read the information in "Notices" on page 21.

Edition notice

This edition applies to version 10.1 of Lenovo[®] ToolsCenter Suite and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright Lenovo 2014, 2015.

Portions © Copyright IBM Corporation 2012, 2014.

LIMITED AND RESTRICTED RIGHTS NOTICE: If data or software is delivered pursuant a General Services Administration "GSA" contract, use, reproduction, or disclosure is subject to restrictions set forth in Contract No. GS-35F-05925.

Figures

| | | | |
|--------------------------------|----|--------------------------------------------------|----|
| 1. License Agreement | 12 | 3. Advanced User Complete Tool Listing | 14 |
| 2. Home page | 13 | | |

Contents

| | | | |
|-----------------------------------------------------------|------------|-----------------------------------------------|-----------|
| Figures | iii | Chapter 7. Known limitations | 15 |
| Chapter 1. About ToolsCenter Suite | 1 | Chapter 8. Workarounds | 17 |
| Chapter 2. Prerequisites | 3 | Chapter 9. Warnings | 19 |
| Chapter 3. New in this release | 5 | Notices | 21 |
| Chapter 4. Information resources | 7 | Trademarks | 22 |
| Documentation | 7 | Important notes | 22 |
| Web resources | 7 | | |
| Chapter 5. Downloading ToolsCenter Suite | 9 | | |
| Chapter 6. Starting ToolsCenter Suite | 11 | | |
| Viewing the Advanced User Complete Tool Listing | 13 | | |

Chapter 1. About ToolsCenter Suite

Lenovo ToolsCenter Suite is a collection of server management tools that help manage your System x[®], BladeCenter, and Flex System environment. ToolsCenter Suite provides full support of in-band management of updates, configuration, and system information on a local machine and out-of-band (OOB) management of updates, configuration, and system information on a remote machine.

The three main functions of ToolsCenter Suite are:

Updates:

You can use the Updates function to update the UpdateXpress System Pack firmware and drivers or individual firmware and drivers by connecting to the Lenovo website or a local repository. There are three update methods:

- Recommended Updates
- Individual Updates
- Download Updates

Configuration:

You can use the Configuration function to modify firmware settings, change frequently used settings, or change an individual configuration using the Full Settings option.

Frequently Used Settings:

- Activation Key Management (for Features on Demand)
- Boot Order
- Energy and Performance
- IMM User Accounts
- System Contact
- Features on Demand Mass Activation

Full settings:

- BootOrder
- IMM
- iSCSI
- Network
- PXE
- SYSTEM_PROD_DATA
- uEFI

System Information:

You can use the System Information function to collect full system information, catalog this information, and send the collected information to a Lenovo support team or customer site FTP server. This function also provides system health status, including the IMM system event logs and Light Path information.

ToolsCenter Suite collects full system information about the following aspects of a system for both a local machine and a remote machine:

- Alerts
- Basic analysis and highlights

- Hardware
- Logs
- Software (including Operating Systems)

Chapter 2. Prerequisites

ToolsCenter Suite requires the following prerequisites:

- You must have administrator or root-equivalent operating-system privileges to use ToolsCenter Suite.
- An Internet connection is required to download updates from the Lenovo website, or to send the collected system information file to the Lenovo website or the customer site FTP server.
- A browser supported by ToolsCenter Suite. For a complete list of supported browsers, refer to the Supported web browsers topic of the *ToolsCenter Suite User's Guide*.
- To ensure ToolsCenter Suite works correctly, verify that Java script and CSS are enabled in your browser settings.

Chapter 3. New in this release

ToolsCenter Suite 10.1 provides a number of enhancements since the previous release, v9.63.

New system support

The following hardware is now supported by Lenovo ToolsCenter Suite 10.1:

- IBM Flex System x240, 8956
- Lenovo Flex System x240, 7162, 2588
- Lenovo Flex System x280 X6/x480 X6/x880 X6 Compute Node, 4258, 7196
- Lenovo Flex System x440, 7167, 2590
- Lenovo System x3500 M5, 5464
- Lenovo System x3750 M4, 8753
- Lenovo System x3850 X6/x3950 X6, 6241

New operating system support

The following new operating systems are supported by Lenovo ToolsCenter Suite 10.1:

- Red Hat Enterprise Linux, version 7.1
- Red Hat Enterprise Linux, version 6.7
- SUSE Linux Enterprise Server 12 (x86/x64)
- SUSE Linux Enterprise Server 11.4 (x86/x64)

For complete operating system support information, see the "Supported operating systems" topic of the User's Guide.

New server options support

None

Problem(s) fixed

The following problem has been fixed in ToolsCenter Suite 10.1:

- ToolsCenter Suite returns errors if some firmware settings are not found on x3250 M5.

Enhancement(s)

None

Known limitations

The Bare Metal Update function does not work with the latest IMM firmware due to an unknown issue.

Workarounds

None

Warnings

None

Dependencies

None

Chapter 4. Information resources

You can find additional information about Lenovo ToolsCenter Suite in the product documentation and on the World Wide Web.

Documentation

The following documentation resource provides additional information about ToolsCenter Suite.

The Lenovo ToolsCenter Suite User's Guide explains how to use all of the ToolsCenter Suite functions and is available at: <http://www-947.ibm.com/support/entry/portal/docdisplay?Indocid=LNVO-USRGD>.

This publication is available in Portable Document Format (PDF). You need Adobe Acrobat Reader to view it. If you need the Adobe Acrobat Reader, it is available for download directly from Adobe at: www.adobe.com/products/acrobat/readstep2.html.

Web resources

The following websites and information center topics are resources for using Lenovo ToolsCenter Suite.

Websites

- ToolsCenter Suite (TCS) for Lenovo x 86 servers
<http://www-947.ibm.com/support/entry/portal/docdisplay?Indocid=LNVO-TCSUITE>
Use this website to download the Lenovo ToolsCenter Suite tool and documentation.
- Lenovo ToolsCenter for Lenovo x86 servers
<http://www-947.ibm.com/support/entry/portal/docdisplay?Indocid=LNVO-CENTER>
Use this website to download tools that support System x and BladeCenter products.
- IBM PureSystems Redbooks®
<http://www.redbooks.ibm.com/portals/puresystems/>
Use this website to find published Redbooks on Flex Systems.
- Using System x Features on Demand Redbook
<http://www.redbooks.ibm.com/redbooks.nsf/RedpieceAbstracts/redp4895.html?Open>
Use this website to download the *Using IBM System x Features on Demand* publication.
- IBM Flex System Compute Nodes
http://pic.dhe.ibm.com/infocenter/flexsys/information/topic/com.ibm.acc.common.nav.doc/compute_blades.html
Use this web page to obtain information about Flex System Compute Nodes.
- BladeCenter Support and services

<http://www-03.ibm.com/systems/bladecenter/support/>

Use this website to obtain information about online technical support, downloads and drivers, and RETAIN[®] tips for BladeCenter products.

- System x support and services

<http://www-03.ibm.com/systems/x/support/>

Use this website to obtain information about online technical support, downloads and drivers, and RETAIN tips for System x products.

- ServerProven[®]

<http://www-03.ibm.com/servers/eserver/serverproven/compat/us/indexsp.html>

Use this website to obtain information about the hardware compatibility of System x and BladeCenter systems with IBM applications and middleware.

Forums

- developerWorks Forums

<https://www.ibm.com/developerworks/community/forums/html/forum?id=11111111-0000-0000-0000-000000002691#topicsPg=0>

Use this website on [ibm.com](http://www.ibm.com)[®] to learn about various forums that are available to discuss technology-related and product-related issues pertaining to System x hardware and software products. This website includes a link for obtaining the forum using a Rich Site Summary (RSS) feed.

- IBM[®] BladeCenter[®] Forum

<https://www.ibm.com/developerworks/community/forums/html/forum?id=11111111-0000-0000-0000-000000000819>

Use this website on [ibm.com](http://www.ibm.com) to learn about various forums that are available to discuss technology-related and product-related issues pertaining to BladeCenter hardware and software products. This website includes a link for accessing the forum using a Rich Site Summary (RSS) feed.

Chapter 5. Downloading ToolsCenter Suite

ToolsCenter Suite is a self-extracting application that does not require installation.

About this task

ToolsCenter Suite is available for download from ToolsCenter Suite (TCS) for Lenovo x 86 servers at <http://www-947.ibm.com/support/entry/portal/docdisplay?lnocid=LNVO-TCSUITE>.

Procedure

1. Select one of the following shipment packages:
 - `lnvgy_utl_tcsuite_10.1_winsrvr_i386.zip`
 - `lnvgy_utl_tcsuite_10.1_winsrvr_x86-64.zip`
 - `lnvgy_utl_tcsuite_10.1_rhel5_i386.tgz`
 - `lnvgy_utl_tcsuite_10.1_rhel5_x86-64.tgz`
 - `lnvgy_utl_tcsuite_10.1_rhel6_i386.tgz`
 - `lnvgy_utl_tcsuite_10.1_rhel6_x86-64.tgz`
 - `lnvgy_utl_tcsuite_10.1_rhel7_x86-64.tgz`
 - `lnvgy_utl_tcsuite_10.1_sles10_i386.tgz`
 - `lnvgy_utl_tcsuite_10.1_sles10_x86-64.tgz`
 - `lnvgy_utl_tcsuite_10.1_sles11_i386.tgz`
 - `lnvgy_utl_tcsuite_10.1_sles11_x86-64.tgz`
 - `lnvgy_utl_tcsuite_10.1_sles12_x86-64.tgz`
2. After downloading the appropriate ToolsCenter Suite zip file, double-click the file to complete the file extraction.

Chapter 6. Starting ToolsCenter Suite

After you have downloaded and copied the appropriate ToolsCenter Suite zip file for the target server and extracted the files, you can start the ToolsCenter Suite program. ToolsCenter Suite must be run on the target server.

Before you begin

When starting ToolsCenter Suite for the first time, you are prompted to read the terms of the license agreement. After accepting the terms of the license agreement, this page does not display again. If you need to reference the license agreement again, there is a link in the **About** menu item for viewing the license agreement.

Note: ToolsCenter Suite does not support running concurrent sessions of ToolsCenter Suite. If another session of ToolsCenter Suite is already open with active operations that cannot be stopped, such as configuration and inventory updates or compare and updates, a message is displayed stating:

Another user is currently logged in and performing an operation that cannot be interrupted. Wait for several minutes, and log in again.

However, if the session that is already open is able to stop, a message is displayed stating:

Another user is currently logged in with the same user ID. Do you want to log in with the same user ID?

If you select Yes, the user currently logged in will automatically be logged out. If you select No, you will return to the login page, where you can enter a different user ID.

About this task

Complete the appropriate steps for your operating system:

- For a Windows system, perform steps 1 and 3.
- For a Linux system, perform steps 2 and 3.

Procedure

1. For Windows, double click **run.bat**. The ToolsCenter Suite script file launches the Tomcat server and starts the default browser.

Note: The first time using ToolsCenter Suite, the ToolsCenter Suite License Agreement page opens.

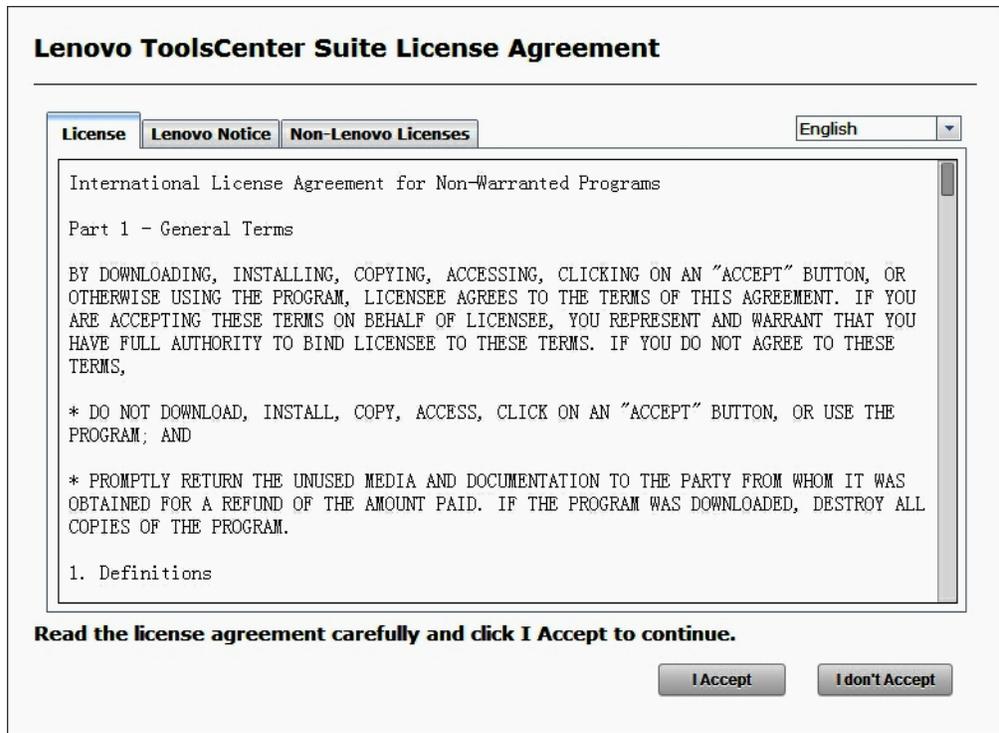


Figure 1. License Agreement

On subsequent sessions of ToolsCenter Suite, the ToolsCenter Suite Home page opens.

2. For Linux, double click **run.sh**. The ToolsCenter Suite script file launches the Tomcat server and starts the default browser.

Note: The first time using ToolsCenter Suite, the ToolsCenter Suite License Agreement page opens. On subsequent sessions of ToolsCenter Suite, the ToolsCenter Suite Home page opens.

3. Read the license agreement and click **I accept**.
The ToolsCenter Suite Home page opens.

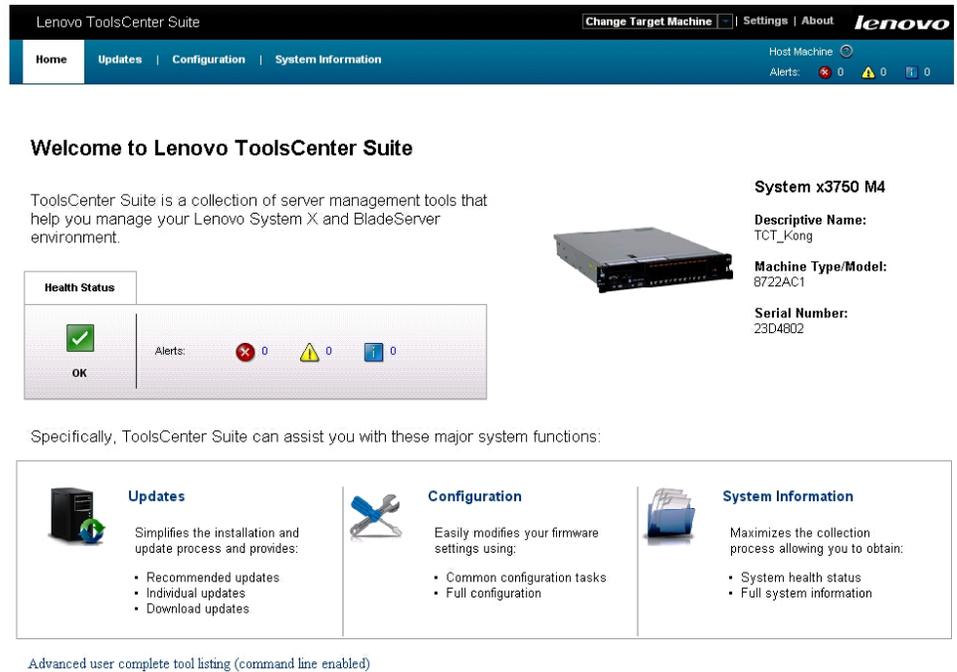


Figure 2. Home page

What to do next

The Home page provides access to the ToolsCenter Suite functions, the **Settings** and **About** menu items, the **Advanced User Complete Tool Listing**, and the following information:

- Machine name
- Descriptive Name
- Machine Type/Model
- Serial Number
- Health Status
- Alerts

Viewing the Advanced User Complete Tool Listing

The Advanced User Complete Tool Listing provides a list of command line and deployment tools and support page links for each of these advanced user tools.

Procedure

1. To view the list of the Command Line and Deployment Tools, click **Advanced User Complete Tool Listing** on the Home page. The Advanced User Complete Tools Listing window opens.

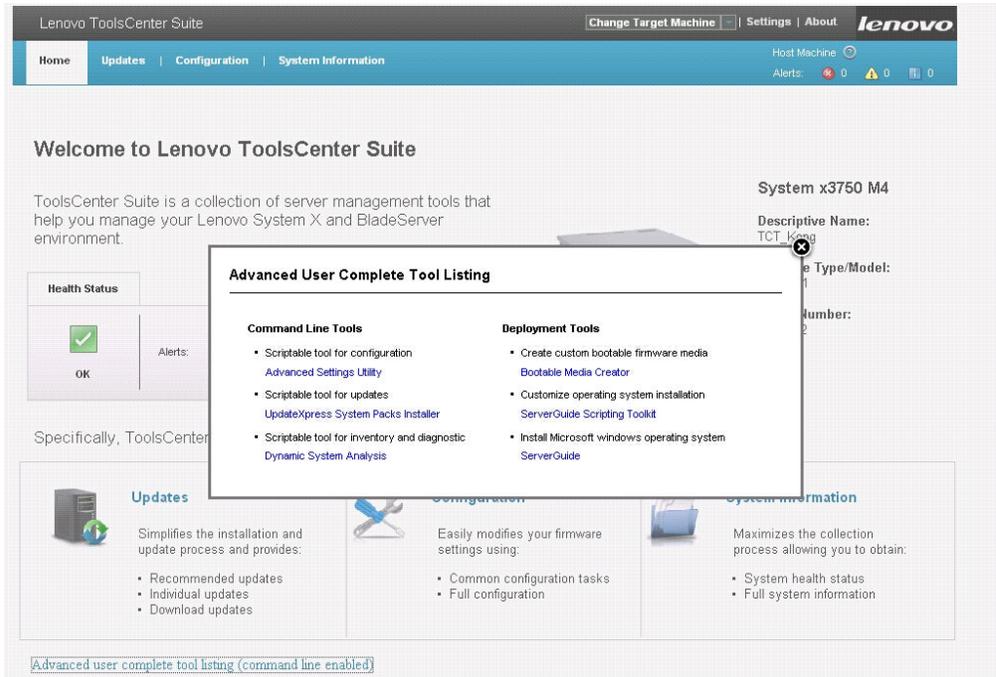


Figure 3. Advanced User Complete Tool Listing

- To view one of the items in the list, click a link. A browser window opens for the related support page.
- To close the Advanced User Complete Tool Listing window and return to the Home page, click x.

Chapter 7. Known limitations

The current known limitations for ToolsCenter Suite 10.1 are:

The Bare Metal Update function does not work with the latest IMM firmware due to an unknown issue.

Activation Key Management:

If you are using Internet Explorer version 8, 9, or 10, when you click **Install from the Local File**, the file dialog box may not open.

Multi-Node System Support:

ToolsCenter Suite shows only the Primary Node information on the Home and Information pages. ToolsCenter Suite provides only the Configuration Function for the Primary Node.

FoD Mass Activation: (Root Cause: IMM CIM Class IBM_ActivationKey did not provide the FoD UID of the device on which the key installed.)

Note the following:

- In the 10.1 release, ToolsCenter Suite FoD Mass Activation is unable to support the scenario of more than one identical adapters being installed on a server, while a key is installed only on some of these adapters. In this situation, ToolsCenter Suite will not install the key for any adapters even it does not have this key installed.
- ToolsCenter Suite cannot display FOD UID when exporting keys for Multiple Endpoints in FoD Mass Activation.

OOB connect to Flex System

If you have already created an IPMI account with a username that is the same as the CIM, if it has a different password, ToolsCenter Suite will fail to create the IPMI account with the same credential as the CIM account.

In this case, to continue providing support for that remote Flex Server:

1. You need create another CIM account whose username is different from that of the IPMI account, and then input this account in TCS.
2. Either you or TCS (when user is aware of that) can change the IPMI account password to make it same as the CIM account password.

Unzipping the downloaded ToolsCenter Suite package to the ToolsCenter Suite working directory causes the system to crash

Unzipping the downloaded ToolsCenter Suite package to the ToolsCenter Suite working directory causes the system to crash because the ToolsCenter Suite working directory name is too long. Unzip the downloaded ToolsCenter Suite package under the system root directory.

Windows 64-bit operating systems

For all Windows 64-bit operating systems, you will get RAW data and be missing the logic device table information on Windows OS.

Full Settings option

In the Full Settings option, when changing the value of **Power.PowerPerformanceBias**, there is no error message reported even though the setting change is not successful.

In Firefox, for Boot Order in Configuration

In Firefox, for Boot Order in Configuration, select the blank row of the list builder widget. The last row of the list builder widget will be selected and highlighted.

Chapter 8. Workarounds

The following workarounds are applicable to ToolsCenter Suite 10.1:

When using Firefox on Red Hat Enterprise Linux 6 Server Update 6, the browser shows "Issuer certificate is invalid". (Error code: sec_error_ca_cert_invalid).

Workaround:

Set the property "*security.use_mozillapkix_verification*" to true on the about:config page.

Custom mode is not currently supported for Energy and Performance of Frequently Used Settings of Configuration.

Workaround:

Use Full Settings to change these values.

When using IE on some Windows operating systems, the progress icon may not rotate

Workarounds:

For Windows 2008, under **Windows Server Manager > Configure IE ESC**, turn off the **Internet Explore Enhanced Security Configuration** for the current user.

When using IE on some Windows operating systems, there is no activation key install progress page when install activation key from Local file.

Workarounds:

- For Windows 2012, under **Server Manager > Local Server**, turn off the IE Enhanced Security Configuration.
- For Windows 2008, under **Windows Server Manager > Configure IE ESC**, turn off the Internet Explore Enhanced Security Configuration for the current user.

Chapter 9. Warnings

The following warnings are applicable to ToolsCenter Suite 10.1:

- The Bare Metal Update function is currently incompatible with IBM brand systems.
- FoD functions, including FoD configuration and FoD mass activation, only work on IMMv2.
- OOB and BMU updates only work on an IMMv2 system.
- For Red Hat and SUSE Linux, to run ToolsCenter Suite you need to run the `"/usr/sbin/setenforce 0"` command to close SELINUX.
- In Internet Explorer v10 (IE10), the password entry field now has an Eye icon. The Eye icon allows you to read the password info. This is a new function of IE 10.
- We do not recommend that you use browser actions such as back, forward, refresh in a browser window. ToolsCenter Suite does not fully support back, forward, and refresh. Under some circumstances, using these browser functions can cause unexpected results.
- System Information and Updates use the proxy configured in the Setting menu item and not the proxy configured in the browser configuration.
- **SYSTEM_PROD_DATA.SysInfoProdName** in the Full Settings option of the Configuration function is not editable, to ensure the server behaves correctly.

Notices

Lenovo may not offer the products, services, or features discussed in this document in all countries. Consult your local Lenovo representative for information on the products and services currently available in your area.

Any reference to a Lenovo product, program, or service is not intended to state or imply that only that Lenovo product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any Lenovo intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any other product, program, or service.

Lenovo may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

*Lenovo (United States), Inc.
1009 Think Place - Building One
Morrisville, NC 27560
U.S.A.
Attention: Lenovo Director of Licensing*

LENOVO PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. Lenovo may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

The products described in this document are not intended for use in implantation or other life support applications where malfunction may result in injury or death to persons. The information contained in this document does not affect or change Lenovo product specifications or warranties. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of Lenovo or third parties. All information contained in this document was obtained in specific environments and is presented as an illustration. The result obtained in other operating environments may vary.

Lenovo may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Any references in this publication to non-Lenovo Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this Lenovo product, and use of those Web sites is at your own risk.

Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Trademarks

Lenovo, the Lenovo logo, Flex System, System x, and NeXtScale System are trademarks of Lenovo in the United States, other countries, or both.

Intel and Intel Xeon are trademarks of Intel Corporation in the United States, other countries, or both.

Internet Explorer, Microsoft, and Windows are trademarks of the Microsoft group of companies.

Linux is a registered trademark of Linus Torvalds.

Other company, product, or service names may be trademarks or service marks of others.

Important notes

Processor speed indicates the internal clock speed of the microprocessor; other factors also affect application performance.

When referring to processor storage, real and virtual storage, or channel volume, KB stands for 1 024 bytes, MB stands for 1 048 576 bytes, and GB stands for 1 073 741 824 bytes.

When referring to hard disk drive capacity or communications volume, MB stands for 1 000 000 bytes, and GB stands for 1 000 000 000 bytes. Total user-accessible capacity can vary depending on operating environments.

Lenovo makes no representations or warranties with respect to non-Lenovo products. Support (if any) for the non-Lenovo products is provided by the third party, not Lenovo.

Some software might differ from its retail version (if available) and might not include user manuals or all program functionality.

lenovo®

Printed in USA