Lenovo Bootable Media Creator Readme

Version 10.3

Contents

About Lenovo Bootable Media Creator

You can use Lenovo Bootable Media Creator to create bootable media that is suitable for applying firmware updates, running preboot diagnostics, and deploying Microsoft Windows operating systems on supported System x and BladeCenter systems.

System x and BladeCenter tools each have their own bootable CD. Using Bootable Media Creator, you can create a single bootable image on supported media (such as CD, DVD, ISO image, USB flash drive, or set of PXE files) that bundles multiple System x and BladeCenter tools and updates from UpdateXpress System Packs, which contain Windows and Linux firmware and device driver updates. You can also create a Lenovo ServerGuide Setup and Installation CD for deploying Windows operating systems and updates on supported systems.

Important: Device drivers are not included on the bootable image and must be updated separately.

Bootable Media Creator can acquire the latest bootable environment, UpdateXpress System Pack, individual updates, and LenovoPreboot Dynamic System Analysis from the local system or it can download these tools and the Lenovo ServerGuide from the Lenovo website. An Internet connection is required to download tools and updates from the Lenovo website. You can use an HTTP proxy when connecting to the Web. If you use an HTTP proxy, the HTTP server must support Secure Sockets Layer (SSL).

You can run only one instance of Bootable Media Creator on a system at a time, whether it is started from the graphical or command-line interface. This includes instances of Lenovo Bootable Media Creator that are bundled in other tools, such as UpdateXpress System Pack Installer.

Bootable Media Creator10.3 filters the update packages included in the bootable media based on the purpose of the media and the machine types you have selected.

- For deployment media containing Lenovo ServerGuide, which is a Windows-based tool, the Windows PE update packages for the machine types you have selected are added to the media.
- For diagnostic or update media, which use Linux-based tools, only the Linux update packages for your selected machine types are included. Prior versions of the tool included all available update packages, resulting in significantly larger media.

You must have administrator or root-equivalent operating-system privileges to use Bootable Media Creator.

Information resources

You can find additional information about Lenovo Bootable Media Creator in the product documentation and on the World Wide Web.

Documentation

The following documentation resource provides additional information about Lenovo Bootable Media Creator.

Publications

The most recent version of Lenovo Bootable Media Creator (BoMC) Users Guide is available for download at: http://publib.boulder.ibm.com/infocenter/toolsctr/v1r0/topic/bomc_lenovo/printable_doc.html.

Web resources

These Web sites provide additional resources for the System x and IBM BladeCenter products.

Websites

- Bootable Media Creator (BoMC) for Lenovo x86 servers

  http://support.lenovo.com/us/en/documents/LNVO-BOMC

  Use this website to download the Lenovo Bootable Media Creator tool and documentation.

- Lenovo ToolsCenter website

  https://support.lenovo.com/us/en/documents/LNVO-CENTER

  Use this website to download tools that support System x and BladeCenter products.

These websites provide information about product compatability and support, warranties and licenses, and various technical resources:

- Lenovo BladeCenter Support products and services

  http://shop.lenovo.com/us/en/systems/servers/blades/bladecenter/

- Lenovo ServerProven

  http://www.lenovo.com/us/en/serverproven/

- System x Support website

  Lenovo Server and Storage Resource Library

Forums

Use these websites to learn about various forums that are available to discuss technology-related and product-related issues pertaining to System x and BladeCenter hardware and software products. These websites include links for obtaining the forums using Rich Site Summary (RSS) feeds.

- System x Forum website

  developerWorks Forums

- BladeCenter Forum website

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

Installation and upgrade information

Complete installation instructions, including supported hardware, operating systems and bootable media, such as USB keys, are provided in the ToolsCenter for Lenovo x86 Servers Information Center information center on the Web at publib.boulder.ibm.com/infocenter/toolsctr/v1r0/topic/bomc/bomc_t_installing_bomc.html.

System Enablement Pack (SEP) for ToolsCenter provides an update to existing ToolsCenter tools by providing a collection of files and utilities to support a specific set of machine types until the next version of the tools is released.

To add support for new machine types, use the **Update Support List** function of the Bootable Media Creator to update the support list from the IBM web site with the systems listed in the support list page. When the tool creates bootable media from the IBM site, it acquires the required SEPs for the supported systems and includes them in the created media. This is the preferred method of applying SEP.

You can also manually download the SEP files from "http://www.lenovo.com/support" on page and place them in your working directory before running the tool to create your media. The file to download depends on the purpose of your image:

ibm_utl_sep_3.0x_winpe*

for ServerGuide deployment boot images.

ibm_utl_sep_3.0x_windows*
for Update images, including deployment and update.

ibm_utl_sep_3.0x_anyos*
for diagnostic and update boot media.

Known limitations, problems, and workarounds

This section describes limitations, problems, and workarounds that are applicable to Lenovo Bootable Media Creator.

Limitations and problems

The following limitations and problems are applicable to Lenovo Bootable Media Creator.

BoMC does not support Mellanox firmware updates
BoMC does not support updating Mellanox firmware.

Only TFTP server running on Linux OS is supported when creating a PXE directory with BoMC.
If you are creating a PXE directory with BoMC, only a TFTP server running on a supported version of Linux OS can be used.

Workarounds

The following workarounds are applicable to Lenovo Bootable Media Creator.

When deploying Windows 2008 editions on a System x3250 M5 with or without ServeRAID C100 enabled, a blue screen might occur
To avoid this problem, complete the following steps:

1. Open **uEFI** settings.

2. Open the **Device and I/O Ports** setting.

3. If the *ServeRAID C100* is enabled, change the **onboard SATA ports as** to `RAID` or `IDE`.

4. If the *ServeRAID C100* is not enabled, change the **onboard SATA ports as** to `IDE`.

5. Save the changed settings. The system will work normally when you reboot from ServerGuide.

The keyboard does not work when confirming to exit ToolsCenter program
After booting a system with bootable media created using Bootable Media Creator, when you select to exit the program, you are prompted to confirm the exit action. The keyboard cannot be used to confirm the exit action.

Use the mouse to confirm the exit action, or create the media to run in TUI mode.

cygwin1.dll conflict
Bootable Media Creator ships the `cygwin1.dll` (version 1.5.24, renamed to `cygwinz.dll`), which is required by the `mkisofs.exe` and `cdrecord.exe` utilities. The cygwin DLL does not support multiple versions running at the same time. You must exit all other applications that depend on `cygwin1.dll` before running Bootable Media Creator on a Microsoft Windows system.

Bootable Media Creator might fail to burn a CD or DVD if it runs on RHEL3 with an IDE CD-ROM or IDE DVD-ROM
Add `hdx=ide-scsi` to the boot loader configuration file. For example: `/etc/lilo.conf` for LILO or `/boot/grub /menu.lst` for GRUB), where `hdx` is either `hda`, `hdb`, `hdc`, or `hdd`, depending on where your CD or DVD drive is located.

USB flash drives that are used by Linux are not recognized by Windows

To enable Microsoft Windows to recognize the USB flash drive for Bootable Media Creator on a Windows system, format the USB flash drive on a Linux system to *FAT32* file format using the **mkdosfs** utility. For example: `mkdosfs -I -F 32 /dev/sdb`).

Failure when burning created ISO files to CD/DVD, or created CD/DVD fails to boot
If you are unable to burn created ISO files to CD or DVD media, or if the CD or DVD you have created fails to boot, try using an alternative media writing software or use a different brand and type of media.

IBM BladeCenter HS22 fails to boot from the SanDisk 4GB bootable USB key
When using the SanDisk 4GB bootable USB key created by Bootable Media Creator to boot a BladeCenter HS22 (machine type 7870), the system might boot directly into the OS environment installed on the hard disk drive but not boot into the USB key.

Update the uEFI firmware or use a Lexar USB key or a bootable CD.

USB key automatically mounts in *noexec* mode on SLES 10 sp4
As a security measure, USB keys can be mounted in *noexec* mode, which prevents executable files on the key from running. This prevents you from using the BoMC binary, even after using **chmod** to change permissions.

Copy the binary to the hard drive of the system, use **chmod** to give it proper permissions, and execute from the hard drive.

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Index

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