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What is PE Builder?

Bart's PE Builder helps you build a bootable CD-Rom similar to microsoft's Windows Preinstallation Environment (WinPE)

PE Builder (pebuilder.exe) runs on Windows 2000/XP/2003. It does **not** run on Windows NT4/ME/9x.

PE Builder is written by Bart Lagerweij.

To contact Bart, look on this webpage: <http://www.nu2.nu/contact/bart/>

What is Windows PE?

Microsoft Windows Preinstallation Environment (WinPE) is a minimal operating system based on the Windows XP kernel. It will give you a complete Win32 environment with network support, a graphical user interface (800x600) and FAT/NTFS/CDFS filesystem support. Very handy for burnin testing systems with no OS, rescuing files to a network share, virus scan and so on.

Windows PE will replace any Dos bootdisk (even masterpieces like modboot and Bart's Network Bootdisk) in no time!

Support

You can run PE Builder in “verbose” mode by starting pebuilder.exe with the “-v” parameter.

If you have any problems or questions about PE Builder here is where you can get more information:

- Make sure you have the latest version, goto <http://www.nu2.nu/pebuilder/> and check.
- Read this manual (helpfile) carefully, the answer to your problem maybe in it.
- Read the PE Builder webpage, <http://www.nu2.nu/pebuilder>.
Take special notice of the FAQ section, <http://www.nu2.nu/pebuilder#faq>
- Enter the CD forum, <http://www.nu2.nu/forum/>. Read/search the “Windows PE” forum and if you problem is not listed, become a “member” so you can post a question in the “Windows PE” forum.
- If your problem/question is still not solved/answered you can contact the author
Please keep in mind, that the PE Builder program is put together in my “spare” time.
That time is very limited as I also work 40 hours a week.
To contact the author, read here: <http://www.nu2.nu/contact/bart/>

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PE Builder

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Release Notes

Release notes and known limitations:

Diskpart.exe does not work in (Window PE) when build from Server 2003. It returns error “the disk management services could not complete the operation” There is no solution yet...

The language and keyboard support is somewhat limited. The only keyboard layout currently supported is US keyboard layout.

PE Builder has been tested and known to work using the installation files from the following versions of Windows:

- Windows XP Home Edition (Service Pack 1) - English
- Windows XP Professional (Service Pack 1) - English
- Windows Server 2003, Standard Edition - English
- Windows XP Professional (Service Pack 1) - Dutch
- Windows Server 2003, Standard Edition - Dutch

Source Dialog

Path to Windows installation files:

Drive letter to CD or local/remote path containing one of the following versions of Windows.

- Windows XP Home Edition (Service Pack 1)
- Windows XP Professional (Service Pack 1)
- Windows Server 2003, Web Edition
- Windows Server 2003, Standard Edition
- Windows Server 2003, Enterprise Edition

For example, if you use MSDN Windows server 2003 English CD-Rom, you must enter “<cdrom>:\English\Win2003\Standard” as the path to your Windows files...

(where “<cdrom>” is the driveletter of your CD-Rom drive)

Path to your already installed Windows:

Select the local or remote path to an already installed Windows system. You must point to the system’s “windir” on most systems that is “c:\windows”.

For example, if you use Windows server 2003 and you have already installed a file server called “nu2server”, for which you have the correct (admin) access to over the network you can enter “\\nu2server\admin\$” or “\\nu2server\c\$\windows”.

Be sure that the system you point to has the same language as your installation source files.

Add files/folders this (custom) directory:

Select a local or remote path containing any folders and files you want to add/include in the ISO image file.

NOTE: to use this, you must also enable “Create ISO Image” in the “Output” dialog.

Network Dialog

Enable Network Support:

Use this checkbox to enable or disable Network support. When you enable network support, you will have to provide PE Builder with 2 files, “netcfg.exe” and “factory.exe”. These files can also be called “x86netcfg.exe” and “x86factory.exe”.

To enable network support PE Builder requires 2 files, factory.exe and netcfg.exe.

These files are not included with PE Builder!

The 2 files can also be called x86netcfg.exe and x86factory.exe.

Please use factory.exe version 5.2.3790.0 or higher (previous versions had bugs).

You can get factory.exe from:

- Windows Server 2003 Installation CD-Rom, extract it from \support\tools\deploy.cab.
- Windows Server 2003 Resource Kit Tools
<http://www.microsoft.com/downloads/details.aspx?familyid=9d467a69-57ff-4ae7-96ee-b18c4790cffd&displaylang=en>
Note! This kit is 12MB! Extract it from rktools.msi\Cabs.winrk.cab\deploy.cab (nested cabinet files!).

You can get the latest netcfg.exe version from:

- Windows Preinstallation Environment (Windows PE) 1.2.

Some older version netcfg.exe can be found from:

- Windows XP Service Pack 1 (SP1) OEM Preinstallation Kit (OPK).
- ERD Commander 2002.
- Avast! BART CD Final Beta
http://www.avast.com/i_idt_227.html
- http://web.firststone.it/aggiornamenti/Microsoft/WinXp/OPK_XP/NETCFG.EXE (v5.0.2600.0).
Did not test this file myself, but it looks OK.

When you put the 2 files in the same directory as pebuilder.exe, PE Builder will autodetect them.

Maybe more/updated information on factory.exe and netcfg.exe can be found on the PE Builder homepage, <http://www.nu2.nu/pebuilder/>

Location to netcfg.exe:

Select the local or remote path to “netcfg.exe” or “x86netcfg.exe”.

Location to factory.exe:

Select the local or remote path to “factory.exe” or “x86factory.exe”.

When you put the files in the same directory as pebuilder.exe, PE Builder will automatically put in the correct path.

Options Dialog

Enable “Press any key to boot from CD” timeout option:

When enabled you must hit a key within the timeout to boot from the CD-Rom. When no key is pressed system will boot from next bootable device.

[This screen will contain more options in future...]

Output Dialog

Output directory:

Select a local or remote path to where you want to “store” the files PE Builder copies for you. This location must have enough free space to hold these files.

Create ISO Image:

When enabled PE Builder will create the ISO image for you. **Unless you are a bootable CD expert I would advice you to enable this option!** Or if you want to burn it yourself, your burning application must have ISO-9660:1999 (version 2) filesystem support and also store all filenames in uppercase.

Just below the checkbox you enter the location you want the ISO image file saved.

Build Dialog

This window shows all messages generated by the builder. Building can take a few minutes, depending on how fast your system is.

The messages are also saved (at the end) to pebuilder.log

When you are tracing errors, you can search the pebuilder.log file for “error:” to find them.

Plugin

In this dialog you can enable and disable all available plugins.
Just select the plugin and hit the “Enable/Disable” button.

