# OEM Preinstallation Kit(OPK) Overview

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# Agenda

- What is OPK ?
- OEM Preinstallation Kit Benefits
- Installing the OPK Tools
- The Preinstallation  Process
- OPK directory structure
- Prepare the installation files
- Demo

# What is OPK Kit?

- **The OPK was designed and created specifically for OEMs and System Builders to make it easier to install and configure the Operating System.**

- **OPK Kit Component**

  - Setup Manager

  - Windows Preinstallation Environment (Windows PE)

  - Sysprep

# OEM Preinstallation support

- ## XP Series
  - Windows XP Home Edition with SP 2
  - Windows XP Professional with SP 2
  - Windows XP Professional For Embedded
- ## Windows Server 2003 Family
  - Windows Server 2003, Standard Edition
  - Windows Server 2003, Enterprise Edition
  - Windows Server 2003, Datacenter Edition
  - Windows Server 2003, Web Edition

# OEM Preinstallation Kit Benefits

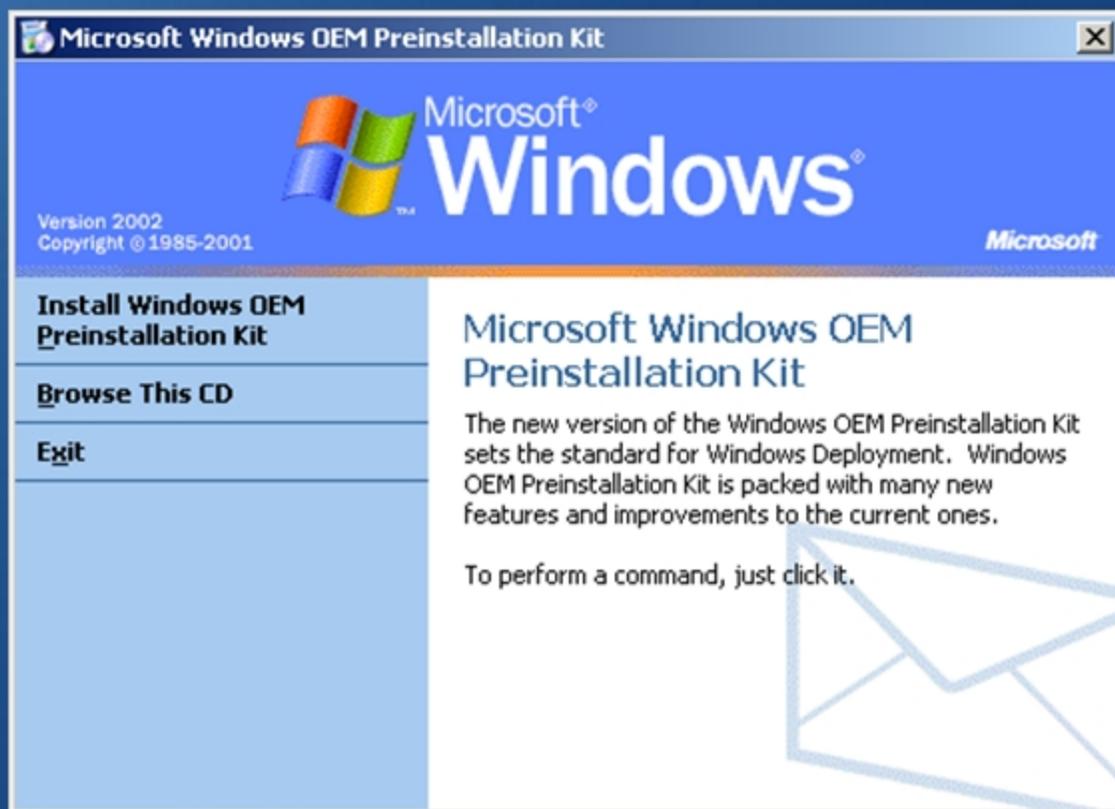| Benefits | |
|---|---|
| Flexible methodology | Enables you to choose compact disc-based, network-based, or peer-to-peer preinstallation methods |
| Customization | Enables you to add shortcuts and branding information to the operating system |
| Hardware flexibility | Enables you to preinstall drivers for devices that do not have built-in support in the operating system |
| Application preinstallation | Allows you to preinstall software programs during the installation of Windows XP. |
| Audit capability | Enables you to test preinstalled computers without interrupting the preinstallation process |
| Easy to use and saves build time | Wizard-like interface makes the OPK easy to setup and use and will save time compared to manual installations and adding apps/drivers. |

# Comparison of Preinstallation Methods

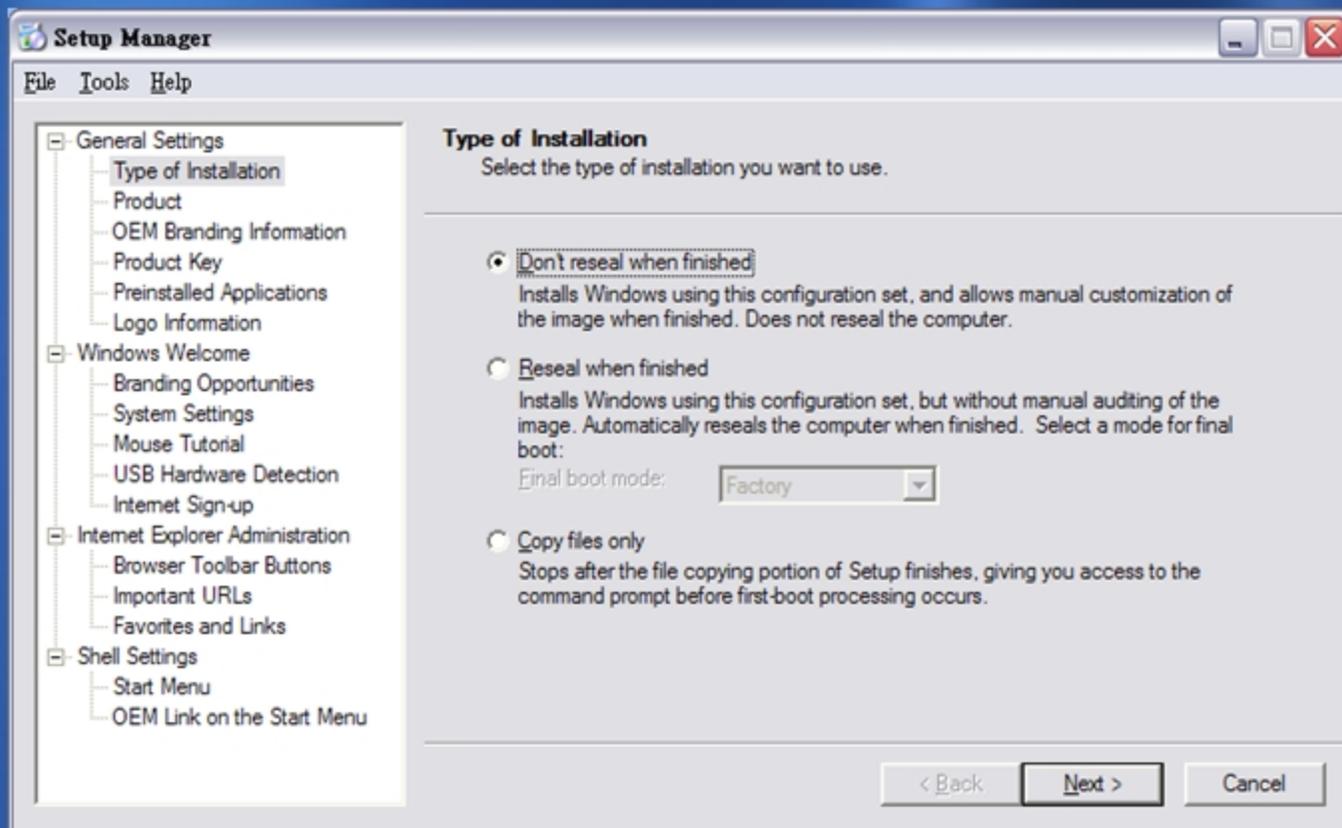| Method | Speed | Volume | Customization |
|---|---|---|---|
| **Build-to-Plan** <br> Image of master installation is deployed without customization to destination computers. | Fast | Highest | None |
| **Build-to-Order** <br> Image of master installation is deployed to destination computers, which are run in Factory mode and customized to order. | Fast | Fast | High |
| **Network Setup** <br> Destination computers are booted with Windows PE and Windows is preinstalled from a network distribution share. | Slowest | High | High |
| **CD Boot** <br> Setup is run on the destination computer using the Windows product CD. Manually customize, audit, and reseal the installation. | Slow | Lowest | Lowest |

# Installing the OPK Tools

# Installing the OPK Tools

# OPK Tool - Setup Manager

# Contents of the Windows OPK

| Subdirectory | Contents |
|---|---|
| C:\OPKTools | Setupmgr.exe; Readme.txt; default location of the distribution share |
| C:\OPKTools\Cfgsets | Configuration sets created by Setup Manager |
| C:\OPKTools\Docs | Windows OPK User's Guide, Windows Preinstallation Environment User's Guide, Preinstallation Reference, and white papers |
| C:\OPKTools\Lang | Default location of the Windows product files that you preinstall onto destination computers |
| C:\OPKTools\Samples | Sample files |
| C:\OPKTools\Wizfiles | Files required by Setup Manager. Do not change or remove these files. |

# The Preinstallation Process

**1**
- Install OPK Tools (Server 2008)
- Add Win XP Product Files to a share
- Create the config files
- Add Drivers to $OEM$ and Unattend.txt
- Create an WinPE image

Technician Computer

**2**
- Boot the computer to WinPE from a CD, USB flash disk or the network
- Start the setup

**3**
Reseal the computer, or run Audit and/or Factory mode of Sysprep and then run reseal

Master Computer

**4**
Build an image of the installation and store it on the technician computer, if desired

**5**
Deploy image from the technician computer onto the destination computers

Destination Computers

# The Preinstallation Process

1. **Copy the install files to a share:**
   xcopy d:\i386 "c:\share\XPPro\i386"
2. **Create the $OEM$ folder in \i386**
3. **Create \i386\$OEM$\$1\sysprep and extract d:\support\deploy.cab to it.**
4. **Create \i386\$OEM$\$$\system32 and create a file oeminfo.ini in that folder.**

```
Oeminfo.ini

[Version]
Microsoft Windows XP and the Windows .NET Server family
WinVer=5.01

[General]
Manufacturer=Fabricam
Model=DEMOPC
[Support Information]
Line1="Call +44-118-909-2480"
```
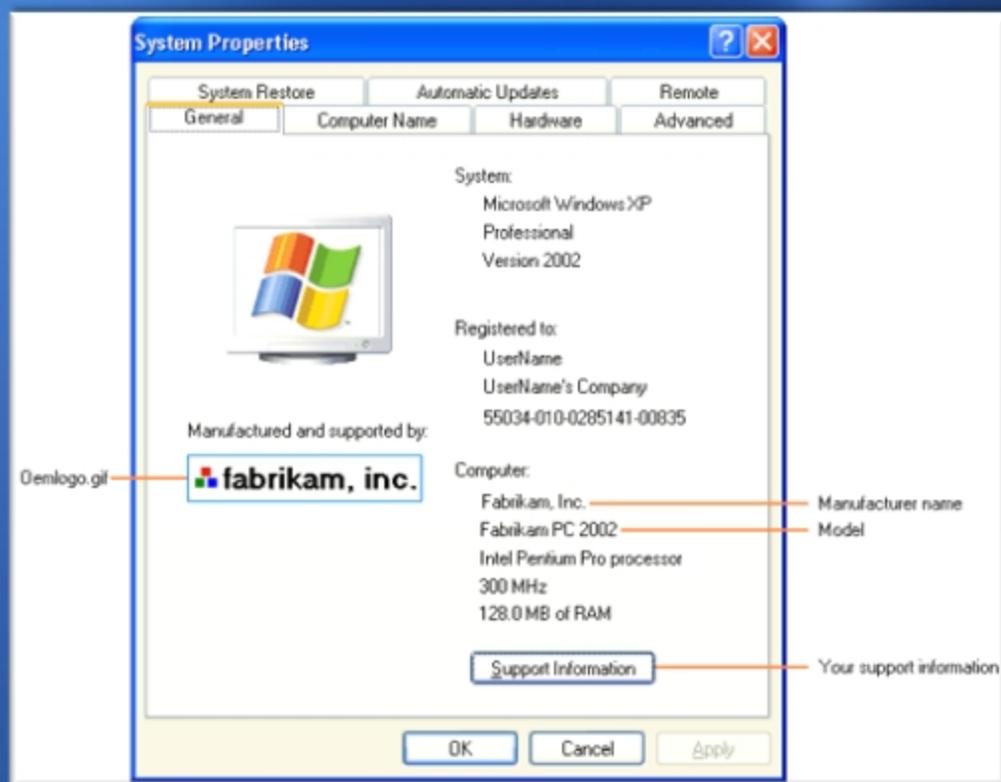
# 5.Create a bitmap file, Oemlogo.bmp, that contains your company logo. The bitmap must be 172 x 100 pixels in size. Place the file in the \i386\$OEM$\$$\System32 folder.

# 6. Create the unattend.txt file

You can create this file using setupmgr.exe ( Setup Manager), but you will need to manually edit it afterwards. Creating it manually can be another option.

```
Unattend.txt
[Unattended]
UnattendMode = FullUnattended
OemPreinstall = Yes
TargetPath = *
Filesystem = LeaveAlone
OemSkipEula = YES
FactoryMode = YES


[GuiUnattended]
    TimeZone = `004`
    AdminPassword = *
    AutoLogon = Yes
    OEMSkipRegional = 1
    OEMSkipWelcome = 1

[UserData]
    FullName=`OEM Preinstall`
    OrgName=`OEM Preinstall`
    ComputerName= *
    ProductID=`TXVFD-2CWFF-23JX3-FB6BR-XND4W`


[Display]
    BitsPerPel=32
    Xresolution=1024
    Yresolution=768
    Vrefresh=60

[Identification]
JoinWorkgroup=Workgroup

[Networking]
    InstallDefaultComponents=Yes
```
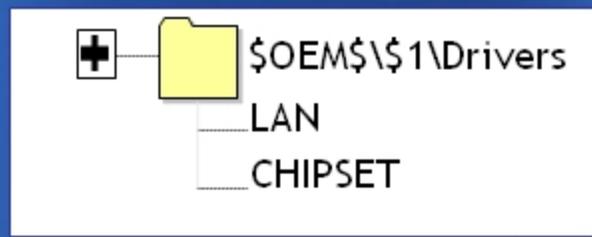
# 7. Add Drivers - OEMPnPDriversPath

Copy the driver files to $OEM$\$1\Drivers\...
(you need to create these folders)

# 7. Add Drivers – OEMPnPDriversPath

Add the OEMPnPDriversPath parameter into the [Unattended] section of the Unattend.txt File to preinstall 3rd party drivers during the Preinstallation Process

[Unattended]

Unattendmode = FullUnattended

OemPreinstall = Yes

OEMPnPDriversPath=drivers\video\nvidia;drivers\audio\realtek;drivers\tuner\maui

(additional drivers must be separated by semicolons)

# 7. Add Drivers – DriverSigningPolicy

Some hardware manufacturers have not yet had their drivers (i.e., Video Capture card and Video card) signed by the Windows Hardware Quality Labs (WHQL).

To preinstall unsigned drivers you must include DriverSigningPolicy=Ignore in the unattend.txt:

[Unattended]
Unattendmode = FullUnattended
OemPreinstall = Yes
DriverSigningPolicy=Ignore

# 8. Some more config files

Create the following scripts (need to be adjusted to your Directory names, in this example z: is the name of the share) and place them in the "WinXP" directory:

```
Unattend.bat:


set AnswerFile=c:\unattend.txt
set SetupFiles=c:\I386

C:\I386\winnt32 /s:%SetupFiles% /unattend:%AnswerFile%
/syspart:c:

wpeutil reboot
```

DEMO