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Microsoft

December 11, 1997

Dear OEM/Authorized Replicator

Microsoft is pleased to deliver to you:

- Microsoft® Internet Explorer 4.01 Win32 English CD ODK Kit w/OLS

Enclosed please find:

- Kit # X03-56125
- Kit Document # X03-56126
- Kit Guide #X03-56127
- Kit CD Master # X03-56128
- Kit Floppy Master # X03-57885

IF YOU ARE AN AUTHORIZED REPLICATOR, PLEASE REMOVE AND DESTROY THE FLOPPY MASTER LABELED "NTW PREINSTALL DISK". THIS FLOPPY DISK IS FOR USE BY OEM MANUFACTURERS ONLY IN THEIR PREINSTALLATION PROCESS.

IF YOU ARE AN OEM, PLEASE REVIEW THE ATTACHED PREINSTALLATION DOCUMENTATION.

For help with any additional questions, please contact your Account Manager.

Thank you for choosing Microsoft products!

OEM Operations

Microsoft Corporation is an equal opportunity employer

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December 17, 1997

Dear OEM:

In late September 1997 Microsoft Corporation ("MS") distributed to licensed OEMs a supplemental release of Updated Windows Features (" September Supplement") to the OEM Preinstallation Kit ("OPK") for the Product(s) identified below. The September Supplement included, among other components, Internet Explorer 4.0 and it was (and still is) available from Authorized Replicators as part of "OSR 2" release of Windows 95. Shortly, you will receive one or more additional Supplements to the OPKs for these Products ("December Supplements"). The December Supplements will include, among other components, Internet Explorer 4.01.

Product Name(s) and Version(s): Microsoft® Windows® 95, Microsoft® Windows NT® Workstation version 4.0, and/or Microsoft® Windows NT® Server version 4.0.

Language Version(s): English, German, French, Spanish, Italian, Dutch, Swedish, Brazilian-Portuguese, Norwegian, Danish, Finnish, Portuguese (Iberian), Greek, Russian, Polish, Czech, Hungarian, Slovenian, Turkish, Japanese (Kanji), Korean (Hangul), Traditional Chinese, Catalan, Slovak, Basque, and/or Simplified Chinese.

The December Supplements are as follows:

1. Updated Features of Windows 95 and Windows NT 4.0 Products, including Internet Explorer version 4.01, updated versions of NetShow, Outlook™ Express, and other new and updated components. For your convenience, Service Pack 3 for Windows NT 4.0 Products is also included on the CD with this Supplement.

2. OSR 2.5 for Windows 95, including Internet Explorer version 4.01, updated versions of NetShow, Outlook™ Express, and other new and updated components of Windows 95.

License

The December Supplements are part of the Product Deliverables for the Product(s) identified above, and are therefore subject to the terms and conditions of the OEM License Agreement between MS and your company for the Product(s) ("Agreement"). The additional rights for Customization of Supplemental Components described in Section III of the Supplement Addendum for the September Supplement shall also apply to the December Supplements. Preinstallation and distribution of the December Supplements described in this letter shall be optional.

If you have any questions regarding these Supplements or your Agreement, please contact your Account Manager. We hope that you will find the Supplements useful.

Microsoft OEM Sales

What's New with Internet Explorer 4.01?

Summary
This document provides a summary of the new with Microsoft Internet Explorer 4.01.

What is Internet Explorer 4.01?
Internet Explorer 4.0 is an extremely well-received product, demonstrated by its record-setting download pace of over 3mm downloads since it became available on 30 September 1997. However, the Internet Explorer Product team does not stop working simply because the software has been made available, as they are constantly striving to improve the product. Thus we've a made some improvements to Internet Explorer 4.0 in the following areas:

- Accessibility enhancements so users with motion, vision, or hearing impairments can browse the web
- End user installation and stability fixes for those users who downloaded Internet Explorer 4.0 and experienced difficulty with the installation process
- Includes security fixes including the Freiburg and Buffer Overrun patches

Will OEMs be able to customize Internet Explorer 4.01 by creating their own channel and Active Desktop?
Yes. OEMs can still customize Internet Explorer 4.01. The tool to integrate your Active Desktop and channel with IE 4.01 is the Internet Explorer Administration Kit (IEAK).

Is the IEAK getting updated as well?
Yes. OEMs who are licensed for Windows 95 or Windows NT Workstation 4.0 will receive the IEAK 4.01.

What is the international release schedule for IE 4.01?
All languages that were released for version 4.0 will be updated to 4.01. All languages should be released within the next couple of months.

Internet Explorer 4.0: OEM Pre-Installation Process

The purpose of this document is to further describe how the OEM can pre-install IE4.0 onto an end-user's machine. This document does not describe how to customize IE4.0. The OEM should use the Internet Explorer Administration Kit (IEAK) for customization purposes. If customization is done, the customized IE4.0 package should be used in place of the standard IE4.0 package.

The first portion of this document describes the basic mechanics of how to pre-install IE4.0. Topics include IE4.0 command line switches, product identification number, and pre-installation of cached content. Information covered in these sections is not specific to the operating system and will work on either Windows 95 or Windows NT Workstation. At the end of this document, there are specific tips outlined to pre-installing IE4.0 on OSR2 and NT4.

Pre-Installation Process

To pre-install IE4.0 on the end-user's machine, the IE4 setup program must be run in batch mode using a set of command line switches. These switches will allow the OEM to control the look and feel of the setup process.

IE4.0 Command Line Switches

IE4 setup is comprised of two components: ie4setup.exe and ie4wzd.exe. ie4setup.exe is an installation wrapper around ie4wzd.exe, the setup wizard. Running ie4setup.exe by itself will run ie4wzd.exe with a set of default switches. To control the look and feel of the active setup wizard it is necessary to use command line switches in conjunction with ie4wzd.exe.

When IE4 setup is run in quiet mode, no input is required by the user. Because of this, setup tries to determine the channel locale based off the locale of the machine. For example, if the OEM machine is going to an Australian user, the user would probably want Australian channels. By using quiet mode install, the user would get US channel locale. Thus, the OEMs would need to build a separate IE4 package via the IEAK for each channel locale. This is also the case if the OEM chooses to customize the browser in any way with the IEAK.

Available Switches:

/Q:[A]	Quiet Mode (Q:A is AdminQuiet – skips all checks and doesn't display any messages)
/M:[1|2]	Install Mode (1 is standard (default); 2 is full)
/I:[Y|N]	Install Windows Desktop Update (Y is default)
/R:N	Disable hardboot/softboot
/S:	Path to ie4setup.exe

Examples:

ie4setup.exe

This displays each wizard page to the user and allows them to choose the type of installation, their channel locale, and if they want the windows desktop update.

ie4setup.exe /q /c:"ie4wzd.exe /q /M:1 /S:""#e""

This runs ie4setup in quiet mode which requires no user input, but does show progress UI. It installs the standard components. /S:""#e"" points ie4wzd.exe back to the source path of where ie4setup.exe is being run from.

ie4setup /Q:a /c:"ie4wzd.exe /Q:a /R:n /M:2 /I:y /S:""#e""

This runs ie4setup in complete quiet mode (no user input required, no UI). It selects a full install, with windows desktop update, and does not force a reboot.

If the OEM chooses to customize via the IEAK, the above set of install switches is still valid. The Install Mode switch (/M), however, corresponds to the install modes specified by the OEM within the IEAK. For this case, /M:0 corresponds to the first option (minimum), /M:1 is the second option, and so forth.

Cached Content

When pre-installing IE4.0, cached content needs to also be pre-installed. Cached content allows the user to view pre-cached channel content before they are connected to the web. To pre-install cached content, the content directory needs to be xcopied to the users hard drive. This hard drive needs to have a volume label. Inside the content directory, there is an executable file called cdcache.exe. This file should be run in silent mode (no UI nor user input required):

cdcache.exe /silent

If the OEM is customizing IE4 and wishes to install their own pre-cached content, they should follow the instructions for creating cached content outlined in *Internet Explorer 4.0: OEM Customization Process* and copy it into the content directory.

Product Identification Number (PID)

If the OEM is customizing IE4 with the IEAK, they need to ensure that the Product Identification Number is the correct OEM PID number. They should refer to the *Internet Explorer 4.0: OEM Customization Process* for instructions and the correct OEM PID number.

Tips on using the IE 4.0 setup within the OSR 2 OPK

There are two mechanisms whereby IE 4.0 components can be added to an OSR 2 install. Depending on the types of install or manufacturing model used, the IE 4.0 setup can be completed in the factory, or a link to the IE 4.0 setup can be left on the desktop for the end user to launch.

Installing IE 4.0 in the factory.

This method entails installing IE in audit mode. This can only automated for the express case of preinstall. If you are using custom case installs, you will need to manually audit the machine. This process can not be used on a multilingual install. If you ship multilingual, you must leave a link on the desktop for the end user to use to install IE 4.0.

Steps.

1. Edit your configuration set in maintenance mode. To do this run OPKWIZ /m:*configsetname*
2. On the application preinstallation page of the wizard enter the command line and path for IE 4.0 setup. ***Note: when passing a command line via the application page, double quotes (") are used as a delimiter. This means that the leading quote of a string will be stripped. To work around this replace each leading quote with two (2) double quotes.***
3. Either re run mkref.bat or use updref.bat to propagate the changes to your systems.
4. Proceed as normal for your installs, remembering that for a custom case install you will need to manually launch audit or the install will not take place.

Leaving a link on the desktop for the IE 4.0 Setup.

Creating links is discussed in the Chapter 7 of the OPK User's guide. This is straightforward, but does require different approaches for express, custom, and multilingual installs. Each begins with determining the correct updateini entries for setup.ini that will cause grpconv to create the links.

Express cases are the simplest as you can create the INF and reference it using the application preinstallation wizard page.

For custom cases (excepting multilingual) the simplest step is to locate the setup.ini file in your reference system and modify the file directly. This file will be located in REF:\Image\windows

The multilingual case is trickiest, but does allow the flexibility to modify the inf processing performed based on the language chosen by the end user. The file that controls this is named olang.inf and resides in the REF:\Image\pisetup\lang\XXX directory, where XXX is the three character code for the language. That is, the English olang.inf, resides in REF:image\pisetup\lang\ENG, and the German file in REF:image\pisetup\lang\GER. In this file locate the section named GENMULTI and add the commands to this section. You will need to modify each olang.inf to perform this function, as the only one executed will be the one that corresponds to the language chosen by the end user.

Pre-installing SP3 and IE4 with NT4

Overview

This document describes three options for preinstalling IE4 with NT4. Each of the three options provides different benefits and features depending on the solution needed. All of these options can be implemented using the standard NT 4.0 OEM preinstall tools and methods.

The IE4/NT4 integration options are:

- Automatically install IE4 with NT4.
- Install a shortcut to the IE4 setup program on the user's desktop.
- Make "The Internet" desktop icon point to the IE4 setup program.

All of these options require the preinstallation of SP3 or greater, which is described in the document.

Known Limitations

- This is not a slipstream of an Service Pack. You still need to reapply the Service Pack when system state changes.
- There are some issues with uninstall order if the user decided to uninstall SP3 and IE4. Thus, the examples given here do not create an uninstall directory for SP3. If you need an uninstall directory for auditing using Rollback, see the *Rollback Precautions* section.
- The user must log in using an Administrator-level account to install IE4. IE4 will warn the user about this requirement.
- Current issue with IE4 Authenticode-2 and reapplying SP3. Please see the IE4 release notes or the KB article database for more information.

Steps Common to all NT4/IE4 Preinstall Options

These steps are common to all of the IE4 preinstall options detailed below. SP3 or greater is required for many of IE4 features, and these steps detail how to preinstall SP3 at the end of NT4 GUI mode setup.

Implementation Steps

Consult the *Microsoft Windows NT 4.0 Resource Kit for more information.* All examples are given in **boldfaced** text.

Step 1: Create a distribution sharepoint

Create an NT4 OEM preinstall share called nt4

Step 2: Create the following directories within an existing distribution sharepoint directory

```
mkdir c:\nt4\$oem$\C
mkdir c:\nt4\$oem$\C\SP3
mkdir c:\nt4\$oem$\C\SP3\i386
mkdir c:\nt4\$oem$\C\ie4
```

where `c:\nt4` *is the name of the existing distribution sharepoint directory*

Step 3: Copy all the files from the appropriate platform directory, and two tag files from the Windows NT 4.0 Service Pack 3 compact disc to the SP3 directory.

```
copy d:\i386\*.* c:\nt4\$oem$\C\SP3\i386
copy d:\spcdrom.40 c:\nt4\$oem$\C\SP3
copy d:\disk1 c:\nt4\$oem$\C\SP3
```

where `d:` *is the CD ROM drive letter..*

Step 4: Copy all the files required to install IE4 to the appropriate directory:
Example:

```
copy d:\ c:\nt4\$oem$\C\IE4
```

where `d:\ie4` *is the path of all the IE4 install sources.*

Step 5: Create a CMDLINES.TXT file (using Notepad, for example) with the following content. Save the file in the oem directory of the distribution sharepoint.

```
[Commands]
"C:\SP3\i386\update /n /u /z"
```

Step 6: Create or update an existing UNATTEND.TXT file that contains the following line under the [Unattended] section:

```
[Unattended]
OemPreinstall = yes
```

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Automatically install IE4 with NT4

Goal

This method automatically installs the IE4 components for the user after NT Setup has completed and reboots. The system is set to auto-log on as Administrator, and launches the IE4 setup program. Once IE4 setup has completed, the system automatically reboots, and the user is ready to log-on normally.

IE4 setup is run automatically using the Explorer Startup Group. However, once IE4 setup has completed, it needs to be removed from the Startup group, since setup does not need to be run again. This is done using a small program that is provided. Also, to preserve the user experience, the default NT Welcome screen is not displayed. However, once the IE4 components install, the IE4 Welcome screen is displayed.

User Experience

1. User goes through NT4 Setup and reboots system. SP3 will have been installed.
2. User selects Windows NT from the boot loader menu.
3. Windows NT starts and automatically logs-on using the Administrator account.
4. Desktop and shell initialize, and IE4 setup begins automatically.
5. User sees IE4 setup wizard pages and progress bars, but no user input is required.
6. When IE4 setup completes, the system automatically reboots.
7. Upon reboot, the user logs in normally, and the IE4 components are installed and available as the default browser.

Implementation Steps

Follow the steps given above, but add the following steps:

Step 7: Copy the following file to the OEM\c\ie4 directory:

```
ieinst.exe
```

Ieinst.exe is the executable that is needed to automatically install the IE4 components. Ieinst.exe will launch the IE4 setup program and remove the shortcut that launches IE4 out of the startup group.

Step 8: Create the following directory:

```
mkdir c:\nt4\$oem$\C\winnt\Profiles\All Users\Start
Menu\Programs\Startup"
```

Create a shortcut called `ieinst.lnk` that has the following target path: [The target path can be viewed using the Properties of a shortcut]

```
C:\ie4\ieinst.exe ""c:\ie4\ie4setup.exe" /Q"
"c:\winnt\profiles\All Users\Start
Menu\Programs\Startup\ieinst.lnk"
```

The first argument launches the IE4 install program with the necessary flags. The second argument deletes the shortcut from the Startup group once the install is complete. You should also set the *Start in* field on the shortcut properties page to c:\ie4.

Then copy the shortcut you have created (ieinst.lnk) to the directory listed below.

copy "ieinst.lnk" "c:\nt4\oem\C\winnt\Profiles\All Users\Start Menu\Programs\Startup"

Step 9: **Add the following lines to the cmdlines.txt file:**

```
"Regedit.exe /S .\autolog.reg"

"Regedit.exe /S .\welcome.reg"
```

These two registry scripts enable auto-log on and disable the display of the Welcome screen.

Step 10: **Create the following two registry scripts in the c:\nt4\OEM directory. You can either use the scripts provided or you can create them using regedit or notepad:**

Welcome.reg

```
REGEDIT4

[HKEY_USERS\DEFAULT\Software\Microsoft\Windows\CurrentVersion\Explorer\Tips]
        "Show"=dword:00000000
```

Autolog.reg

```
REGEDIT4

[HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Winlogon]
        "AutoAdminLogon"="1"
        "DefaultUserName"="Administrator"
        "DefaultDomainName"="$COMPUTERNAME$"
        "DefaultPassword"=""
```

Where $COMPUTERNAME$ = needs to be filled in with the name of the computer.

Step 11: Add the following entry in UNATTEND.TXT

```
[GUIUnattended]
OEMBlankAdminPassword=1
```

This sets the Administrator password to blank. This allows NT to auto-log the Administrator user into the system to install the IE4 components.

Step 11: Run Windows NT 4.0 setup in unattended mode using the above UNATTEND.TXT file

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Limitations and Notes

- This method sets the Administrator password to blank, or whatever the OEM selects. The user would then need to change this password after the IE4 components are installed.
- The two registry scripts listed here were previously used in the Zero Administration Kit for NT 4.0
- If you use winnt.exe, you need to use a $$Rename.txt file in each directory with a long filename. For information about $$Rename.txt, consult the *Windows NT Resource Kit or the Windows NT OPK.*

Rollback Precautions

Service Pack 3 and the IE4 components includes fixes that are incompatible with the rollback system auditing tool included with the Windows NT OPK. If you plan to use Rollback.exe to audit systems preinstalled with Service Pack 3 and IE4, you must uninstall the Service Pack and IE4 prior to running Rollback.exe. If you run Rollback.exe on a system with Service Pack 3 and IE4 installed, several problems can occur, such as the inability to boot the system. If you plan to test your systems with Rollback.exe, please use the following process to avoid such problems.

If you need to run rollback, you need to make sure that Service Pack 3 creates an uninstall directory. This can be done by omitting the /n flag in cmdlines.txt when calling the SP3 update.exe.

While in Audit Mode, follow these steps:

Step 1: **Uninstall IE4 from the Add/Remove Programs Control Panel. Select the first option [Remove IE4 and all components]. You will need to reboot after this. When you log-in again, IE4 will prompt you to remove all user settings. You should click Yes for any of these dialogs.**

Step 2: **Uninstall SP3 by calling update.exe with the uninstall flag.**

```
cd c:\sp3\i386
update /u /y /z
```

Step 3: **Copy the following file:**

```
copy c:\winnt\system32\msnsspc.dll c:\$WIN_NT$.~LS\i386
```

This file needs to be copied because IE4 does not return this file back to the file originally copied by NT Setup. Thus, to prevent a version conflict dialog displayed to the user during NT Setup, this file needs to be copied to the WIN_NT.~LS directory.

Step 4: **Reboot the system and run Rollback.exe**

```
Rollback.exe
```

Service Pack 3 will be reinstalled when your customer receives the system and goes through the graphical phase of Windows NT Setup, which will re-execute the `"C:\SP3\i386\update /u /z"` command in the Cmdlines.txt file (see Step 4 in the previous procedure).

It is highly recommended that you fully test this Service Pack 3 uninstall functionality with your specific preinstall process.

Install a Shortcut to IE4 on the Computer's Desktop

Goal

This method will place a shortcut to the IE4 install program on the All Users desktop for the computer. Any user who logs into the system will be able to see this shortcut.

This shortcut launches the IE4 install program in attended mode, so the user will be able to customize the IE4 installation.

User Experience

1. User goes through NT4 Setup. User will see SP3 install progress gauge. User will reboot system
2. System reboots into bootloader, user selects Windows NT.
3. User logs into Windows NT.
4. User sees IE4 shortcut on desktop, and selects it.
5. Depending on configuration, user sees IE4 setup wizard pages and progress bars, but no user input is required. Or the user could have a fully manual install, and the user selects all options.
6. When IE4 setup completes, the system automatically reboots. (If manual install, user must initiate reboot)
7. Upon reboot, the user logs in normally, and IE4 will be installed.

Implementation Steps

Follow the steps given above, but add the following steps:

Step 7: Create the following directory:

```
mkdir "c:\nt4\$oem$\C\winnt\Profiles\All Users\Desktop"
```

Then, copy a shortcut to the IE4 install program to this directory. The OEM will have to create this shortcut. This shortcut points to the following file: c:\ie4\ie4setup.exe. If a customized install is desired, add the needed flags to the shortcut using the target path entry. (Can be viewed using the Properties dialog of a shortcut)

copy "Install Microsoft Internet Explorer 4.0.lnk" "c:\nt4\oem\C\winnt\Profiles\All Users\Desktop"

Step 8: Run Windows NT 4.0 setup in unattended mode using the above UNATTEND.TXT file

Work Items / Limitations

- The IE4 shortcut is still on the desktop when the installation is finished. By utilizing the ieinstall.exe program of method 1, the shortcut can be removed automatically.

Have "The Internet" icon launch the IE4 setup program

Goal

This method will change "The Internet" icon on the desktop to always launch the IE4 install program. When the user finishes with IE4 setup, then this icon will launch the IE4 browser or ICW (Internet Connection Wizard) respectively.

This option launches the IE4 install program in attended mode, so the user will be able to customize the IE4 installation

User Experience

1. User goes through NT4 Setup. User will see SP3 install progress gauge. User will reboot system
2. System reboots into bootloader, user selects Windows NT.
3. User logs into Windows NT.
4. User clicks on the "The Internet Icon".
5. Depending on configuration, user sees IE4 setup wizard pages and progress bars, but no user input is required. Or the user could have a fully manual install, and the user selects all options.
6. When IE4 setup completes, the system automatically reboots. (If manual install, user must initiate reboot)
7. Upon reboot, the user logs in normally, and IE4 will be installed.

Implementation Steps

Follow the steps given above, but add the following steps:

Step 7: Create the following registry script iexplore.reg using regedit.

Iexplore.reg

```
REGEDIT4

[HKEY_CLASSES_ROOT\CLSID\{FBF23B42-E3F0-101B-8488-
00AA003E56F8}\Shell\Open\]
"Command"="c:\ie4\ie4setup.exe"
```

Place this file in the OEM directory. If a customized IE4 install is desired, add flags to the IE4 setup using the Command value.

Step 8: Add the following line to cmdlines.txt

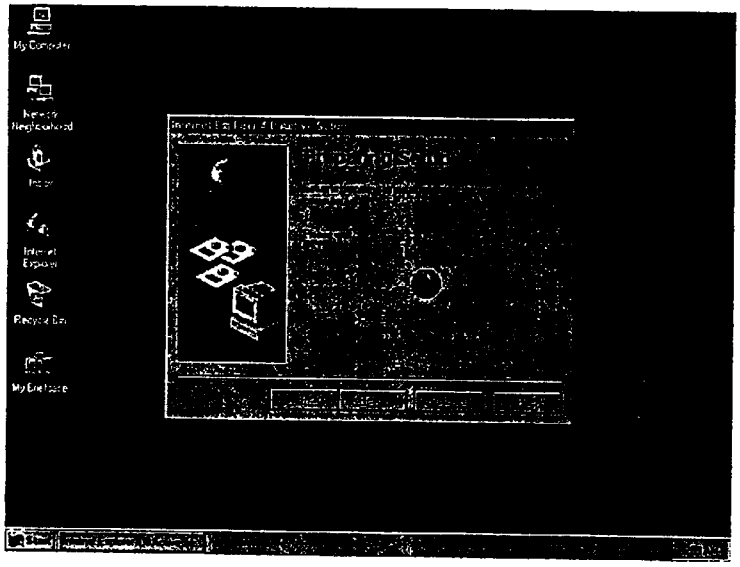
"regedit /S .\iexplore.reg"

Step 9: Run Windows NT 4.0 setup in unattended mode using the above UNATTEND.TXT file

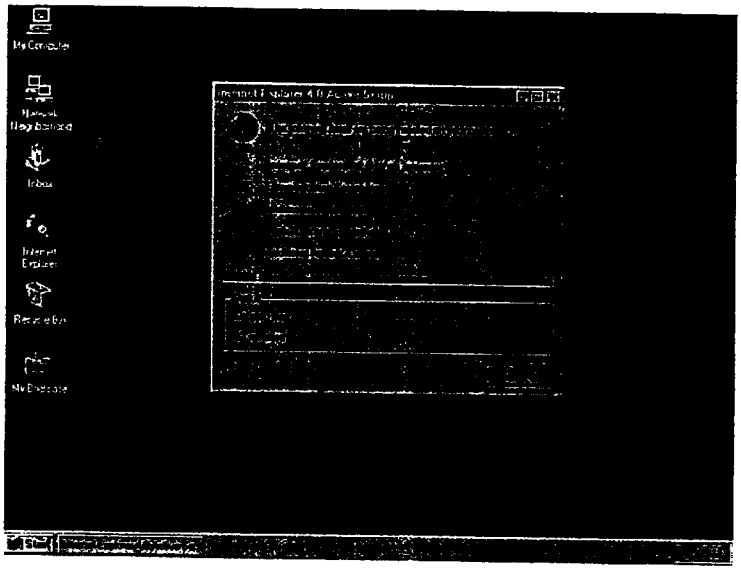
```
c:\dist\winnt /u:unattend.txt
```

Screenshots of IE4 installing in unattended mode:

This is the user experience of IE4 installing in unattended mode for method 1. After the system automatically logs on, the IE4 setup wizard is launched automatically, and the following screen is displayed to the user.



Then, the IE4 install process begins, and IE4 is installed.



After this process completes, the system is automatically rebooted.