Chapter 2

This chapter contains information that can be used to create custom Microsoft Windows setup information files (SETUP.INF, CONTROL.INF, and APPS.INF) for multiple installations.

Note

specify custom drivers, applications, and machine types for multiple systems.

Related information Windows User's Guide: Chapter 15, "Maintaining Windows with Setup"

"The Windows Initialization Files"; "Troubleshooting Setup" in Chapter 13, "Troubleshooting Windows 3.1"

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About the Setup Information Files

Three files supply information used by the Windows Setup program: SETUP.INF, CONTROL.INF, and APPS.INF. The entries in each of these files are discussed in detail in separate sections of this chapter.

files and application files, and to create program groups that you can use to run applications from Program Manager. This file is on the Windows installation disk #1 and is not compressed.

Setup and Windows Mode Setup. The SETUP.INF entries specify which files to copy based on the system hardware configuration and the choices specified during installation. You can modify the SETUP.INF entries to accommodate specific hardware and software configurations for installing Windows on multiple machines.

### W

APPS.INF is the file that contains information for installing applications with Windows. You can modify this file to install PIF information for custom applications during Windows installation. Setup places the APPS.INF file in the SYSTEM subdirectory during installation.

### W

CONTROL.INF is the file that contains specific information about printers and international settings. You can modify this file to install custom printer drivers. Setup places the CONTROL.INF file in the SYSTEM subdirectory during installation.

For other ways to customize Setup to meet the installation needs for your site, see the Custom Installation Decision Tree in Chapter 1, "Windows 3.1 Installation."

The setup information (.INF) files are text files in a format similar to WIN.INI and SYSTEM.INI. The .INF files are broken into logical groups called sections. Each section has a header that is an identifier in square brackets, such as [shell], with values assigned under each section header. Brief comments are included below many section headers to explain the contents of that section.

Each section has a format similar to this:

[section] keyname = value ; comment

Entry

[section] and the left bracket must be in the leftmost column on the screen.

#### keyname

letters and digits. Some keyname entries must be followed immediately by an equal sign (=).

# value

quoted string, depending on the entry. Any entry listed in this chapter that does not appear in your .INF file has the default value.

## ; comment

same line as an entry. You can include comments anywhere in an .INF file by prefacing the comment with a semicolon (;).

In this chapter, the items that appear in bold in an entry are actual words included in the entry. For example: [win.net]. Values that must be substituted in the entry are shown in italics. For example:

keyname = profile, description, filesize

Case (capital or lowercase letters) does not matter for values, unless specified for a particular item. Some items must be enclosed in double quotation marks (" "). For example: caption= "Windows Setup".

# Note

the placement of the [blowaway] section in SETUP.INF. Also, the entries do not necessarily appear alphabetically as they are listed in this chapter. So to change an entry, you must search for it within the section.

To change entries in a setup information file:

- 1. unedited form.
- 2.

3.

Important Always back up the .INF file before you open it, and use care

when making changes with a text editor. Incorrect changes can lead to unexpected results when you run Setup. Also, some editors can damage characters with ANSI values of greater than 127. Use a nonformatting text editor to change these files, or make sure to save the files in ASCII (textonly) formats.

SETUP.INF: The Setup Information File

This discussion describes details about each section in SETUP.INF, and how and when to modify entries. The discussion follows roughly the same order as sections appear in SETUP.INF, in these topical categories:

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The following table summarizes the purpose of the sections in SETUP.INF.

Type of section Purpose

General installation sections Defines the Windows Setup Help file [run] [dialog]

Windows Resource Kit

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[data] [winexec] [disks] [oemdisks] [user] [windows] [windows.system] [windows.system.386] [bluemax] and [386max] [shell] Display driver sections Defines a set of display drivers [.3gr] Keyboard and code page Maps keyboard short names and descriptors sections Defines keyboard short names [keyboard.tables] [codepages] Mouse driver sections Defines mouse driver keynames [dos.mouse.driver] mouse drivers [lmouse] Network installation sections Defines names for network files and .INI file changes for networks [Network\_Version] drivers [Network\_Specific] System fonts sections Defines system font files by display resolution [fixedfonts]

Type of section Purpose

[oemfonts]

**Copy-files sections** Defines files to copy for 80286 PCs [win.copy.net] [win.copy.net.386] network workstation [win.copy.386] [DelFiles] [RenFiles] [win\_copyFiles] Program Manager Defines Program Manager groups to modify for Windows 3.1 upgrade Groups sections Defines Program Manager groups to be created [group#] Fonts sections Defines vector and raster screen font files based on display resolution [ttfonts] Incompatible driver sections Defines drivers to remove in CONFIG.SYS [incompTSR1] [incompTSR2] with Windows [block\_devices] Miscellaneous sections Defines data for multimedia drivers [translate] [update.files] [ini.upd.patches] [blowaway] [ini.upd.31] System configuration sections Maps system short names and descriptors [machine] [special\_adapter] [ebios] [language]

General Installation Sections

The following sections in SETUP.INF define the installation options and specify the filenames and locations of related files for MS-DOS Mode Setup:

[setup] [windows.system] [run] [windows.system.386] [dialog] [386max], [bluemax] [winexec] [shell]

[setup]

This section contains the location of the help file for the Setup program. If you want online help to be available during installation, there must be an entry similar to this:

[setup] help= setup.hlp

[run]

The entries in this section specify which programs should run at the end of Setup. If you want to run an application when Setup is completed, enter its name here. For example, to run Control Panel after Setup is completed, include this entry:

[run] "control"

[dialog]

This section contains the text strings used in the Setup dialog boxes. Some of the keynames and the default text assigned are:

[dialog] caption = "Windows Setup" exit = "Exit Windows Setup" title = "Installing Windows 3.1" options = "In addition to installing Windows 3.1, you can:" printwait = "Please wait while Setup configures your printer(s)..." copywait = "Welcome to Microsoft Windows 3.1! . . ." (other copywait entries)

[winexec]

This section provides data needed by MS-DOS Mode Setup so that Setup can copy the correct Kernel file for Windows Mode Setup. You probably do not need to change these entries.

[winexec] execstd= "dosx.exe " execcmd= " krnl286.exe /b /q:" exechimem= "xmsmmgr.exe" himemcmd= "" Krnl386= 2:krnl386.exe Krnl286= 2:krnl286.exe dosx= 2:dosx.exe

[data]

This section defines a series of default settings for Setup. The first half of these entries specifies the hard disk space and minimum memory required for basic running without options. If you plan to install additional files during Setup, you must increase the minimum disk space required for installation. The second half of these entries refers to the default files and other data used by Setup.

These are the standard entries for the [data] section:

[data] netadmin= 16000000 netadminupd= 16000000 upd2x386full= 1050000,8000000 upd2x386net= 300000 upd3x386full= 550000,5000000 upd2x286full= 900000,6500000 upd3x286full= 550000,5000000 upd3x286full= 5500000,5000000 new386full= 1050000,8000000 new386full= 900000,6500000 new386net= 300000,300000

startup= WIN.COM defdir= C:\WINDOWS short name= Windows welcome= "Windows 3.1" deflang= enu defxlat= 437 defkeydll= usadll register= "regedit /s /u setup.reg" tutor= "wintutor.exe " NetSetup= FALSE MouseDrv= TRUE Version= "3.1"

NoteIf you want to force users to set up using network installation (setup /n), make sure netsetup=true in [data]. For more information, see "Setting Up Windows for a Network" in Chapter 1, "Windows 3.1 Installation."

[disks] and [oemdisks]

These sections describe the disks that might be requested during installation. The format for entries in [disks] and [oemdisks] is:

n= path, disk name, disk tag

### Entry

n

number 0 is reserved to represent the Windows Setup directory.

path the same drive as the Windows Setup disks.

disk name name for each disk number used.

disk tag is in the drive).

This is a sample entry for Windows installation disks:

#### [disks]

1=. ,"Microsoft Windows 3.1 Disk #1",disk1 2=. ,"Microsoft Windows 3.1 Disk #2",disk2

3=. ,"Microsoft Windows 3.1 Disk #3",disk3

4=. ,"Microsoft Windows 3.1 Disk #4",disk4

5=. ,"Microsoft Windows 3.1 Disk #5",disk5

6=. ,"Microsoft Windows 3.1 Disk #6",disk6

## [oemdisks]

Z=. ,"HP DeskJet Series v2.0 disk (from printer box or contact HP)",diskz

If you want to install other applications from disk during Windows installation, you can add an entry in the [disks] section. For details, see "Modifying .INF Files for Custom Installations" later in this chapter.

#### Note

1:, identifies which Windows installation disk contains that file, based on the entries in the [disks] section. If Windows is installed from a network server where all files exist in a single directory, Setup ignores the disk numbers.

[user]

This section describes which installation disk contains the user and company identification. This is a temporary file.

# [windows]

This section identifies which files MS-DOS Mode Setup will copy into the WINDOWS directory. The assignment of Net for the win.src and system.src entries tells Setup to copy these files only for the Windows Administrative Setup option (setup /a), to prepare a shared copy of Windows for running Setup over a network.

[windows] 1:setup.hlp 1:setup.txt 3:control.hlp 2:win.src, Net 1:system.src, Net 1:winhelp.exe

[windows.system]

This section defines which files MS-DOS Mode Setup will copy into the Windows SYSTEM subdirectory. For details about the files copied during Windows Mode Setup, see "Copy-Files Sections" later in this chapter.

[windows.system] 1:gdi.exe 1:user.exe 1:win.cnf 1:lzexpand.dll 2:ver.dll

[windows.system.386] and Related Sections

These sections describe files to be copied into the SYSTEM subdirectory for 80386 machines:

[windows.system.386] 1:cpwin386.cpl

[386max] 2:386max.vxd 2:windows.lod

[bluemax] 2:bluemax.vxd 2:windows.lod

# [shell]

This section tells Setup which application to install as the Windows shell. The default shell is Program Manager.

[shell] progman.exe, "Windows Program Manager"

**Display Driver Sections** 

Windows display drivers require three kinds of files:

which contains code for communication between the display adapter board and Windows. These files are specified in the [display] section.

# W

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The grabber file (.2GR for standard mode; .3GR for 386 enhanced mode), which contains code to support data exchange between Windows and non-Windows applications. These files are specified in entries in the [display] section. The fonts for 386 grabbers are specified in [.3gr] sections. In Windows 3.0, these files had .GR2 and .GR3 filename extensions.

support in 386 enhanced mode. The related VDD files are specified in entries in the [display] section.

The naming conventions listed parenthetically are not required. However, most drivers use this naming convention.

If you are using a display driver other than those in the Windows package, you can add a custom entry that contains the display driver data in [display]. For Setup to correctly install third-party display drivers, you must copy the driver and the appropriate grabber files, and you must also update the 286grabber= or 386grabber= entries in the [boot] section of SYSTEM.INI.

During Custom Setup, you can specify the display type. Setup copies the matching system fonts for that display type. For information about the related system font files, see "System Fonts Sections" later in this chapter.

[display]

This section specifies information about various display devices. This is the format for entries in this section:

keyname= driver, description, resolution, 286grabber, logo code, VDD, 386grabber, ega.sys, logo data, optional section

Entry

keyname sections of SETUP.INF.

driver

description in the Change System Settings dialog box in Setup.

resolution numbers enclosed in quotes.

286grabber data exchange between Windows and non-Windows applications in standard mode.

logo code

VDD

386grabber data exchange in a virtual machine under 386 enhanced mode.

ega.sys driver needs to be installed.

logo data

optional section about the display driver.

Important Do not change description strings for drivers, because they are used during installation to make a decision to upgrade files, depending on which driver is already installed. Changing description string can cause errors in updating drivers.

Chapter 2 The Windows Setup Information Files

These optional sections in SETUP.INF define details about display drivers:

[v7vga] [8514] [tiga2] [v7d] [xgasm] [vgamono] [v7b] [v7b] [v7f] [xgalg] [tiga1] [v7c] [v7e] [xgalo] The optional sections have this format:

file, destination, ini file, section, OldEntry, NewEntry

Entry

file

destination

null. The value is 0: if the file is to be copied to the WINDOWS directory or 0:system if the file is copied to the SYSTEM subdirectory.

ini file SYSTEM.INI; this item is optional.

section

OldEntry this item is optional.

NewEntry

This example shows the default entry for the 8514 display, which is a high-resolution IBM display:

[display] 8514= 2:8514.drv, "8514/a", "100,120,120", 3:vgacolor.2gr, 2:vgalogo.lgo,2:vdd8514.386,

This is the optional section for the 8514 driver, which modifies the dpi= entry in the [8514.drv] section in SYSTEM.INI:

[8514] ,,system.ini,8514.DRV,"dpi=","dpi=120"

[.3gr] Font Sections

The 386 grabber supports copying text and graphics in a non-Windows application and translating it for Windows to use. The [vga.3gr], [vga30.3gr], [v7vga.3gr], [ega.3gr], [vgadib.3gr], [plasma.3gr], [herc.3gr], and [tiga.3gr] sections specify which font files to copy for the 386 grabber described in the section name. (The 386 grabber itself is specified in an entry for the specific display device in [display].)

Each entry in a [.3gr] section is a list of filenames for the appropriate fonts, including the installation disk number. For example, this entry specifies fonts for the 386 grabber that supports Video 7 VGA:

[V7VGA.3gr] 2:CGA40WOA.FON,2:CGA40850.FON 2:CGA80WOA.FON,2:CGA80850.FON 2:EGA40WOA.FON,5:EGA40850.FON 2:EGA80WOA.FON,2:EGA80850.FON

If code page 437 is used (the default for character support in the U.S.), then Setup copies the \*WOA.FON files. If the code page is not 437, Setup copies the \*WOA.850 files.

Keyboard and Code Page Sections

These sections specify the files for the keyboard drivers and code page support for Windows:

[keyboard.drivers] [keyboard.tables]

You might want to change these sections of SETUP.INF if you want to use a different keyboard driver, or if you want to use different foreign language support than is specified in SETUP.INF. If you change the keyboard support in these sections, you should also modify the deflang=, defxlat=, and defkeydbl= entries in the [data] section earlier in SETUP.INF.

[keyboard.drivers]

This section maps the actual keyboard driver filenames to the keyboard short names defined in [keyboard.types]:

[keyboard.drivers] kbd= 2:keyboard.drv kbdhp= 2:kbdhp.drv

[keyboard.types]

This section creates the keyboard short names used in the [machine] section. Each entry in this section also specifies whether a keyboard-specific DLL must be installed. The format for entries in this section is:

short name=description, DLL filename

Entry

short name

description System Settings dialog box in Setup.

DLL filename null.

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The standard entries for this section are:

[keyboard.types] t3s0alat= "All AT type keyboards (84 - 86 keys)" ,nodll t1s2at&t= "AT&T '301' keyboard",nodll t1s4at&t= "AT&T '302' keyboard",nodll t4s0enha= "Enhanced 101 or 102 key US and Non US keyboards" ,nodll t3s0hp1= "Hewlett-Packard Vectra keyboard (DIN)",nodll t4s40oliv= "Olivetti 101/102 A keyboard" ,nodll t1s0oliv= "Olivetti 83 key keyboard" ,nodll t3s10oliv= "Olivetti 86 Key keyboard" ,nodll t2s1oliv= "Olivetti M24 102 key keyboard" ,usadll t1s42oliv= "PC-XT 83 key keyboard" ,nodll t1s0pcxt= "PC/XT - Type keyboard (84 keys)",nodll

[keyboard.tables]

This section maps short names for DLLs to disk locations and filenames for the DLLs required by specific keyboard types. This section is useful only if you need foreign language support for Windows.

Note

[keyboard.tables] beldll= 2:kbdbe.dll, "Belgian" bridll= 2:kbduk.dll, "British" cafdll= 2:kbdfc.dll, "Canadian Multilingual" dandll= 2:kbdda.dll, "Danish" dutdll= 2:kbdne.dll, "Dutch" findll= 2:kbdfi.dll, "Finnish" fredll= 2:kbdfr.dll, "French" candll= 2:kbdca.dll, "French Canadian" gerdll= 2:kbdgr.dll, "German" icedll= 2:kbdic.dll, "Icelandic" itadll= 2:kbdit.dll, "Italian" latdll= 2:kbdla.dll, "Latin American" nordll= 2:kbdno.dll, "Norwegian" pordll= 2:kbdpo.dll, "Portuguese" spadll= 3:kbdsp.dll , "Spanish" swedll= 2:kbdsw.dll, "Swedish" swfdll= 2:kbdsf.dll, "Swiss French" swgdll= 2:kbdsg.dll, "Swiss German" nodll=, "US"

usadll= 2:kbdus.dll , "US" usddll= 2:kbddv.dll , "US-Dvorak" usxdll= 2:kbdusx.dll, "US-International"

[codepages]

Setup refers to this section when any code page other than code page 437 is installed in the system. If Setup detects another code page, it installs the correct files for the translation table and (for VGA displays) the correct OEM font.

Note

This is the format for entries in this section:

codepage = xlat table, OEM font, WOA font, description

Entry

codepage with the appearance of characters on the display.

xlat table font file with the code page.

OEM font correct OEM font.

WOA font correct font to be used by the Windows grabber.

description code page is used.

[codepages] 863= 1:xlat863.bin, 2:vga863.fon, 2:app850.fon, "Canadian-French (863)" 861= 2:xlat861.bin, 2:vga861.fon, 2:app850.fon, "Icelandic (861)" 865= 2:xlat865.bin, 2:vga865.fon, 2:app850.fon, "Nordic (865)" 850= 2:xlat850.bin, 2:vga850.fon, 2:app850.fon, "Multi-Lingual (850)" 860= 3:xlat860.bin, 2:vga860.fon, 2:app850.fon, "Portuguese (860)" 437= , , 2:dosapp.fon, "English (437)" Mouse Driver Sections

The [pointing.device], [dos.mouse.driver], and [lmouse] sections define information about the pointing device used while running Windows. If you want to use a mouse driver that is not included with Windows, you can add custom mouse driver references in these sections.

## [pointing.device]

This section provides a table of information for the pointing devices supported by Windows 3.1. This is the format for each entry in this section:

keyname= mouse driver, mouse descriptor, VMD, optional section

Entry

keyname

mouse driver disk number.

mouse descriptor appears in the Change System Settings dialog box in Setup.

#### VMD

Device support file (for using the mouse with non-Windows applications in 386 enhanced mode). If multiple VMDs are specified, they must be separated by commas and enclosed in quotes. Example: "x:\*vmd,2:1vmd.386".

optional section about a mouse driver.

The assignment of \*vmd as the VMD value indicates that this file is built into WIN386.EXE (and therefore is not a separate file on the installation disks); x: refers to the disk where WIN386.EXE is located.

[pointing.device]

hpmouse= 2:hpmouse.drv, "HP Mouse (HP-HIL)", x:\*vmd lmouse= 3:lmouse.drv, "Logitech", 2:lvmd.386, lmouse ps2mouse= 2:mouse.drv,"Microsoft, or IBM PS/2",x:\*vmd genius1= 2:mscmouse.drv,"Genius serial mouse on COM1", 1:mscvmd.386 Windows Resource Kit genius2= 2:msc3bc2.drv, "Genius serial mouse on COM2", 1:mscvmd.386 msmouse2= 2:mscmouse.drv,"Mouse Systems serial or bus mouse", 1:mscvmd.386 msmouse1= 2:msc3bc2.drv, "Mouse Systems serial mouse on COM2",1:mscvmd.386

nomouse= 2:nomouse.drv, "No mouse or other pointing device", x:\*vmd kbdmouse= 2:kbdmouse.drv,"Olivetti/AT&T Keyboard Mouse",x:\*vmd [dos.mouse.driver]

This section maps the Windows mouse driver to the appropriate MS-DOS mouse driver. Setup updates the MS-DOS mouse driver for compatibility with Windows 3.1.

[dos.mouse.drivers] mouse.sys= 4:mouse.SYS, "MS DOS Mouse driver .SYS ver 7.XX" mouse.com= 4:mouse.com, "MS DOS Mouse driver .COM ver 7.XX" mousehp.sys= 3:mousehp.SYS,"HP DOS Mouse driver .SYS ver 7.XX" mousehp.com= 3:mousehp.com,"HP DOS Mouse driver .COM ver 7.XX"

[lmouse]

This section provides data to support the Logitech MS-DOS mouse driver.

[lmouse] 2:lmouse.com,0:,,,,

Network Installation Sections

The network installation sections in SETUP.INF are in three parts:

of network drivers.

information for specific networks.

The information that you might add to customize these sections for your site could include entries for updated network drivers in the [Network\_Version] sections, or entries in the [Network\_Specific] sections to specify information for SYSTEM.INI, such as emmexclude= entries.

[network]

This section is used to associate the network keyname with the appropriate files that must be installed to support the network from within Windows.

This is the format for entries in this section:

network keyname= driver, description, HelpFile, optional file, WininiSectName, SysiniSectName, VDD, VDD, . . .

Entry

network keyname

driver

description the Change System Settings dialog box in Setup.

HelpFile

optional file

WininiSectName

SysiniSectName

VDD

Windows applications in 386 enhanced mode. Any number of filenames can be specified.

These are the standard entries for the [network] section:

[network] nonet= ,"No Network Installed" 3open= ,"3Com 3+Open" 3share= ,"3Com 3+Share" ,,,msnet\_stuff lantastic= ,"Artisoft LANtastic" banyan= ,"Banyan Vines" dlr= ,"IBM OS/2 LAN Server" pclp= ,"IBM PC LAN Program" lanman= ,"Microsoft LAN Manager" msnet= ,"Microsoft Network (or 100% compatible)", ,,,msnet\_stuff novell= ,"Novell Netware" pathworks= ,"DEC Pathworks" 10net= ,"TCS 10Net"

[Network\_Version] Sections

These sections provide information about specific network versions.

Section name

[10net.versions] [30pen.versions] [banyan.versions]

[dlr.versions] [lanman.versions] [lantastic.versions]

[novell.versions] [pathworks.versions] [pclp.versions]

The format for these sections is:

version #=description, optional files, optional sections

Entry

version #

description

optional files

optional sections

For example, this is the entry describing Microsoft LAN Manager versions:

[lanman.versions] xx000000="versions 1.X",,lmbasic 00020000="version 2.00 Basic",,lmbasic 01020000="version 2.00 Enhanced",,lmenh20 00021000="version 2.10 Basic",,lmbasic21 01021000="version 2.10 Enhanced",lanman21.drv,lmenh21nodrv,lmenh21

This entry describes additional details for five different versions of LAN Manager, including references to the [lmbasic], [lmenh20], and [lmbasic21] network-specific sections.

[Network\_Specific] Sections

These [Network\_Specific] sections specify data that Setup must add to WIN.INI or SYSTEM.INI, as indicated by the WininiSectName and SysiniSectName entries in the [network] section described earlier in this chapter.

These are the [Network\_Specific] sections in SETUP.INF:

[10net41] [lmenh20] [10net41a] [lmenh21] [10net42] [lmenh21nodrv] [10net42def] [msnet\_stuff] [10net50] [novell301] [3open1] [novell321] [ban4] [old\_pclp] [ban41] [pclp132] [ban41def] [unsupported\_net] [dec4]

This is the format for these sections:

[network keyname] ini-keyname=section, entry-keyname, value

Entry

network keyname

ini-keyname

section

entry-keyname

value

For example, this is the entry for Novell NetWare version 3.01:

```
[novell301]
warning=2
driver=2:netware.drv
vxd=x:*vnetbios,2:vnetware.386,2:vipx.386
sysdir=2:netware.hlp,2:nwpopup.exe
windir=2:ipx.obj,2:ipxodi.com,2:netx.com,2:lsl.com
windir=2:tbmi2.com
```

System Fonts Sections

Setup refers to the [sysfonts], [fixedfonts], and [oemfonts] sections to install a set of fonts to use as the system font. Setup determines the appropriate fonts to install by finding the nearest match for the display resolution defined in the [display] section. This is the format for entries in the system fonts sections:

font filename, description, resolution

These are the standard system fonts sections:

[sysfonts] 1:egasys.fon,"EGA (640x350) resolution System Font", "133,96,72" 1:vgasys.fon,"VGA (640x480) resolution System Font", "100,96,96" 1:8514sys.fon,"8514/a (1024x768) resolution System Font", "100,120,120"

1:egasys.fon,"AT&T (640x400) resolution System Font", "120,96,80"

[fixedfonts]

2:egafix.fon,"EGA (640x350) resolution Fixed System Font", "133,96,72" 1:vgafix.fon,"VGA (640x480) resolution Fixed System Font", "100,96,96" 1:8514fix.fon,"8514/a (1024x768) resolution Fixed System Font", "100,120,120" 2:egafix.fon,"AT&T (640x400) resolution Fixed System Font", "120,96,80"

[oemfonts] 1:egaoem.fon,"EGA (640x350) resolution Terminal Font (USA/Europe)", "133,96,72",1 1:vgaoem.fon,"VGA (640x480) resolution Terminal Font (USA/Europe)", "100,96,96",1 1:8514oem.fon,"8514/a (1024x768) resolution Terminal Font (USA/Europe)",

1:egaoem.fon,"AT&T (640x400) resolution Terminal Font (USA/Europe)","120,96,80",1

For more information about fonts, see "Fonts Sections" later in this chapter, and see Chapter 9, "Fonts."

**Copy-Files Sections** 

Windows Mode Setup uses these sections to identify which files to copy to the WINDOWS directory or to the SYSTEM subdirectory. Setup uses these copy-files section names to determine which groups of files to copy for the appropriate configuration of Windows:

Under each copy-files section is a set of entries in this format:

from, to

Entry

•

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from

to

directory, or 0:system to indicate the SYSTEM subdirectory.

For example, the entry 1:myfile.txt,0: copies the file MYFILE.TXT from disk #1 to the WINDOWS directory. If the [win.copy.win386] section contains an entry #pwin386,0:system, then Setup copies all files in the [pwin386] section to the SYSTEM subdirectory. If the name of an entry in any copy-files section is preceded by a "#" character, the entry refers to a group of files in a separate entry in SETUP.INF. For example, the [win.copy] section is:

[win.copy] #net, 0: #win.shell, 0: #win.other, 0:system

The #net, 0: entry indicates that Setup should copy the files listed in the [net] section into the user's WINDOWS directory. For all items in the copy-files sections, a text string, enclosed in quotes, shows the text that Setup displays to indicate which files are currently being installed.

**Basic Copy-Files Sections** 

The main copy-files sections include:

[win.other] be copied for 80286 machines.

 $\cdot$  [win.copy.net], which specifies that the files listed in [net] be copied for network setup.

[net.win386] be copied for network setup for 80386 machines..

[win.shell], [pwin386], and [win.other] be copied for 80386 machines.

The following describes the contents of the supporting copy-files sections:

files to copy for network setup:

drivers to install:

•The [win.other] entries specify various drivers, DLLs, and font files to copy, plus the Windows core files. Example:
the Windows shell. Example:

for 386 enhanced mode:

[DelFiles] and [RenFiles] Sections

These sections lists files that will be deleted or renamed when Setup upgrades Windows version 3.0 to version 3.1. You can add or remove items from these lists, using wildcards in filenames wherever appropriate. For example, some of the standard entries in these sections are:

[DelFiles]

; The first files in the list are deleted from Windows System directory (for local setup). ; Note that DelFiles section always is processed before RenFiles section. tmsr?.fon helv?.fon swapfile.exe kernel.exe

(other entries)

[RenFiles] ; Similar section but for file renaming to create .bak if needed MIDIMAP.CFG,MIDIMAP.OLD ADLIB.DRV,MSADLIB.DRV

**Copy-Files Sections for Applications** 

The entries in the [win.apps], [win.games], [win.dependents], [win.scrs], [win.bmps], and [win.readme] sections describe the Windows applications, screensaver, and README files to be copied if the user requests these files during Custom Setup. All files listed are copied in Express Setup.

For details about adding information for custom applications, see "Modifying .INF Files for Custom Installations" later in this chapter.

These sections have this format:

#:filename, description, filesize, profile string

Entry

#:filename element to be copied.

description Windows Setup dialog box for selecting applications to copy during Custom Setup.

filesize

profile string [group#] section, to determine if and how the item is added to a Program Manager group with DDE. The profile string is also used to find any needed .DLL files in the [win.dependents] section.

The end of each section contains an entry that specifies the disk space required for all the files in that section. If you add an entry to any section, you must also increment the disk space number.

The following summarizes the contents of the application copy-file sections:

help files. Example:

.

•

. Example:

Windows Resource Kit

•

audio files, and MIDI sample files. Example:

# Program Manager Groups Sections

After Setup copies files to the appropriate Windows directories, it tells Program Manager to create the groups listed in the [new.groups] or [progman.groups] section. Related [group#] sections contain entries that describe the contents of the groups that Program Manager will create.

This is the format for entries in the [new.groups.] and [progman.groups] sections:

section = Progman group, Min/Max

Entry

•

section definition.

Progman group Manager.

Min/Max when loading Windows, where 1=maximize, nothing=minimize.

For details about installing a custom group in Program Manager, see

"Modifying .INF Files for Custom Installations" later in this chapter.

[new.groups]

If you are updating Windows from 3.0 to 3.1, Setup uses the [new.groups] section instead of the [progman.groups] section.

This is the standard entry for this section:

[new.groups] group7=Main,1 group1=StartUp group2=Accessories group6=Games

[progman.groups]

This section contains a list of the Program Manager groups that are built for new installations of Windows 3.1. These are the standard entries in this section:

[progman.groups] group3=Main,1 group4=Accessories group5=Games group1=StartUp

[group#] Sections

After the Program Manager groups are created, program items are installed in the groups based on the [group#] section entries. This is the format for entries in these sections:

description, filename.exe, icon filename, icon n, profile

Entry

description below the icon in Program Manager.

filename.exe represented in the group. If filename.exe is null, the item will be deleted from the group.

icon filename

for the program item. If this is blank, the first icon in filename.exe is used.

# icon n

of the icon specified in icon filename. If this item is null, the first icon is used. If you want to use the nth icon, use the number n—1. That is, for the third icon, specify 2.

### profile

value is null, the item will always be added to the group. Otherwise, the item will only be added if it was installed with the Add/Remove Files dialog box in Custom Setup.

These are the standard entries for the [group#] sections:

[group3] "File Manager", WINFILE.EXE "Control Panel", CONTROL.EXE "Print Manager", PRINTMAN.EXE "Clipboard Viewer", CLIPBRD.EXE "MS-DOS Prompt", DOSPRMPT.PIF, PROGMAN.EXE, 9 "Windows Setup", SETUP.EXE "PIF Editor", PIFEDIT.EXE "Read Me", README.WRI,,,readme

[group4] "Write",WRITE.EXE "Paintbrush", PBRUSH.EXE,,,pbrush "Terminal",TERMINAL.EXE,,, terminal "Notepad", NOTEPAD.EXE,,, notepad "Recorder",RECORDER.EXE,,, recorder "Cardfile",CARDFILE.EXE,,, cardfile "Calendar",CALENDAR.EXE,,, calendar "Calculator", CALC.EXE,,, calc "Clock",CLOCK.EXE,,, clock "Object Packager", PACKAGER.EXE,,, packager "Character Map", CHARMAP.EXE,,, charmap "Media Player", MPLAYER.EXE,,, mplayer "Sound Recorder",SOUNDREC.EXE,,, soundrec

[group5] "Solitaire", SOL.EXE,,,sol "Minesweeper",WINMINE.EXE,,, winmine

[group1]

[group2] "Object Packager", PACKAGER.EXE,,, packager "Character Map", CHARMAP.EXE,,, charmap "Media Player", MPLAYER.EXE,,, mplayer "Sound Recorder",SOUNDREC.EXE,,, soundrec "PIF Editor" "Write",WRITE.EXE "Control Panel"

[group6] "Solitaire", SOL.EXE,,,sol Windows Resource Kit Chapter 2 The Windows Setup Information Files

"Minesweeper", WINMINE.EXE,,, winmine

[group7] "PIF Editor", PIFEDIT.EXE "Read Me" "Read Me", README.WRI,,,readme "Tutorial" Fonts Sections

The last files that Setup copies are the raster, vector, and TrueType font files, based on the resolution of the display as defined in the [display] section. Three vector fonts (ROMAN.FON, MODERN.FON, and SCRIPT.FON) are resolution independent and are installed by default.

This is the format of entries in the [fonts] section:

filename, description, resolution

Entry

filename

description Fonts dialog box in the Control Panel, plus the point sizes that are installed.

resolution represent the font aspect ratio.

For example, the entries for VGA displays in the [fonts] section are:

[fonts] (other entries) 6:SSERIFE.FON, "MS Sans Serif 8,10,12,14,18,24 (VGA res)", "100,96,96" (other entries) 6:COURE.FON, "Courier 10,12,15 (VGA res)", "100,96,96" (other entries) 6:SERIFE.FON, "MS Serif 8,10,12,14,18,24 (VGA res)", "100,96,96" (other entries) 6:SYMBOLE.FON, "Symbol 8,10,12,14,18,24 (VGA res)", "100,96,96" (other entries) 6:SMALLE.FON, "Small (VGA res)", "100,96,96"

This is the format for entries in the [ttfonts] section:

font header file, description, font file, fontfamily/flags

Entry

font header file Windows Resource Kit description dialog box. The first letter of each word in the string needs to be capitalized.

font file

fontfamily/flags normal-weight font, 0100 is a bold font, and 1000 is an italic font. The fontfamily/flag value must be enclosed in quotes. These are the entries for the [ttfonts] section:

[ttfonts]
5:ARIAL.FOT, "Arial (TrueType)", 5:arial.ttf, ""
5:ARIALBD.FOT, "Arial Bold (TrueType)", 5:arialbd.ttf, "Arial0100"
5:ARIALBI.FOT, "Arial Bold Italic (TrueType)", 5:arialbi.ttf,
"Arial1100"
5:ARIALI.FOT, "Arial Italic (TrueType)", 5:ariali.ttf, "Arial1000"
5:COUR.FOT, "Courier New (TrueType)", 5:cour.ttf, ""
5:COURBD.FOT, "Courier New Bold (TrueType)", 5:courbd.ttf,
"Courier0100"
5:COURBI.FOT, "Courier New Bold Italic (TrueType)", 5:courbi.ttf,
"Courier1100"
5:COURBI.FOT, "Courier New Italic (TrueType)", 5:couri.ttf,
"Courier100"
5:COURI.FOT, "Courier New Italic (TrueType)", 4:times.ttf, ""
3:TIMES.FOT, "Times New Roman (TrueType)", 4:times.ttf, ""

3:TIMESBI.FOT, "Times New Roman Bold Italic (TrueType)", 4:timesbi.ttf,

4:TIMESI.FOT, "Times New Roman Italic (TrueType)", 4:timesi.ttf, "Times New Roman1000" 5:SYMBOL.FOT, "Symbol (TrueType)", 5:symbol.ttf, ""

Incompatible Driver Sections

### W

Setup checks these sections in SETUP.INF for names of incompatible drivers and TSRs: [compatibility], [incompTSR1], [incompTSR2], and [block\_devices]. You can add to the lists of drivers and TSRs in any of these sections.

Some manufacturers are updating their drivers for compatibility with Windows 3.1. To determine whether you have the latest version of a driver, check with the driver manufacturer.

If Setup finds a command in the CONFIG.SYS file that loads any of the files listed in [compatibility], it removes the command and leaves a blank line. You can reinstall these files at a later time.

Setup checks three other sections: [incompTSR1], [incompTSR2], and [block\_devices]. The TSRs and drivers listed in [incompTSR1] prevent Setup from running and should be removed from memory and from Windows Resource Kit

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AUTOEXEC.BAT and CONFIG.SYS before running Setup. The TSRs and device drivers listed in [incompTSR2] can cause problems if they are running during Setup or when you start Windows. The block devices listed in the [block\_devices] section are not compatible with Windows 3.1.

#### Note

the information in the Readme file in your Windows package. Microsoft will update the entries in the incompatible driver sections when new information is known about these and other programs. For more information about these TSRs and Setup, see "Troubleshooting TSRs During Setup" in Chapter 13, "Troubleshooting Windows 3.1."

Miscellaneous Sections

Several sections provide information about files to update and translate filenames for OEM installation disks.

[installable.drivers]

This section specifies drivers that can be installed for multimedia Windows, including drivers for MIDI, sequencers, waveform audio, SoundBlaster boards, and device timers. The format for entries in this section is:

keyname= filename, types, description, VxDs, default parameters

Entry

keyname

filename

types

description

VxDs

default parameters

The standard entries for this section are:

[installable.drivers]

```
adlib= 3:adlib.drv,"MIDI","Ad Lib",4:vadlibd.386,
lapc1= 3:mpu401.drv,"MIDI","Roland LAPC1",,
midimapper= 4:midimap.drv,"MidiMapper","MIDI Mapper",,
mpu401= 3:mpu401.drv,"MIDI","Roland MPU401",,
sequencer= 4:mciseq.drv,"Sequencer","[MCI] MIDI Sequencer",,
soundblaster= 3:sndblst.drv,"Wave,MIDI","Creative Labs Sound Blaster
1.0",
```

soundblaster2= 3:sndblst2.drv,"Wave,MIDI","Creative Labs Sound Blaster
1.5",

timer= 5:timer.drv,"Timer","Timer",5:vtdapi.386, thunder= 3:sndblst2.drv,"Wave,MIDI","Media Vision Thunder Board",3:vsbd.386,,adlib wave= 4:mciwave.drv,"WaveAudio","[MCI] Sound",,"4"

[translate]

This section specifies translated OEM filenames, with their installation disk filenames and locations. Some examples of entries in this section include:

[translate] WinDiskName=25,"Microsoft Windows 3.0 Disk" WinDiskName=14,"Windows Disk #" \*vddvga=2:vddvga30.386 cti.lgo=2:herclogo.lgo herclogo.rle=1:herclogo.rle vddega=2:vddega.386 vgacolor.gr2=3:vgacolor.2gr vgalogo.lgo=2:vgalogo.lgo vgalogo.rle=2:vgalogo.lgo rgdi.rle=2:vgalogo.rle rgdi.lgo=2:vgalogo.rle vga.gr3=1:vga30.3gr (other entries for font, keyboard, DLL, and code page filename translations)

[update.files]

This section describes installable drivers to be updated if earlier versions of the files are found on the user's hard disk. The format for this section is:

location, filename

Entry

location WINDOWS directory, or 0:system to indicate the SYSTEM subdirectory.

filename

These are the standard entries for this section:

[update.files] 0:system,3:sndblst.drv 0:system,3:sndblst2.drv 0:system,3:adlib.drv 0:system,3:mpu401.drv 0:system,5:vtdapi.386 0:system,3:vsbd.386 0:system,4:vadlibd.386

Setup uses the [Update.Dependents] section to update dependents of files listed in [Update.Files]. These are the standard entries for this section:

[Update.Dependents] msadlib.drv = 4:vadlibd.386 sndblst.drv = 4:vsbd.386 sndblst2.drv = 4:vsbd.386

[ini.upd.patches]

This section is used by MS-DOS Mode Setup and Windows Mode Setup to temporarily rename profile strings for .INI entries during Setup if the original profile string exists in the .INI file and has a value defined. The format for this section is:

ini file, section, temporary profile, original profile

Entry

ini file

section

temporary profile

original profile

These are example entries for this section:

[ini.upd.patches]
system.ini, Boot, "olddrivers" ,"drivers"
win.ini, Desktop, "oldwallpaper" ,"wallpaper"
system.ini, Boot, "oldtaskman" ,"taskman.exe"

[blowaway]

This section marks the end of the installation information and the beginning of the configuration sections. This section tells Windows Mode Setup where to stop reading the SETUP.INF file, because Windows Mode Setup does not need this information.

[ini.upd.31]

This section tells Setup which lines in SYSTEM.INI and WIN.INI are to be replaced with new values in the upgrade from Windows version 3.0 to version 3.1. This is the format for entries in this section:

ini file, section, OldEntry, NewEntry

Entry

138

ini file

section

OldEntry null, Setup assumes that the NewEntry is to be added.

NewEntry

Some of the entries in this section include:

[ini.upd.31]

system.ini, 386Enh, "keyboard=bpvkd.386", "keyboard=\*vkd" system.ini, 386Enh, "device=vpicda.386", "device=\*vpicd" system.ini, 386Enh, "device=\*vhd", "device=\*blockdev" system.ini, 386Enh, "device=\*vpd", system.ini, 386Enh, , "device=\*pagefile" win.ini , FontSubstitutes, , "Helv=MS Sans Serif" win.ini , FontSubstitutes, , "Tms Rmn=MS Serif" win.ini , FontSubstitutes, , "Courier=Courier New" win.ini , FontSubstitutes, , "Times=Times New Roman" win.ini , FontSubstitutes, , "Helvetica=Arial" (other entries for fonts that have been replaced or removed for Windows 3.1)

System Configuration Sections

These sections provide information for installing appropriate system files for various machines.

[system]

The [system] section is used to map system short names used in the [machine] section to the appropriate system files. This section lists drivers that are selected only by the [machine] settings; these drivers can vary from system to system, and do not have special selections in the Setup menus:

[system] system= 2:system.drv sound= 1:mmsound.drv comm= 1:comm.drv hpsystem= 2:hpsystem.drv

[machine]

This section is used by Setup to install the appropriate system files for various machines. Most machines use the "MS-DOS System" option, but some specific original equipment manufacturers (OEMs) need special drivers or specific switches to be set in the SYSTEM.INI file for compatibility.

A system description for each entry in [machine] appears in the System Settings list in Setup. An asterisk (\*) in the menu means that Setup will use the device specified in this section, overriding the description of the detected device for keyboards, mouse drivers, displays, and other elements. This is the format for the entries in this section:

keyname= description, system drv, kbd drv, kbd type, mouse drv, disp drv, sound drv, comm drv, himem switch, ebios, Cookz

Entry

keyname

description appear in the system-description dialog box in Setup.

system drv

kbd drv [keyboard.drivers].

kbd type [keyboard.types].

mouse drv [pointing.device].

disp drv [display].

sound drv

comm drv

himem switch allows HIMEM.SYS to access extended memory. For a list of these numbers, see Chapter 13, "Troubleshooting Windows 3.1."

ebios

### Cookz

that contains information for modifying entries in the .INI files, usually to define [386enh] entries in SYSTEM.INI.

Important Do not change the order of entries in the [machine] section.

The list of drivers in [machine] is a default list. If Setup detects a different

display adapter than the type listed for the machine, the detected display driver will be installed.

For example, this shows the first three entries in the [machine] section:

[machine] ibm\_compatible= "MS-DOS System",system,kbd,t4s0enha,nomouse,egahires,

ast\_386\_486= "AST: all 80386 and 80486 based machines", system, kbd,

at\_and\_t= "AT&T PC",system,kbd,t4s0enha,nomouse,!
olibw,sound,comm,,ebios,
(other entries)

These are the default [Cookz] specified in [machine] entries:

[apm\_cookz] [everex\_cookz] [nec\_pm\_cookz] [apm\_sl\_cookz] [ibml40\_cookz] [t5200\_cookz] [ast\_cookz] [ncr386sx\_cookz] [zen386\_cookz]

The entries in the [Cookz] sections have this format:

ini file, section, cookie, needed file

Entry

ini file

section

cookie

needed file

For example, this [Cookz] section for the AST system specifies that the entry emmexclude=E000-EFFF should be added to the [386enh] section of SYSTEM.INI:

[ast\_cookz] system.ini,386enh,"emmexclude=E000-EFFF",

The [Cookz] section for MS-DOS systems with Advanced Power Management (APM) defines special drivers to be copied plus SYSTEM.INI additions:

[apm\_cookz] specialdriver,,,5:power.drv system.ini,386enh,"device=vpowerd.386",5:vpowerd.386 ,,,5:power.hlp

[special\_adapter]

This section is used by MS-DOS Mode Setup to provide support for special adapters that require additional files or other changes to the standard Windows installation. For example, for the EtherLink MC adapter, the entry DMABufferSize=32 is placed in the [386enh] section of SYSTEM.INI.

The default entries in [special\_adapter] are:

[special\_adapter] eitherlink= DMAbuffersize,32 cdrom= 2:lanman10.386

[ebios]

This section is used by the [machine] section to indicate which files are copied for extended BIOS support on the specific configuration. EBIOS means Extended Basic Input/Output System.

[ebios] ebios= x:\*ebios hpebios= 2:hpebios.386,x:\*ebios

[language]

Setup uses this section to install the language libraries that come with Windows. A language DLL must be installed for systems needing language support other than U.S. English. Each entry in this section has this format:

keyname=language DLL, DLL description, language ID

Entry

keyname

language DLL installation disk number.

DLL description the language in Control Panel.

language ID

The default entries for this section are:

[language] dan= 2:langsca.dll, "Danish",1030 nld= 2:langdut.dll, "Dutch" ,1043 enu=, "English (American)" ,1033 eng= 2:langeng.dll, "English (International)" ,2057 fin= 2:langsca.dll, "Finnish",1035 fra= 2:langfrn.dll, "French",1036 frc= 2:langeng.dll, "French Canadian" ,3084 deu= 2:langger.dll, "German",1031 isl= 2:langsca.dll, "Icelandic",1039 ita= 2:langeng.dll, "Italian",1040 nor= 2:langsca.dll, "Norwegian",1044 ptg= 2:langeng.dll, "Portuguese" ,2070 esp= 2:langspa.dll, "Spanish (Classic)" ,1034 esn= 2:langeng.dll, "Spanish (Modern)",3082 sve= 2:langsca.dll, "Swedish" ,1053

Note

APPS.INF: The Application Installation Information File

### W

Windows installation. The APPS.INF file contains information in these basic sections:

Applications dialog box.

specifies settings for COMMAND.COM.

when it runs under 386 enhanced mode Windows.

Existing Applications stage of installation. This section is described later in this section.

sections define information for optimizing PIFs. This section is described later in this section.

If you have a custom PIF you want to install for multiple systems, or if you want to tailor application setup in other ways, you can change entries in APPS.INF.

#### Note

conflicts in setting up PIFs for applications that use the same executable filename.

### [dontfind]

This section is used when Setup is searching the hard disk for Windows applications. The entries in this section are overlooked by Setup, and these items are not placed in the Program Manager Applications Group. This prevents Setup from creating duplicate copies of standard Windows applications.

Some of the files in the [dontfind] section are listed in the following table. Check SETUP.INF in your system for the most up-to-date list. Filenames

APM.EXE **PRINTMAN.EXE** CALC.EXE **PROGMAN.EXE** CALENDAR.EXE QT.EXE CARDFILE.EXE **RCPPW.EXE** CHARMAP.EXE **RCW.EXE** CLIPBRD.EXE **RECORDER.EXE** CLOCK.EXE **REGEDIT.EXE** CONTROL.EXE **REGLOAD.EXE** CVPACKW.EXE **REVERSI.EXE** DDESPY.EXE SDKPAINT.EXE **DEWPROJ.EXE** SETUP.EXE DIALOG.EXE SHAKER.EXE DLGEDIT.EXE SHED.EXE DRWATSON.EXE SOL.EXE EQNEDIT.EXE SOUNDREC.EXE FONTEDIT.EXE SPOOLER.EXE FTP.EXE SPY.EXE **GRAPH.EXE** STRESS.EXE **GRAFLINK.EXE** SWAPFILE.EXE HEAPWALK.EXE SYSEDIT.EXE

# [pif]

# W

APPS.INF (rather than a subset of options in SETUP.INF, as in earlier versions of Windows). Several related sections also appear in APPS.INF, the details of which are described below.

A PIF is always created for any non-Windows application when you install it to run under Windows, and a program item is added to the Applications group in Program Manager. You can add PIFs during Setup by specifying the disk location of a custom PIF in a [win\_copyFile] section in SETUP.INF, or by letting Setup create a PIF from custom entries in APPS.INF.

For a list of the applications for which PIF information is included in APPS.INF, see "Applications with PIF Data in APPS.INF" in Chapter 7, "Setting Up Non-Windows Applications," in the Windows Resource Kit.

exe file= pif name, window title, startup directory, close-window flag, icon filename, icon n, standard pif, 386 pif, ambiguous exe, optimized pifs

Entry

exe file

pif name

window title bar.

startup directory application starts.

#### close-window flag

is automatically closed when the user quits the application. The value is cwe if the application window should be closed on exit; the value is null if the window should not be closed on exit.

icon filename default is PROGMAN.EXE; in Windows 3.1, many PIFs list icons from MORICONS.DLL.

icon n

standard pif standard mode; the default is [std\_dflt].

386 pif enhanced mode; the default is [enha\_dflt].

ambiguous exe executable filename specified in exe file.

optimized pifs settings.

Important The list in [pif] must remain in alphabetical order by executable filename.

These are the entries for [std\_dflt] and [enha\_dflt], which specify the

values for the default standard mode and 386 enhanced mode PIFs:

[std dflt] ; Default is a text mode application that does not directly modify COM ports. ; Other possible options are given for reference. ; (or) means the entry corresponds to a radio button group minconvmem= 128 videomode= txt xmsmem= 0,0 checkboxes= [enha dflt] ; Other possible options are given for reference. ; (or) means entry corresponds to radio button group convmem= 128,640 emsmem= 0,1024 xmsmem= 0,1024 dispusage= fs execflags=; bgd, exc multaskopt= 50,100 procmemflags= dit,hma dispoptvideo= txt dispoptports= hgr dispflags= emt otheroptions= afp

The options for [std\_\*] and [enha\_\*] entries are the same kinds of settings you make in the PIF Editor dialog boxes for standard and 386 enhanced mode.

The following example shows the basic [pif] entry for an application that uses LEARN.EXE as the executable filename:

LEARN.EXE= LEARN ,"Learning Microsoft Works",,cwe,moricons.dll,5,

These are the optimized pifs sections for Learning Microsoft Works:

;Learning Works (LEARN.EXE) [std\_LEARN] minconvmem= 185 videomode= gra xmsmem= 0,1024 checkboxes= kbd,pps

[enha\_LEARN] dispoptvideo= hgr convmem= 185,520 emsmem= 0,4096 xmsmem= 0,4096 dispusage= win execflags= exc procmemflags= hma dispoptports= dispflags= emt,rvm

When you choose to have Setup install other applications to run under Windows, Setup displays a list of applications that use the same exe file so that you can choose which application you want to install. For example, these are the default ambiguous exe entries in APPS.INF for other applications besides Microsoft Works that use LEARN.EXE as the exe file:

[amb\_learn] ;MS quick pascal, learning works, learning word (LEARN.EXE) LEARN.EXE= LEARN ,"MS Quick Pascal Express 1.0",,cwe,moricons.dll,5,

LEARN.EXE= LEARN ,"Learning Microsoft Word 5.0",,cwe,moricons.dll,5,

LEARN.EXE= LEARN ,"Learning Microsoft Word 5.5 ",,cwe,moricons.dll,5,

And, as an example, these are the optimized pifs sections for Learning Microsoft Word 5.5:

[std\_LEARN55] minconvmem= 180 videomode= gra

[enha\_LEARN55] dispoptvideo= hgr convmem= 180,195 emsmem= 0,0 xmsmem= 0,0 dispoptports=

You might want to include custom entries in APPS.INF if, for example, you want to use different PIFs for the same application. During Setup, users would be prompted to specify which PIF to install. This example adds PIF information for a custom application and uses a custom optimized pif section:

XYZAPP.EXE= xyzapp,"XYZ - Example APP",C:\ XYZAPP,cwe,moricons.dll,25, [opt\_XYZ] XYZAPP.EXE= xyzapp2,"XYZ - Enhanced",C:\ XYZAPP,cwe,moricons.dll,27,,enha\_XYZ2,

[enha\_XYZ2] minconvmem= 204 videomode= gra xmsmem= 320,1024 dispoptports= txt

# Note

you attempt to edit APPS.INF to incorporate new standard settings. For details, see Chapter 8, "PIFS and PIF Editor."

CONTROL.INF: The Control Panel Information File

# W

.

during setup to install printer drivers and to provide international support. The three sections are:

printer drivers.

Printer Driver Sections

The [io.device] and [io.dependent] sections provide information about printer drivers. If you want to install a printer driver during Setup other than a driver that is supplied with Windows, add references in these two sections.

A custom printer driver might be able to use the fonts already installed in Windows, or it might require additional files to be installed with it and specified in the [sysfonts], [fixedfonts], and [oemfonts] sections of SETUP.INF.

[io.device]

This section lists all of the supported printers for Windows 3.1. This section is used by Control Panel to install printer support. This is the format for each entry in this section:

filename, description, scaling string, scaling string

Entry

filename

description and that is used in WIN.INI.

scaling string scaling for the device.

A driver can have more than one entry in [io.device] to specify settings that correspond to different printers.
Some of the entries in this section include:

[io.device]

6:TTY.DRV,"Generic / Text Only","DEVICESPECIFIC" 6:HPPCL.DRV,6:unidrv.dll,"Agfa Compugraphic Genics","DEVICESPECIFIC" 6:pscript.DRV,"Apple LaserWriter II NTX","DEVICESPECIFIC" 6:HPPCL.DRV,6:unidrv.dll,"Apricot Laser","DEVICESPECIFIC" 6:HPPLOT.DRV,"AT&T 435","CONTINUOUSSCALING" 6:CITOH.DRV,6:unidrv.dll,"AT&T 470/475","DEVICESPECIFIC" 6:EPSON9.DRV,6:unidrv.dll,"Epson DFX-5000","DEVICESPECIFIC" 6:HPPCL.DRV,6:unidrv.dll,"HP LaserJet IID","DEVICESPECIFIC" (other entries)

[io.dependent]

Control Panel checks this section to see if the printer driver requires other files to be copied to the SYSTEM subdirectory. The files to be copied might be soft font installers, font files, help files, or other support for the printer. This is the format for each entry in this section:

driver filename, files to be copied with the driver

The default entries in this section are:

[io.dependent] pscript.drv = 6:pscript.hlp, 6:testps.txt tty.drv = 6:tty.hlp ibm4019.drv = 6:sf4019.exe lbpiii.drv = 6:can adf.exe lbpII.drv = 6:can\_adf.exe pg306.drv = 6:sfinst.exe hppcl.drv = 6:finstall.dll, 6:finstall.hlp, 6:unidrv.hlp hpdskjet.drv = 6:finstall.dll, 6:finstall.hlp, 6:unidrv.hlp hppcl5a.drv = 6:finstall.dll, 6:finstall.hlp, 6:hppcl5a.hlp, 6:hppcl5op.hlp paintjet.drv = 6:dmcolor.dll, 6:unidrv.hlp thinkjet.drv = 6:unidrv.hlp canon130.drv = 6:unidrv.hlp canon10e.drv = 6:unidrv.hlp epson9.drv = 6:dmcolor.dll, 6:unidrv.hlp epson24.drv = 6:dmcolor.dll, 6:unidrv.hlp escp2.drv = 6:unidrv.hlp fuji9.drv = 6:dmcolor.dll, 6:unidrv.hlp

```
fuji24.drv = 6:dmcolor.dll, 6:unidrv.hlp
ibmcolor.drv = 6:dmcolor.dll
oki9.drv = 6:unidrv.hlp
oki9ibm.drv = 6:unidrv.hlp
oki24.drv = 6:dmcolor.dll, 6:unidrv.hlp
nec24pin.drv = 6:dmcolor.dll, 6:unidrv.hlp
panson24.drv = 6:dmcolor.dll, 6:unidrv.hlp
proprint.drv = 6:unidrv.hlp
proprint.drv = 6:unidrv.hlp
```

[country]

This section is used by Control Panel for international formats. We recommend that you only make international modifications by choosing the Country icon in the Control Panel.

For example, these are the two entries for Canada. The "!" symbol is a field delimiter.

"Canada (English)", "2!1!0!2!1!1!0!2!1!1!!\$!,!.!/!:!,!dd/MM/yy!MMMM d, yyyy!ENG" "Canada (French)", "2!2!3!2!1!1!0!2!8!1!!!\$! !,!/!:!;!yy-MM-dd!d MMMM, yyyy!FRC"

The [country] section contains entries for these countries:

Australia Spain Austria Sweden Belgium (Dutch) Switzerland (French)

Belgium (French) Switzerland (German) Brazil Switzerland (Italian) Canada (English) Taiwan

Canada (French) United Kingdom Denmark

United States Finland Other Country France

Modifying .INF Files for Custom Installations

You can create custom Windows installations for multiple systems by changing entries in the Setup information files to modify the following:

workstations.

•

. .

This section summarizes the activities related to modifying the .INF files for custom installations.

Modifying .INF Files to Install Custom Windows

If you want the users at your site to run a customized version of Windows, you can modify the SETUP.INF file before setting up Windows for the workstations.

You can change default Program Manager groups, create other groups, and add applications to these groups. You should only modify SETUP.INF if you want to set up a customized Windows desktop; you do not need to modify this file if you want the default Windows configuration.

Removing Hardware Devices from Lists in Setup

During Setup, users might be required to specify hardware devices from a list of supported devices. For example, when setting up a printer, the user is presented with a list of printers. The user must know what kind of printer the system is connected to and select that printer from the list. Users might also have to select their particular display, pointing device, network, or other hardware devices.

You can remove from these lists any devices that your users do not have by modifying the SETUP.INF and CONTROL.INF files. Be careful not to remove a device that a user might have, because this might cause the Setup program to run incorrectly.

To remove a printer from the list of printers:

1.

2.

printers you do not want to display in the Setup lists.

To remove other hardware devices from the lists in Setup:

to display in the Setup lists.

[network], [machine], and [pointing.device].

If you remove an entry from SETUP.INF or CONTROL.INF, the entry will not appear when users install a printer from Control Panel or change system settings by running Setup from within Windows. Windows Resource Kit Chapter 2 The Windows Setup Information Files

Specifying Windows Applications to Install

You can create a custom list of Windows applications, bitmaps, and screensavers to be installed with Windows if you want to restrict or customize the installation for multiple systems. To do this, add or remove entries in the [win.apps], [win.dependents], [win.games], [win.scrs], and [win.bmps] sections of SETUP.INF.

Forcing the Network Setup Option

If you want to make sure that users set up a shared copy of Windows (the setup /n option), you can modify SETUP.INF so that even if the user types setup without the /n option, the Setup program installs a shared copy of Windows on the workstation.

To do this, make sure netsetup=true in the [data] section of SETUP.INF. The default entry is netsetup=false, which allows users to run any of the Setup options.

Modifying .INF Files to Install Custom Applications

If you want Windows to install a custom application for multiple systems, you can make changes in .INF files to install the application during Setup.

The examples in the following discussion show the steps for installing a custom application, QB.EXE, with its help file and PIF.

Copying Additional Files to a User's Directory

If you want the application files to be copied to the user's WINDOWS directory during Setup, you can specify additional files to copy during Setup in the [net] section of SETUP.INF for network setup, or specify files in [win.copy] to copy for stand-alone systems.

The files you want to copy must be either on a floppy disk or in the same directory as the Windows files on the network server. If the files are on a floppy disk, you must first assign a disk number in the [disks] section of SETUP.INF and then specify that disk number in the [net] or [win.copy] sections.

To specify an additional disk that Setup can prompt for:

number, path of the disk, name of the disk, and disk tag (used to determine if the disk is in the drive). Example:

The disk number refers to the Windows Setup disk where the file is located. Make sure the values for the disk name and disk tag items in the [disks] entry match the actual disk label and volume name.

To copy additional files to a user's system:

1.

SETUP.INF for the files that Setup should copy. Or add a reference in one of these sections to an optional [win\_copyFiles] section.

WINDOWS directory.

subdirectory, you might change the [win.net] section as follows:

; files are specified in [custom.apps]

2.

[win.copy], add that section to SETUP.INF with a list of the files to copy. For each file you want to copy, include a disk number, a colon, the filename, and a description (optional).

If the files are on the network, you can specify any disk number; the number will be ignored, but you must still specify a number. If the files are on a floppy disk, use the number specified in the [disks] section.

and help file, the [custom.apps] section should contain these entries:

3.

to the [win.dependents] section to install the DLL file. Example:

Adding Custom Groups to Program Manager

You can edit SETUP.INF to change the content of the default Program Manager groups or to add your own custom groups. You should only modify SETUP.INF for this purpose if you want to create a custom Windows desktop for multiple systems. Otherwise, individual users can use the menu commands in Program Manager to customize their personal desktops.

If this SETUP.INF file will be used both for updating and for new installations, add the group to both the [program.groups] and the [new.groups] sections.

To add an application to a Program Manager group:

1. SETUP.INF to install a custom Program Manager group. Example:

[new.groups]

(other entries)

group9=QBlibbet

## 2.

describes the program item.

then the application filename and icon information. If the application is not in the WINDOWS directory, include the path. Example:

This example specifies the icon extraction file as MORICONS.DLL, a file

A custom group for your application will be created in Program Manager, with a program item in that group, when the other Program Manager groups are installed during Setup.

If the application is on a network, make sure each user has access to the appropriate network drive. After Setup, you might also want to specify a working directory for user files so that personal files don't remain in the shared application directory. You or a user can specify a working directory by modifying the Program Item Properties in Program Manager. For details, see Chapter 3, "Program Manager," in the Windows User's Guide.

Adding Custom PIF Information in APPS.INF

If your custom application uses the same executable filename as other applications listed in the [pif] section in APPS.INF, add entries in that file to define specific information about your application.

To add custom PIF information in APPS.INF:

1.

2. application. Example:

Blibbet",,cwe,moricons.dll,24,std\_QB1,enha\_QB1

3. information. Example: