

Release Notes

Windows Millennium Edition Beta 3

April 2000

Please read this document carefully. Its purpose is to help you test new and updated features and their functionality in the Beta 3 release of the Microsoft® Windows® Millennium Edition operating system, referred to as Windows Me throughout this document. This document contains technical application notes and known issues for these features. However, it is not a complete documentation of all Windows Me Beta 3 features. To get the most up-to-date version of this document, go to <http://winbeta.microsoft.com> and click **Documentation**.

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Before You Start

It is recommended that you back up any important existing data and programs before you install or run Windows Me Beta 3. You should also disable or uninstall any antivirus utilities you may have running before you install Beta 3.

System Requirements

The system requirements for Windows Me Beta 3 are listed below. Before you install Beta 3, make sure your computer meets the following minimum system requirements:

- .. Pentium® or equivalent, 150 MHz or higher processor.
- .. 32 MB of RAM. (More memory improves performance.)
- .. Adequate free hard-disk space. A typical installation requires 500 MB to 575 MB, but can range between 460 MB and 675 MB, depending on your system configuration and the options you choose to install.
- .. VGA or higher resolution monitor.
- .. CD-ROM or DVD-ROM drive.
- .. Microsoft Mouse or compatible pointing device.

Certain features have additional requirements:

- .. For Internet access, 14,400 modem or fax modem and a service provider, such as MSN. (The service provider may charge a fee.)
- .. For sound, a sound card and speakers; or headphones; or USB speakers (requires a computer with USB support).
- .. For DVD Video, a DVD-ROM drive and compatible DVD decoder card (or DVD decoder software).
- .. For broadcast reception, a Pentium® processor and compatible TV tuner card. (Reception depends on availability of broadcast sources within your area.)

For Windows Movie Maker, the following hardware and software are required:

- Processor: 300-megahertz (MHz) Pentium II or equivalent
- RAM: 64 megabytes (MB)
- Storage: 2 gigabytes (GB) of free hard-disk space for video capture
- Audio: An audio capture device
- Video: A video capture device
- E-mail: An Internet connection and an e-mail application

For Windows Media Player, the following software is recommended:

- Processor: 266-megahertz (MHz) Pentium II or equivalent
- RAM: 64 megabytes (MB)
- SVGA monitor

To use Windows Media Player with a portable music device, either:

(a) Microsoft Windows CE-based Palm-size and Pocket PCs

Minimum requirements:

- ActiveSync 3.0 or higher
- Microsoft Windows CE version 2.11 or greater
- Windows Media Player for Palm-size PC

or

(b) CompactFlash readers and media

Setup

To enhance the Windows Me Setup process and eliminate some common user issues, Setup keeps a local cache of needed files on your computer. These files are copied to the Windows\Options\Install folder during the initial file copy. This also enables you to add optional components and drivers seamlessly without having to be prompted for the installation media.

Software Expiration

This Beta 3 software has an expiration date. As the expiration date approaches, a message will notify you that the software is going to expire. This message appears each time you start the program, but normal operation is not affected until the actual expiration date. However, normal operation can be affected if you accidentally set your system calendar beyond 06/01/00 and then start Windows Me.

Important: Do not set the date beyond 08/15/00. Doing so may make your computer unusable.

System warning date: 06/01/00

System expiration date: 08/15/00

General Information

Welcome to the Release Notes for Microsoft Windows Millennium Edition Beta 3. As the next step in the evolution of Microsoft Windows consumer operating systems, Windows Me is designed to enhance and simplify computer use for home users. Windows Me makes it easier for home users to:

- Set up a computer quickly and connect to the Internet.
- Share information with others on a home network.
- Maintain the health of a computer.

What's New?

Windows Media Player

Accessibility

This release of Windows Media Player has limited keyboard accessibility. These issues will be addressed in the final release.

Skin Chooser

In this release of Windows Media Player, you can customize the look of your player by changing its "skin." This feature is currently *not* supported when you are also using the Windows Input Method Editor (IME) that comes with Far East versions of Windows.

Media Library

You can use this release of Windows Media Player to generate a database of all of your audio and video content. For the final release of Windows Media Player, you may have to regenerate that database and recreate your custom playlists. This can be done easily by searching your hard drive for your content. To regenerate the database, in Windows Media Player, click the **Tools** menu, and then click **Search Computer for Media**.

Portable Device

This release of Windows Media Player works with the following devices:

Microsoft Windows CE-based palm-size and pocket PCs

Minimum requirements:

ActiveSync 3.0 or higher

Microsoft Windows CE version 2.11 or greater

Windows Media Player for Palm-size PC

- CompactFlash readers
- Iomega drives (Zip, Jaz, Klik!)

Note: If the device does not appear in the Windows Media Player portable device pane, make sure all devices are properly installed and media is present in *all* connected devices.

Additional devices will be supported with the final release of Windows Media Player 7.

Windows Rights Manager

Microsoft is very concerned about your privacy. The following sections explain how your information is being used by the Restore and Security Upgrade (Individualization). It is our intent to keep any personal information confidential; we will not share your unique information outside of Microsoft.

Restore Service:

In order to allow for a restore service, Microsoft and our partners (record labels, players, video labels, and many others) worked to develop a restore schema. The goal of this service is to grant users permission to restore and move digital media licenses between personal computers for legitimate use.

This service allows for a limited number of license transactions. When you restore your licenses, you are sending some information to Microsoft that uniquely identifies your computer for internal tracking purposes. We store this unique identifier in a database and keep track of the number of times you attempt to restore. Note that we do not share this unique information with any other services either internal or external to Microsoft. You also are sending some encryption information that enables us to give you a key to restore your old licenses to the new computer (or to the same computer that has either re-installed the operating system or changed some hardware component).

None of the encryption information is stored permanently. In the event that you exceed the limits of our restore schema, you will be asked to enter some additional personal information. This personal information will not be shared outside of Microsoft. Your unique information (both the unique identifier and possibly the personal information) will be transported and stored in a secure environment that protects against unauthorized access, data corruption or loss, and unwanted use or distribution. Microsoft reserves the right to consolidate the information for reporting to help ensure we have adequate service to meet the demands and security for the restore service.

Security Upgrade (Individualization):

In order to use content with a higher security rating, some vendors are requiring that you upgrade your security components in the Windows Rights System. Microsoft provides this service, and no unique information is shared with the content providers or any third parties.

When you upgrade your security level, you are sending some information to Microsoft that uniquely identifies your computer for internal tracking purposes; this also includes some security files. We store this unique identifier in a database and keep track of the number of times you attempt to upgrade your security. We do not share this unique information with any other services either internal or external to Microsoft. We also keep track of which security files were downloaded to the computer. This information is not used to identify the user of the computer, but to help Microsoft prevent security breaches that could affect legitimate users. Your unique information will be transported and stored in a secure environment that protects against unauthorized access, data corruption or loss, and unwanted use or distribution. Microsoft reserves the right to consolidate the information for reporting to help ensure we have adequate service to meet the demands and security for the Security Upgrade (Individualization) service.

Note: Please file your Windows Media Player bug reports under Multimedia with WMPlayer in the title with the error or summary of the behavior experienced.

Task Scheduler Behavior

There is no longer an icon for the Task Scheduler on the taskbar (next to the clock). If you would like to turn on the taskbar icon, set the following registry key:

HKLM\Software\Microsoft\Plus!\System Agent

"EnableTrayIcon" dword=0x00000001

To open the Scheduled Tasks folder, click **Start**, point to **Programs**, point to **Accessories**, point to **System Tools**, and then click **Scheduled Tasks**.

Universal Plug and Play

Universal Plug and Play (UPnP) defines an architectural framework for creating self-configuring, self-describing devices and services. It enables seamless connectivity and communication between Windows Me and intelligent appliances in the home, office, and everywhere in between. Plug a UPnP device into your home network and your Windows Me computer will immediately discover it, display it in the My Network Places folder, and allow easy Web-based control.

How do I install it?

UPnP is installed as an optional component during Windows Me Setup. Simply select Universal Plug and Play in the Communications component of Windows Setup in Control Panel (Add/Remove Programs).

Windows Script 5.5 Release Notes:

Beta 3 of Windows Me contains updated versions of Microsoft JScript and VBScript. JScript 5.5 is compliant with the new ECMAScript Edition 3 standard, with some minor differences to preserve backwards compatibility. VBScript 5.5 has improved support for Regular Expressions, although the object model for accessing submatches has changed since Beta 2. Updated documentation for both VBScript 5.5 and JScript 5.5 will be available when the final product ships.

For more information about the new features in Windows Script 5.5, see <http://msdn.microsoft.com/workshop/languages/clinic/scripting121399.asp>.

What's Been Updated Since Beta 2?

Movie Maker

Record Narration

You can record audio to synchronize with clips you have placed in the workspace. For example, you can narrate the project while you preview it on the monitor.

Import Audio

You can insert audio clips into your project, just as you can insert video clips and still image clips. Audio clips appear on the audio bar when you view your project in the timeline view.

Adjust Audio Levels

You can adjust audio levels between two audio tracks (the audio that was recorded as part of a video clip and the audio that was recorded or imported and added to the audio bar). Adjusting the audio levels determines which audio track will play louder than the other.

Take a Photo

You can take photos of the video you are previewing, regardless of whether you recorded it in Windows Movie Maker. A photo is saved as a still image file with a .jpg extension.

Trim Clips

You can remove parts of a clip you do not want in your project. For example, you can trim the beginning or end of a clip.

Splitting and Combining Clips

You can split a video clip into two clips, or you can combine two or more contiguous video clips.

Create Transitions

You can create a cross-fade transition, which causes the frames in the playing clip to fade out as the frames in the new clip fade in. You can also adjust the time duration of a transition, up to the duration of the adjacent clip.

Saving Movies

You can save a project as a movie for playback on your computer, or you can distribute it by sending it in an e-mail message or publishing it to a Web site.

Note: If you file a Windows Movie Maker bug, please do the following:

- Make sure the category is "Multimedia."

- Include the word "MovieMaker" and a brief summary of the problem in the title.

Shutdown

Hard disks spin down when you restart the computer

Windows will no longer spin down your hard disk when you restart your computer.

USB

Character repeat paused at regular intervals

On some keyboards when you hold down a key to repeat, it would stream several characters, pause, stream another block of characters, pause, and then repeat. **This has been fixed.**

Remote wakeup would not work after third attempt

You should now be able to perform multiple consecutive remote wakeup attempts without fail.

USB mice attached to USB keyboards may not have functioned after PnP

This is fixed.

Remote wakeup did not work after hibernation

This has been fixed.

Keyboard LED states were not restored after suspend/hibernation

This has been fixed.

Out of bandwidth dialog box would no longer pop up

This has been fixed.

Computers with USB storage devices attached would not fully suspend

Some computers would appear to "bounce" out of suspend if USB storage devices were present. This has been fixed.

Remote wakeup did not function on APM systems

This feature has been reenabled. If this does not work on your computer, please verify that it did work in previous versions of Windows before filing bugs.

Shell

System faults when you open a .zip file with Compressed Folders

When you tried to open a .zip file, you could receive a fault in Zipfldr.dll. This issue could occur if Windows Explorer was configured for Details view. This has been fixed.

Error when attempting to launch Dial-Up Networking from the Communications group

When you tried to open Dial-Up Networking from the shortcut in the Communications folder on the **Start** menu, you received an error message. This has been fixed

Display

Matrox Ultima/Impression display adapter not working after upgrade

When you upgraded to Windows Me with the Matrox Ultima/Impression display adapter, the display adapter would no longer work properly. Windows Device Manager would not report any conflicts or issues regarding the display adapter. Removing the display driver and then adding it back again after restarting your computer corrected the problem. This has been fixed.

Diamond Stealth S220's advanced display property tabs not displaying in Windows Me

With a clean install of Windows Me with the Diamond Stealth S220, the advanced property tabs for the display adapter would not appear. The InControl icon also would not appear on the taskbar. If you upgraded from Windows 98 SE to Windows Me, the Diamond advanced property tabs were retained. This has been fixed.

Internet Explorer

Start and Complete navigation sounds both play when navigating Web sites

There is a known issue where you will hear both the Start and Complete navigation sounds when you click links on Web sites and when a page is loading frames. This has been fixed.

Script error on @Home

When you try to customize your name on @Home's site, you may receive an error stating "Oops, I think you closed the BuFord window on me. Please reopen it first." This has been fixed.

Clicking on @Home link produces a blank window

When you click the "How Do I" link on the @Home main page, a blank window may appear. This has been fixed.

Links that you clicked previously may not retain the visited link color

Previously visited links may lose their "visited" color after the page is refreshed or you restart Internet Explorer. This has been fixed.

First page prints completely black on HP LJ4SI

When you print from Internet Explorer to an HP LaserJet 4SI, the first page may appear completely black. This has been fixed.

Outlook Express

The Print dialog box may not appear when you print from Windows Address Book

When you try to print contact information from Windows Address Book, the **Print** dialog box may not appear. This has been fixed.

Printing selected text in Outlook Express will cause Out of Memory or Jscript errors

When you try to print selected text inside of an e-mail or news message, you may

experience an Out of Memory error or a fault in Jscript.dll. You can work around this by moving the text into Notepad and printing from there. This has been fixed.

Question mark added to signatures in Outlook Express

When you manually or automatically add a signature to a Mail or News message, a question mark is displayed at the end of the signature. This has been fixed.

Cannot print from Outlook Express

If you select Print from the File menu in Outlook Express, nothing happens. Outlook Express seems to lose the focus (the title bar turns gray). This has been fixed.

Printers

Printer IHVs who send EULA pop-ups to users during point-and-print operations were previously put on a blocking list during Net Crawler installation. These have been removed.

IHVs who write their .inf files to call Microsoft inbox USB stack issues are worked out and fixed.

USB printing issues are resolved.

Core power management issues regarding printing have been fixed.

Help links from the Troubleshooter have been updated.

Installing updated drivers from Windows Update is fixed.

Print APIs are now documented correctly.

Robustness issues (such as GPFs when users tries to uninstall third-party printing software) in the spooler API have been fixed.

Printing with Centronics parallel to USB dongle-print jobs were getting stuck, and there were driver-signing issues with fixed core files. These issues have been resolved.

Novell Network 3.2 client directory viewing is fixed.

The print spooler now provides user pop-ups to warn users of print job loss if they try to initiate power management functions during printing or spooling.

The IPP client is now on the Windows Me CD in the Add-Ons\InetPrinting folder.

For more information, see the Printers.txt readme file.

System Restore

In some cases, System Restore would fail to restore successfully to the first system checkpoint and would display a script error on the restore confirmation screen. This issue has been fixed.

What is it?

System Restore is a real-time change monitor and restore feature of Windows Me. It automatically creates both change-based and periodic restore points. Users can revert their systems back through these restore points to recapture prechange or optimal system behavior. System Restore will remove older restore points to make room for new restore points. System Restore will not cause you to lose work. It will not monitor or restore well-known personal file types such as .doc, .bmp, .and .pdf. files, e-mail, browser history or favorites, or any contents of the My Documents folder. File change and registry

copies are stored on the Windows partition in an access-protected data store. System Restore monitors and restores the entire disk.

How do I install it?

As part of the operating system, System Restore is installed enabled with Windows Me if you have at least 200 MB of available disk space on the Windows partition (in addition to the space required for Windows Me). If your computer does not have enough space available, System Restore will install disabled.

If you later create enough available disk space and want to turn on System Restore, carry out the following steps:

1. In **Control Panel**, open **System** properties.
2. Click the **Performance** tab, and then click **File System**.
3. Click the **Troubleshooting** tab, and then clear the **Disable System Restore** check box.

Application Compatibility

Bookshelf 2000

Program requires Shockwave control when started, and information display panels are missing.

[Message]: "This page contains a new Shockwave format movie that the current Shockwave control cannot handle. Would you like to download the newer version of the control?"

If you click **No**, the panels normally displayed on the left side of the program's screen are missing. If you click **Yes**, the Macromedia Web site is launched. If Shockwave 7.0.3 is installed (the only option obviously available), a message appears requesting that you restart your computer. If Bookshelf is opened after the computer restarts, the same Shockwave message is displayed, with the same results as before.

Shockwave 8 is now available for download and fixes this problem.

Compaq Remote Support

When you close Compaq Remote Support, you may receive an error in Shellker.

Crusaders of Might and Magic

There is USB sound corruption (such as static or garbled sound) in the introduction and during game play.

Delta Force 2

Menu sounds are garbled on a USB audio system. The audio completely cuts out for several seconds at a time during the opening video.

FreeI.net Client 2.5

After you install the FreeI.net 2.5 client, you may be unable to dial your new connection. Please check to see whether Rnaph.dll has been overwritten by the application.

To prevent this file from being overwritten during installation, carry out the following steps before you install the client:

1. Open the Windows\System folder.
2. Right click the Rnaph.dll file, and then click **Properties**.
3. On the **General** tab, set the file attribute to **Read Only**.

If this file has already been overwritten, you can extract the original file from the installation .cab files to replace the older version. To do this, carry out the following steps:

1. At an MS-DOS prompt, change to the CD ROM or folder where your Windows Me installation .cab files are stored.
2. Type the following:
extract /a base2.cab rnaph.dll /l c:
3. This extracts a new copy of the file to the root of your C drive (or any other location you specify after the /l switch).
4. Remove the entry created by FreeI.net from the registry by using Regedit, browsing to HKCU\RemoteAccess, and then deleting the entire entry for the FreeI.net connection.

System File Protection currently is not protecting this file as it should.

FreeI.net Client 2.6

When you install this program, it returns an error stating:

"This is the Windows 98/NT/2000 version of FreeInternet.com. To install this on Windows 95, please go to www.freei.net and download the Windows 95 version."

To work around this problem, open the Win.ini file and add the following line to the [compatibility95] section:

```
FREEICLI=0x00080000
```

Save Win.ini, and then install the program.

GetRight 4.1.1

With GetRight installed, click on an HTML download link: Internet Explorer 5.5 will go to a blank page while putting the URL of the download link in the address box.

Homeworld

There is USB sound corruption, and the introduction is very slow and jerky. Also, once you enter a game, there is a large amount of static in the background (static is not associated with sound effects of game music).

Network Gaming (IPX) Connection Problems

Some games have problems connecting to network games via IPX. The problem is currently under investigation.

Outlook 98

When you open Outlook 98, an assertion failure happens on line 763, resulting in the program shutting down. If you upgrade from a system that has the DFS client installed, Mapi32 is overwritten during Setup, causing this error. To work around this problem, before upgrading, remove Dfs.inf from the Windows\Inf folder.

Hibernation

When you use hibernation, you can turn off your computer and know that when you come back, everything will be restored exactly as you left it-including programs and documents you didn't have time to save or close. Everything in memory gets saved on the disk, and the monitor and hard disk get turned off. You also save power and wear and tear on your computer.

If you experience frequent interruptions, you might also consider putting your computer into automatic hibernation after a specified number of minutes. Note that hibernation is available only if your computer supports it (see the release notes for more information).

Enabling Hibernate support:

If your system supports hibernate (see requirements needed below), you can enable Hibernate from the Power Options Control Panel. Click **Start - Settings - Control Panel - Power Options**. If Hibernate is supported on your system you will have a Hibernate tab. Click the tab and check the **Enable Hibernate** box.

Hibernation Requirements

You can check the **C:\WINDOWS\NOHIBER.TXT** to determine what may be causing Hibernate to be disabled. Below is a list of system requirements needed to support Hibernate:

- ACPI or APM 1.2 system (ACPI preferably)
- Video Adapter that supports Hibernation (see below for in-box supported drivers)
- WDM audio drivers
- No SCSI

In-Box Supported Video Drivers for Hibernation:

VGA

Standard PCI Graphics Adapter (VGA)

NeoMagic

NeoMagic MagicGraph128XD

NeoMagic MagicMedia256AV

NeoMagic MagicMedia256ZX

NeoMagic MagicMedia256XL+

Nvidia

NVIDIA RIVA TNT

NVIDIA RIVA TNT2

NVIDIA RIVA TNT2 Pro

NVIDIA RIVA TNT2 Ultra

NVIDIA Vanta

NVIDIA RIVA TNT2 Model 64

NVIDIA Aladdin TNT2

NVIDIA Quadro

Intel

810

810e

815

ATI:

ATI 3D Rage Pro

All-In-Wonder PRO

Xpert@Play

Xpert@Work

RAGE XL AGP 2X

RAGE XL AGP 2X

RAGE LT PRO AGP 2X

RAGE LT PRO PCI 2X

RAGE LT PRO PCI 2X

RAGE MOBILITY P AGP

RAGE MOBILITY P PCI

RAGE PRO TURBO AGP

RAGE PRO TURBO PCI

Known Issues

Movie Maker

General Issues

You must have an audio driver installed on your computer for Windows Movie Maker to function.

You must have an audio and video capture device to record content.

You cannot use Windows Movie Maker with display devices of 16 colors or less.

Access to audio and video device driver settings is limited (for example, volume controls for line in and line out on your audio card or brightness and contrast controls on your video card). To adjust these settings, use the software that came with the device.

Windows Movie Maker does not support multiple monitors.

The audio recording level meter does not accurately reflect the audio level.

Issues with Organizing Collections or Clips

When you add a clip, do not use names that exceed 256 characters.

Issues with Recording Content

When you import .bmp images, the image must contain 256 or more colors.

When you import files, make sure the source file is not moved or deleted. If you are importing over a network, make sure that you have a constant connection. Windows Movie Maker will no longer function if the source file is moved or deleted or if the connection is lost.

When you are using a digital video camera, you may not be able to hear the audio while previewing the video on the monitor. However, both audio and video are captured during recording.

The clip creation feature in the **Record** dialog box will not create clips for black-and-white video clips.

You cannot import content that was protected by using Microsoft Windows Media Rights Manager.

When you record, some capture devices display two device drivers. One driver is for Video For Windows, the other driver is for Windows Device Manager. When possible, select the Windows Device Manager driver.

If you use the ATI All-In-Wonder 128 driver, you can preview your video on the monitor, but you cannot record it.

You must import files over a network using the Universal Naming Convention (UNC) rather than the HTTP protocol.

You cannot import files with the following characters in the file name:], *, /, \, &, ~, \$, @, or #.

Internet Games

Games are unable to connect to server

If you gain access to the Internet through a corporate network or LAN, you may find that you are unable to connect to the game servers due to your company's firewall. The games will report that they are "Unable to connect to server." This happens because the firewall is blocking the port that the games use to communicate with the Internet game server.

Solution: Ask your network administrator to open port 28805 for outgoing requests.

Games take a long time to find other players

When you start an Internet game, the server automatically matches you with one or more Windows Me users around the world who also want to play the game. The time required to complete this matchmaking process depends on the number of people who are playing. Because there are fewer people participating in the beta than will be using the final product, beta users may find that matchmaking takes several minutes (or more) to complete.

Solution: To reduce your waiting time, try playing during the peak hours (around 8 p.m. Pacific Standard Time).

Power Management

Mobile systems hang during the hardware detection stage in Setup when an Ethernet PCMCIA card is installed

Some mobile systems will hang indefinitely somewhere between 10 and 14 minutes through Setup. Systems may experience this problem when an Ethernet PCMCIA card is installed and present during Setup. Restarting the computer has no effect; the system will continue to hang at the same point.

Workaround: Remove the PCMCIA card and restart the computer manually. After Setup finishes, you can reinsert the PCMCIA card.

Systems with the NeoMagic video card may not restore video on resume from Stand By (S3).

Workaround is to move the mouse or hit the CTRL key. If that does not work, try toggling between your Internal Monitor and External Monitor. Microsoft is currently investigating this bug.

Battery status is not updated correctly if batteries are added/removed to the system, or if Power Source is changed rapidly.

Microsoft is currently investigating this issue. The workaround is to wait ~5 seconds before changing power sources, or to reboot once the battery state has changed.

Printers

When you install a printer from the printer manufacturer's CD, the first .inf file located is used even if multiple exact matches are found. If you are installing a printer and pointing to a manufacturer's driver CD that contains multiple localized versions of the same driver, the wrong driver will be installed on Windows Me. This will be fixed in a future release.

Hibernation

System with Logitech mouse drivers may fail to resume from Standby or Hibernate

To resolve this issue, update your Logitech drivers to the latest version Windows provides.

Systems using the Standard PCI Graphics Adapter (VGA) mode may fail to resume from Hibernate.

This is a known issue and will be addressed in a future build.

Serial Mouse does not work on resume from Hibernate

Microsoft is currently investigating this issue. There is no workaround to avoid this problem.

System may only be able to wake from USB once, or at random times, while in Stand By mode.

This will be addressed in a future build. The workaround is to wake via a PS/2 device or by the Power Button on an ACPI system.

ATI All-In-Wonder Pro cards do not support Hibernate - driver rejects request to Hibernate

Drivers provided from Windows Me for the ATI All-In-Wonder cards do not support Hibernate correctly. You will get a rejection message if you try to hibernate with these drivers. This is expected, and there is no workaround.

No Hibernate option; C:\Windows\Nohiber.txt says that Serwave.vxd does not support hibernate

This is a known issue. To work around this problem, carry out the following steps:

1. In **Control Panel**, open **System** properties.
2. Click the **Device Manager** tab, and then expand the **Sound, video, and game controllers** section.
3. Disable the **Wave Device for Voice Modem**.
4. Restart your computer, then check the **Power Options** settings in Control Panel for Hibernate support, or C:\Windows\Nohiber.txt again.

This issue will be addressed in a future build.

IBM 600X and 770X are very slow to resume from Hibernate

Microsoft is investigating this issue currently. To work around this problem, carry out the following steps:

1. In **Control Panel**, open **System** properties.
2. Click the **Device Manager** tab, and then expand the **CDROM** section.
3. Right-click your CD-ROM, and then click **Properties**.
4. On the **Settings** tab, clear the **Auto insert Notification** check box.
5. Restart your computer.

ATI Rage LT drivers do not support Hibernate

The drivers in the build for Beta3 do not support Hibernate. This will be addressed in a future build.

Docking

Warm docking with multiple profiles causes the user to be prompted twice

This happens when there are multiple profiles of the same configuration. Windows needs to prompt the user to ensure the correct profile is selected

System Hangs when Dock change is detected after attaching wedge while unit is hibernated

The workaround is to not change docking status while the machine is in Hibernate. Due to major changes in the system configuration, Windows is unable to resume from Hibernate.

Docking event messages disappear (or do not appear at all) before docking events are actually completed

This will be addressed in a future build. While the dock change is in progress you should notice the mouse cursor changing to the busy status.

On hot undock with no undocked profile, hardware detection is extremely slow

It may be necessary to create the undocked profile by shutting down the system, undocking the notebook, and then booting.

System fails to undock correctly if you enter Stand By and then try to undock

You need to use the Eject button from the Start menu to ensure you can eject correctly

Shell

Icons can randomly change.

This is a known issue with the current build of Windows Me and will be addressed in a future build.

USB

Some USB speakers are reenumerated after resume from hibernation

We are currently investigating this issue.

Internet Explorer

Named Anchor Tags May Not Work

When you navigate to a named anchor tag on another Web page (e.g., <http://www.thiswebsite.com/default.htm#bookmark5>), you may go to the top of the page rather than to the bookmark section. This is being investigated for a future fix.

Issues with the @Home cable service

If you discover any issues when using the @Home cable service, please put "@HOME" in the title field of any bugs that you enter about this service.

Outlook Express

Preview pane flickers when changing messages

There is slight lag between when the preview pane is cleared and the next selected message appears. This is being investigated for a future fix.

New mail notification when synchronizing newsgroups

When synchronizing newsgroups, the new mail icon appears in the systray even though there are no new mail messages. This is being investigated for a future fix.

Every click of a URL in OE launches a new window

Rather than using existing Internet Explorer windows, Outlook Express opens a new window for each link clicked. This is being investigated for a future fix.

AutoUpdate

AutoUpdate slows system or causes mouse and keyboard to become unresponsive for brief periods

When AutoUpdate is running you may notice that the mouse and keyboard freeze momentarily, then resume, then freeze again. The AutoUpdate icon may be visible in the system tray, or the WUAUBOOT process may be in memory when this occurs. This issue has been confirmed *only* on systems with the "NDC 10/100 Fast Ethernet" adapter installed. If your system exhibits this behavior, but does not use this adapter, please file a bug report.

Solution: To work around this issue, the card must be set to a specific speed. Follow these steps:

1. Click **Start**, point to **Settings**, and then click **Control Panel**.
2. Open **Network** properties. (Click **view all Control Panel options** if the **Network** icon is not present.)
3. Double click the listing for **NDC 10/100 Fast Ethernet**.
4. Click the **Advanced** tab.
5. Change the connection type to a specific speed required by your network. For example, if connected to a cable modem or DSL box, the setting should probably be **10 MB Full-Duplex**.

Dplay

- Trying to run the Voice wizard on Windows Me with the sound card disabled or not installed will give you the error message, "An unexpected error occurred in the Sound Hardware Test Wizard. Voice Chat will be disabled. Click OK to continue." After enabling or reinstalling your sound card you can run the wizard again. (To do so, click **Start**, point to **Settings**, click **Control Panel**, and then open **Sounds and Multimedia** properties.)
- Voice does not work if you move the Hardware Acceleration slide bar when you have a PCI 128 sound card. Do not adjust the Hardware Acceleration slide bar if you have a SoundBlaster PCI 128 sound card.

Steps not to take and how to correct them:

After enabling voice for the games it is available on in the Control Panel. Start game either host, or as a client and ensure that you have acceptable voice communication and you drop from the game, open up DXDiag and under the sound tab, reduce Hardware Acceleration by any of the allowed increments, then rejoin the game you will notice that there is no longer voice capability. If you drop from the game again, set the Voice acceleration back up to full acceleration, and rejoin the game then reboot the system and rejoin the game, and you will have voice. Do not adjust the Hardware Acceleration slide bar with a SoundBlaster PCI 128 sound card.

- Adjusting the hardware acceleration slider can result in failure of voice chat. Do not adjust the hardware acceleration slider on your sound card. If you adjust the hardware

acceleration slider, and then run the Voice wizard, you will encounter the following error: DirectPlay Voice has encountered an error.

Returning the hardware slider to its original position and restarting your computer should fix this.

- On certain revisions of the Aureal Vortex chipset the voice retrofit may only have limited functionality (game by game) or not work at all. This may be fixed with an updated driver from the manufacturer.

General Compatibility Issues

Firewall Programs Cause Blue Screen on Start

The installation of some firewall-type programs can cause the system to return a Windows Protection Error on starting Windows. The following programs are known to be affected:

- Norton Internet Securities 2000
- AtGuard FireWall
- Shiva VPN Client 6.60
- SecuRemote v4118

SFP & the _Restore\Temp Directory

_Restore\Temp directory is getting filled with a lot of files, with some programs. The following programs are known to be affected:

- Fix-It Utilities
- Cleansweep
- MS Backup

Some Programs Cannot Be Installed on This Version of Windows

Windows Me version numbers are being revised upward to 4.90.xxxx from 4.10.xxxx. Some programs might not install correctly, because they interpret the version information incorrectly. If you find a program that exhibits this behavior, please file a bug.

The following programs are known to be affected:

- Conseal PC Firewall
- PC-DUO 4.x

Follow the steps below for a workaround for Conseal PC Firewall:

Click **Start**, click **Run**, and then type **regedit**.

Expand HKey_Local_Machine\Software\Microsoft\Windows\CurrentVersion.

In the right pane, double-click the value for **VERSION**.

Edit the value **Windows Me** to read **Windows 98**, and then click **OK**.

Install the program.

Perform the same steps after program installation to change the key back to Windows Me.

Programs that create a rescue disk or bootable floppy disk

Rescue disks or bootable floppy disks made by some programs installed in Windows Me may not work correctly. Microsoft is working with a list of software vendors so that they will update their products with the latest versions of the startup files.

The following programs are known to be affected:

- Drive Copy
- Partition Magic
- Nuts & Bolts
- Drive Image
- Guard Dog
- Inoculan Anti-Virus
- Norton Utilities

IntelliPoint 3.x software

Several issues are currently being investigated with all 3.x IntelliPoint software.

Specific Application Compatibility Issues

3DFX Tools

Voodoo3 3dfx Tools, in Control Panel, does not list the **Tweaks** and **Info** options.

Adobe PageMill v3.0

If you try to click the Help on Help option on the Help menu, you will see the following message:

"Cannot open the file: HtmHlp98.chm."

This issue is currently under investigation.

Adobe Premiere 5.1 & Miro DV300 Codec

There is pink display corruption in the clip window if you play files using the Miro DV300 codec. This issue is currently under investigation.

Anfy Java v1.4.3

The Anfy 1.4.3 program faults (GPF's) in Javart.dll or hard hangs the computer if you add Java applets to the desktop as Active Desktop items. This issue is currently under investigation.

Anno1602

Installation of this program fails because the program's call to DirectXSetup fails. This issue is currently under investigation.

AOL5

After you install AOL5, the computer will go into standby but will not come back from a standby state and will blue screen. This issue is currently under investigation.

Babylon Translator

Babylon Translator (German) attempts to translate Systray icons, including its own. If you right-click systray icons, the context menus will appear under Windows 98 Gold or SE, but with Windows Me a translate attempt by Babylon will be initialized. Disabling the program eliminates the problem, but only until the program is enabled again. This issue is currently under investigation.

Beatnik Player 2.05

Beatnik sounds do not work in Internet Explorer even when the player is installed correctly. They cause JavaScript errors. This issue is currently under investigation.

Black Ice Defender v1.9.6

After installation of this program, it is unable to establish a filter. This error can be seen on the **Intruders** tab of the program. This issue is currently under investigation.

Check It 98

This program causes a fault (GPF) in CKModem.dll on launch. This issue is currently under investigation.

Control It 4.5

Explorer may cause an IPF in module Rp32exp.dll if you try to initiate a file transfer from the host to the client computer. This issue is currently under investigation.

Crypkey Instant

CrypKey Instant may not run properly in Windows Me. In addition, programs that are protected using recent versions of Crypkey encryption also may not run. Kenonics Corporation is aware of the problem. Please submit bug reports on any CrypKey encrypted programs that are failing due to this problem.

Typical failures will include errors similar to "Failed to find license," or "CrypKey Error; This program encountered a problem. There was an unknown problem retrieving the licensing information." If you have a CrypKey encrypted program and it is currently running, you may find that after running Disk Defragmenter the program will no longer be able to find its license. This issue is being investigated.

The Curse of Monkey Island

If you ALT+ESC out of the game, and then ALT+TAB back into the game, the office shortcut bar pops up and causes color palette distortion. Change the desktop color and the program will be fine.

Cybersitter 99

If you have Cybersitter installed and you upgrade from Windows 98 or Windows 98 SE, you will not be able to browse the Internet (or an intranet through a proxy server). You will also not be able to browse the Internet by using Dial-Up Networking. This issue is being investigated.

Solution: Uninstall Cybersitter, establish Internet access again, and then reinstall Cybersitter 99.

Digital Dashboard

Compaq EZ2200 locks up after the desktop is loaded following an upgrade to Windows Me.

Work-around: Click **Start**, and then click **Run**. Type **msconfig**, click the **Startup** tab, and then clear the **Digital Dashboard** option to prevent it from loading at startup. This issue is currently under investigation.

Dragon Naturally Speaking and Point and Speak version 3.52

Dragon Naturally Speaking version 3.52, a voice-recognition program for dictating to text, doesn't recognize when the Audio wizard has been completed. This issue is being investigated.

Solution: There is a patch available on Dragon's Web site, located at: <http://dragon-support.dragonsys.com/support/tweb.nsf/50a26d036b1c0561852567ae005e38c2/7e6fb1e1c23c02b6852567d300667867?OpenDocument>.

Dr. Solomon's Anti Virus

If you try to upgrade Windows 95 or later with Dr. Solomon's Anti Virus v7.70 installed, it will cause an exception to occur. This issue is currently being investigated and should be fixed in a future version of Windows Me.

Solution: Update this version to a later version, or uninstall this version before upgrading to Windows Me, and then reinstall after the upgrade.

Encarta World Atlas 2000

Msworld5 causes an IPF in Kernel32.dll if you click the back button while in a Virtual Flight. World Atlas 2000 first displays a message stating: "Encarta Interactive World Atlas is unable to continue running." This issue is currently being investigated.

First Aid 2000

McAfee First Aid 2000 is not compatible with this version of Windows. McAfee is aware of the problem and is investigating the issue.

FrontPage 2000

When you switch to MS Script Editor, the changes you made in FrontPage will flash and then disappear the first time. Switching back and forth between windows does not refresh the MS Script Editor. In order for the changes to appear, you will need to edit the page in FrontPage again. This is currently under investigation.

HP Help (Hewlett-Packard)

The **Show Me** button doesn't show video clips in any of the subtopics under the **How Do I...?** topic in Hewlett-Packard Help.

Hijaak Pro 5.0

This program causes a crash in GDI.exe if you upgrade from OSR2 to Windows Me. The vendor is being contacted.

Iomegaware Utilities

Certain features offered by this software are not available due to changes in the operating system. Iomega is currently enrolled in the beta program and will have an update before Windows Me ships. Known issues include:

- The Zip drive not ejecting when you shut down Windows.

- Removable devices set as fixed disks still appearing as removable from within Windows Explorer. Programs that only install to fixed disks (non-removable hard disks) will still work when setting your drive as such. The bug is merely cosmetic.

Please report any other issues you discover with these utilities. This issue is being investigated.

Juno 3.0

Users of Juno should update to version 3.0.13 or later. The latest version available from <http://www.juno.com> is version 3.0.1092.2818. Versions prior to 3.0.13 have many failures in Windows Me that are corrected by later releases. You can tell which version of Juno you have installed by right-clicking Juno.exe, and then viewing the properties of the file.

Microsoft Global IME

The download packages from

<http://www.microsoft.com/msdownload/iebuild/ime5_win32/en/ime5_win32.htm>

cannot be installed in Windows Me. This issue is being investigated. The IME packages affected are:

- Chinese (Simplified) and Chinese (Simplified) with Lang pack

- Chinese (Traditional) and Chinese (Traditional) with Lang pack

- Japanese and Japanese with Lang pack

- Korean and Korean with Lang pack

Global IME packages that do not have this problem are in test and will be released externally for the Windows Me release.

Mindspring 3.0x

If you attempt to update the Mindspring Desktop, the download screen pops up asking if you want to open the file from its current location or save it to disk. If you try to open from current location or try to open after downloading, it asks what program to use to open the file. The files have .mst extensions.

Money 98

Every startup opens multiple browser windows instead of trident hosting.

MSDN Oct 99 and Jan 2000 Release

You may receive the following error when installing the MSDN October 1999 release: "Setup has detected that a required HTML Help system component (Hhsetup.dll) is missing from your computer. Click Cancel to exit setup. If you click OK, Setup will continue and the MSDN Library may not function properly."

Solution: Copy the Hhsetup.dll manually from the MSDN CD (x86\setup\hh12x\hhsetup.dll) to the %Windir%\System folder prior to installing MSDN. Be sure you copy the x86 version and not the version that is intended for Alpha computers.

Netsonic version 2.5

This program gets stuck in a restart loop; the program's installation alerts you that you need to restart to work properly. Version 2.5 of Netsonic is not compatible with Windows Me; it requires an older version of Wsock32.dll.

This issue is currently under investigation. To uninstall the program, first remove the shortcut to Webmain.exe from the Startup group, right-click the **Gator** icon on the taskbar, and then click **Exit**. Restart your computer. Then you can uninstall normally.

Norman Antivirus

This program currently does not work with Windows Me. The software vendor has been contacted and will provide a working update when Windows Me ships.

Norton AntiVirus version 5.0 and 2000 Scheduled Scan

If you install Norton Antivirus 5.0 and 2000 into Windows Me, it may create an invalid switch in the Task Scheduler for the scheduled disk scan. To correct this, double-click Task Scheduler in the system tray, right click the Norton Antivirus scheduled scan entry, and then change the invalid switch (-u or -w) to be /L. This issue is currently under investigation.

Norton Speed Disk 2000

If you use Speed Disk 2000 when you have NeroCD95 installed, it will result in a system crash, and in some cases a spontaneous restart of the system.

Workaround: This problem has been reproduced in released Win9x operating systems, but much less reliably. The program vendor is aware of the problem and is investigating. As a workaround, you can rename Nero's VXD in %Windir%\System\IOSubsys and restart prior to running Speed Disk. However, you will need to reapply the old name to use NeroCD again.

Norton System Works

The icon that groups all of the system taskbar icons together will not work. Symantec is investigating this issue.

Norton Utilities Protected Recycle Bin

The Norton Utilities Recycle Bin icon does not appear properly. This issue is being investigated.

Norton Your Eyes Only

Possible Data loss: If you have the "bootlock" security option installed, you need to disable it before upgrading to Windows Me. This feature is currently unusable due to master boot record changes in Windows Me.

Solution: Please disable this feature before upgrading.

Nuts & Bolts

Once Nuts & Bolts is installed, if you try to open the Fortress icon you receive a page fault error in Shlwapi.dll. This issue is currently under investigation.

Nuts & Bolts 98

After installing Nuts & Bolts, you must restart. Once you log back on, the system gives you five or more IPF's in User.exe. After the fifth error (Usually, "Rundlg has IPF in Module User.exe") the system freezes. The mouse moves and you can press CTRL+ALT+DEL to restart, but you cannot get the system back under control.

Nuts & Bolts 98's Launch Rocket will not load under Windows Me.

These issues are currently under investigation.

Oil Change version 2.5 and McAfee Oil Change Online

These products are currently unable to identify Windows Me as a valid operating system. This issue is currently under investigation.

Office 2000

When you are trying to save to Web folder locations from within an Office common dialog box, you may receive memory corruption and/or other "unable to save to file" messages. This issue is being investigated

Oracle 8.1.5 Personal Edition

Oracle does not support installing version 8.1.5 PE into Windows Me. As an unsupported workaround, you may add the following line to the [compatibility95] section of Win.ini prior to installation:

```
Jrew=0x00080000
```

After Setup is complete, Oracle will recommend a restart. There is one additional step necessary prior to restart; Oracle may add a non-standard path statement to Autoexec.bat. Please modify this SET PATH statement to use short file names if you find a quoted LFN string represented as part of the path. You can confirm that the path was merged successfully into the registry after restarting by examining the PATH variable in the registry at HKLM\System\CurrentControlSet\Control\SessionManager\Environment

Net8 Easy Config will not launch if a missing Oracle path statement is still in the registry.

Please note that Oracle does not support the use of this product in Windows Me, and has authorized these workarounds for testing purposes only.

PageKeeper Pro 3.0

If you choose to add "New Document from Web" with Internet Explorer 5.5 installed, you will not obtain the Web site.

PCAnywhere 9.01, PCTelecommute 1.0 and Sysmark 2000

Both PCAnywhere 9.02/9.01 and PCTelecommute by Symantec and Sysmark 2000 will default to Driver11.cab for printer drivers. Windows Me does not have a Driver11.cab, and if you select Driver5.cab for the driver install, the programs will hang. There is no workaround known at this time. This issue is being investigated.

PCTelecommute 1.0

During setup of PCTelecommute 1.0, you may see a failure to register Irareg.dll. You can continue Setup normally after confirming this error.

Solution: As a workaround, after Setup is finished, copy Windows\System\Regsvr32.exe to the folder where Irareg.dll is located. Open a command prompt and from the directory type:

regsvr32.exe irareg.dll

This will register the DLL properly.

PCTV Vision USB

The machine locks up when you exit the program by using the close button or the **Exit** menu. The only recovery is a cold boot. No crash in the debugger. This program comes with the Pinnacle Studio PCTV USB device.

PGP Security

If you use the PGP Tray icon to decrypt text in the current window, it will fail, causing the following error to appear: "PGP could not automatically copy the text from your window."

Solution: The current workaround is to press CTRL+SHIFT+D instead of clicking the icon.

PGP Security

PGP Security v6.51 with PGPnet enabled and it securing the NIC adapter the computer is no longer able to log into the network. This issue is currently under investigation.

PowerDesk Utilities

PowerDesk 3.03a breaks Task Scheduler and Printers in Windows Me. There is an option in PowerDesk 3.03a, by Mijenix Corporation, that enables the program to open My Computer and Folders. When this option is turned on it breaks the Printers folder in Control Panel and the Task Scheduler on the taskbar. When either of these is open, it displays the My Desktop folder with the various icons available on the desktop.

Solution: Disable the PowerDesk option to use PowerDesk to open "My Computer and Folders." Mijenix Corporation is working on a fix.

PrintShop Deluxe version 10.0

If you open PrintShop Photo Pro in PrintShop Deluxe v10.0, Internet Explorer script errors will occur when the program starts. This issue is currently being investigated.

QI SW decoder

DVD playback fails because the decoder cannot create an overlay after upgrading to Windows Me. This issue is currently being investigated.

Resume Maker Deluxe

When you open a document from inside Resume Maker, the icons that appear are scattered and not lined up. This issue is currently being investigated.

Snapshot 2.0

Snapshot is unable to see folders in directories when it attempts to open a file from a saved folder. You cannot browse through folders because none are viewable. This issue is currently under investigation.

SolSuite 2000

The computer locks up during game play. This issue is currently under investigation.

StopLight95

Upgrading to Windows Me with this program installed returns multiple errors and the program does not function. Setup no longer allows you to upgrade when it detects that StopLight 95 is installed. This issue is currently under investigation.

Suite Enterprise 1.5

If you install this Rational software on Windows Me, it will cause the computer to not start correctly. The Rational software requests a restart, and on restart the computer monitor hangs on a black screen (no error messages or blue screens) and dies in the boot process. When hooked up to a debugger, it was found that a file installed by Rational (Vpured.vxd) is breaking during kernel init and causing a trap 14. If you delete or rename this VXD, it will allow the computer to start correctly, and the Rational software will finish its configuration and function normally. This issue is currently under investigation.

SurfWatch 98

After installing SurfWatch 98 you may get a "SSDPSRV caused an invalid page fault" error in module Kernel32.dll after restart and before logging on. This issue is currently under investigation.

Sybergen Sygate 3.1 and SyShield 1.1

Do not install these products in Windows Me; installation will result in an unbootable system. If you install this product, you will need to start in Safe mode to uninstall it. Sybergen is aware of the problem and is investigating future updates.

Visiosonic Digital 1200SL

This program does not function properly in this build of Windows Me. This issue is currently under investigation.

Visual Basic 6.0

If you add a WebBrowser Control to a form, it may cause an IPF in VB6 when run, if the form is not already open in Design mode

VizAct 2000

Some users of VizAct may experience an installation error ("Internal Error 2613"), which prevents successful setup. This is a VizAct issue that affects all owners of the VizAct CD that is version 1.00.0720, both in Windows Me and Windows 2000. The patch for this issue can be obtained from:

<http://download.microsoft.com/download/vizact2000/Install/1.0/WIN98/EN-US/Viz2613.exe>

Word 97

Microsoft Word 97 causes a Winword GPF error in the art gallery on a Windows 95 migrated computer. This issue is currently under investigation

Word 2000

On a clean Windows Me installation, saving a Word 2000 Web page with an underscore in the file name will cause an IExplore error to occur if you try to preview the Web page. This issue is currently under investigation.

Xdrive.com

You may be unable to successfully establish a mapping to your xdrive share. Connection may hang at 90% completion. It may be possible to end-task on Xdrive to access your mapped drive, although this is unreliable. You may also find that Xdrive Monitor will fault when started (this fault is also fairly easy to reproduce in our released Win9x operating systems). These issues are currently under investigation.

MS-DOS-Related Program Issues

MS-DOS-based programs trying to run in real mode

MS-DOS-based programs that try to run in MS-DOS (real) mode will fail. Some of these programs can be fixed by changing the MS-DOS .pif file so that it does not force or suggest MS-DOS mode. To do this, carry out the following steps:

Right-click the .pif file associated with the program, click **Properties**, and then click the **Program** tab.

Select the **Prevent MS-DOS-based programs from detecting Windows** check box, and then click **OK**.

Double-click the modified batch file to run the program.

MS-DOS-based programs that add entries to Autoexec.bat or Config.sys

If a program such as a TSR or executable file adds an entry to either the Autoexec.bat or Config.sys file, those files will not be loaded. The following programs are known to be affected:

- Hurricane 98
- Slimware Windows Bridge
- McAfee AntiVirus
- Microsoft Plus! 98
- GoBack
- PC-Cillin
- Norton Antivirus

This issue is currently under investigation.

MS-DOS-based programs that require real-mode MS-DOS

Programs that require real-mode MS-DOS do not currently work in Windows Me.

The following programs are known to be affected:

- Partition Magic
- Drive Copy 2.0
- Drive Copy 3.0
- Drive Image

This issue is currently under investigation.

Note: Drive Copy cannot create a proper .pif file in Windows Me to set it to run in real-mode MS-DOS. Windows Me creates a default .pif file that sets this program to run in an MS-DOS window. However, you should never attempt to run this program from an MS-DOS window; this can lead to data loss. It must be run from a bootable floppy disk.

Internet Connection Sharing (ICS) Issues

ICS client and host can't simultaneously play with an external third party on the Zone. With some games, an ICS client and host can't simultaneously play with an external third party on the Zone. The game stops working until the client computer is restarted. The

Zone software is upgraded automatically when logging on to the Zone, so using old Zone software is not an option.

We have confirmed the issue with the following programs but others may also be affected:

- StarCraft
- Age of Empire I & II
- Quake II

The issue is currently under investigation.

Note: The issue is partially fixed, in that with most games, an ICS host can host a game, and a client and an external third party can join. There are still issues with a third party hosting the game, and an ICS host and client joining the game.

Real Player 5 and G2 fail to connect on both client and host when ICS is enabled

Real Player 5 and G2 fail to connect on both client and host when ICS is enabled intermittently. This primarily affects streaming video. By default, Real Player is set to use TCP and UDP and to automatically find the best transport.

Solution: Disable ICS, which Real Player uses to connect on the host. To enable or disable ICS, right-click the ICS icon on the taskbar, and then click the appropriate setting.

Note: This currently appears to be fixed. If you encounter any of these issues in an ICS environment, please post to the appropriate newsgroup; see Microsoft.beta.millennium.ics.

Windows Media Player

Video streaming using Windows Media Player over 300K connections is currently working. If you encounter any of these issues in an ICS environment, please post to the appropriate newsgroup; see Microsoft.beta.millennium.ics

DPLAY still needs integrated with ICS

Dplay is not yet completely integrated with ICS, so ICS clients and host may have problems playing games with third party Internet players. This issue is currently under investigation.

Host machine will disconnect after specified amount of time even if a client is generating activity

What this means is that clients downloading large files will be disconnected if Internet Explorer is set to disconnect after a certain elapsed time if no activity is taking place. This issue is currently under investigation.

Solution: The workaround is for the user to manually disable the Internet Explorer **autodisconnect if idle** option.

Home Networking Issues (HNW)

After performing a clean custom install of Windows Me and selecting ICS, the sharing button in the Internet Explorer connections CPL points to the old wizard (Icssetup.exe) rather than the new wizard (Netconn.exe)

In this scenario, the user will not be able to perform ICS installation correctly.

Solution: This is being fixed. For now, the user must not select ICS during a custom setup, or perform a typical setup.

In a machine with Two NICs and a Modem for connectivity the Host can no longer resolve DNS

This is due to ICS Setup's not setting the IP address correctly for multiple IP addresses. One NIC has the correct IP address (192.168.0.1) while the other does not.

Solution: Statically set the other NIC to 192.168.1.1 and everything will work fine. Once the Home Networking wizard Multiple subnet UI is in place, this will work, as the ICS code is in place for this to work. The other alternative is to simply change which NIC is used for the internal adapter by swapping cables.

File and Print sharing enabled disables sharing of Shared Documents folder when the Home Networking wizard is ran on a Windows Me host

This bug repros if the user has file and printer sharing installed before running the Home Networking wizard. If the user does not have file and printer sharing enabled before running the Home Networking wizard, everything is fine.

If the user does have file and printer sharing enabled before running the Home Networking wizard, it takes two or three runs through the Home Networking wizard to actually share the folder, and the folder then never appears shared, even when it finally is.

The behavior is the same with an autoinstall as with a regular install; if the user unselects file and printer sharing after an auto install that installs sharing, it works. Conversely, if the user performs a regular install and adds sharing, and then runs Netconn, the bug repros.

This issue is currently under investigation. The workaround for now is to ensure that file and printer sharing is disabled before running the Home Networking wizard.

Installing and Uninstalling Internet Connection Sharing

The install and uninstall of Internet Connection Sharing is integrated into the Home Networking Wizard. If Internet Connection Sharing is installed as an optional component (either through a clean install or Add/Remove Programs), then the Home Networking Wizard will need to be run to configure the adapters.

The Home Networking Wizard can be found at Programs --> Accessories --> Communications.

Toshiba Tecra 780 with bios version 6.40 or below

If modem is installed in Windows Me and the user changes the bios setting to disable the modem while modem is still installed, Windows ME we will blue screen.

If modem is uninstalled in Windows Me and the user changes the bios setting to disable the modem, then the user reboots the system, it will still enumerate the device. When it attempts to load the driver it will cause the system to reboot and then repeat eternally.

Workaround:

Leave the modem enabled in bios and disable the modem in Windows Me not the bios.

Display

ATI Rage 128 All in Wonder unable to capture audio/video with the latest ATI Web site provided drivers

Installing the latest ATI Web site provided drivers will cause some audio/video capture devices to be labeled "Not Working" in Device Manager. This is a known issue, and we are working on a fix.

ATI Rage 128 All in Wonder unable to capture audio/video after upgrade, if anything but the latest ATI Web site provided drivers were installed

Upgrading to Windows Me with older ATI drivers installed (build 6220 or earlier) will cause some audio/video capture devices to be labeled "Not Working" in Device Manager. You must either first install the latest ATI drivers (build 6263) then upgrade, or reinstall the ATI drivers after upgrading.

Universal Plug and Play

- You must use Client for Microsoft Networks as the logon.
- The extent of discovery of devices is limited to those in a local subnet. That is, the SSDP Multicast TTL = 1.
- InvokeAction calls for the same service, if called sequentially in the same thread that creates the service object, may not work correctly.
- If the "Browse in a New Process" option is selected, then UPnP devices will be visible only from the My Network Places folder on the desktop, and not by using Windows Explorer.
- If Internet Connection Sharing is enabled, then events will not be received from an event source not on the home network.

AT&T WorldNet Service (Online Services)

If you upgrade over Win 98 or Win 98 SE, you may receive an error when running AT&T WorldNet setup. Immediately after copying files, the AT&T setup wizard will attempt to set up the modem. The error will appear on the second wizard page - "384 -

Dial-Up Networking Not Installed.” This can occur even if you have properly installed dial-up networking and a modem.

The workaround for this problem is to remove and re-install Dial-Up Networking from control panel. Follow these steps:

- 1) Go to Control Panel and choose Add/Remove Programs
- 2) Select the Windows Setup tab and highlight “Communications” in the Components list box
- 3) Click on the Details . . . button and clear the check box for “Dial-Up Networking”
- 4) Hit OK on the Communications page and OK on the Add/Remove Programs Properties
- 5) Reboot when prompted
- 6) Go back to Control Panel, Add/Remove Programs and the Windows Setup tab
- 7) Select “Communications” again, and click on “Dial-Up Networking” to add DUN back
- 8) Hit OK on both pages and reboot when prompted
- 9) Re-run AT&T WorldNet Setup

Windows Image Acquisition (WIA)

Windows Image Acquisition is the next generation of scanners and digital camera support in Windows. If you are an imaging hardware vendor or an imaging application developer, you can find more information on WIA at <http://www.microsoft.com/hwdev/wia>. You can post your feedback or questions regarding WIA on the microsoft.beta.millennium.scanners_cameras newsgroup.

Supported devices

Still Digital Cameras

(All cameras are serial unless otherwise noted)

- Agfa ePhoto 307, 780, 1280, 1680
- Canon PowerShot A5, A5 Zoom, Pro70
- Epson PhotoPC / CP-100, 500 / CP-200, 600 / CP-500, 700 / CP-600, 750Z / CP-700Z
- FujiFilm DX-5/DS-10, DX-7/DS-20, DX-9/DS-30, MX-700, DS-300
- HP PhotoSmart C20, C30, C200
- Konica Q-M100, Q-M100V
- Kodak DC200, DC210, DC215, DC220 (USB only), DC260 (USB only), DC265 (USB only), DC290 (USB only), DC240 (USB only), DC280 (USB only)
- Minolta Dimage V
- Nikon CoolPix 900, CoolPix 950, CoolPix 700
- Casio QV 10, QV 10A, QV 11, QV 30, QV 70, QV 100, QV 120, QV 200, QV 300, QV 700, QV 770, QV 5000SX
- Olympus D-200L, D-220L, D-300L, D-320L, D-340L, D-340R, D-500L, D-600L, D-400Z
- Sanyo DSC-V1/VPC-G200, DSC-X1/VPC-X300,
- UMAX AstraCam (USB), AstraCam 1000 (USB)

IrTran-P based Still Digital Cameras:

- Casio QV-770, QV-5000SX, QV-7000SX
- Sharp VE-LC2
- Sony DSC-F3
- JVC GCS1

USB Streaming Video Cameras:

- Intel YC72
- Intel YC76 (a.k.a. Intel Create and Share Camera)
- Intel CS330 (a.k.a. Intel PC Camera Pack)
- Intel CS430 (AKA Intel PC Pro Camera Pack)
- Philips PCA645VC Digital Camera
- Philips PCA646VC Digital Camera
- Philips PCA675VC USB VGA Camera
- Philips PCA680VC USB VGA Camera

1394 DV camcorders:

Any AVC-compliant DV camcorder, which implements the VCR subunit, can be used in WIA. The following models have been tested:

- Panasonic DVCPro (PAL, NTSC), NV-DE3 (NTSC), NV-DS77 (PAL), NV-DX100 (PAL), NV-DS5 (PAL), DV-710 (NTSC)
- Sharp VL DC5 (NTSC)
- JVC GR-DVL 9500 (NTSC), GR-DVM5 (NTSC)
- Canon Optura (NTSC), Vistura (NTSC), Elura (NTSC)
- Sony VX1000(NTSC), PC7 (NTSC), VX700 (NTSC), PC-1 (NTSC), TR-7000 (Digital 8), TRV-510 (Digital 8), TRV-103(Digital 8), TRV 310 (Digital 8), TRV 900

Scanners

- Primax Colorado USB 19200
- Epson GT-5000 (SCSI), GT-5500 (SCSI), GT-8500 (SCSI), GT-9500 (SCSI), Expression 636 (SCSI)
- Hewlett-Packard ScanJet 4100C (USB), 6200C (SCSI/USB), 5200C (USB only), 6300C (SCSI/USB), 5p (SCSI), 6100C or 4c/3c (SCSI), 4p (SCSI), 3p (SCSI), Ilex (SCSI), Iip (SCSI), Iic (SCSI)
- Microtek ScanMaker 4 (SCSI), 5 (SCSI), 6400XL (SCSI), 9600XL (SCSI), E3 (SCSI), E3 Plus (SCSI), E6 (SCSI), III (SCSI), V300 (SCSI), V310 (SCSI), V600 (SCSI), X6 (SCSI), X6EL (SCSI), X6u (USB), V6USL (USB/SCSI), X12USL (USB/SCSI), V6UPL (USB only)
- Microtek SlimScan C3u (USB), C6u (USB)
- UMAX Astra 600S (SCSI), 610S (SCSI), 1200S (SCSI), 1220S (SCSI), 2400S (SCSI), 1220U (USB), 2000U (USB), 2100U (USB), 2200 (USB/SCSI), 4000U (USB),

- UMAX PowerLook 1100 (1394)
- Visioneer 6400 USB, Visioneer 7600 USB, 6100 USB, 5300 USB
- Visioneer OneTouch 8600 USB, 8100 USB

Known problems with above devices

Scanners

Once a SCSI-scanner is installed for the first time, it may not be accessible until the PC is rebooted.

Pressing the "test" button from an HP scanner troubleshooting tab will launch the application associated with the event (i.e., the scanner and camera wizard).

The Visioneer 7600 driver from the manufacturer conflicts with the driver that ships in Windows Millennium. When both drivers are installed, remove the original driver (Start | Settings | Control Panel | Add / Remove Programs). Look for the visioneer 7600 driver and uninstall it.

Accessing two HP scanners (one SCSI and the other USB-based) at the same time will fail. This will be fixed for later versions of Windows.

Installing the Umax driver will not allow the Windows Millennium supplied-driver to work anymore. The only way to get around this problem is to re-install Windows Millennium.

In some cases, while using the HP 3300c scanner, the buttons on the scanner may not work when booting for the first time. The workaround is to launch an imaging application like Kodak Imaging (found on Start | Programs | Accessories). Simply starting and exiting this application will allow the buttons to work again

Still cameras

When browsing into any of the above cameras from "my computer", use the "web view" instead of the "classic view". Otherwise, you will lose functionality only available in "web view".

IrTran-P based cameras are not automatically installed. To avoid potential conflicts with other applications that require the COM (serial) port, these cameras need to be manually installed. They're grouped under "Microsoft" as the driver vendor. Once installed, they may conflict with other infrared-based devices.

Installing a serial-based camera more than once does not create a unique name for the camera. To change the camera name, single click on the name below the camera icon and change the name.

Saving an audio file from the camera view will not generate a warning when an existing *.wav file is being overwritten. To work around this, drag and drop the sound file to a different location.

The "preview" function in the camera view allows "editing" of the picture when an application associated with JPEG files is launched. Saving the changes from the application will not write them back to the camera.

In most cases, it is strongly recommended that only one driver be installed for each device supported directly in Windows Millennium (see above list). Using the Windows Millennium provided driver is the preferred way to access the supported devices. The following cameras are known for having problems when both drivers are installed:

- Nikon 700 and 950 models
- Canon A5
- Casio cameras

Video cameras

The Phillips 680 video camera does not support taking a picture by pressing the button on the camera. Instead of an actual picture, a black frame is generated.

Deleting pictures created from a video or web camera from the DOS command line will display the wrong file size (approx. 3.99 Gig). The file is much smaller than that. This will be addressed in later versions of Windows.

Installing a scanner

Please consult your scanner manufacturer's installation instructions. Once one of the above supported scanners is installed, WIA will automatically detect it and install the appropriate drivers.

Installing a serial camera

From the control panel, select "Scanners and Cameras". Then, select "Add Device". This wizard will list all the non Plug 'n Play supported WIA devices in Millennium. Select the "manufacturer" for your camera and select the model. If you're not sure which port to select, use the default "Automatic port select" and continue with the wizard. If you'd like to rename the device, you can do it in this step or simply leave the default name.

Selecting "finish" after the last step will install the appropriate drivers and display a new icon under "my computer" and in the "Scanners and Cameras" folder in the control panel. If your camera is not listed, follow the manufacturer instructions.

Using the Scanners & Cameras folder

This folder, found in the "control panel", is used to configure scanners and cameras supported in this version of Windows. If your scanner or camera is not listed here, use the manufacturer instructions to configure it.

Using the installed scanners and/or cameras from "My Computer"

Double-clicking on a WIA scanner will launch the "Scanner and Camera Wizard" (see below for details).

Double-clicking on a WIA camera will "open" the camera and show thumbnails of all the pictures currently on the camera. To access the wizard from this view, right click on the camera icon, and select "Use Wizard" from the context menu.

Using the still digital cameras folder view

When using a still WIA camera, double-clicking it from "my computer" will allow you to browse in the camera, see thumbnails of the pictures, delete them, drag and drop, copy and paste outside the view, and copy to My Pictures folder.

When switching between the "camera" and "pictures" command tabs, the views and the commands may flicker.

If the camera supports tethered commands, the "camera" tab will display a "take picture" entry. Selecting "take picture" will trigger the camera to immediately take a picture.

Some cameras may take more than a few seconds to process to picture. You cannot do anything with the camera while it's processing.

Sound annotations can be saved by right clicking on the picture thumbnail and selecting "Save Sound As..". It can also be played by selecting "Play Sound".

If the camera has subfolders, you will be able to drill down into the folders from this view.

Using the video digital cameras folder view

When using a WIA-supported video camera, double-clicking it from "my computer" will allow you to preview the video from the camera and capture "stills" from it. Each "still", or frame, is individually treated as a picture and available for you to drag 'n drop, copy to the clipboard and paste into an application, copy to "my pictures" folder, delete, etc.

To capture a frame, click on "take picture" command. This command will snap the current frame from the video and save it on your hard disk.

Note that, unlike still digital cameras, the "captured" pictures are not deleted when you close Explorer. You will need to delete them from this folder view.

Using the Scanner and Camera Wizard

When you connect a WIA plug 'n play (USB) digital camera from the above list, the Scanner and Camera Wizard will automatically launch.

The Wizard can also be launched by double clicking on a WIA scanner from "my computer" or from the camera folder view ("copy all pictures.." command).

If you're using a non-PnP camera (i.e., serial port based), or you would like to manually start the wizard, you can launch it from Start | Programs | Accessories.

When using a camera, the wizard will allow you to:

- "Explore the camera", which is the same view as double-clicking on the camera from the "My Computer" view.

- Preview thumbnails directly through the wizard, rotate pictures, view picture information, select / change the picture names, select / create a destination folder, and copy all the selected pictures.

Note that if you have no pictures on the camera, the "next" button will be disabled. Also, by default, all selected pictures are saved in a folder named after today's system date under "My Pictures" folder. To change these defaults, select the "Advanced Settings" option from the 3rd wizard page.

When using a scanner, you can:

- Select the scan region and save it to a file.

- Preview the region you would like to scan

- Adjust the contrast & brightness, color depth, and resolution of the image being scanned

From the second page of the scanner portion of the wizard, the "Enlarge selection" check box will allow you to "zoom" into the selected scan region. Once you've selected the region to scan, the following page is very similar to the camera counterpart. The major difference is that you can save scanned images in 3 formats (BMP, JPEG, or TIFF).

Another difference is the default destination folder. For scanned pictures, no subdirectories are created.

NOTE: video cameras can only be used through the wizard once you "take pictures" with it. Otherwise, the "next" button will be disabled.

Scanners & Cameras control panel applet

If you're upgrading from Windows98 or Windows98 SE, you will notice that the control panel "Scanners and Cameras" application has been replaced with the "Scanners and Cameras" folder. To view information on your installed devices, open the "Scanners and Cameras" folder, and double click on the device icon.

STI based Scanners or Cameras

Scanners or digital cameras, whose drivers were written using the STI (Still Image Architecture) in Windows98 and Windows98 SE, continue to work as they used to.

Using the Scanner and Camera common dialogs

Windows now offers three new common dialogs. One for scanners, one for still cameras, and one for supported video cameras. These dialogs are accessed when working through the TWAIN compatibility layer, and with WIA Visual Basic based applications.

The camera common dialog only shows pictures. It does not show any other files associated with your pictures (i.e., sound annotations).

Microsoft Paint is now enhanced to support WIA

MS Paint will now allow you to communicate with your WIA scanner or camera. If you have a WIA device installed, an entry in the File menu titled "From Scanner or Camera" will be enabled. If enabled, this option will use the WIA common dialogs to communicate with the WIA supported scanners or cameras.

For a still digital camera, you will be able to copy, preview, and/or delete pictures on the camera.

For a scanner, you will be able to crop, adjust the scanned image attributes (contrast, brightness, etc.) and scan a region of interest.

NOTE: to preview a scan, you will need to press the "preview" button first.

For a video digital camera, you will be able to preview the video, capture multiple frames, and open one of the frames.

The Windows common open / insert dialog enhancements

The common open / insert dialog used by many applications, such as Outlook Express, can now "open" a JPEG file from a tethered WIA still digital camera.

Adding this functionality allows any application that understands JPEG and that uses the system common dialog to get files from the cameras. Getting pictures directly from cameras is no longer restricted to imaging applications only.

Using the camera property pages

The camera property pages may be accessed from the device selection common dialog, which automatically shows up when more than one WIA device is installed, or from the camera folder under "My Computer". The property page includes information about the camera and events associated with it.

If you'd like to change what happens when a PnP camera is connected, select the "events" tab and select an event from the "select an event" dropdown. Then, select a program from "run this program", "prompt for which program to run", "take no action", or "Save all pictures to this folder". As more applications become WIA-aware, you will be able to determine which application should get notified when the camera is connected.

Using the "My Pictures" Screensaver

A "My Pictures" screen saver has been added. Once turned on, the screen saver will automatically read pictures from "my pictures" folder (and its subfolders) and display them. To activate or change the screen saver behavior, right click on an open space on the desktop, select "properties", select the "screen saver" tab, and select "my pictures screensaver". To adjust transitions, select "settings" from this tab.

Performance

Performance for serial-based cameras has been greatly enhanced since beta2.

TWAIN

To add support for WIA devices, the TWAIN Datasource Manager has been modified to also recognize WIA devices.

Support for 16bit datasources has also been added. You should be able to use all your existing TWAIN applications and devices independently of WIA.

TWAIN Compatibility Layer

When WIA devices are properly installed and active, applications that only communicate with TWAIN devices can now communicate with WIA devices. This is referred to as the "twain compatibility layer".

The TWAIN compatibility layer only supports UI-mode. Applications that require ui-less mode may not work correctly. We are working with application vendors to address this issue.

The TWAIN compatibility layer has been enhanced for this release. There are no major known issues.

Non-WIA device and application issues

NOTE: The sites mentioned below are supplied and managed by the device or application vendors. Microsoft, in no way, warrants that the links or the updates will do what they're intended to. If you have any issues related to the information provided in this section, contact the vendors.

Devices

- Acer scanner models 310U/320U, 620U/620UT, 640U/UT do not work properly in Windows Millennium. A fix from Acer is available on:
<http://www.api.com.tw/products/imaging/service/driver/Win2000/MIRA340U.exe>
- Epson Perfection 636 (also known as Epson GT-7000 in some places) returns a "Scanner not ready.." message. In some cases, the PC may run out of memory. Contact Epson for an updated driver.
- Epson Stylus Scan 2500 does not scan. Contact Epson for an updated driver.
- Dexxa 4800 parallel scanner will not work in Millennium. No fix is available for this problem.

Applications

- Textbridge Pro 9.0 cannot communicate with WIA devices. A fix for this problem is available on <http://www.scansoft.com/support/microsoft/>
- Easy Photo SmartPage Pro scanner's EZPhoto will generate a fault in Windows Millennium. No fix is available for this application.
- Kai Photosoap does not support 1-bit black & white images. For a fix, please contact the vendor.

Caere's Pagekeeper Pro 3.0 may lock up when retrieving pictures from cameras. Please contact Caere for more information.

Misc.

Intellimouse Explorer, Optical and Web are not options in the Mouse.cpl Button tab pull-down menu.

Changing button assignments will not work with these mice. Current button settings will work, but cannot be changed. Also note that versions of the Intellipoint software older than 3.1a will not install on Windows Me.

Workaround:

To get the customizable button functionality for the Intellimouse Explorer, Optical and Web first install Intellipoint 3.1a from:

http://www.microsoft.com/products/hardware/mouse/driver/drivers_pc31a.htm

then follow the steps below:

- 1) Click on Start and select Run.
- 2) In the Run Open text area type "msconfig" (without the quotes), then click OK or press enter.
- 3) In the System Configuration Utility, click on the Win.ini folder tab.
- 4) Click on the plus sign next to the [Compatibility95] category.
- 5) Click on the entry that starts with "POINT32=" so that it is highlighted then click the Edit button.
- 6) Change the entry so that it matches the one below:

POINT32=0x0080000

- 7) Click OK. When asked to reboot, click Yes.