

The following are notes provided by Microsoft for WinG version 1.0:

Microsoft WinG version 1.0

This file describes known bugs, gotchas, and helpful hints for the WinG Version 1.0 final release.

WinG version 1.0 provides fast DIB-to-screen blits under Windows 3.1, Windows for Workgroups 3.11, Windows 95, and Windows NT version 3.5. WinG will not run on Windows NT version 3.1 or on earlier versions of Windows.

WinG requires a 386 or better processor to run. WinG will not run on a 286.

Updated information on WinG is available on CompuServe in the WINMM forum and on <ftp.microsoft.com>.

Known Bugs And Limitations

The following are known problems with or useful tidbits of information about WinG version 1.0.

- Noticeable timing differences have been found while running the WinG profiler on a computer connected to a network. For accurate results, disconnect your computer from the network the first time you run a WinG application. After the profile is complete, you can plug the net in again. NOTE: Microsoft is not liable for any damage you may incur by incorrect handling of your computer hardware.
- WinG uses a slightly different color matching algorithm than the regular Windows system software when blitting an 8-bit image to a 4-bit planar display such as a standard VGA. Results may occasionally be different.
- WinG relies on the mmsystem timer drivers to determine display performance. If mmsystem.dll and timer.driv are not installed correctly, the results of the performance test may be incorrect. mmsystem.dll should appear on the drivers= line of the [boot] section of system.ini, and timer=timer.driv should appear in the [drivers] section of system.ini.

Driver-Specific Problems

WinG depends on Windows display drivers written by independent hardware manufacturers for much of its speed. Bugs or performance problems in third-party display drivers may cause problems in WinG. In many cases, the video card manufacturer has already fixed the bug, and upgrading your display driver will often clear away problems.

There are some specific "bugs" in display drivers of which you should be aware. The list below is not intended to slight the manufacturer of any particular card or driver.

A list of stress-tested configurations is available on the CompuServe WINMM forum and ftp.microsoft.com.

Some names in this list are trademarks of the respective manufacturer.

- Early drivers for Diamond Viper cards included a "Power Palette" option that is no longer supported by Diamond. They recommend that you upgrade your drivers if you have this option. WinG may be slower when power palette is enabled.
- IBM no longer supports the IBM ThinkPad 720c. There are some problems using WinG with the ThinkPad 720c display drivers.
- Cirrus drivers before version 1.43 have many known bugs which have been fixed in the more recent drivers. Be sure to upgrade your drivers if you are still running with this version.
- Some ATI drivers offer a "Crystal Fonts" option. Turning Crystal Fonts on in 8-bit modes sets up a non-palettized driver that can slow WinG significantly.
- The ATI mach8 Radical drivers cause a number of problems in both WinG and in Windows with some versions of the ATI chipset. Be aware.
- The ATI VGA Wonder drivers (W31-*.drv) will crash during a call to StretchDIBits in the profiler. Users can run the SVGA256.DRV driver that shipped with Windows.
- Many miro Crystal drivers have problems with StretchDIBits, so they crash during profiling.
- Early ATI Mach 32 PCI cards have a hardware timing problem and will hang while blting. ATI will replace these cards for no cost.
- WinG is incompatible with the #9GXE "TurboCopy" mode. Use the #9 control panel to disable TurboCopy (it is off by default).
- WinG uses a GetPixel to synchronize with display hardware when writing directly to the screen. The ATI Mach 32 driver's GetPixel does not work properly, so it is possible to use GDI to draw to the screen, then use WinG to blt to the screen and have them overwrite each other. Be careful mixing GDI drawing commands and WinG blts to the display.
- The Orchid mmtllo.drv driver for the Prodesigner IIs has duplicate system colors which prevents applications from getting an identity palette and greatly reduces the WinG blt speed. A workaround is to set SYSPAL_NOSTATIC mode or use standard the Tseng ET4000 drivers instead of the mmtllo drivers.

A Note on Speed

WinG is designed to be the absolute fastest way to blt DIBs under

Windows. The goal, achieved in many cases, is to blt at memory bandwidth to the display device.