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## **Help on a specific topic**

push button: Help

mnemonic key: H

To get help for a specific topic, you may use Windows Help's search function to locate the topic.

## Scanline Buffer

edit control: Scanline Buffer

mnemonic key: L

Size, in bytes, of scan buffer area. This area is used to buffer the individual scanline commands sent to the display card. It is also used by other graphics functions to buffer data. Sending large blocks of data will generally decrease the time it takes to perform graphics operations.

If Windows is run in real mode, this buffer is allocated from base memory. Memory is very limited in real mode, and the 2K default/minimum is strongly recommended.

If running in protected mode, the Windows DGIS driver will automatically use a minimum buffer size of 16K. If you intend to operate Windows in protected mode, setting the scanline buffer size to a value greater than 16K may, based on your PC's configuration, improve performance.

### See Also

[Cached Fonts](#)

[Stack Size](#)

## Cached Fonts

edit control: `Cached Fonts`

mnemonic key: `T`

Maximum number of fonts DGIS caches on the display card. Increasing the number of fonts to cache may improve the performance of applications that display multiple typefaces at once.

The number of fonts that may be cached depends on the amount of memory available on the display card and the size of fonts you use. Caching too few fonts may slow the performance of some font operations. Caching too many fonts, however, may slow other graphics operations that could more effectively use the display card's memory.

The optimum number of fonts to cache depends on the applications you use. If you primarily use word processing applications, a higher number of cached fonts may improve overall system performance. If you most often use graphics applications, fewer cached fonts may be desired. If you are new to Windows or use a variety of Windows applications, the default value of 5 cached fonts is recommended.

### See Also

[Scanline Buffer](#)

[Stack Size](#)



## Stack Size

edit control: Stack Size

mnemonic key: K

Size, in bytes, of stack to allocate for DGIS. When in real mode, DGIS needs a larger stack than GDI provides. This item is not applicable when running in protected mode. Generally you do not need to modify this parameter from its 2K byte default.

### See Also

Cached Fonts

Scanline Buffer

## **4x4 Dithers**

radio button: Small (4x4)

mnemonic key: M

This option specifies the size, in pixels, of monochrome dithers. 4x4 dithers are generally faster than 8x8 dithers, however, 8x8 dithers produce a broader range of grey scales. 4x4 dithers is the default setting.

Color dithers are always 8x8 and are not affected by this option.

### **See Also**

[8x8 Dithers](#)

## 8x8 Dithers

radio button: Large (8x8)

mnemonic key: X

This option specifies the size, in pixels, of monochrome dithers. 4x4 dithers are generally faster than 8x8 dithers, however, 8x8 dithers produce a broader range of grey scales. 4x4 is the default dither setting.

Color dithers are always 8x8 and are not affected by this option.

### See Also

[4x4 Dithers](#)

## 4x4 Hatch Size

radio button: Small (4x4)

mnemonic key: 4

This option specifies the size, in pixels, of all hatch patterns. 4x4 hatch patterns are faster than 8x8 hatch patterns, however, they are not as easy to distinguish at higher resolutions. 4x4 is the default hatch size.

### See Also

[8x8 Hatch Size](#)

## **8x8 Hatch Size**

radio button: Large (8x8)

mnemonic key: 8

This option specifies the size, in pixels, of all hatch patterns. 4x4 hatch patterns are faster than 8x8 hatch patterns, however, they are not as easy to distinguish at higher resolutions. 4x4 is the default hatch size.

### **See Also**

[4x4 Hatch Size](#)

## **DGIS does styled lines**

radio button: DGIS

mnemonic key: D

If this option is enabled, all styled lines (dashed or dotted for example) will be drawn directly by DGIS. Enabling this option provides the highest performance. This is the default and recommended setting.

The algorithm used by DGIS to draw styled lines may not exactly match the method used by GDI emulation. This should rarely be a problem.

### **See Also**

[GDI does styled lines](#)

## **GDI does styled lines**

radio button: GDI

mnemonic key: I

If this option is enabled, all styled lines (dashed or dotted for example) will be emulated by GDI. Enabling this option will slow the performance of styled line drawing. The default setting that allows DGSI to draw all styled lines is recommended.

### **See Also**

[DGSI does styled lines](#)

## **DGIS Widelines**

radio button: DGIS

mnemonic key: S

If this option is enabled, all wide lines (thickness greater than 1 pixel) will be drawn by DGIS. Enabling this option will improve the performance of some wide line drawings while decreasing the performance of others. Most applications will not benefit from having DGIS draw wide lines, and the default option allowing GDI emulation is recommended.

The algorithm used by DGIS to draw wide lines does not exactly match the method used by GDI emulation. This sometimes causes unwanted pixels to be displayed when polygons are outlined with wide lines. You may also notice the difference at end caps and line joins.

### **See Also**

GDI Widelines



## **GDI Widelines**

radio button: GDI

mnemonic key:        G

If this option is enabled, all wide lines (thickness greater than 1 pixel) will be emulated by GDI and passed to DGSI as a series of horizontal scanlines. Enabling this option will improve the performance of some wide line drawings while decreasing the performance of others. Most applications will benefit from having GDI emulate wide lines. This is the default.

### **See Also**

DGSI Widelines

## All polygon fills by DGIS

radio button: DGIS does all fills

mnemonic key: F

If this option is enabled, all filled polygons will be drawn directly by DGIS. Enabling this option provides the highest performance. This is the default setting.

The algorithm used by DGIS to draw filled polygons does not exactly match the method used by GDI emulation. In particular, DGIS fills the right and bottom edges of a polygon and GDI does not. This difference can be seen when polygons are displayed with the XOR (exclusive OR) writing mode, which is typically done for gradient or fountain fills.

### See Also

[GDI does XOR polygon fills](#)

[GDI does all polygon fills](#)

## **GDI does XOR polygon fills**

radio button: GDI does XOR fills only

mnemonic key: R

If this option is enabled, all filled polygons will be drawn directly by DGIS except when the writing mode is XOR. When the writing mode is XOR, GDI will emulate the filled polygons.

The algorithm used by DGIS to draw filled polygons does not exactly match the method used by GDI emulation. In particular, DGIS fills the right and bottom edges of a polygon and GDI does not. This difference can be seen when polygons are displayed with the XOR (exclusive OR) writing mode, which is typically done for gradient or fountain fills.

### **See Also**

[All polygon fills by DGIS](#)

[GDI does all polygon fills](#)

## **GDI does all polygon fills**

radio button: GDI does all fills

mnemonic key: E

If this option is enabled, GDI will emulate all filled polygons. Enabling this option will slow performance.

The algorithm used by DGSI to draw filled polygons does not exactly match the method used by GDI emulation. In particular, DGSI fills the right and bottom edges of a polygon and GDI does not. This difference can be seen when polygons are displayed with the XOR (exclusive OR) writing mode, which is typically done for gradient or fountain fills.

### **See Also**

[All polygon fills by DGSI](#)

[GDI does XOR polygon fills](#)

## **StretchBlt discard data**

radio button: Discard data on compression  
mnemonic key: P

If you select this option, extra pixels will be discarded on compression during a Windows StretchBlt operation. This is the default setting for StretchBlt handling.

When compressing images through the StretchBlt operation, there are three methods of handling compression of pixels. Multiple pixels which are being compressed to a single pixel can be logically AND'd together, OR'd together, or the 2nd through nth pixels of the source can be discarded. Unfortunately GDI does not pass the driver the current compression method during a StretchBlt operation, therefore, requiring this configuration option.

### **See Also**

[StretchBlt AND data](#)

[StretchBlt OR data](#)

## StretchBlt AND data

radio button: AND data on compression  
mnemonic key:       A

If you select this option, extra pixels will be AND'd together on compression during a Windows StretchBlt operation.

When compressing images through the StretchBlt operation, there are three methods of handling compression of pixels. Multiple pixels which are being compressed to a single pixel can be logically AND'd together, OR'd together, or the 2nd through nth pixels of the source can be discarded. Unfortunately GDI does not pass the driver the current compression method during a StretchBlt operation, therefore, requiring this configuration option.

### See Also

[StretchBlt discard data](#)

[StretchBlt OR data](#)

## **StretchBlt OR data**

radio button: OR data on compression  
mnemonic key:      O

If you select this option, extra pixels will be OR'd together on compression during a Windows StretchBlt operation.

When compressing images through the StretchBlt operation, there are three methods of handling compression of pixels. Multiple pixels which are being compressed to a single pixel can be logically AND'd together, OR'd together, or the 2nd through nth pixels of the source can be discarded. Unfortunately GDI does not pass the driver the current compression method during a StretchBlt operation, therefore, requiring this configuration option.

### **See Also**

[StretchBlt discard data](#)

[StretchBlt AND data](#)

## **Clear Display at Termination**

check box: Clear Display

mnemonic key: Y

Sometimes, especially in dual monitor configurations, it is annoying to see the remnants of the graphics data on the high resolution monitor when the current activity is centered on the other monitor. Selecting this option ensures that the high resolution screen will be cleared of any graphics data when Windows is exited. Disabling this option will result in the high resolution screen retaining any graphics data that was drawn on it just before Windows was terminated.

The default mode is for the Clear Display option to be disabled (for compatibility with previous releases of the drivers).



## **Inhibit Repaints**

check box:  Inhibit Repaints

mnemonic key: B

This option is only applicable when you are running Windows in enhanced mode. A context switch from a fullscreen DOS session back to the Windows desktop will normally result in a repaint of the entire graphics content of the Windows screen. It will be faster and visually more pleasing if the repaint is skipped. By enabling this option the driver will inform Windows that repaints are not necessary after the switch back from a fullscreen DOS session.

Note that some DGIS cards share the same framebuffer between the Windows screen and the DOS screen. On these cards a repaint is necessary and regardless of the setting of this option repaints will always be done after the switch back from a fullscreen DOS session.

The default setting is for repaints to always occur (for compatibility with previous releases of the drivers).

## **Install New Drivers**

push button: Install New Drivers

mnemonic key: N

Selecting this option will add the DGIS high and low resolution drivers to the list of drivers that can be selected using the Windows Setup program. It will also create file C:\UPDATE.BAT that will copy the Windows DGIS drivers to the correct Windows directory.

Selecting this entry copies the appropriate data into the Windows SETUP.INF file. The current SETUP.INF is saved as SETUP.BAK.

## **Save Option**

push button: Save

mnemonic key: V

Save the option changes to the Windows WIN.INI file. You must exit Windows, then restart Windows for the changes to take effect.

## Cancel Option

push button: Cancel

mnemonic key: C

Cancel any changes made and close the **DGIS OPTIONS** window. This also closes the Help window if no other applications are using it.

/\*\*\*\*\*\*

\* term.rtf 1.3 fetched 91/08/26 \*

\* @(#) last changed 91/06/17 13:19:29 \*

\* @(#) /sccs/Dgis2.0/Windows3.0/WConfig/s.term.rtf

\*

\*\*\*\*\*/

## **What is GDI? What is DGIS?**

GDI (graphics device interface) is a graphics library within Windows that supports device-independent graphics operations.

DGIS (Direct Graphics Interface Standard) is the graphics library that supports your display card.

## **StretchBlt**

The StretchBlt command is a function used by Windows applications to copy a bitmap from a source to a destination. During the copy, the bitmap can be stretched (destination bigger than source) or compressed (destination smaller than source).

## **C:\UPDATE.BAT**

The Windows DGIS drivers cannot be overwritten while you are running Windows. After terminating your current Windows session, this batch file can be used to copy new drivers from a DGIS release to the correct Windows directory on your hard disk.



## **Protected Mode**

Microsoft Windows may be operated in real, standard, or enhanced mode. Enhanced and standard modes are also referred to as protected mode. It is recommended that you use enhanced mode for optimum performance. Enhanced mode is the default.

## **Using Help's Search**

Click on the Search push button or press the mnemonic key 'S' to invoke Windows Help's search function. Type in the search string in the search dialog box. For detail description of Windows Help's search method, please refer to the Windows User Guide.

## **ALT-TAB to select windows**

While holding down the ALT key, press the TAB key to activate the next window.

## **Mnemonic Keys**

A mnemonic key allows the user to make a selection of a menu command, or a dialog control with a single key stroke. The underlined character in the command or control text string defines the key stroke. Mnemonic keys are case-insensitive.