

Free System Resources

Free System Resources was written by:

Chet Williams
1737 Peyton Ave 'K'
Burbank, CA 91504
(818) 954-9128

Free System Resources is a Shareware package

Registration fee is \$10

Please contact with any suggestions
or for software support.

Thanks!!

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Purpose

The purpose of the Free System Resources programs is to provide a mechanism to allow the user to know when the Window system resources are low. To let the user know the current Window resource level the program provides the current and lowest levels of the Graphical Device Interface (GDI), User resources and available memory. To Help the user to keep out of trouble a trigger level is provided to alert the user when the resource level goes below a given point.

Free System Resources gives individuals a chance to avoid out-of-memory errors with the resulting lost of current input. It is most useful when multiple concurrent applications are started.

Automatic notification when the resources are low is the most significant feature of this package.

Installation

The Free System Resources application requires Windows 3.1. The Reporting on the memory managed by the virtual memory manager is valid only with 386 enhanced mode. GDI and User available resources are available running either enhanced or standard mode.

The Free System Resources files distributed in the Zip'ed file do not contain VBRUN300.DLL. This file was not included to reduce transmission time. VBRUN300.DLL is available from most BBS. If you require VBRUN300.DLL and are unable to locate it, contact the author and I will ship it to you.

Installation from disk

1. Make sure that VBRUN300.DLL is in your WINDOWS/SYSTEM directory. If it is not on your disk the distribution disk contains a copy and should be copied to your WINDOWS/SYSTEM directory. Note: Check the date to be sure that you have the most recent version.
2. Insert the setup disk in a floppy disk drive.
3. Go to Windows Program Manager and choose the Run command from the file menu. In the Command line box, type either a:setup or b:setup depending upon where disk is located.
3. When Setup starts, follow the instructions on the screen.

Installing a Zip'ed file

A zip'ed file is a file which has multiple files compressed into a single file with a file extension of ".ZIP". When a file is unzip'ed the individual files are de-compressed and are then available for use by the system.

1. Place the file PASSAGE.ZIP into a temporary directory and un-zip (de-compress) using PKUNZIP.
2. One of the de-compressed files in the temporary directory is SETUP.EXE. Using the Windows file manager select the file SETUP.EXE in the temporary directory and double click to begin the setup process.
3. When Setup starts, follow the instructions on the screen.

The unregistered version has a Registration Reminder Screen. It will appear once each time the application is started.

Notes on Use

An INI file is maintained which maintains information such as location of program window, trigger amounts and color scheme between executions.

The menu provides the capability to modify the colors displayed for the percentages and the background. Colors should be selected so that minimized icons which are triggered to appear normally will not be missed.

It is suggested that this program be placed in program start up group with the minimized attribute.

The minimized icon label shows two lines. The first line displays the current Memory, GDI, and User Percent available space. The second line displays the lowest Memory, GDI, and User Percentage that have occurred since the program was started. To reset the lowest percentages, restart the application.

To eliminate the flicker on the minimized icon description lines, click on "No Percentages on Minimized Icon".

The On Top capability is not necessary with the trigger percentages. However, at times On Top capability will be helpful when viewing the current or lowest percentages.

Once the available resources go below the trigger amounts the minimized button will be inoperative. It is necessary to modify the trigger amounts in order to minimize the application when resources are below the trigger amounts.

Considerations

The GDI and User data space (heap) is limited to 64K. If the user runs out of either of these two data spaces an "Out of Memory" error message will occur. Sufficient GDI and User data space must be available to avoid problems. If the user's work habits or applications are such that memory problems occur this program can be helpful in keeping the user out of trouble by setting trigger levels.

The memory (global heaps) levels managed by the virtual memory manager are less of a problem due to the way that the memory manager works. The global heaps is managed by pages which can be 2048 or 4096 bytes. The memory manager keeps tracks of which pages are disposable. When additional memory is required the disposable pages are removed. Disposable

pages are those pages which have had no modifications and can be restored when needed.

Problems in the global heap can occur when the hard disk is low on space. This occurs as 386 enhanced mode gives more logical RAM than you have physical RAM, but only if you have the hard disk space free.

Some programs have what is known as memory leaks. Memory leaks are programs which uses memory and does not return it to the system after use. To locate these kinds of problems track the current percentage available during execution and after program termination to see that the resource is returned to the system. It may be necessary to change drivers (such as changing the Video driver to standard VGA) to find the problem program.

Memory

Shows that memory (global heap) that is control by the virtual memory manager. This is includes both physical and virtual (also known as disk swappable or swap file) memory.

Graphical Device Interface (GDI)

The data space (heap) used by the GDI library (GDI.EXE) contains graphics information regarding brushes, fonts, icons, and so on. GDI is the interface between windows software and the physical device. Drawing functions and graphical objects are supported along with the ability to determine the characteristics of the device. The various drivers interface with the GDI to provide the logical to physical interface between screens and printers.

User

The data space used by the USER library (USER.EXE) contains style information pertaining to windows (forms) and controls as well handles to objects such as windows and menus.

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