WinSpeed SRM V1.0 - Windows System Resources Monitor

WinSpSRM displays the current status of your Windows System Resources, updated every second. Three types of resources are displayed, System Heap, GDI Heap, and User Heap. The screen shows you the percentage of each of these resources that has been used, and the actual amount remaining to the system, in K bytes for System Heap, and in bytes for GDI and User Heap.

The 'Beep' button controls a low resources alarm. If Beep is on (the default) an alarm will sound if
you use more than 90% of GDI or User Heap, or if you have less than 200KB of System Heap left. Pressing the Beep button toggles the status of the alarm (i.e. switches it off). If the alarm goes off, it is a good idea to exit Windows and then re-start it, because if you run out of resources, you are in __Big__ trouble.

System Heap is the total memory available to Windows, including Base, Extended, and Swapfile (if you are running in Enhanced Mode) the percentage used includes memory assigned to SmartDrive and used by DOS. The important part of this figure is how much you have left. Too little and you will not be able to launch new applications, running out can cause Windows to crash.

GDI Heap is a data segment belonging to GDI.EXE, one of the Windows Kernal programs. GDI memory is used to store Windows graphics objects such as Cursors, Fonts, Icons, Pens, and Brushes. Programs which use a lot of these objects will use up GDI Heap. Many (most?) Windows applications create graphics objects and forget to release them, this means that as you run programs during the day, your GDI Heap shrinks. This is a major cause of UAEs. The solution is 1) don't run 'Bad' programs, or 2) exit Windows and re-start when your heap fills up.

User Heap is a data segment in another Windows kernal program (USER.EXE), which contains information about Windows that are currently on the screen. Closing applications that are currently running will reduce the usage of this resource. Some programs also use up User space, and if your User Heap gets low, you should close Windows and re-start.

You can use this utility both as an early warning system for low system resources situations, by running it constantly in the background (it does not use up resources while running, and is fairly efficient), or to identify 'Bad' programs by running them alongside it and watching for gradually increasing memory usage.

This program was developed as part of the WinSpeed Version 1.1 package, which is due to be
released in mid-Febuary, but since it is ready now I have decided to release it early as version 1.0. If you have WinSpeed 1.0, you may notice that it is a 'Bad' program (i.e. it gradually uses up the GDI Heap), I would like to apologise for this and I promise that WinSpeed 1.1 will be better. The interesting thing is that I did not know there was a problem until I wrote this program and tested it!

I would like to thank David Stafford for telling me (in Assembly yet! - do you speak any other languages Dave?) how to call the undocumented GetHeapSpaces function, Matt Pietrek at Borland for answering my questions with blinding speed and accuracy, and everyone else on the BPROGB forum for keeping me company in the small hours. I would also like to assure Dieter (he knows who he is) that the Sydney ferries are very safe and (almost) Germanically efficient).

Please report any bugs/suggestions to me (Chris Hewitt) on CompuServe ID 100036,133.