

Organic Art 1.x Knowledge Base

Summary: Screen saver runs slowly under Win95.

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Applies to: Windows 95

X-ref: MS KB Article Q74042

Problem:

Organic Art screen saver runs slowly/jerkily under Windows 95. CPU/RAM is adequate. Occurs in 256 or 16-bit colour, so is not simply true colour being slower.

Explanation:

This problem is seen when one or more of the applications running use a “busy wait” when idling. This is not recommended programming practise under Windows, and could be considered a bug in those applications.

This behaviour can be confirmed by running the Windows 95 System Monitor, which is under Start Menu, Programs, Accessories, System Tools (not to be confused with the “System Resource Meter” in the same menu). Note this tool is an optional item at install, so you may need to add it from the Windows 95 CD. This tool shows a graph of CPU usage, and if an application is in a busy wait, the CPU usage will be high, perhaps 100% (normally it should be under 5% on an idle system).

The Organic Art screen saver is affected by this behaviour as it is “well behaved” - it runs at a low task priority, and is designed to yield to user applications when they demand CPU time. Other applications may not be noticeably affected, as Windows 95 uses both pre-emptive (“32-bit”) and co-operative (“16-bit”) multi-tasking. The older co-operative task switcher will still function reasonably well, but only among tasks of the same priority. Note that any other low-priority tasks on your system will be slowed down, not just the Organic saver.

This problem is not seen on Windows NT, which has code specifically to check for the busy wait behaviour, and force the application down to an idle priority. It is also not seen on Windows 3.1, as Win32s appears to ignore the process priorities altogether.

Solution:

One solution is to upgrade or replace the application(s) causing the problem. If this is not feasible, the Organic Art saver can be configured to run at a higher priority so it will not be affected. Note that increasing the priority of the screen saver will mean that when it activates, it could slow down a genuinely busy application (e.g. a lengthy spreadsheet recalculation, backing up files to a tape, or acting as a network file server).

Warning: To reconfigure Organic Art, you will need to use “RegEdit” to edit its key in the system registry. Accidentally changing or deleting unrelated registry keys could cause your system to become unstable and require re-installation. RegEdit operates directly on the registry database - no copy is

made, and there is no Save or Undo operation. If you are not familiar with this tool, please read its help before you start changing registry keys.

Note: in the instructions below, entries you must type in are given in quotes - you don't type in the quote marks themselves unless otherwise stated.

1. Run the Windows 95 Registry Editor - from the Start Menu choose Run and enter "regedit".
2. Go to the key:
3. HKEY_CURRENT_USER/Software/Computer Artworks/Organic Art/1.0
4. Now right click in the right hand pane, and add a new value of type DWORD and name it "ProcessPriority". Double click this and set it to the hexadecimal value 20. It should now say "0x00000020 (32)" as the value.

See the Organic Art Help under "Advanced Configuration" (note: not Advanced Options), in the General section, for more information on the ProcessPriority key.

Status:

The behaviour of Organic Art is by design, and so there is no "fix" as such.

Suggest:

1. Make Windows 95 .REG file available for download, which will make the above changes automatically when double clicked.
2. Add process priority option into saver configuration dialog.