

dAgent v 1.4

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1 Introduction

dAgent is intended for use by programmers and people of a somewhat technical bent who use Windows v3.0. It improves your ability to monitor and manipulate your Windows system.

dAgent offers on-line help using the standard Windows help-file format.

dAgent is a medium model C program written using the Windows SDK and Microsoft C compiler v5.1. Four named code segments are used in order to keep memory requirements down.

dAgent has been tested on Compaq 386/20e, 386s and Portable 386 machines as well as a small number of clones. The print out has been tried on a variety of printers and seems robust.

This document was written with Microsoft Write and is intended for printing on a Laserjet III using Helvetica 10 point.

2 Functions

The main functionality of **dAgent** resides in a series of tools called Agents. These agents display information, or let you manipulate your system, or in the case of Alerts let you define a set of operational limits which **dAgent** will police for you, 'grassing' on the system when it (for example) runs more than a set number of tasks, uses up too many timers or runs low on disk space.

All of the functions listed here may be invoked using any of these methods :

- i) Select the appropriate option from the **T**ools Menu.
- ii) Click on the appropriate button with the left hand mouse button.
- iii) Press Alt+<underlined letter of option required>.

2.1 Mouser :

Similar to the Spy program supplied with the Windows SDK, it 'informs' on any visible window as you place the mouse cursor over it. It doesn't however allow you to see all the messages received by that window **but** it does give complete window style information as well as a number of other useful items such as RGB values for client area points, module name and handle, window name and handle, parent window name and handle etc

N.B. Because the window required for this tool is so large, the main **dAgent** screen is minimised whilst Mouser is running and restored again afterwards.

Mouser will not operate if you have not got a mouse. Sorry.

Mouser uses a dynamically updated displayed and relies entirely on mouse-clicks for its operation. If you wish to move the mouser information screen in order to view what is underneath, click once on it, use the title bar to drag it to the desired position

and click on it again. In order to return to the **dAgent** screen proper, click the right hand mouse button or use the system menu.

2.2 Atoms :

Windows makes extensive use of a sort of semaphore which it calls Atoms. Each has a name, a number and a use count. Atoms may either be Global (available to all) or local (available to your program only). Atoms may be Added, Deleted (reduce their use count), 'Found' by name or 'Got' by number. **dAgent** lets you do all this

Global atoms are used extensively to control Dynamic Data Exchange (DDE) between Windows applications.

The **Add** button will add a Global Atom in the **String** box, returning its id in a messagebox as well as inserting it in the **Id** box. The **Find** button will return the id of the string entered in the **String** box, or an error message if it does not exist. The **Get** button will return the name of the Global Atom whose name is in the **String** box in a messagebox - if it does not exist an error message should be returned. Beware however; a flaw (I think) in the SDK causes the program to crash if you attempt to 'Get' an atom which does not exist.

The **Quit** button returns you to **dAgent**.

2.3 Stock Objects :

A single display showing a sample of each of the default fonts and brushes available on your system.

The **Ok** button returns you to **dAgent**.

2.4 General :

A single display showing Windows version, mode, current and temporary file directories and other general information including available memory and timers. Note that in 386 enhanced mode, the Program Manager takes the minimum of the two percentage figures given for available heap space in the GDI and USER modules when it quotes the available memory.

The **Ok** button returns you to **dAgent**.

2.5 ClipBoard :

Describes the current contents of the ClipBoard and allows you to clear it.

The **Clear Clip** button clears the clipboard and returns you to **dAgent**; the **Ok** button returns you to **dAgent**.

2.6 Keyboard/Mouse :

Describes the keyboard, allows you to set the Mouse double click rate and the Caret blink rate or swap the mouse buttons.

N.B. For some reason I haven't fathomed, the System Metric information concerning the swapping of mouse buttons is only updated when Windows is restarted; in order to keep things consistent I update win.ini when you swap the buttons. This is unsatisfactory but consistent with the Control Panel, so at least Microsoft had the same problem.

The **Ok** button writes the changes specified to your win.ini file and returns you to **dAgent**; the **Quit** button reverses any changes made and returns you to **dAgent**.

2.7 System Metrics :

A single display showing System Metrics, ie things like default Menu bar height and so on.

The **Ok** button returns you to **dAgent**.

2.8 Dev Caps :

A cycling three screen display showing the Device Capabilities of the screen and all printers installed on your system. Device Capabilities include things like device height, driver version number, text effects such as underlining and italicising, curve effects such as whether it can do circles or ellipses, and so on.

A list-box lets you select which device's device capabilities are displayed, the **More** button lets you cycle through the three pages of information available and the **Ok** button lets you finish and return to **dAgent**.

2.9 Alerts :

Allows you to monitor the operation of your system. You can set minima and maxima for each of the items listed below and a period between tests. If any of the limits are broken, a message box is displayed or a beep sounded to warn you.

The items which can be monitored are as follows :

- Disk Space
- Memory
- GDI Heap space
- USER Heap space
- Timers available
- Number of running Tasks

NB the shareware version will not monitor available Disk Space on Network drives. This feature is available in the registered version.

This dialog is complicated, I suggest you try it.

3 Report

dAgent generates a report of the information given by the General, Keyboard/Mouse, System Metrics and Device Capabilities tools described above. This could be used for remote diagnosis, during systems development or to analyse the differences between device drivers.

To generate the report on your default printer, select **Print** from the **File** menu.

4 How to pay for/register dAgent

This version of **dAgent** is ShareWare. You may use it for a period of 21 days for the purpose of evaluation only. If you decide to use it 'for real' you must register it. Go on, it won't break the bank. Use of this program in a business environment, for or by a business requires a site license; these aren't expensive either so drop me a line and we can talk about it - customisation, source code, support etc ... can be arranged.

You may copy this program and give it to others provided you include this documentation and alter neither.

Registered copies of **dAgent** version 1.4 with your name embedded in place of the ShareWare message are available for £15.00 including floppy disk (add £5 if registering from outside the United Kingdom). Please include your name, address, and floppy disk format. See below for my address. Make cheques payable to Andrew Walsh.

Site licenses for **dAgent** version 1.4 are available for £95 including floppy disk (add £5 if registering from outside the United Kingdom). Please include your name, company name, company address, and floppy disk format. See below for my address. Make cheques payable to Andrew Walsh.

5 How to contact me

Whether or not you register this software, I would be glad to receive any comments, suggestions or bug reports - if **dAgent** doesn't tell you what you want to know, tell me and I'll try to put it in the next release.

I can be contacted via Royal Mail at :

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or via my CIX account "gorgias".

6 Liability

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