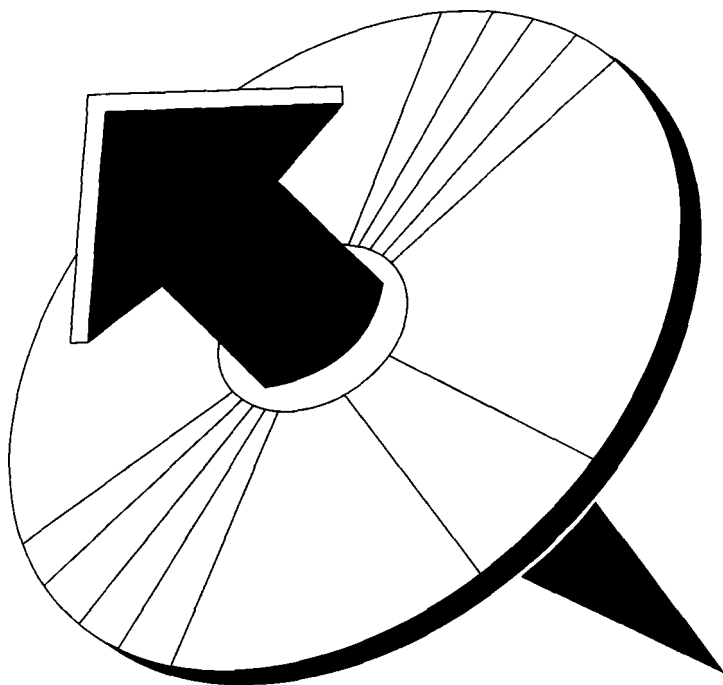


CDFast2



**CD-ROM Caching and Performance
Enhancement Utility**



Introduction

CDFast2 is a utility which improves the performance of most CD-ROM applications by using intelligent data caching algorithms. CDFast2, once loaded, works in the background in one of several modes, "Minimum Memory mode", "Enhanced mode" or "Extended Mode". CDFast2 uses a configurable amount of memory with as little as 12K which should not prevent CD-ROM applications from functioning due to lack of memory. CDFast2 will run on any version of CDFS, all CD-ROM applications, CD-ROM drives and any Acorn Archimedes computers. The Rest of this manual may refer to CDFast2 as CDFast. The CDFast application requires RISC OS 3 or later.

Licence

This is a single user licence, which allows the usage of CDFast on a single computer by the licensee only.

Using CDFast

You should first make a backup copy of the CDFast2 master disc, then put the master disc in a safe place. Always use the backup copy when using CDFast2, do not write-protect the backup disc as you may wish to save a configuration file to this disc.

To load CDFast on your system; simply place the backup disc into floppy disc drive, and click on the floppy disc icon. You should see a dialogue box appear in the centre of the screen indicating that CDFast is loaded, and in which operating mode CDFast is configured to. CDFast is now fully functional, and will immediately work the next time any CD-ROM disc is accessed.

Additional CDFast Products

- A site licence is available for CDFast.
 - There is also a multi-user version designed for networks, called NetCDFast.'
- Please phone for details of these and other Eesox CD-ROM products.

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Installing CDFast onto a Hard Disc

If you wish CDFast to be loaded automatically when you switch on your machine, follow the appropriate instructions for your system below.

RISC OS 3.5 or later

CDFast can be used either with or without the configuration and statistics window loaded on the Icon Bar. Copy the !CDFast application into one of the following directories depending upon how you want the software to be loaded.

To load CDFast and the Configure application, copy !CDFast to:

```
$.!Boot.Choices.Boot.Tasks
```

To Load CDFast only, copy !CDFast to:

```
$ .Apps
```

You can load the configuration application at any time, by double clicking on the !CDFast icon in the application directory.

Other Versions or RISC OS

If you wish to install CDFast onto a hard disc, it is recommended that you copy the whole !CDFast application into the root directory. To do this put the floppy disc into the drive, click on the floppy disc icon (CDFast is loaded); the !CDFast icon can be seen in a directory window. Click on the hard disc icon and then drag the !CDFast icon onto the directory window of the hard disc. The floppy disc may now be removed. The next time you switch on the computer, click on the hard disc icon and CDFast will be loaded from the hard disc.

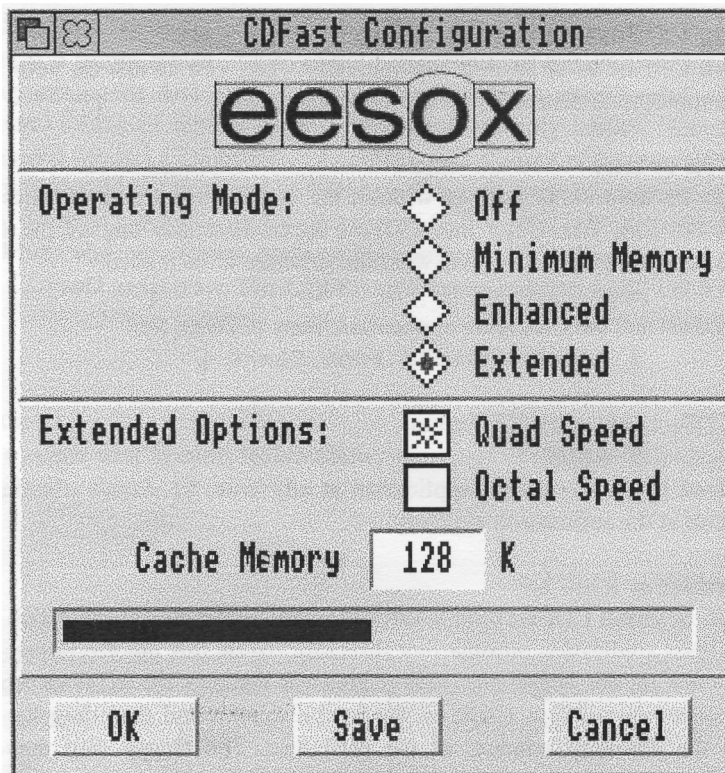
If you prefer to put !CDFast into a sub-directory, you should add a line to your !BOOT sequence which runs the "!CDFast.!boot" file.

```
eg.      *RUN harddisc::$.CDROM.!CDFast.!boot
```

Configuring CDFast

If you do not already have the CDFast icon loaded onto the icon bar double click on the !CDFast application.

Click 'Menu' over the CDFast icon on the icon bar, and select the option "Configure". You should see the following window displayed.



CDFast can be operated in one of three modes, "Minimum Memory mode", "Enhanced mode", "Extended mode" or CDFast may be turned off altogether. There are memory requirements and performance differences between the different modes, you should select the mode most appropriate. to your needs.

- **Off:** This mode uses only 4K for the code. There will be no performance improvement. It may be used temporarily if you really need the extra memory (most unlikely).
- **Minimum Memory:** This mode uses only 12K (code and cache), performance is greatly improved. This mode should be used if your applications run out of memory when running in other modes.
- **Enhanced:** This mode uses 36K (code and cache). It provides a good overall performance increase at the expense of a little more memory.
- **Extended:** This mode uses 4K for the code and 48K - 256K configurable for the cache. It provides the best overall increases at the expense of extra memory. Select as much memory as you can afford. If you have a "Quad speed (x4)" or better drive select the "Quad" speed flag. If you have an "Octal speed (x8)" or better drive, select the "Octal" speed flag for improved performances with these types of drives.

Choose an appropriate mode by clicking on one of the mode options. If you selected "Extended mode", then you will also be able to configure the amount of memory to set aside for the cache; by either dragging the slide bar or typing the amount required. You can also select the "Quad Speed" or "Octal Speed" buttons as appropriate for your CD-ROM drive.

(NB. selecting "Quad Speed" or "Octal Speed" for a CD-ROM drive which is not to specification may result in poorer performance under some conditions, although other conditions may benefit. It is recommended to use these options appropriately as they have been optimised for these circumstances only.)

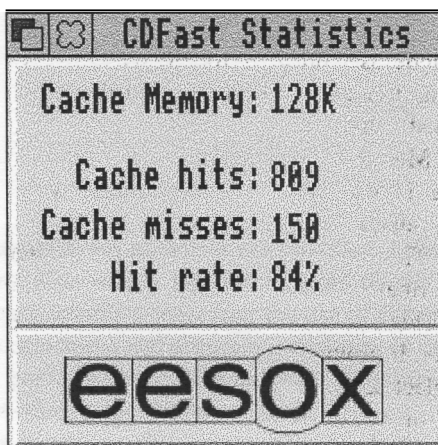
Once you have selected your operating mode and options click on one of these buttons:

- | | |
|--------|---|
| OK | Configures CDFast to the options indicated. Flushes the cache. |
| Save | Configures CDFast, and saves the chosen options. These will be the default options the next time CDFast is loaded. Flushes the Cache. |
| Cancel | Reverts back to the last configured mode. |

Selecting "quit" from the menu, quits the configuration application, but CDFast will continue to operate and provide performance enhancements.

Statistics Window

Click on the CDFast icon on the icon bar to open the statistics window.



The statistics window shows you how well CDFast is working. It can be used to tailor the amount of cache memory to use. The higher the "Hit rate" the better. Anything over 30% is considered to be good, and will give speed good improvements.

(NB. the hit rate is not a realistic indication of performance, only efficiency of caching.)

- **Cache Memory:** indicates how much memory CDFast has set aside for data caching. This should be the same as the memory configured, unless your system does not have the requested amount available.
- **Cache Hits:** is the number of times a block of CD-ROM data has been requested which was already located in the cache.
- **Cache Misses:** is the number of times a block of CD-ROM data has been requested which had to be read from the CD.
- **Hit Rate:** is the percentage of hits to the total number of CD-ROM blocks requested.

The figures can be reset, and the cache flushed by selecting "OK" again on the configuration window.

Performance Enhancement Figures

The information below indicates typical average performance increases which were obtained with CDFast using a variety of simple tests. The tests were carried out on a standard A5000 Archimedes, with a variety of CD-ROM drives.

- Test 1:** Opening root directory of CD-ROM for first time ("Acorn Educational Directory, Issue 4").
- Test 2:** Complicated "Super Search", in the "Acorn Educational Directory".
- Test 3:** Interactive file copying, using a 6.4Mbyte file.
- Test 4:** Using PhotoView to decode a 4Base image to a 256 colour sprite.
- Test 5:** Using PhotoView to decode a 16Base image to a 256 colour sprite.

	Min Memory	Enhanced	Extended
Test 1	+ 31%	+ 44%	+46%
Test 2	+ 34%	+ 33%	+35%
Test 3	+ 22%	+ 31%	+31%
Test 4	+ 18%	+ 33%	+38%
Test 5	+ 18%	+ 33%	+69%

NB. Actual figures will vary depending upon the configuration of the system, CD-ROM drive and version of CDFS used.

Disclaimer

The software and accompanying materials are provided without any warranty of any kind from the vendors. This means that the vendors do not in any way warrant or guarantee, or make representations regarding the use of either the software or written materials in terms of correctness and accuracy, reliability or otherwise. The entire risk as to the results and performance of the software is assumed by you and not the vendors. This does not effect your statutory rights.

Because our policy is to continually improve our products, we reserve the right to make changes without notice.

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