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What is PrintAid?

If you use a LaserWriter, you can print in the background with the help of Apple's PrintMonitor. If you use a different kind of printer, there are "spooler" programs you can buy from several companies. A spooler intercepts the information before it is printed, returns control of the application to you, and then sits in the background feeding the information to the printer.

If you don't have a spooler, the next best thing is for the application to keep feeding information to the printer, but allow you to switch to another application (under MultiFinder) and work there. This is quite easy for the programmer to accomplish, but unfortunately most don't do it. Perhaps they're worried that you will do something silly like try to print from another application before the first print job is finished. What's worse, they don't even give time to other tasks running in the background. For instance, suppose your communication program is downloading something in the background, and then you decide to print something in, say, MacWrite II or Word 4. As soon as the printer starts going, the download stops!

I wrote the PrintAid control panel extension (INIT/cdev) to alleviate this problem. It installs a routine which is called periodically during printing, and which allows you either to switch the printing application into the background or to run something else in its background. If the printing application puts up a modal dialog, which normally prevents MultiFinder from switching to another application, then PrintAid will modify the dialog type so that it will not prevent switching. In this case you will have to click the mouse a couple of times. As usual, you can cancel printing (when the printing application is in the foreground) by pressing command-period. Let me emphasize that PrintAid is NOT A SPOOLER.

The original plans for System 7 included a new printing architecture, which was to allow background printing for every printer. That was dropped under time pressure, but presumably Apple will get around to it sooner or later, and then PrintAid will become obsolete.

Using PrintAid

To use PrintAid, put it into your System Folder (or, in System 7, your Control Panels folder) and reboot. You can use PrintAid's control panel interface to turn PrintAid off, turn off its startup icon, or read this help text.

Limitations and Imperfections

- You still may not get instant response to your attempt to switch to a different application during printing. Have you noticed that printing (other than draft mode) happens in two stages? First the application works for a while without printing, and then the printer starts up. It is in this second stage, with the printer actually printing, that PrintAid goes into action.
- Some applications were not set up to work in the background. MicroSoft Word 4 is an example. If you don't mind using ResEdit, you can fix this: Edit the SIZE resources, and change the "Can Background" bit to 1. Usually, PrintAid will put up an alert box if you put it in the background and the application does not have its "Can Background" bit set, but if the application is REALLY MultiFinder-ignorant, then PrintAid may not be able to tell that it has been put in the background.
- There are likely to be some esthetic flaws, due to the fact that PrintAid cannot process update events and activate events. (Update events are what cause windows to be redrawn when parts that were covered become exposed; activate events control things like highlighting of scroll bars and whether or not the text insertion point is visible.)
- If an application does its own event processing while printing, then PrintAid will not attempt to interfere, even if the application does not allow background printing. CE Software's Amazing Paint is an example of this. Although PrintAid has no effect on Amazing Paint, you can achieve the same effect with ResEdit: Change the procID of the "cancel print" DLOG from 1 to 9, and set the "Can background" bit of the SIZE 0 resource to 1. Of course, this change has not been approved by CE Software and should not be done to your only copy of Amazing Paint.

Feedback Addresses

America Online: JWWalker
CompuServe: 76367,2271
InterNet: 76367.2271@compuserve.com
U.S. Mail:
James W. Walker
Department of Mathematics
University of South Carolina

Columbia, SC 29208

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Acknowledgements

I would like to thank the people who served as beta testers for PrintAid 1.0: Brian Hall, Seth Laforge, David Lamkins, Jim Lloyd, Brian Lowry, Robert L Mathews, and Chris Morrison.