

*RAMDiskSaver*TM

Automatic RAM Disk Backup for System 7

This document describes RAMDiskSaver, a utility that performs automatic periodic background back-ups of Macintosh RAM disks. RAMDiskSaver consists of two parts: RAMDiskSaver Extension and RAMDiskSaver Controls. The former is a System 7 background application; the latter, a control panel.

RAMDiskSaver requires several features absent from

Macintosh systems prior to System 7. If any of its system requirements are missing, RAMDiskSaver will gracefully decline to run. RAMDiskSaver can back-up only the current startup disk. It can back-up non-ram startup disks, but it cannot back-up non-startup RAM disks.

The Fine Print (Full-Size)

RAMDiskSaver is copyrighted software, distributed through the shareware system. It is not free. You may distribute unmodified copies of the

complete RAMDiskSaver package — RAMDiskSaver Extension, RAMDiskSaver Controls and this “Read Me” document — freely, but you may not sell it. If you decide to keep a copy of RAMDiskSaver, you must pay for it. To pay for your copy of RAMDiskSaver, send \$20 to: David Kreindler, PO Box 524, Ithaca NY 14851, USA.

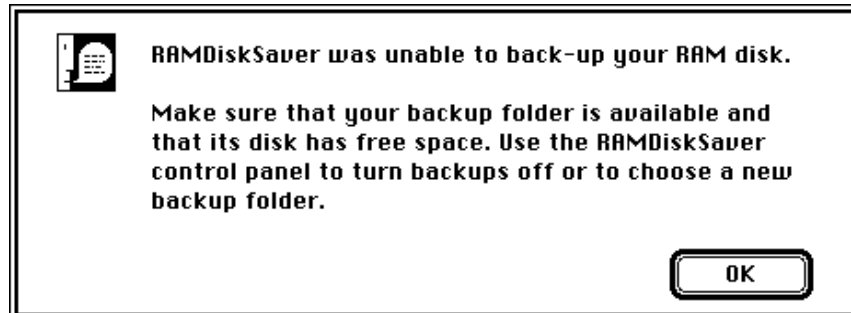
Please support the share-ware system by paying for your copy of RAMDiskSaver — *please.*

RAMDiskSaver is sold without warranty. When you choose to use it, you assume all responsibility for its performance (or lack thereof).

Questions, comments, suggestions and complaints may be mailed to the address above or e-mailed to: dkreindl@well.sf.ca.us.

Getting Started

To use RAMDiskSaver, your computer must have a RAM disk set to be its startup disk. (If you do not already have a startup RAM disk, refer to the section “Making a Startup RAM Disk,” below.) Copy the RAMDiskSaver Extension into your RAM disk’s Extensions folder, and put RAMDiskSaver Controls into its Control Panels folder. Re-start your computer, and you will immediately get a message like this:



This message just means that RAMDiskSaver Extension could not find a preferences file (because there is none). To create a new preferences file, first click the OK button to dismiss the alert box; then open RAMDiskSaver Controls.



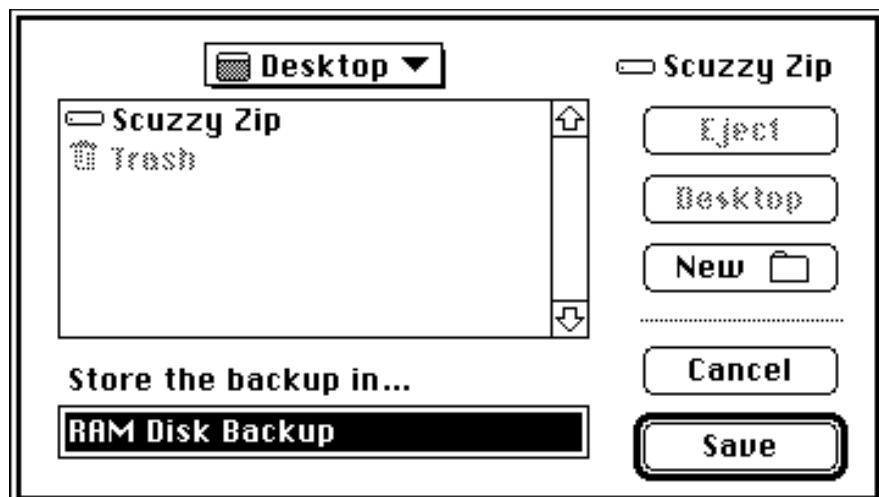
When RAMDiskSaver Controls fails to find a preferences file, it

uses built-in default settings. If you close its window without changing any of these default settings, RAMDiskSaver will create a new preferences file (called “RAMDiskSaver Preferences” and located in your RAM disk’s Preferences folder) containing the following information:

user:.....(unregistered)
automatic backups:.....Off
minutes between backups:10
backup folder:(none chosen)

Setting it Up & Turning it On.

To turn RAMDiskSaver on, you must first tell it where to store your RAM disk's backup. If it is not already open, open RAMDiskSaver Controls. Then click on the button labeled "Choose backup folder...." RAMDiskSaver will present a standard Save dialog box that will look something like this:



You will want to keep your RAM disk's backup on your

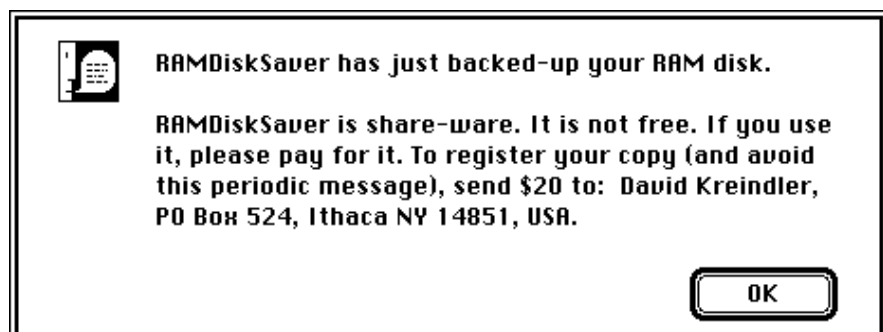
computer's hard disk. The name that you enter in this dialog will become the name of a *folder* that will contain a copy of the contents of your RAM disk. You can put this folder anywhere that you want to (except on the RAM disk itself), but you must not use an existing folder for this purpose, since the backup process would undoubtedly delete all of its existing files and folders.

Decide where you want to create your backup folder and what you want to call it; then click the **Save** button. If you want to back-up

your RAM disk at some interval other than 10 minutes, click the arrows at the right of the “Minutes between backups:” label to adjust the backup interval. Then click the “Automatic backup: On” button, and close RAMDiskSaver Controls’ window.

As soon as you close the window, RAMDiskSaver will make its first backup of your RAM disk. Because, this first time, it has to copy every file from your RAM disk to your hard disk, this first backup might take a little while. Subsequent backups are

much quicker, because RAMDiskSaver only copies new files (and new folders) and files that have changed since the last backup. When it has finished backing up your RAM disk, (if everything went OK) RAMDiskSaver will notify you with a message like this:



After the interval entered in the “Minutes between backups:” box has elapsed, RAMDiskSaver will scan your RAM disk and update

your backup by copying any new or changed files and deleting any deleted files. When it is finished, it will again display the message, as above. When you purchase your copy of RAMDiskSaver, you will have the option of turning these periodic messages off.

Technical Details (for Those Who Care)



RAMDiskSaver Extension is a System 7 background-only application (appe). It does not patch any traps or do anything else untoward to your system. When RAMDiskSaver

Extension receives an Open Application AppleEvent from the system software. It attempts to open a file named "RAMDiskSaver Preferences" in the current startup volume's Preferences folder, if one is available, and reads the information contained therein. If the preferences file indicates that a backup folder has been selected and that automatic backups are turned on, RAMDiskSaver Extension immediately performs a backup of the startup volume — first scanning the backup folder and pruning files and subfolders that do not exist on the startup volume, and then scanning the startup volume and copying files and folders that are either absent from the backup directory's equivalent folder or are out-of-date. RAMDiskSaver Extension uses the Notification Manager to inform an unregistered user that a successful backup has been completed. It also uses the Notification Manager to report a failed backup.

RAMDiskSaver Extension responds to a Quit Application AppleEvent in the same way as to an Open

Application AppleEvent — except that it does not display the successful-scan message, in this case.

After a successful backup, RAMDiskSaver Extension resets its timer and waits unobtrusively in the background until either the time for another scan arrives or it receives another AppleEvent. After an unsuccessful backup, RAMDiskSaver Extension re-attempts the backup after one minute. RAMDiskSaver Extension requests the attention of the system only once every twenty seconds.

(This makes it about a hundred times less obtrusive than the average Macintosh application.)

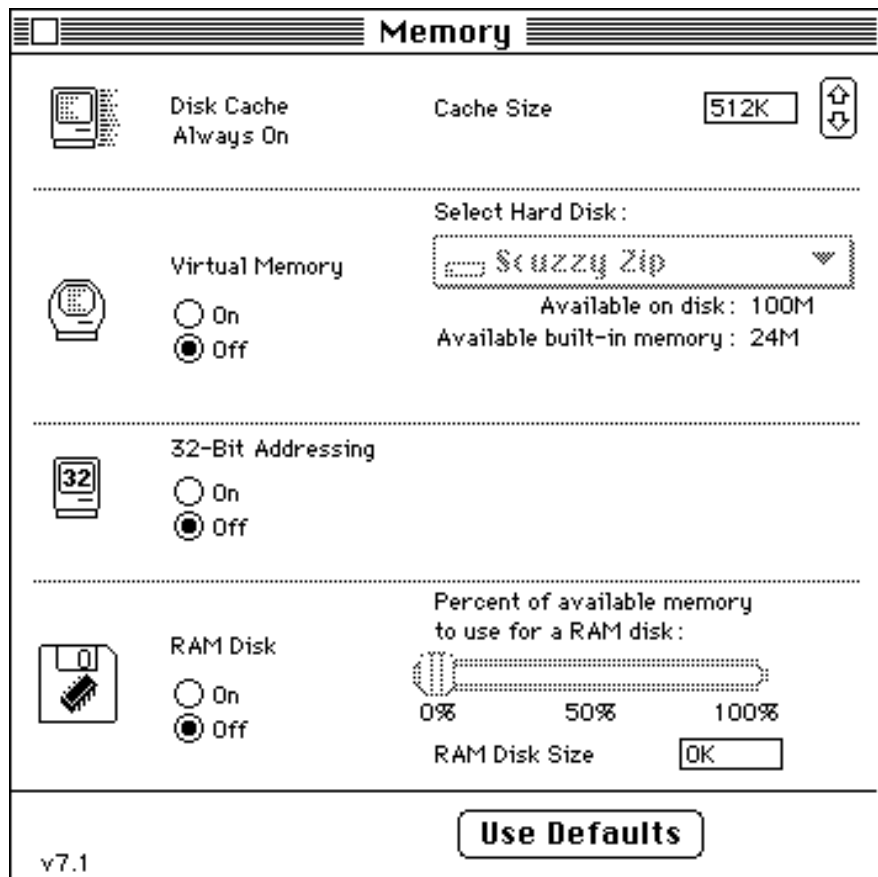


RAMDiskSaver Controls is a simple control panel device (cdev) used for creating and modifying the RAMDiskSaver Preferences file. It has no startup (INIT) component

and therefore does not need to be stored in the Control Panels, Extensions or system folder. Any time that the user closes its window, RAMDiskSaver Controls sends an AppleEvent to the Extension, requesting an immediate scan. This feature allows an immediate change of backup interval or an immediate backup preceding a “chancy” activity.

Making a Startup RAM Disk

To make a RAM disk, open the Memory control panel.



Click the “RAM Disk On” button and drag the “RAM Disk Size” slider to set the size of your RAM disk. When

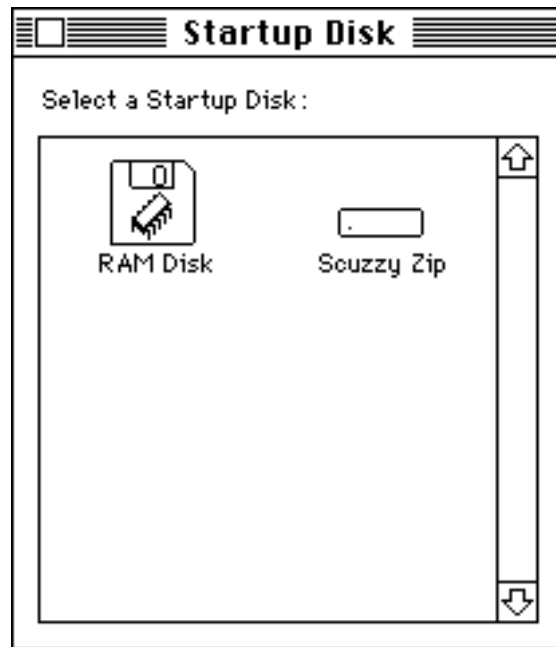
you restart your computer, the RAM disk's icon will appear on your desktop below your computer's hard disk.



To turn your RAM disk into a startup disk, you have two options. You can run Apple's Installer program to install a fresh complement of system software onto your RAM disk. Or you can copy an existing system folder onto it.

When you have installed the system software that you want onto your RAM disk,

open the Startup Disk control panel.



Click the RAM disk's icon to select it as the new startup disk. Then close the Startup Disk control panel, and restart your computer.