

User manual RAMSyncDrive V 1.0





Welcome

Thank you for download this software and we wish you lots of fun with this.

Information on this Manual

Here is a small overview of the formatting in this manual and what you immediately can connect with these:

Tips and notes are shown in italics

Examples are shown in bold

Captions of images are displayed smaller italic

A legal notice Last

All within this manuel specified and where necessary by third protected label and registered trade marks are subject without reservation to the regulations of the valid trademark law and possession rights of the respective. This also applies to the software "RAMSyncDrive" and its components.

System Requirements

Macintosh with at least Mac OS X 10.7.x at least 256 MB available hard disk space for the synchronization



Why a RAMDisk?

A RAMDisk is a disk in the computer's memory.

Advantages:

- Performance of accessing the drive. This is the fastest way of access and that is higher than the speed of hard drives and SSD drives.
- Reducing wear with less access to the hard disk drives
- Lower energy requirements when accessing a ramdisk. Hard drives can run longer in "run power saving mode". For mobile use, a RamDisc increases runtime of a notebook, because reduce access to hard disk.

Disadvantage:

- The data are volatile in the memory of the computer and to a power failure or Restarting this lost.

From the disadvantage also results an advantage:

Have you temporary files like landing on a hard disk and are forgotten, they fit well to a ramdisk. This can be downloads and other things.



To combine the advantages and disadvantages, "RAMSyncDrive" is capable regularly save the contents of the ramdisk on a hard drive. This makes it very fast, because a Synchronization between ramdisk, and harddisk will be used. Here will only modified or new files are written to disk. The directory "TMP" will not synchronized and the data remains volatile.

Please note that before shutting down your computer, wait for synchronization with hard disk, so that your data is backed up.

Please note that a residual risk remains and you use this software on your own risk. We accept no responsibility for any lost data!

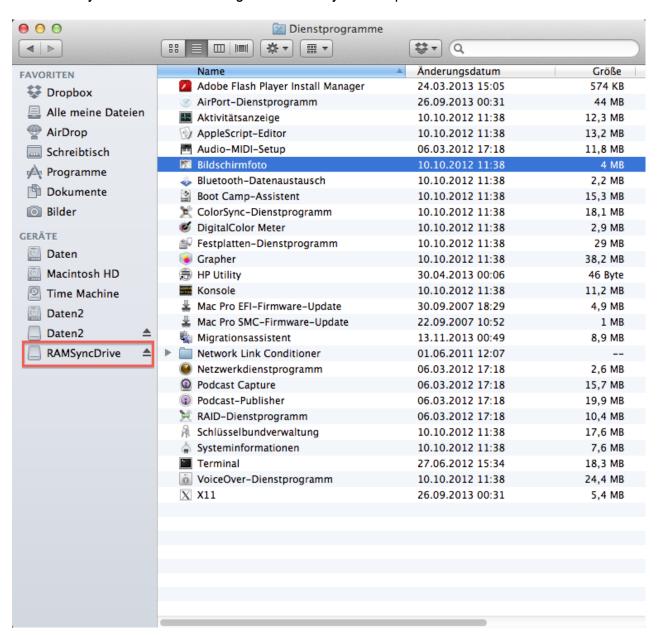
We wish you much fun and success with your personal ramdisk with with "RAMSyncDrive".

W. Zeidler and the Team of Z-Systems in January 2014



Synchronization and functioning

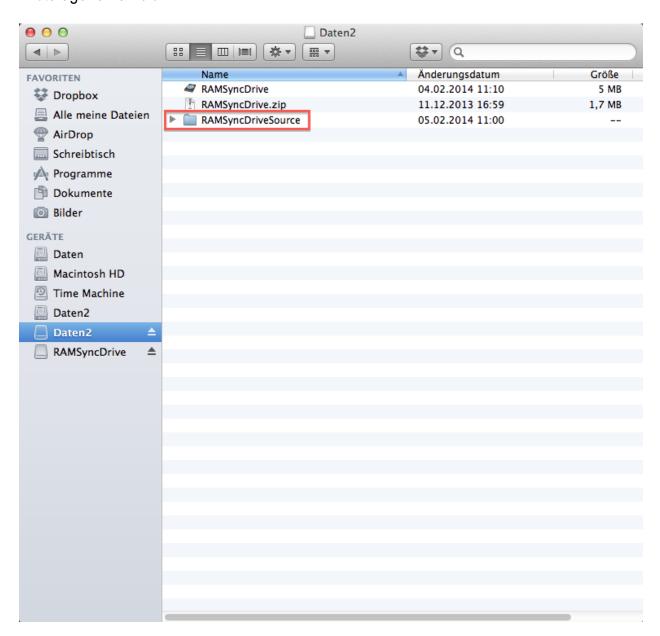
After the launch of "RAMSyncDrive", this creates a ramdisk with the name "RAMSyncDrive". On this you can work like a regular drive Of your computer.





All data are from "RAMSyncDrive" regularly at a desired interval, on the hard drive backed up.

Data will secured from the ramdisk on a regular basis to a target directory on the hard disk. Here, only updated files are overwritten or new files or Directories created. On first start "RamSyncDrive" creates "/User/Documents/RAMSyncDriveSource" as a persistent data storage for ramdisk.





This enables faster and thus secure method to write the data, instead of regularly replaced completely.

Example: Instead of 4 GB of data to the ramdisk overwrite to the hard drive, happens this only for a file that has changed and has only 50 KB in size. This is faster and that is a lower risk of data loss.

The directory "RAMSyncDriveSource" is used by "RAMSyncDrive". If you insert data under "RAMSyncDriveSource", these will be removed at the next synchronization, because these are not present on the ramdisk.

Be careful, please only work on the ramdisk!!!! Do not manipulate the folder "RAMSyncDriveSource"!!!!!

When you quit "RAMSyncDrive" all new and changed data on ramdisk will *backed up* in these Directory on your local hard disk.

At startup of "RAMSyncDrive" ramdisk will created again and all data from these Directory loaded.

Please note: Before you begin working with your data, wait until "RAMSyncDrive" announces that the synchronization is completed. Only then you have all the data from the directory on the ramdisk available.



Preferences

1. Size of the ramdisk

These can be flexibly chosen between 256 MB to 4096 MB. Please note here, your computer's memory. Once the operating system must outsource memory on the hard disk, you have no or only conditionally a speed advantage.

Example: If you have 2 GB of RAM available, then the memory used should no longer operates as be 1 GB. Otherwise there is a danger, that "Mac OS X" must use slow virtual memory.

Do you need more than 4 GB ramdisk? When you write to us your interests in a next update will follow possibly more. 4 GB is for version 1.0 a good size for a drive that is used for current projects.

2. Interval for backup on your hard drive

The default is 60 seconds. Depending on content of the data, you can reduce or increase this. Always when you quit "RAMSyncDrive", a backup to disk will made.

Shorter backup intervals increase disk access and can reduce duration of battery power.

3. Source directory of ramdisk

The ramdisk has always a source directory with which synchronizes them. You can cange this for various tasks or projects with a own ramdisk. Or you can use a ramdisk on a USB stick to use these 1:1 on other computers.

Attention: If you want to use a new directory, then start with a empty RAM disk and copy the data to it. When you use an existing directory on your hard drive, it can be that this is too large and will rejected by "RAMSyncDrive".



Examples of applications

1. Ramdisk as storing temporary files

Save this after the launch of "RAMSyncDrive" just in TMP directory of ramdisk. When you exit "RAMSyncDrive" contents of this directory will lost.

2. Ramdisk to speed up Applications

Save data files of an application on ramdisk and refer within in your application. This is depending upon the application.

Example: Requires an application a database that is on the ramdisk ("/RAMSyncDrive/Datenbank.XY"), then define the location of the database within the application.

In applications such as word processing programs documents directly edited on ramdisk.

Or you can move the cache directory on your web browser into the ramdisk.

Straight to slow hardware this brings a significant speed gain. However, this always depends on the application. Also with fast hardware more power can be achieved.

3. Accelerate processes

There is always more complex sequences on a computer. This can be a build of a compiler. Use here your drive in memory to save time every day.

Also, the RamDisk can serve in virtual machines to accelerate processes of another system, such as Windows or Linux.



4. Drive as a summary of your favorites

Use the ramdisk for your latest files that you need for a task (eg in a project) to have always quickly accessible.

5. Experience report

- "RAMSyncDrive" has been used for a few months as a drive for current projects. These are, for example, solutions in a virtual machine with "Windows Server 2008" and "Visual Studio 2010". The respective solution lies on ramdisk and is integrated as a volume in Windows. This speeds up debugging processes and publications of. Net solutions.
- "Xojo" projects are also on ramdisk and start of a project with the IDE for Mac OS X is accelerated.
- The database of the Time Management System "ZS-TimeCalculation" is located on this drive and a significant acceleration in complex analyzes can be felt.
- Current tasks such as manuals or other files are also available as current favorites on drive. The "TMP" directory of "RAMSyncDrive" is fun for any downloads or just quickly temporary issues that otherwise always inundate of other drives.
- This works reliably without data loss and is even on a fast Mac Pro with 2 x 2.93 GHz 6-Core Intel Xeon, 12 GB RAM and a 512 GB SSD, a performance Profit, which is perceived in my daily work.
- I'm looking forward to more projects, not only in the development sector with "RAMSyncDrive". The drive is also used as a fast backup to a USB stick for mobile use. The source directory lies here on an encrypted image that will just copied.

Send us your <u>experience report</u>, wishes and ideas to <u>info@zsystems.de</u>.



What else is consider?

- 1. When exiting "RAMSyncDrive" the source folder will be provided with "no rights" to indicate clearly that the app. is offline.
- 2. As soon directories and folders are protected from you, it may be that these be not deleted in the source directory. Once you notice this, this is the only reason, while the Application is running, for delete this files on the ramdisk and into "RAMSyncDriveSource". It may here be that you need to authenticate the deletion with a password. An example are directories with information from subversion. In addition, files that you not have rights, are not copied to the ramdisk. For that you always require a authentication and will not synchronized.