

Virtual Hard Drive Pro

for Windows[®] XP, Vista, 2000 & Server 2003

User's Guide

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Chapter 1: Introduction

1.1 Product Overview

Virtual Hard Drive Pro is a RAM disk utility that allows disk data to be processed in a computer's memory chip. A RAM disk looks like a physical hard disk in Windows Explorer, but is in fact a "virtual" disk that ceases to exist (unless saved) when a session ends. In Virtual Hard Drive Pro, the size of your RAM disk is limited only by your computer's available memory.

Virtual Hard Drive Pro is especially useful with files and folders requiring frequent access. For example, you can move your browser's cache folder to a RAM disk improve load times of multimedia on the Internet.

Unless it is saved, the data stored on a RAM disk is lost when you shut down your PC. Saved image files can later be reloaded into Virtual Hard Drive and modified or re-used.

1.2 Some Benefits of Virtual Hard Drive Pro

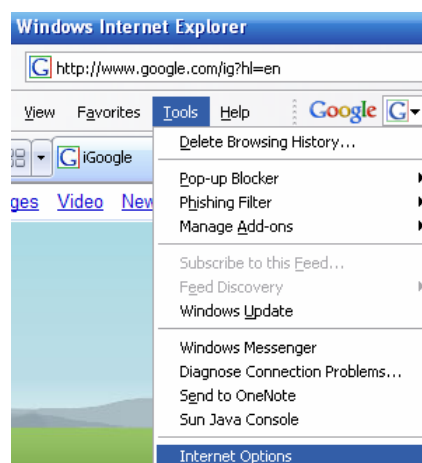
Because your computer's memory is so much faster than the hard disk, a RAM disk greatly improves application performance. Databases, compilers, and graphic design programs process large amounts of data which tax a computer's resources. A RAM disk drive makes data more readily available, balancing the load on a processor

When you browse web pages, junk data is written to your browser's cache memory. By running your browser cache in a RAM disk and not saving the disk image file when you end your session, unwanted cache files are deleted automatically, saving hard drive space.

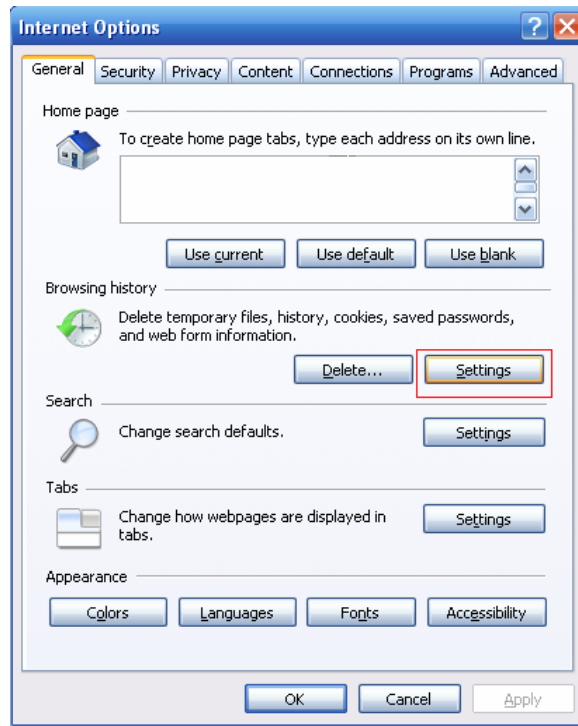
Finally, a RAM drive uses much less energy than a physical hard drive, and therefore extends the charge of a laptop computer's battery.

Using a RAM Disk for Browser Caching

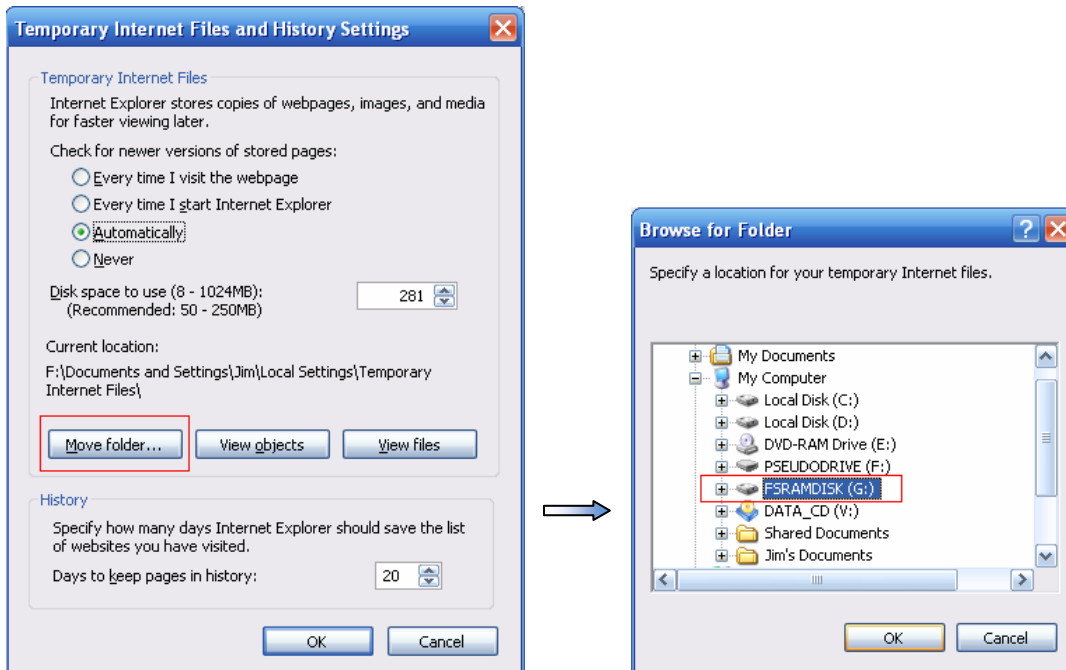
1. Launch Internet Explorer 7.
2. Select click **Tools** → **Internet Options**.



- Under the Internet Options window General tab, locate the **Settings** button for **Browsing history**.



- In the Temporary Internet Files and History Settings window, click the **Move Folder** button. Browse to the Virtual Hard Drive location where you'd like to redirect your temporary internet files.



Chapter 2: Installation

2.1 System Requirements

Supported Operating Systems (32-bit and 64-bit)

- Windows 2000 Pro
- Windows XP Home
- Windows XP Pro
- Windows Server 2003 Standard
- Windows 2000 Server
- Windows 2000 Advanced Server
- Windows 2000 Data Center
- Windows Server 2003 Data Center
- Windows Server 2003 Web Edition
- Windows Server 2003 Enterprise
- Windows Vista

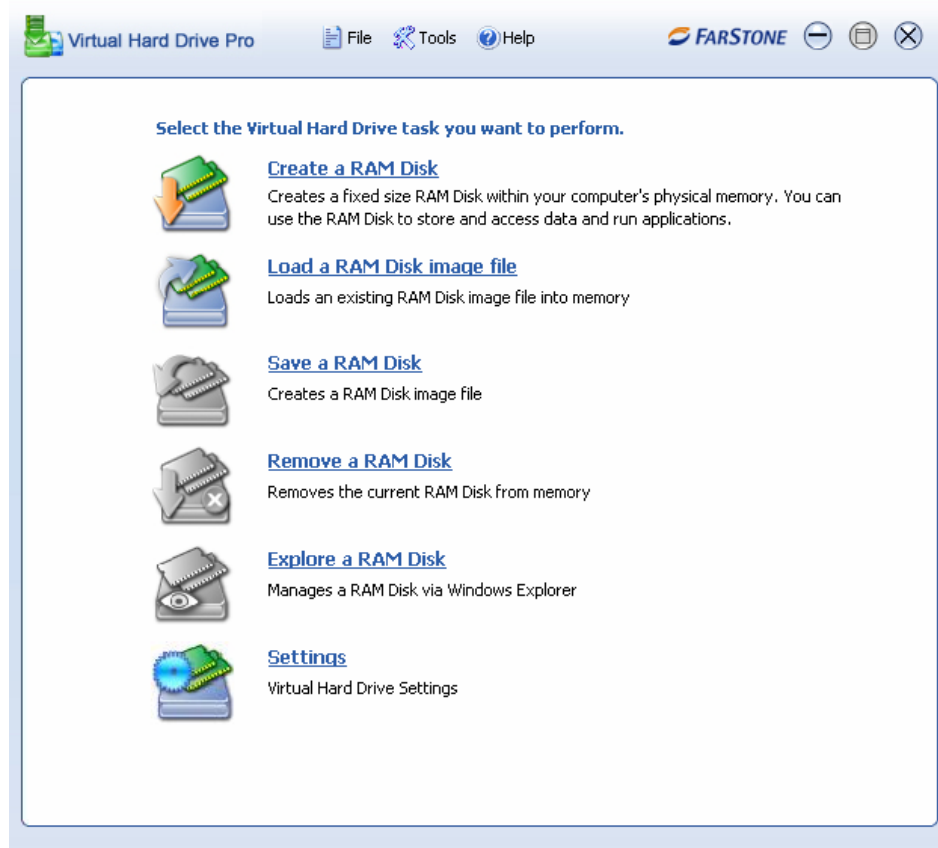
Minimum System Requirements

- 25 MB free hard disk space
- 256 MB RAM or better

2.2 Installing Virtual Hard Drive Pro

1. Double-click on the Virtual Hard Drive Pro executable file to launch the installation program.
2. Carefully read the Software License Agreement. If you accept the terms of the agreement, select **I Accept the License Agreement** and click **Next**.
3. Virtual Hard Drive Pro will give you a default installation path. If you'd like to install the program to another location, click **Change** and browse for a folder.
4. Enter your personal information and your serial number.
5. Click **Next** to install Virtual Hard Drive Pro on your computer.
6. Click **Finish** to complete the installation.

Chapter 3: Using Virtual Hard Drive Pro



3.2 Creating a RAM Disk

1. Click **Create a RAM Disk**.
2. Configure your RAM Drive Settings, including File System, Drive Letter, and RAM Disk Size.
 - a. **File System:** From the drop-down menu, select a file system for your RAM disk. Virtual Hard Drive Pro supports FAT, FAT32, and NTFS.

Note: Different file systems manage data in different ways and have different performance parameters. Select the file system that most closely corresponds with the size of the RAM disk you're creating:

File System	RAM Disk Size	
	Minimum	Maximum
FAT	1 MB	2048 MB
FAT32	33 MB	4 GB
NTFS	3 MB	maximum memory size supported by operating system

- b. **Drive letter:** Assign a drive letter for your RAM Disk.

Note: Only drive letters not used by other drives can be assigned.

- c. **RAM Disk Size (MB):** Allocate a portion of your computer's physical memory for your RAM Disk.

Note: Some programs may not work properly if you do not leave enough RAM for them. We recommend that you set aside no more than 70% of your available physical memory for your RAM Disk.

3. After you've configured your settings, click **Next**.

Note: If the disk size you entered is outside the available range, Virtual Hard Drive Pro will adjust it to the largest available size.

- a. Click **Save as an image file** to save your newly created RAM Disk as an image file
 - b. Click **Explore a RAM Disk** to view the contents of the RAM Disk in Windows Explorer
4. After you've created your RAM disk, click **Finish** to return to the Virtual Hard Drive Pro Main Console.

3.3 Loading a RAM Disk Image File

1. Click **Load a RAM disk image file**.
2. Select an existing image file and click **Next**.
3. Click **Finish** to return to the Main Console after the disk image has loaded.

3.4 Saving a RAM Disk

Because data cannot be stored in RAM, the data in your RAM disk will be lost when you end your session, unless you save it as an image file. Image files can be stored on the hard drive, reloaded, modified, and reused.

1. Click **Save a RAM Disk**.
2. In the popup window, click **Next**.
3. Click **Finish** to return the Main Console after the process is complete.

3.5 Removing a RAM Disk

If you'd like to free up the memory used by your RAM disk or modify the file system, drive letter, and disk space of your RAM disk, you need to remove it from your RAM drive.

1. Click **Remove a RAM Disk**.
2. Click **Next**.
3. Click **Finish** to return to the Main Console when the process is complete.

3.6 Exploring a RAM Disk

You can explore a RAM Disk to view its contents and add files or folders.

1. Click **Explore a RAM Disk**.

2. Once the RAM disk is mounted (displayed in the interface), you can view its contents or edit it as you would edit files in Windows Explorer.

3.7 Settings

1. **Auto-load the most recent image:** Keep the most recently used RAM disk image loaded in Virtual Hard Drive Pro when you restart the program.
2. **Save the image upon restart or shutdown:** Save your RAM disk image automatically when you turn off or restart your PC.
3. **Save the image during hibernation:** Save your RAM disk image automatically when your computer goes into Sleep or Hibernation mode.
4. **Back up the image before saving it:** Automatically makes a secondary backup of the data in your RAM disk when you save it as an image. In the event of a system crash or power loss, the image file will still be preserved.
Note: If you load the image after a system crash, Virtual Hard Drive Pro will ask if you want to repair the image.
5. **Save the image every N minute(s)** (N is a number between 1 and 60): Data in the RAM disk will be saved as an image at pre-set intervals.
6. **Save changes to the image file in real-time:** The image file is automatically saved if any changes are made to the RAM disk.
Note: This setting will not take effect until you reload an image or re-create a RAM Disk.

Chapter 4: Appendix

4.1 Frequently Asked Questions

Q. When I try to create a RAM disk, Virtual Hard Drive Pro displays the following message: "There is not enough available memory for your RAM disk." How do I fix this?

A: You must reserve a portion of your physical memory for your system. In order to do that, you cannot allocate all available memory for your RAM disk.

Q. How much memory should I allocate for my RAM disk?

A: 70% or less.

Q. Why do I get a "System is busy" message when I am saving my image file or disabling the RAM disk?

A: Because the RAM disk is being used by other programs, like Windows Explorer. Close these applications and again.

4.2 Technical Support and Product Updates

If you encounter a technical issue with our products, please contact your vendor or use the FarStone online support system at www.farstone.com/support.

Answers to frequently asked questions (FAQs) about FarStone products are posted on the corporate web site at www.farstone.com/support/faqs.

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