



PARAGON
HFS+ for Windows

User Manual

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Introduction

Data sharing between Mac and Windows domains remains a problem, as Windows still doesn't know a thing about HFS+ the primary file system for Macintosh computers, while Mac OS X only provides read access to NTFS. While Paragon NTFS for Mac solves this naughty issue in Mac OS X, Paragon HFS+ for Windows does it in Windows OS.

With HFS+ for Windows driver onboard, you can plug in HFS+ storages to your PC and get access to their contents for reading, copying, or modification. The driver is based on the [Paragon UFSD technology](#) (Paragon Universal File System Driver) that provides higher data transfer rates than the native HFS+, rock-solid stability, and rich hardware support (USB, FireWire, eSATA, SATA or IDE).



Our company is constantly releasing new versions and updates to its software, that's why images shown in this manual may be different from what you see on your screen.

Key Features

- Gets ready to work in a couple of minutes
- Provides fast and transparent read/write access to HFS+/JHFS+/HFSX/JHFSX under Windows
- Supports the latest Windows 10 and Server 2016
- Runs at startup and auto-mounts all found Mac partitions
- Supports Boot Camp configurations
- Managed through Windows system tray
- [Improved product activation](#) that includes online and offline options
- [Advanced support system](#) to help you submit correct support requests with operation logs and all necessary information with minimal time and effort
- Includes an automatic product updater
- Includes a multi-language installation package
- Safe eject ready

Known Issues

- Apple Core Storage is supported when resided on a single disk. Fusion Drive or FileVault configurations are not supported
- No support for resource forks
- No support for symbolic links and hard links
- No support for ACL (Access Control List)
- HFS+ partitions resided on a GPT disk will not be automatically mounted
- Unmounted partitions will not be automatically mounted after OS restart
- Size of compressed files is always zero

Key Use Cases

- **Import/Export data from/to HFS+.** Let's assume that a hard drive has been taken out from Mac and you need to copy files to or from this disk under Windows OS. Just install our driver, connect this disk via eSATA connector or USB-to-SATA adapter to your PC and here you go – all files on Mac-native volumes are available to work with under Windows.
- **Open documents and multimedia files directly from HFS+.** If you want to watch movies or open large documents contained on a Mac-native volume from your PC, simply install our driver, connect this disk directly to your PC and enjoy the show.

Supported Media

- Ultra high capacity disks (up to 10 TB tested)
- IDE, SCSI and SATA/eSATA disks
- SSD (Solid State Drive)
- Thunderbolt, FireWire (i.e. IEEE1394), USB 1.0, USB 2.0 , USB 3.0, USB-C disks
- PC card storage devices (all types of flash memory, etc.)

Getting Started

In this chapter you will find all the information necessary to get the product ready to use.

System Requirements

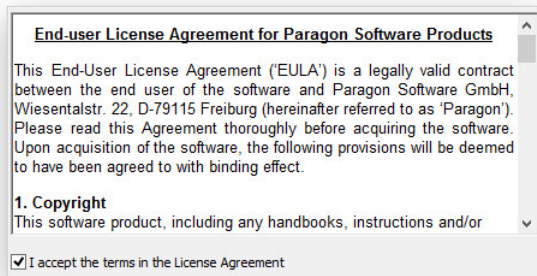
- Windows 7
- Windows 8
- Windows 8.1
- Windows 10
- Windows Server 2008 R2 SP1
- Windows Server 2012 R1/R2
- Windows Server 2016

Installation

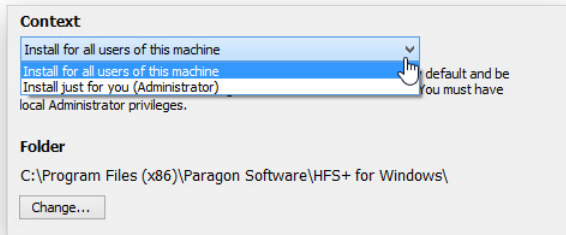


Due to specifics of Windows 8 or Windows 10 Fast Startup feature, we highly recommend you to disable it before installing the driver to avoid possible file system corruption. For more details, please refer to Microsoft Knowledge Base: http://answers.microsoft.com/en-us/windows/wiki/windows8_1-performance/fast-startup-how-to-disable-if-its-causing/f9a4a2d0-104d-42dc-9946-4a2e13c0a348.

1. Click on the supplied setup file to initiate the installation.
2. Click **Continue** on the Welcome page.
3. Please Read Paragon's License Agreement carefully and then select the appropriate option to accept. Otherwise you won't be able to proceed with the installation.

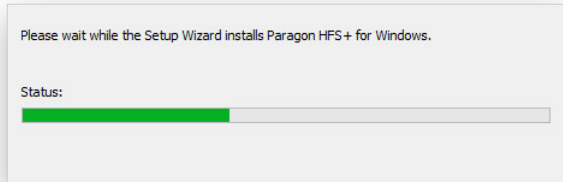


4. Next you are to specify installation parameters.

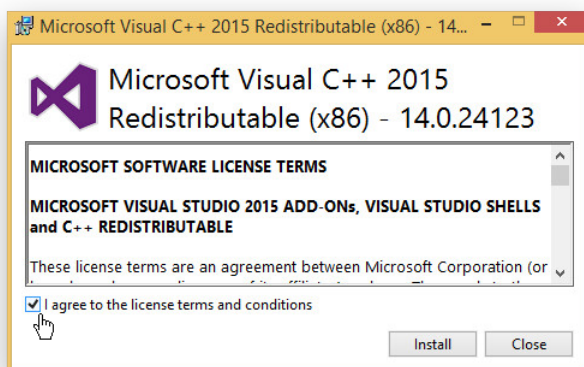


- By default, the product will be available for all users of this computer. If you'd like it to be available for the current user account only, please choose the corresponding option.
- If necessary, manually edit the installation path or click **Change...** to browse for the required location.

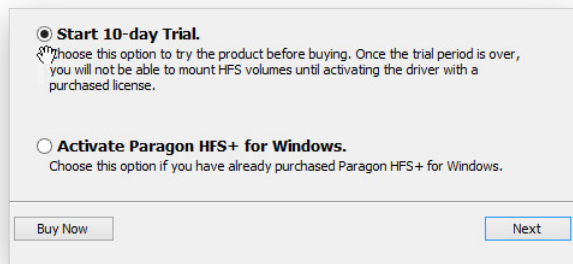
5. Click **Install** to roll out the installation.



6. Your system will be checked for the presence of Visual Studio C++ 2015 (x86) Runtime Library and if not found, you will be prompted to install it (comes with the installation package).



7. HFS+ for Windows needs activation before use.

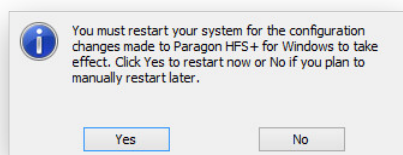


- **Start 10-day Trial.** You can try HFS+ for Windows with no limitations completely for free during 10 days. After that you will not be able to mount HFS+ volumes until activating a valid serial number.
- **Activate Paragon HFS+ for Windows.** If you have already purchased the product, use this option to go through activation of the obtained serial number on your computer. For more details, please consult the [Activating the Driver](#) chapter.



To purchase HFS+ for Windows online, click 'Buy Now' to open a direct link to Paragon's e-shop.

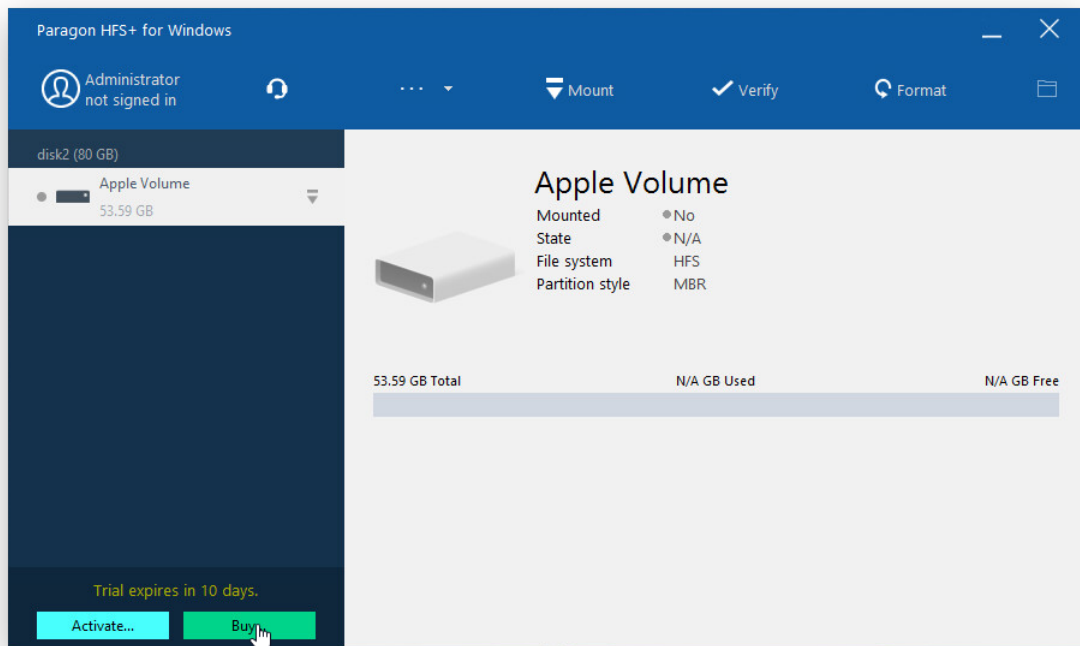
8. Finally click **Restart** to complete the installation.



Activating the Driver

You can unlock the product for unlimited use during the installation or at any moment later in [Application Window](#). The recommended procedure requires an active Internet connection. However, if you don't have the Internet on the target computer, you can try [an offline option](#).

1. First you should purchase the product. The easiest way is to use a direct link to Paragon's e-shop:
 - Double click the product icon on the Windows desktop.
 - Click on **Buy...**



2. By this moment you should have your own serial number. Click on **Activate...**

Online Activation

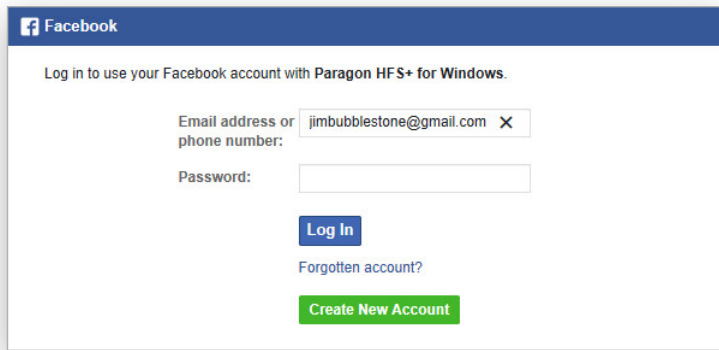
There are two ways of activating the product over the Internet: [with login to MyParagon Customer Portal](#) or Facebook and [without it](#). We highly recommend you to use the first option to let us offer you personal discounts in the future. Besides, you will be able to issue support tickets directly from the product.

Activating with login

3. In the opened dialog enter an email and password of your Paragon's account, then click **Sign in**. If you don't have an account yet, please [create it](#) by clicking the corresponding option.



Alternatively, you can sign in with your Facebook account.



Facebook

Log in to use your Facebook account with Paragon HFS+ for Windows.

Email address or phone number:

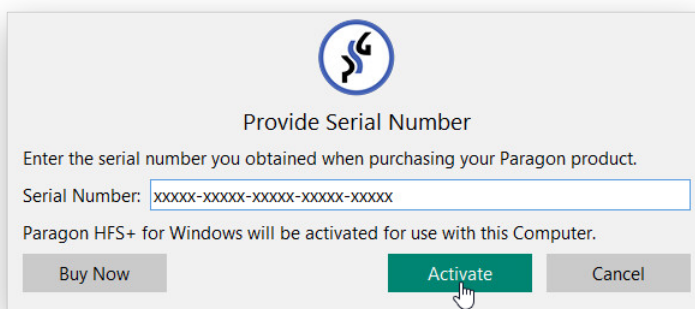
Password:


[Log In](#)

[Forgotten account?](#)

[Create New Account](#)

- If you have purchased the product online as described in the first step, then the product activation will be completed automatically after signing in to your account. If having to do with a box version, you will need to enter your serial number. This info will be sent to our activation server to complete the procedure.





Provide Serial Number

Enter the serial number you obtained when purchasing your Paragon product.

Serial Number:

Paragon HFS+ for Windows will be activated for use with this Computer.

[Buy Now](#) [Activate](#) [Cancel](#)

- If a success, you'll get a corresponding notification.

Activating without login

- In the opened dialog click **Activate Using Serial Number...**





Sign in to Your Paragon Account

Paragon account is required to access and activate your products, get latest updates, special offers, and contact Paragon Customer support.

Email:

Password:

[Did you forget password?](#)

Don't you have an account?

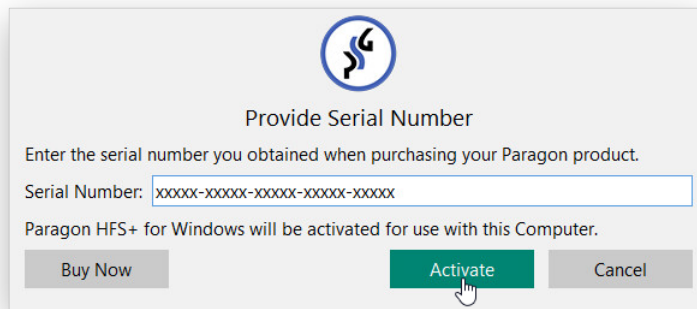
 [Create Paragon Account](#)

OR

 [Sign in with Facebook](#)

[Activate Using Serial Number...](#) [Sign in](#) [Cancel](#)

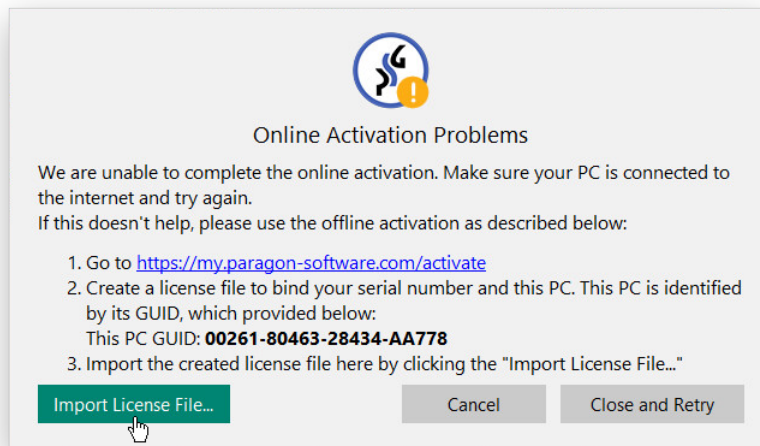
- Enter your serial number, then click **Activate**. This info will be sent to our activation server to complete the procedure.



5. If a success, you'll get a corresponding notification.

Offline Activation

1. If having problems with the Internet or specifically configured Firewall at login to your Paragon's (Facebook) account on the target computer, the wizard will offer you to try an offline option. Before you proceed, write down your GUID and the provided link somewhere.



2. Use the saved link on any computer with the Internet to visit the company's website to sign in to your Paragon's (Facebook) account.

MyParagon Customer Portal

You can use your personal customer account to submit a support request to the technical support and track the status of your requests, manage your software licenses, download your software or the latest update, or obtain an upgrade at a discount.

Sign in

[or create an account](#)

[Forgot password?](#)

OR SIGN IN WITH

3. Enter your serial number and GUID in the corresponding fields, then click **Export license file**.

Offline activation

If you've arrived on this page, chances are you're having a problem activating your copy of a Paragon Software product online.

To resolve this issue, we offer an offline activation procedure, which takes just three simple steps:

1. Create a special license file, which binds the serial number of your product together with a unique identifier for your system (GUID). You can locate the GUID of your computer in the software's offline activation dialog.
2. Export the license file to your computer.
3. Import the license file from your system to the Paragon product installed on the device with the license-bound GUID.

For steps 1 and 2, please enter your serial number and device GUID in the form below to generate the license file. Next, click «Export license file».

OR

When finished, you'll need to switch back to the Paragon Software product and import the created license file.

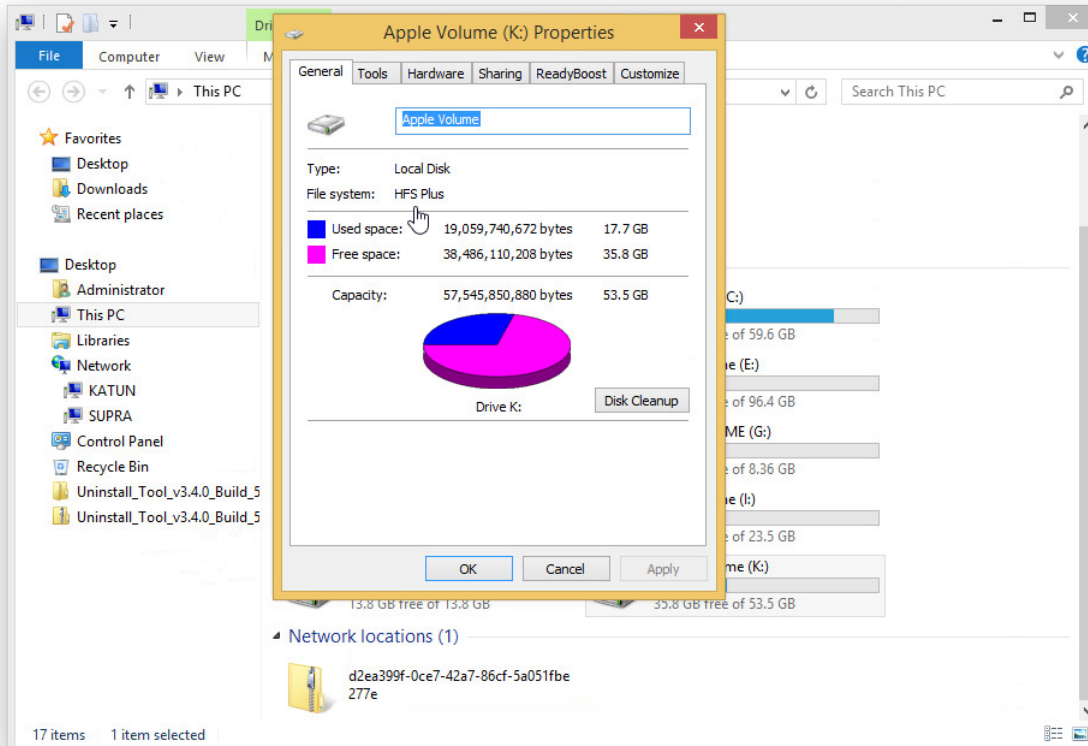
4. If the provided data is valid, you should get the "LicenseSet.xml" file. Copy it to the target computer, then use the **Import License File...** option for the import.

5. If a success, you'll get a corresponding notification.

Using the Driver

First Start

After the product has been installed and activated, Windows will automatically mount (assign drive letters to) all found HFS+ volumes, which you can see in Windows Explorer or any other similar application.



Now you can carry out any operation on an HFS+ volume as if it's Windows-native:

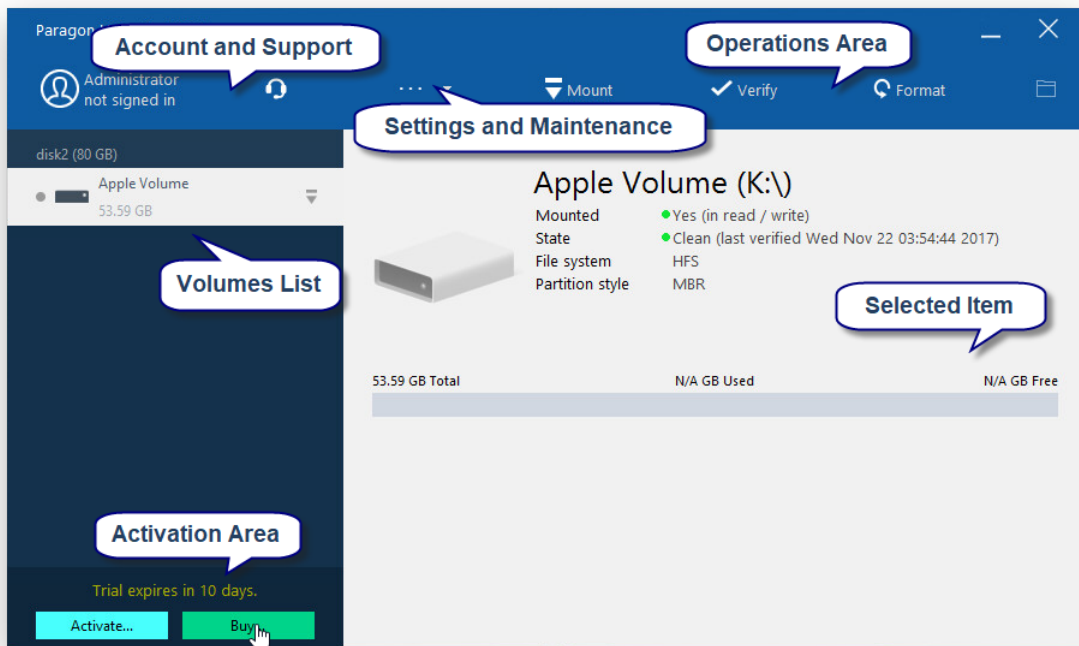
- Transfer data,
- Modify data,
- Delete data, or whatever you feel like doing.



If an HFS+ volume was mounted and then unmounted with a third-party tool or a previous version of Paragon HFS+ for Windows, this volume would not be auto-mounted after the product installation. Such volumes should be mounted manually in [Application Window](#).

Application Window

After the installation an icon of Paragon HFS+ for Windows appears on the Windows desktop. Double click it to open the management interface.



Account and Support

This is where you can sign in to MyParagon Account and submit support requests. For more details, please consult the [Submitting a Support Request](#) chapter.

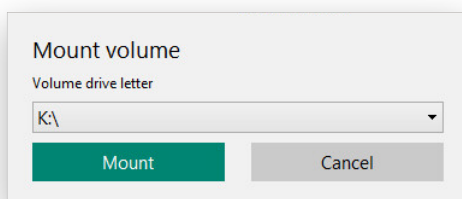
Volumes List

It displays all HFS+ volumes available in the system. Detailed information on the currently selected item is displayed on the right.

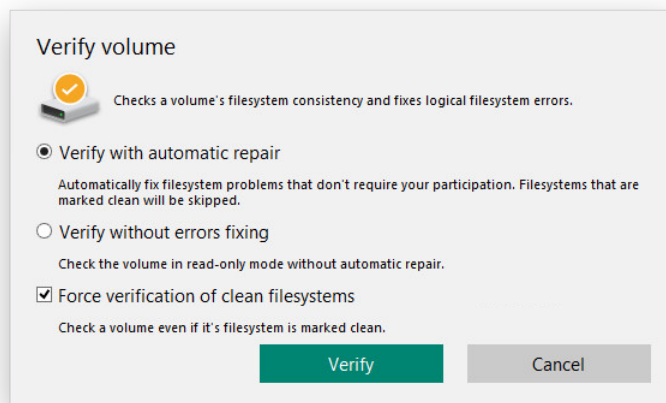
Operations Area

It contains operations you're allowed to do with the currently selected volume.

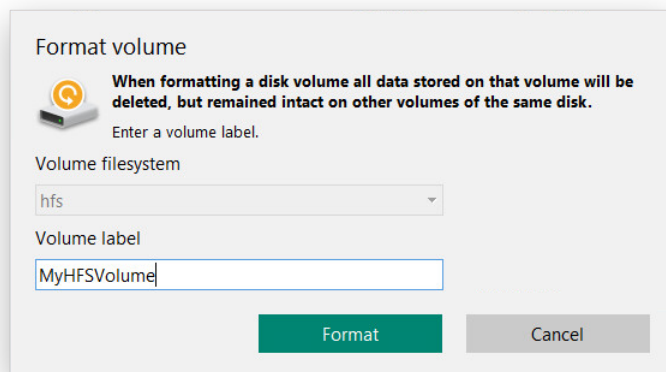
- **Mount/Unmount.** By default, all found HFS+ volumes are automatically mounted in read/write mode at the system startup. Use this dialog to manually unmount or mount an HFS+ volume.



- **Verify.** You can check integrity and fix found file system errors on any HFS+ volume. By default, the examined volume will be checked and repaired automatically even if having a clean file system state. Use the dialog options to change this behavior as desired. Please note that the examined volume should be unmounted.



- **Format.** You can reformat an existing HFS+ volume. Please note that if the volume contains data, it will be deleted during the process, thus make a backup of that data or copy it to another volume if it's important to you.

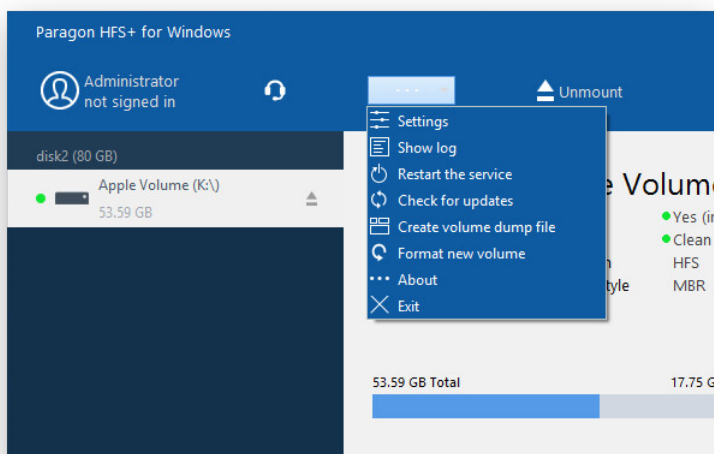


1. Unmount the volume before you start.
2. Enter a label to easily identify the volume later (optional parameter).
3. Click **Format** when ready.

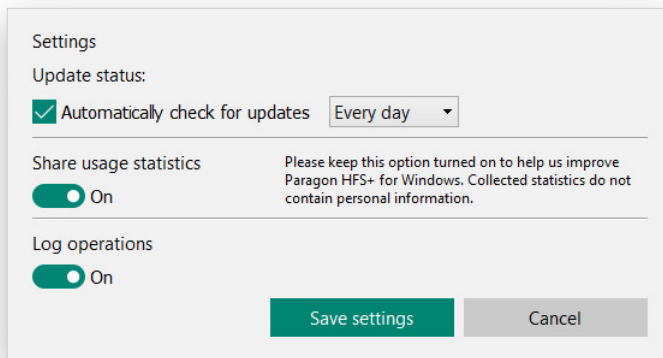
- **Browse.** Use the folder icon to open the volume in Windows Explorer.

Settings and Maintenance

This is where you can open the driver settings and also do some maintenance tasks.



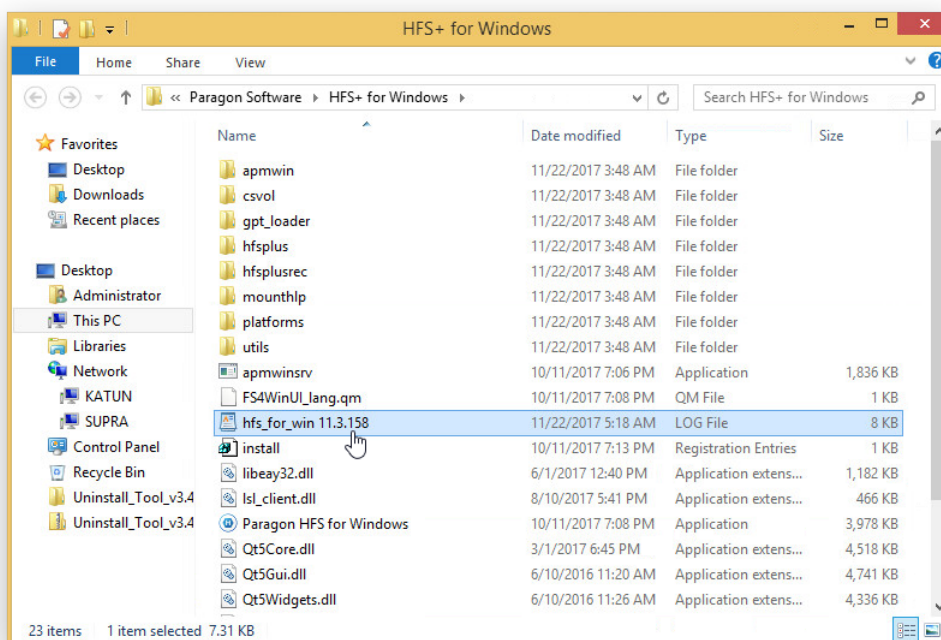
Settings



- **Updates.** By default, Paragon HFS+ for Windows automatically checks company's website for available updates once a day. You can change this period to once a week or month or even disable this feature by unmarking the corresponding checkbox. If a new version of the driver has been found, you will be prompted to install it.
- **Share usage statistics.** Disable this option if you don't want it.
- **Logging.** By default, information on all volume mount actions and encountered errors will be saved in a log file. We do not recommend you to disable the logging as it helps our engineers solve your problems with minimal time.

Show log

Use this option to show the generated log file in Windows Explorer.



Please note that the log file has the UNIX style line break, so please use a text editor that renders it correctly (Notepad doesn't).

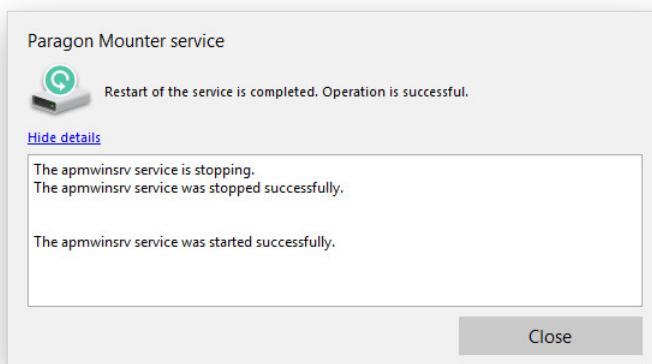
```

VERSION: 11.3.158
[1511351371][0x49C] +APMDriverServiceInit
()
[1511351371][0x49C] Device created
[1511351371][0x4A0] +mounter_control_pooling_thread
()
[1511351371][0x4A0] Device created
[1511351371][0x4A0] All preparations is ok
[1511351377][0x49C] Event created
[1511351377][0x49C] All preparations is ok
[1511351377][0x49C] -APMDriverServiceInit
()
[1511351395][0x53C] \\?\Volume{6177d4e3-
eb81-11e3-8250-806e6f6e6963}: read-only = false
[1511351395][0x53C] \\?
\Volume{dcl1a7e49-499f-11e6-8275-005056890f7e}: read-only = false
[1511351395][0x53C] \\?\Volume{6177d4e4-
eb81-11e3-8250-806e6f6e6963}: read-only = false
[1511351395][0x53C] \\?
\Volume{ad8f9cd1-5fcd-11e7-82a0-005056890f7e}: read-only = false
[1511351395][0x53C] \\?
\Volume{dcl1a852a-499f-11e6-8275-005056890f7e}: read-only = false
[1511351395][0x53C] \\?
\Volume{ad8f9cd1-5fcd-11e7-82a0-005056890f7e}: read-only = false
[1511351395][0x53C] \\?\Volume{85203052-
cbfb-11e7-82a3-005056890f7e}: read-only = false
[1511351395][0x53C] Found HFS+/HFSX partition on device: \\?
\Volume{85203052-cbfb-11e7-82a3-005056890f7e}
[1511351395][0x53C] HFS: version = 4; blocks = 14049280 x 4096,
attrib = 0x80002000, journalInfoBlock = 0x2862F
[1511351396][0x53C] \\?\Volume{6177d4e8-
eb81-11e3-8250-806e6f6e6963}: read-only = false
[1511351396][0x53C] \\?\Volume{6177d4e8-
eb81-11e3-8250-806e6f6e6963}: IOCTL_DISK_GET_DRIVE_GEOMETRY fail:
err = 21
[1511351658][0x490] +HandlerEx
()
[1511351658][0x490] HandlerEx(dwControl = 4, dwEventType = 0)

```

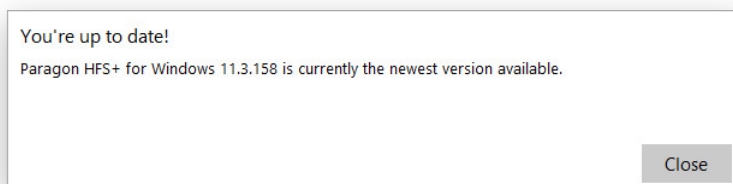
Restart the service

If the driver fails to find and mount HFS+ volumes (e.g. those created with Paragon Hard Disk Manager), first try this option.



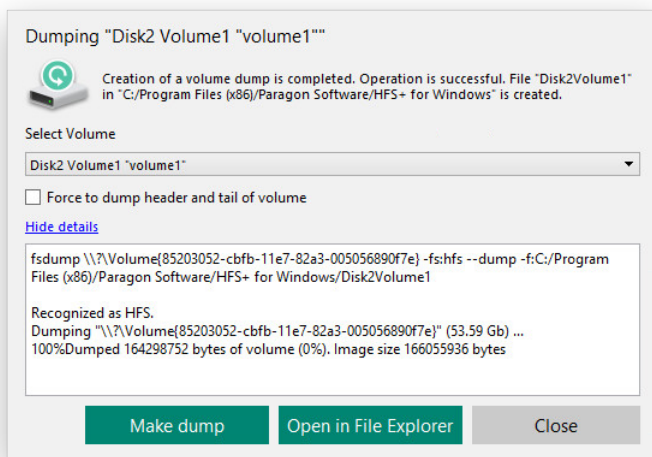
Check for updates

Use this option to check company's website for available updates at any moment.



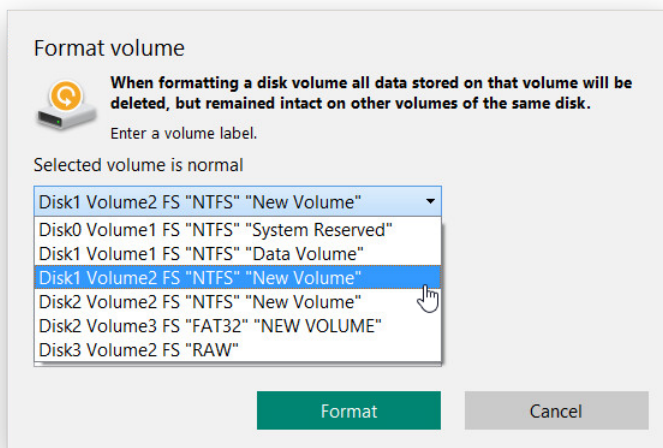
Create volume dump file

You might need to provide a dump of an HFS+ volume you're having troubles with by request of our engineers. Once the dump is created, use the corresponding option to show it in Windows Explorer.



Format new volume

You can format any FAT, NTFS or unformatted volume to HFS+. Please note that if the volume contains data, it will be deleted during the process, thus make a backup of that data or copy it to another volume if it's important to you.



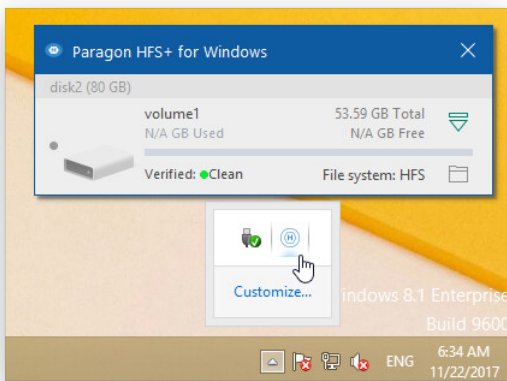
1. Choose the desired volume from the list.
2. Enter a label to easily identify the volume later (optional parameter).
3. Click **Format** when ready.

Activation Area

It displays the current status of Paragon HFS+ for Windows (activated or trial). If it's trial, then two buttons become available to select to let you quickly buy and activate the driver.

System Tray Icon

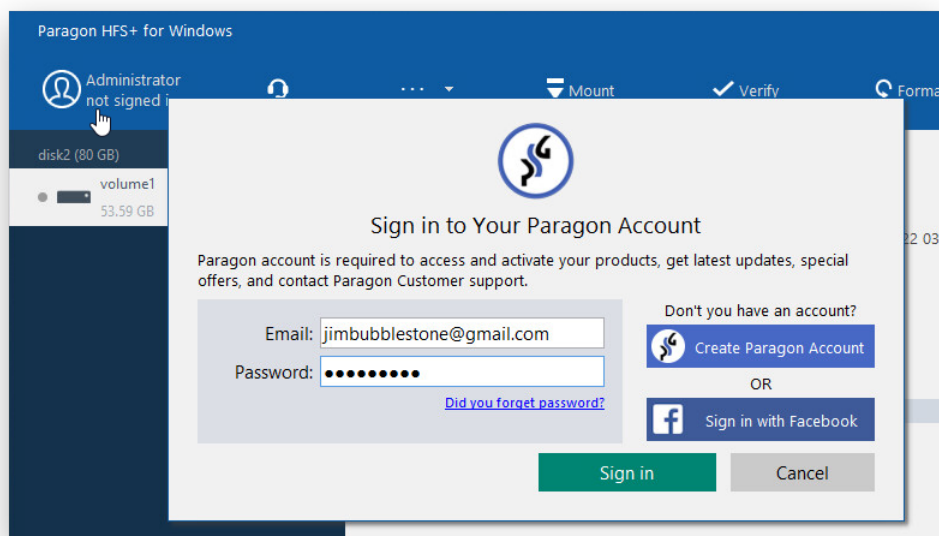
After the installation an icon of Paragon HFS+ for Windows also appears in Windows system tray. Left click the icon to quickly get information on found HFS+ volumes, browse their contents in Windows Explorer, and accomplish mount/unmount operations. Right click the icon to open the main management interface or remove it from the system tray.



Submitting a Support Request

In case of having difficulties with handling the product you can address our support engineers for assistance. To help you solve your problem with minimal time, our engineers need operation logs, your brief description, and in some cases a volume dump. To correctly submit a support request, please use our handy dialog.

1. [Launch the management interface of HFS+ for Windows.](#)
2. Click on the administrator icon. In the opened dialog enter an email and password of your Paragon's account, then click **Sign in**. Alternatively, you can sign in with your Facebook account.



3. Click on the headphones icon. Fill out the ticket request form and attach the operation logs and a volume dump (optional), then click **Send**. That's all. Our support engineers will get in touch with you in a little while.

Send Feedback to Paragon Customer Support

Jim Bubblestone
jimbubblestone@gmail.com

Select a category
"How to..." questions

Write your message
Hello! Please help me

✓ hfs_for_win 11.3.158.log (7.31 kb) X

Attach file

Send Cancel

For more details, please consult the following chapters:

- [Settings](#)
- [Create volume dump file](#)

Appendix

Creating a MyParagon Account

1. Run an Internet browser and visit the page: <http://my.paragon-software.com/>. It is recommended to use Safari, Internet Explorer 10+ or any compatible browser.
2. Click the **Create an account** hyperlink.

MyParagon Customer Portal

Sign in

[or create an account](#)

Email

Password

Sign in

[Forgot password?](#)

OR SIGN IN WITH

f Facebook

3. Fill out the registration form. The most important field in the form is an e-mail address, as it serves as a login to enter the system. Besides, an activation link will be sent to this address as well.

Sign up

OR SIGN IN WITH

Already have an account? [Sign in](#)

- Click **Sign up**. If the provided e-mail address was used to register products in the old Paragon MyAccount system, all data from that account will be migrated to the newly created account.

Sign up

Dear Jim Bubblestone,

We have found that some of your products were registered in the old Paragon MyAccount.

The old Paragon MyAccount is starting to show its age. So we've developed a brand new portal so we can meet current and future requirements for user-friendliness and security and expand our customer service. The old Paragon MyAccount and new MyParagon Portal will exist concurrently for a transitional period.

Please be informed that when you activate your customer account, we will migrate all your account information from the old Paragon MyAccount to the new MyParagon Portal.

Please click Next to proceed.

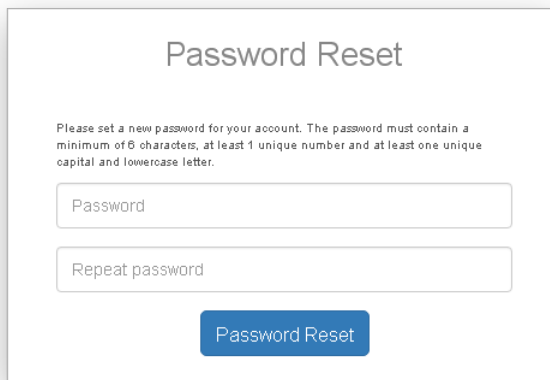
- Once your account is created, you will be prompted to check your inbox for an email with an activation link.

Sign up

Your Paragon account has been created successfully. Please check your inbox and follow the link to activate your account.

[Sign in](#)

- By following the link from the email you can set a password to your account.



Password Reset

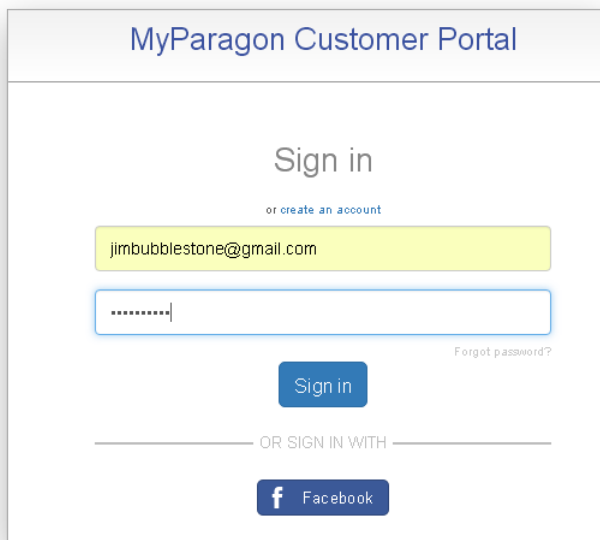
Please set a new password for your account. The password must contain a minimum of 8 characters, at least 1 unique number and at least one unique capital and lowercase letter.

Password Reset

7. That is all.

Registering a New Product in MyParagon Account

1. Run an Internet browser and visit the page: <http://my.paragon-software.com/>
2. Enter an email and password of your Paragon's account, then click **Sign in**. If the user name and password are valid, you will get to your account.



MyParagon Customer Portal

Sign in

or create an account

Forgot password?

Sign in

OR SIGN IN WITH

f Facebook

3. Select **Register new product** in the left pane. Enter your product serial number. You can find it in the product box or obtain from your reseller. Click **Register** when ready.

paragon
SOFTWARE GROUP

Jim Bubblestone >

MyParagon

Product & Services

- My Products
- Register New Product
- My Downloads
- My Upgrades

Support

Profile

Register New Product

XXXXXXXX-XXXXXX-XXXXXX-XXXXXX-XXXXXX

Register

- That is all. The product is now registered, which you can see in the **My products** section. Once the product is downloaded and installed, you can unlock it for unlimited use as described in the [Activating the Driver](#) chapter.