

User Manual

Pomfort SealVerify



Pomfort SealVerify Version 1.0

POMFORT^{fn}

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Getting Started

Pomfort SealVerify - Getting Started



Pomfort SealVerify

The One-Button Check for Travel Drive Consistency

Introduction

Pomfort SealVerify is the one-button software that ensures the completeness and consistency of media data. It's a free tool for Mac OS X and Windows.

Pomfort SealVerify guarantees a complete and consistent data transfer and a quick and easy verification of checksums. It benefits from the sealing functionality that complements the widely used and production-proven MHL standard for checksums.

Travel drives sealed with Silverstack contain a complete inventory list of the entire content. After any further copy step, for example in post production, the free tool Pomfort SealVerify enables the verification of the intended content. It's dead easy: With the click of one button you can check the completeness and consistency of the copied media. A clear approval sign gives you confidence about the perfect condition of your data.

Please visit the [Pomfort SealVerify Product Page](#) to download the application for free.

How to Install on Mac OS X ?

You can download Pomfort SealVerify for Mac OS X from [the product page on the Pomfort website](#).

After a successful download double click the .dmg to mount the disk image and access the application that is inside. Copy the Pomfort SealVerify application to your Applications folder or any other selected place. Double click the app icon to start the application.

How to Install on Windows ?

You can download Pomfort SealVerify for Windows from [the product page on the Pomfort website](#).

Open the .exe file to start the installation process.

You will be guided through the installation process by the installation wizard. Pomfort SealVerify will then be available on your system. Check the Start menu or the desktop icon to launch the application.

System Requirements

For **Mac** Pomfort SealVerify requires **OS X 10.9.5 or later**.

For **Windows** Pomfort SealVerify requires **Windows 7 or later**.

Workflow

For more information about the optimized workflow with Silverstack and Pomfort SealVerify please see the article [A Typical Set-to-Post Scenario with Silverstack and Pomfort SealVerify](#) .

User Interface & Functionality

The initial user interface of Pomfort SealVerify basically has one functionality – it enables you to open the sealed drive or directory you want to verify:



Fig. 1: The Pomfort SealVerify start screen.

When a sealed drive is detected you will receive detailed information about the seal and the sealer of the drive. You can then start the verification process with the click of one button:

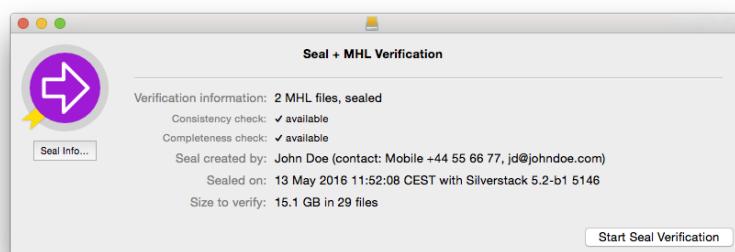


Fig. 2: A sealed drive was detected.

After the verification a clear approval sign gives you confidence about the perfect condition of your data:

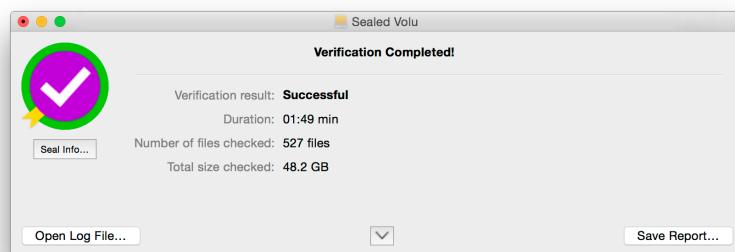


Fig. 3: Successful verification of a sealed drive.

If you want to learn more about detailed functionalities of the application please refer to the article [Verifying Sealed Drives in Pomfort SealVerify](#).

Troubleshooting

For basic troubleshooting please refer to the following articles:

- [I have a problem with the software](#)
- [I have a question about the software](#)

If you had no success finding a solution to your issue please visit our support forum where you can find community help about the free application.

Workflow

A Typical Set-to-Post Scenario with Silverstack and Pomfort SealVerify

In this article you will learn about a typical set-to-post scenario with Pomfort's Silverstack and Pomfort SealVerify. The products are designed to work hand in hand to deliver a secure and optimized copy chain.

About the Workflow

Copying data with Silverstack secures a consistent copy through the use of different hash algorithms. In addition to that, the sealing functionality in Silverstack allows to also verify the completeness of the data copied to the drive. You can think of the seal as a complete inventory list of the drive. After any further copy step, for example in post production, Pomfort SealVerify enables the verification of the intended content.

Due to the Pomfort Seal that is copied along with the data you will always be able to verify if the content of the drive is identical to the initial state when it was sealed. Even after insecure copy steps e.g. with Windows Explorer or Finder verification will be possible.

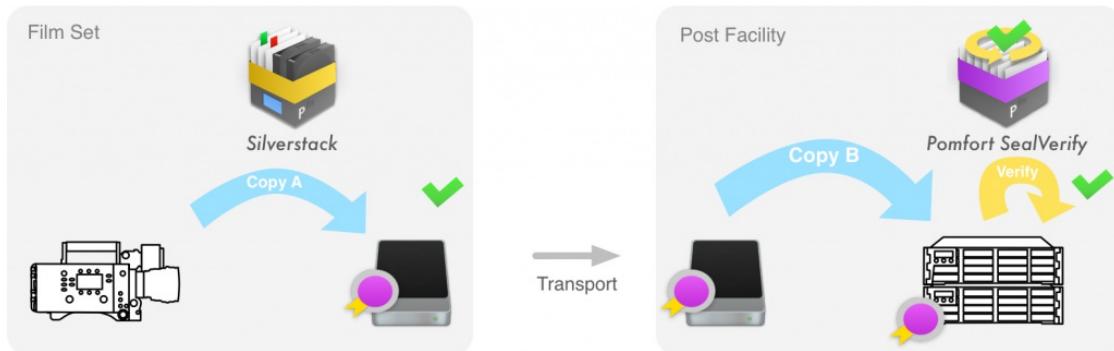


Fig. 1: A typical set-to-post scenario.

Fig. 1 shows a typical set-to-post workflow. The initial copy process from the camera source is made with Silverstack. Before sending the drive to the post production facility Silverstack seals the drive. This process secures consistency and completeness of the media data. When the drive arrives at the post house it is copied to the in-house infrastructure. Because of the seal that is carried along, the content can then be verified with one-click by Pomfort SealVerify.

Pomfort SealVerify marks the end point to a maximum secure copy process initialized with Silverstack.

Learn about verifying sealed drives or folders in Pomfort SealVerify from the article [Verifying Sealed Drives in Pomfort SealVerify](#). Get an overview about the application in the article [Pomfort SealVerify – Getting Started](#).

Technology

Understanding the Pomfort Seal

This article will help you understand the intention and background of the Pomfort Seal.

The Pomfort Seal

The Pomfort Seal complements the widely used and production-proven MHL standard for checksums and can only be produced by Silverstack. During the sealing process, Silverstack creates a seal file (.pfsl) that references all MHL files on the drive. An additional MHL file will be created for all data that was detected on the drive but was not copied onto it with Silverstack. The Pomfort Seal holds all this information together and is even secured against altering the seal itself. Any kind of change of the data on the drive will break the seal and will therefore be detected by [Pomfort SealVerify](#).

Please note that the term of “sealing” has nothing to do with encryption of the data on a drive. The Pomfort Seal does not limit the access to your data. The sealing process aims for integrity, consistency and completeness of data. The term “sealing” is not used in a way that implies a “blocking” or “locking” of data.

Sealed vs Unsealed

The following table will show you the advantages of a drive sealed with Silverstack:

	consistency	consistency + completeness
MHL only <i>(misc. copy tools)</i>	YES	NO
MHL + Seal <i>(Pomfort Silverstack)</i>	YES	YES

MHL files (or other hash files such as .md5 files) basically carry hash values and filenames. With this information, you can verify the consistency of files without access to the original source files. The appropriate tools can determine if the contents of the files mentioned in the MHL file still have the same content as at the time when the hash values have been created. The MHL files are usually created during a copy process.

For a drive with multiple folders copied with multiple copy processes (for examples on a film set, where multiple camera cards are copied to the same travel drive), you cannot verify if one entire folder together with its MHL file is missing. This means with MHL files alone you can verify consistency of single files, but not the completeness of an entire drive.

To solve this problem , the Pomfort Seal contains a list of all MHL files on a drive. With this information, a missing MHL file can be detected very easily. This means that the Pomfort Seal together with the MHL files allows to verify consistency as well as completeness of a travel drive.

The sealing process in Pomfort Silverstack also searches for files on the drive that haven't been listed in MHL files yet. This ensures, that the Pomfort Seal together with the MHL files cover the entire content of the sealed drive.

Pomfort SealVerify is the free one-button process to verify the Pomfort Seal and the listed MHL files. This way a reliable copy chain can be built where both, consistency and completeness of media data can be verified at any time.

Usage

Verifying Sealed Drives in Pomfort SealVerify

Quick Overview

Pomfort SealVerify is the one-button process that ensures the completeness and consistency of media data. Pomfort SealVerify is able to verify drives that have been sealed with a Pomfort seal. This Pomfort seal can be produced by [Pomfort's on-set media management application Silverstack](#). The sealing functionality in Silverstack complements the widely used and production-proven MHL standard for checksums. Instead of a standard checksum *consistency* check with MHL files the Pomfort seal additionally secures the *completeness* of your media data.

Learn more about a possible workflow with the exemplary use case described in the article [A Typical Set-to-Post Scenario with Pomfort SealVerify and Silverstack](#).

Verifying a Sealed Drive

Pomfort SealVerify allows you to verify sealed drives as well as sealed folders. For simplicity reasons we may only refer "sealed drives" below but want to make clear that the same procedure will work for sealed folders.

Learn how to seal drives in Silverstack from the article [Sealing Drives in Silverstack](#).

First Step: Choose a Sealed Drive



Fig. 1: The Pomfort SealVerify start screen

Click the button "**Choose Drive or Folder**" to choose the sealed drive to verify.

When a sealed drive is detected you will receive detailed information about the seal and the person who sealed the drive.

Second Step: Start the Verification Process

You can then start the verification process with the click of one button:

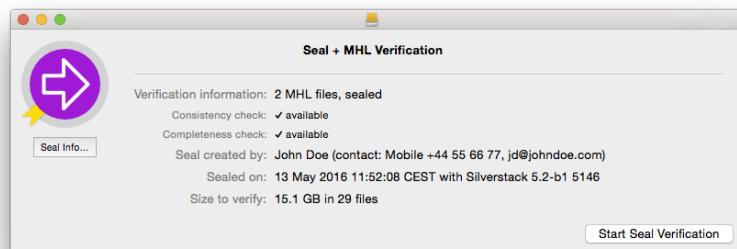


Fig. 2: A sealed drive was detected.

Below the seal you will be able to click the button "**Seal Info**". This will open up the Seal Information with all the details provided in Silverstack during sealing:

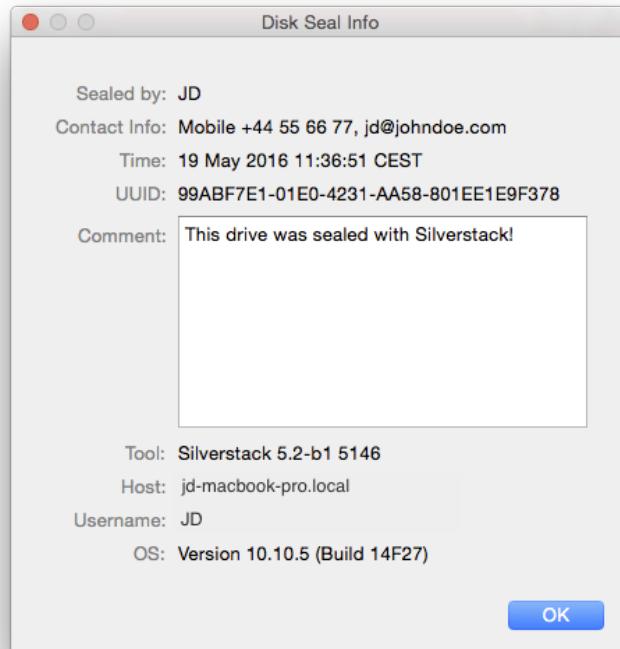


Fig. 3 : Disk Seal Info in Pomfort SealVerify

During the verification process you will see a progress bar and detailed information that will indicate how long the verification process will take. Please note that the verification will read every file in order to create checksums and compare them with the checksums stored in the seal information. The duration of this process depends on the amount of data as well as the read speed and may take from seconds to hours.

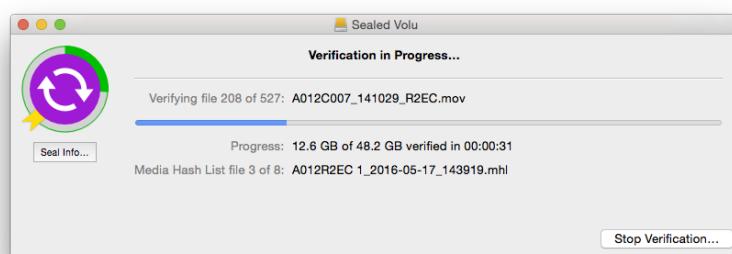


Fig. 4: Verification in Progress

Third Step: Review the Result

After the verification a clear approval sign gives you confidence about the perfect condition of your data:



Fig. 5: A successful verification process.

After the completed verification you can open the detail view with a click on the arrow that points down in the middle of the UI. The



detailed table view will present details about the files that have been verified:

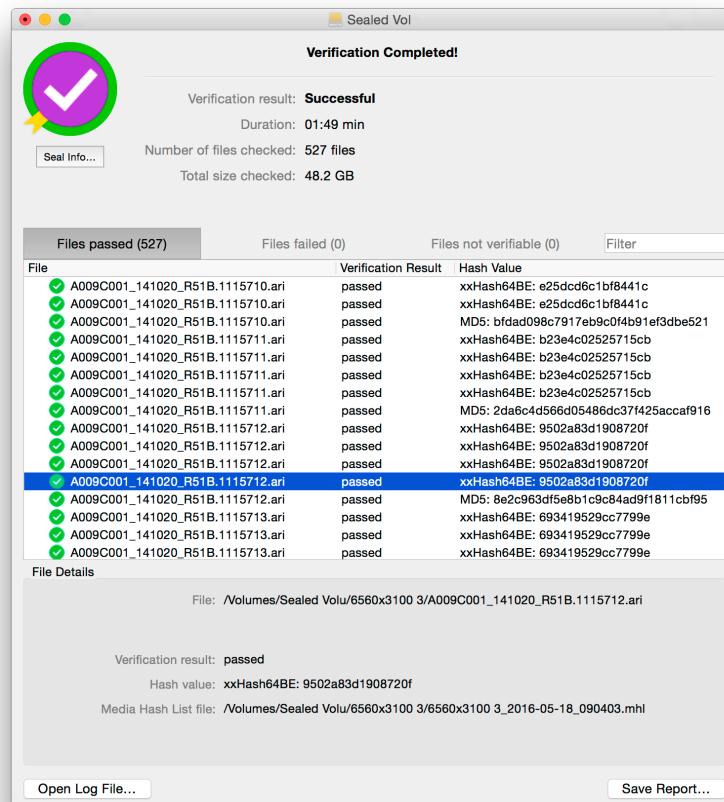


Fig. 6: Verification completed successfully

As displayed in fig. 6 you can see details about a file by selecting it from the table.

The details include:

- File path
 - Verification result
 - Hash value
 - Media Hash List file the verified file is included

If you want to learn about possible error cases please visit the article [Error Cases](#).

Fourth Step: Create a Report

After the verification is finished you will be able to **export a report** that will give you the overview of the verification task. Click "**Save Report**" at the bottom right side of the user interface to save the report in a .txt file format:



Fig. 7: A Pomfort SealVerify report example

The report contains all the information from the table view of the verified files (see fig. 6).

Verifying a Drive with MHL Files (without Pomfort Seal)

If there is no POMFORT Seal present on the drive, but the data is accompanied by MHL files, the verification of the drive is slightly different to verifying a sealed drive.

After choosing a sealed drive in step one, the application will scan for MHL files:

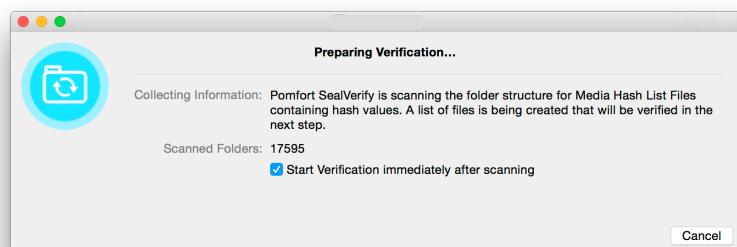


Fig. 8: Preparing verification and looking for Pomfort Seal or mhl files

You can choose to start the verification process immediately after scanning by enabling the checkbox “Start Verification Immediately After Scanning”. In some cases this processing step can be so quick that you will not notice it. It will then directly display the next step.

When there have been .mhl files found you will see the following user interface:

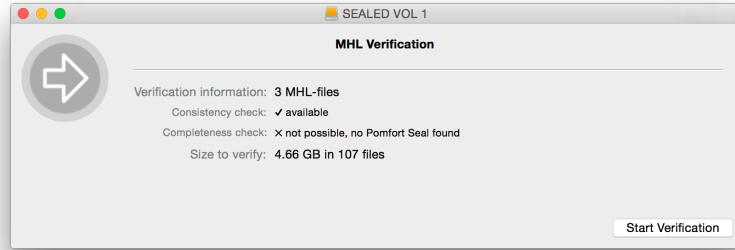


Fig. 9: MHL files found and ready for verification

You will then be able to start the verification. Please see the article [Error Cases](#) for further information about “uncheckable” files

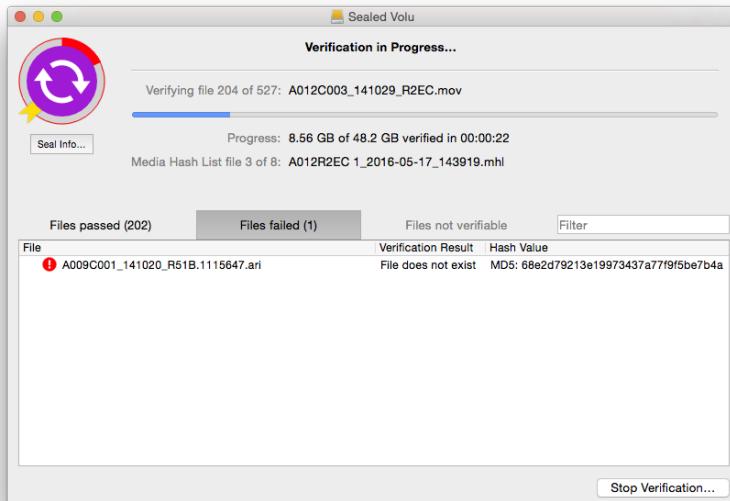
Please note that you will only be able to verify consistency of the files referenced in the detected .mhl files when the drive is not sealed. You will not notice if a whole folder including its .mhl file is missing, or any data that was intended to be on the drive but is not referenced in any .mhl files was lost. Learn more about the Pomfort Seal from the article [Understanding the Pomfort Seal](#).

Error Cases

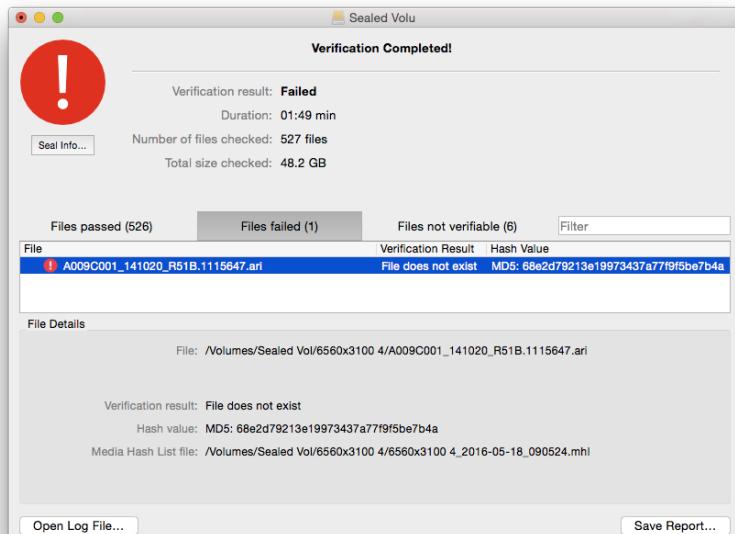
Pomfort SealVerify can detect different error cases. The application will tell you the reason of the error. In any case the Seal Info will give you the needed information to contact the original sealer of the drive to talk to him about a possible reason and solution to the problem. Here are the different error cases the application will be able to give you.

File Does Not Exist

As soon as a file fails you will already see it in the ongoing process:

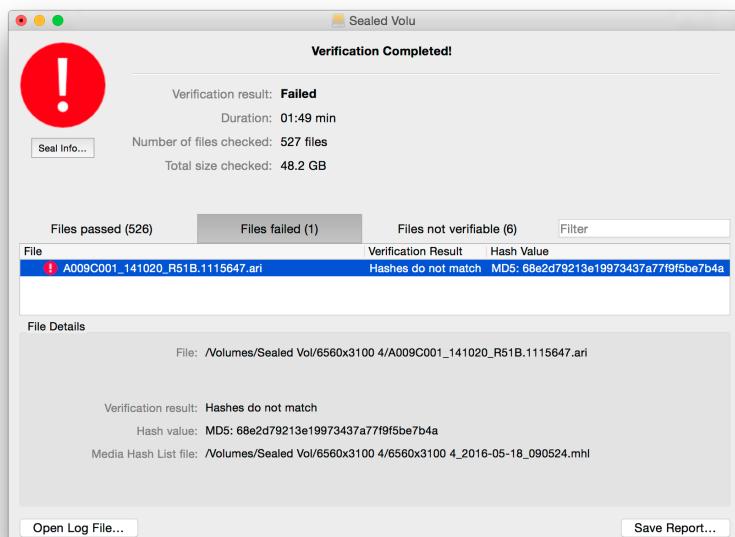


When the verification is completed you will see the clear protest sign that clearly expresses the failed verification. You can find the reason for the failure in the verification result column or select the failed file in the table for more details about it:



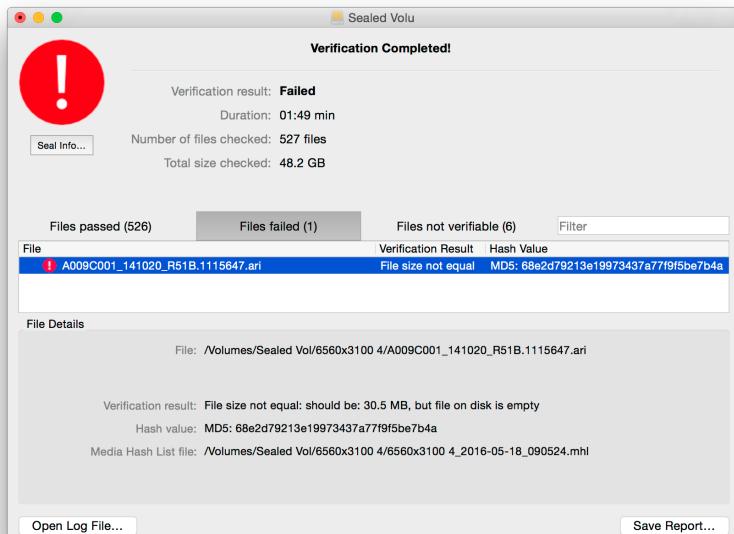
Hash Is Not Equal

In this case the file exists but the hash doesn't match with the original checksum:



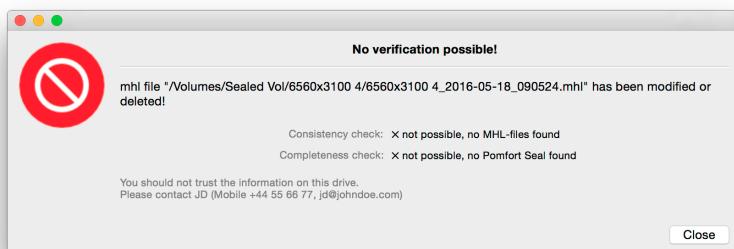
File Size Not Equal

This error case is a special case of hashes do not match. It will tell you additionally that the file size of the existing file does not match the original:



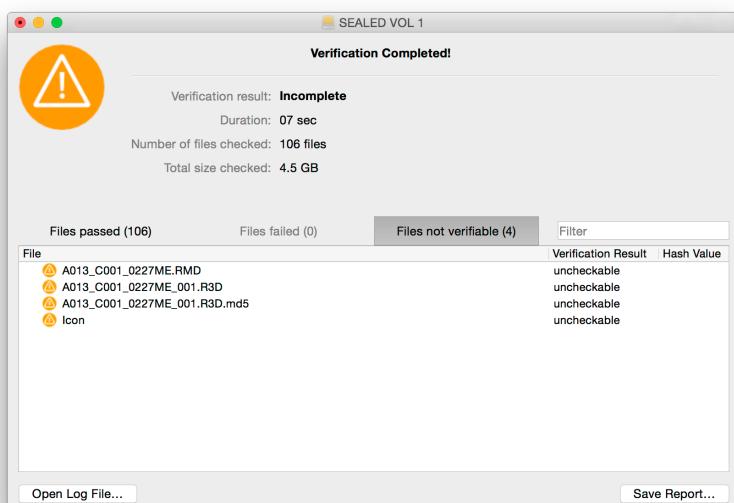
No MHL File Found / MHL File Was Altered

If the drive is sealed and an MHL file was altered or does not exist anymore, Pomfort SealVerify recognizes that the seal was broken. You will see the following error message:



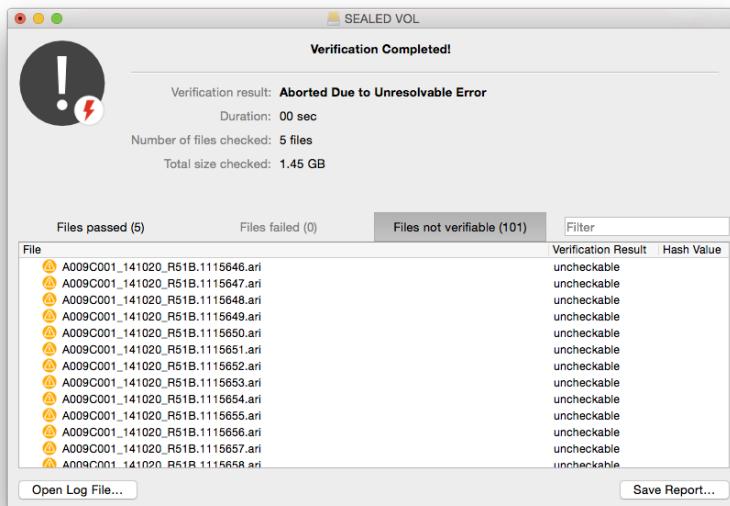
Files Uncheckable

In case you are only verifying MHL files without a seal or files have been copied by hand onto the drive after sealing it with Silverstack you may run into files that cannot be checked because they are not referenced in any MHL file. You will get the following finished verification status:



Unresolvable Error

A critical error happens e.g. when the MHL files cannot be parsed by Pomfort SealVerify:



One possible reason for this error could e.g. be that the drive was not sealed and the MHL file is corrupt.

Troubleshooting

I Have a Problem with the Software

Pomfort SealVerify is a free tool offered for Mac OS X and Windows platforms. Feel free to browse the Pomfort SealVerify KnowledgeBase to find articles that help you with your issue.

For **support questions** we have installed a support forum where you will be able to post your problems or questions about the software to find community help.

[Click here to go to the forum now.](#)

We kindly ask for your understanding that we will not be able to run email support for Pomfort SealVerify. As it is a free application we try to offer the best infrastructure for users to help each other and advance together in the usage of the product.

I Have a Question About the Software

Please feel free to browse the Pomfort SealVerify KnowledgeBase to find an answer to your question among the existing articles.

We have also installed a forum for the application where you can ask all the questions that arise around the application:

[Click here to go to the forum now.](#)

Typical questions are:

[How do I get started?](#)

[I have a problem with the software – what can I do?](#)

[How can I verify a drive with Pomfort SealVerify?](#)

What About Updates?

Updates to the Pomfort SealVerify application will be automatically delivered through the built-in update mechanism. To manually check for updates go to the Main Menu and select "**Pomfort SealVerify > Check for Updates...**". In case of the availability of a later version the sparkle feed will let you start the installation process.

You can see the latest change log for the application in the article Change Log for Pomfort SealVerify. For any questions about the application or occurring issues please find help in the forum.