IMAGINE PRODUCTS, INC®

ShotPut Studio®

Media Management Application User's Guide

Version 1.3, Indianapolis, Indiana USA

Contact Support

Imagine Products Website

Table of Contents

Table of Contents **2**
Legal **5**
Copyright 5
License 7
Welcome **8**
Overview 9
Connections List **11**
Drives 13
Drive Details 13
Drive Type Specification 13
Speed Benchmarking 14
Cloud Upload 16
Connecting a Cloud Provider 16
Switching Tools **19**
Standalone Tools **20**
Copy 21
Sync 23
Syncing Folders 25
Comparing Files/Folders 26
Report 27
MHL 28
Create a New Seal 29
Reseal 29
Verify 30
Search 31
Search by Criteria 31
Search by Item 33
Transcode 35
Preset Tool **39**
Copy Presets 42
Output Destinations 42
Naming Scheme 43
Verification 44
Transcode Presets 46
General Settings 46
Video Settings 47
Audio Settings 48

Timecode Settings 48
Watermark Settings 50
Preview 51
Running Jobs Using Presets 53
Job List **55**
Filters & Order 56
Copy Job History 56
Wrap Reports 59
Completed Jobs **62**
Copy Jobs 63
Right-Click Actions 63
Job Details 65
Job Tree 66
Report Preview 67
Sync Jobs 69
Comparison Details 69
Sync Details 73
Report Jobs 76
Job Details 76
Job Results 76
Job Tree 77
MHL Jobs 78
Job Details 78
Job Results 78
Transcode Jobs 81
Right-Click Actions 81
Job Details 82
Clip Processing and Results 82
Search Jobs 84
Job Details 84
Job Results 84
Settings **87**
Account 87
General Settings 88
Copy Options 88
Transcode Options 93
Sync Options 94
Match by File System Attributes 95
Match by Checksum Value 95
Verification Options 96
Automation Options 98

Notifications 99
Desktop 99
Email and SMS 99
Reports 101
MHL Seal 101
Report Location 104
Report Naming 104
Add Notes 104
PDF Reports 104
CSV & TXT 106
Advanced Settings 108
Reference Link Resolution 108
Date Format 109
Ignore Hidden Files and Folders 110
Change Language 110
Reset to Defaults 110
Appendix A - Installation 111
Installing the Software 111
System Requirements 111
Activation 111
How to Register 112
Appendix B - Troubleshooting 113
Technical Support 113
Contacting Imagine Products 113
Check for Updates 113
Diagnostic Logs 113

Legal

Copyright

Documentation Version 1.3 ShotPut Studio for Macintosh, copyright © 2024 Imagine Products, Incorporated. All rights reserved. This documentation and the software accompanying it are the property of Imagine Products, Incorporated and are loaned to the user under the terms of a Limited Use License Agreement. Unauthorized copying or use of this documentation, the software, or any associated material is contrary to the property rights of Imagine Products Incorporated and is a violation of state and federal law. This material must be returned to Imagine Products, Incorporated upon request.

ShotPut Pro, myLTO, PrimeTranscoder, TrueCheck and PreRollPost are trademarks of Imagine Products, Incorporated. Offload with Confidence!, Imagine: We've Got Your Back(up)! are service marks of Imagine Products, Incorporated.

ShotPut Studio® for Macintosh copyright © 2024 Imagine Products, Incorporated.

Imagine Products, Inc. ® is a registered federal trademark Reg. No. 4,711,231.

Imagine Products, Incorporated reserves the right to change functionality and specifications of products documented herein without notice. All products and company names mentioned in this document are trademarks of their respective owners.

3rd Party SDKs/APIs

Boost C++ Libraries
Copyright Joe Coder 2004 - 2006.
Distributed under the Boost Software License, Version 1.0.
LICENSE_1_0.txt (https://www.boost.org/LICENSE_1_0.txt)

FFmpeg
Portions of this application use certain unmodified FFmpeg libraries under the LGPLv2.1 licensing. FFmpeg is a trademark of Fabrice Bellard, originator of the FFmpeg project. Imagine Products, Inc. claims no ownership of FFmpeg or any of their code that may be downloaded from www.ffmpeg.org.

OPENEXR
OpenEXR www.openexr.com
License:
Modified BSD License:

Copyright (c) 2002-2011, Industrial Light & Magic, a division of Lucasfilm Entertainment Company Ltd. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
Neither the name of Industrial Light & Magic nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

RED
The R3D SDK and all included materials (including header files, libraries,
sample code & documentation) are Copyright (C) 2008-2024 RED Digital Cinema.
All rights reserved. All trademarks are the property of their respective owners

PLEASE DO NOT MAKE ILLEGAL COPIES OF THIS SOFTWARE

The software you are using was produced through the efforts of many people: independent producers, production studios, programmers, distributors, retailers and other dedicated workers.

The costs of developing and delivering to you this and other software programs are recovered only through software sales. The unauthorized duplication of personal computer software raises the cost to all legitimate users.

In addition, the same federal copyright law protects this software as your organization's video productions. Copying software for any reason other than to make a backup is a violation of law.

Individuals who make unauthorized copies of software may be subject to civil and criminal penalties.

Imagine Products, Incorporated supports the industry's efforts to fight the illegal copying of personal computer software.

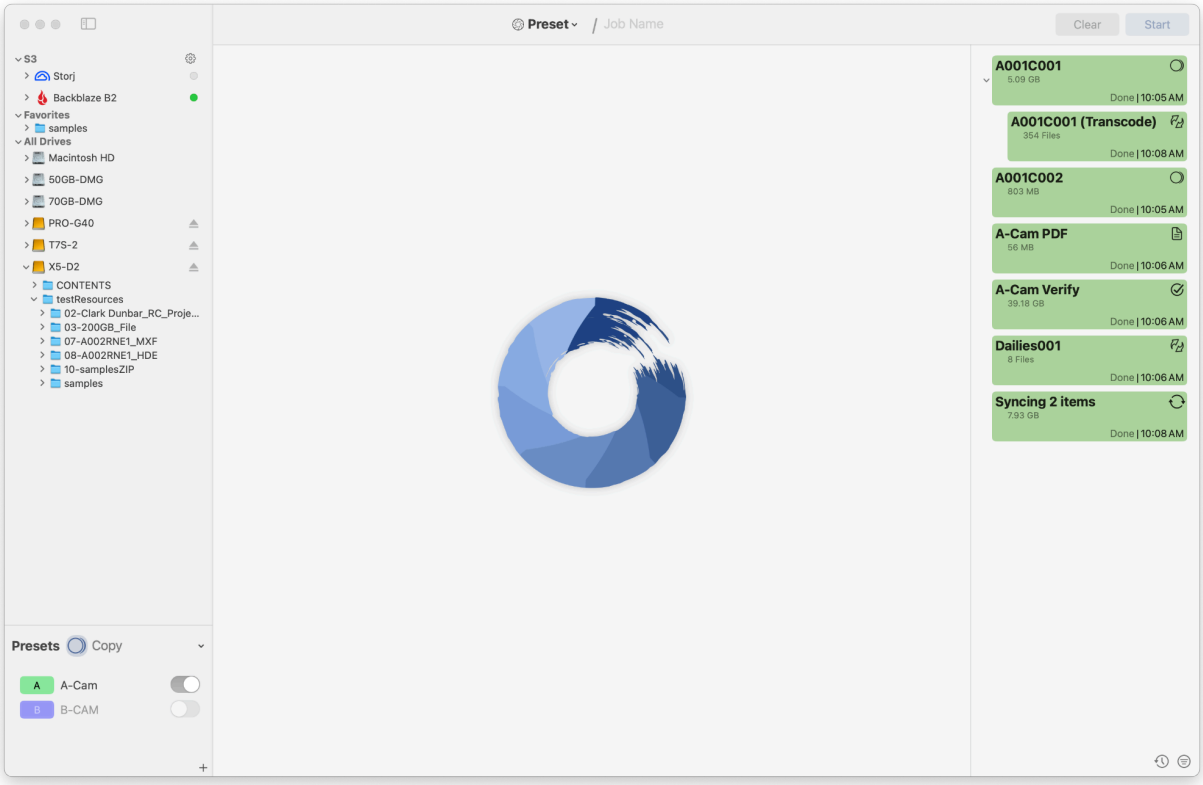
WARNING! Copyright law and international treaties protect this computer program. Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law.

License

Please refer to the End User License Agreement (EULA) terms that you agreed to during download and installation of the application. The EULA is accessible from the application Help menu and on the website. Imagine Products, Inc. reserves the right to update the EULA with notification. By using this application you consent to the EULA terms.

Welcome

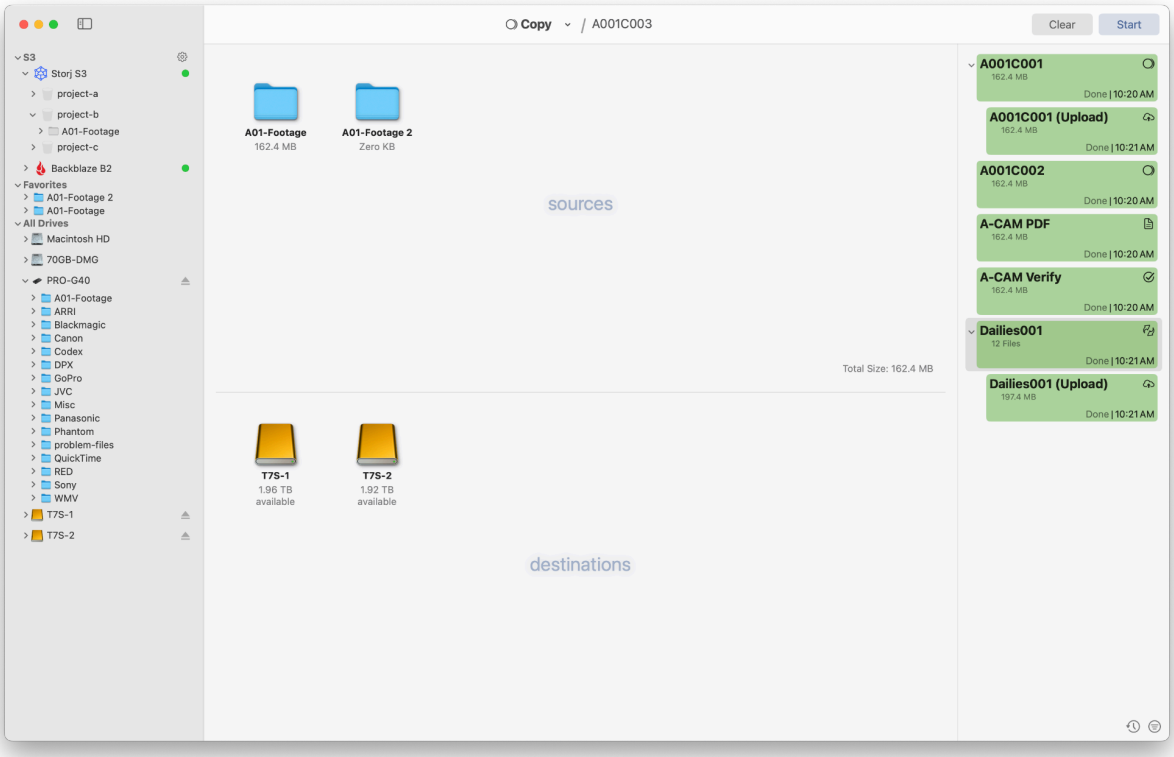
We’re pleased that you’ve chosen ShotPut Studio for all your media management needs. Within Shotput Studio’s streamlined interface you’ll be able to quickly and easily perform a variety of post-production tasks, allowing you to manage your media with ease.



ShotPut Studio works with any camera or audio files, regardless of manufacturer, including ARRI®, BlackMagic Design®, Canon®, DJI™, GoPro®, JVC®, Panasonic®, RED®, Sony® and more.

Overview

ShotPut Studio is a comprehensive workflow solution that combines the functionality of many of Imagine Products' software applications, enabling streamlined offloading, reporting, verification, uploading, and transcoding processes for media files. With a user-friendly interface and powerful features, ShotPut Studio offers an efficient and secure way to manage your data.



ShotPut Studio simplifies offloading by automatically copying the contents of cards, entire hard disks, or selected files to multiple locations simultaneously. The software ensures security and accuracy through checksum verification, allowing users to verify the integrity of copied files against the originals. Additionally, ShotPut Studio supports the creation of Media Hash List (MHL) files to seal folders of files, providing an important quality control check for downstream workflows.

It recognizes over 20 different camera formats, including file-based RAW from various camera manufacturers. ShotPut Studio's integrated analysis tools offer robust features such as personalized PDF reports with metadata and thumbnails and the ability to calculate and verify checksums for files.

ShotPut Studio also incorporates powerful transcoding capabilities. It supports fully automated processing and allows users to create customized presets for transcoding, including edit quality

ProRes files and web-shareable, compressed, watermarked clips with burned-in timecode, LUT application, and more.

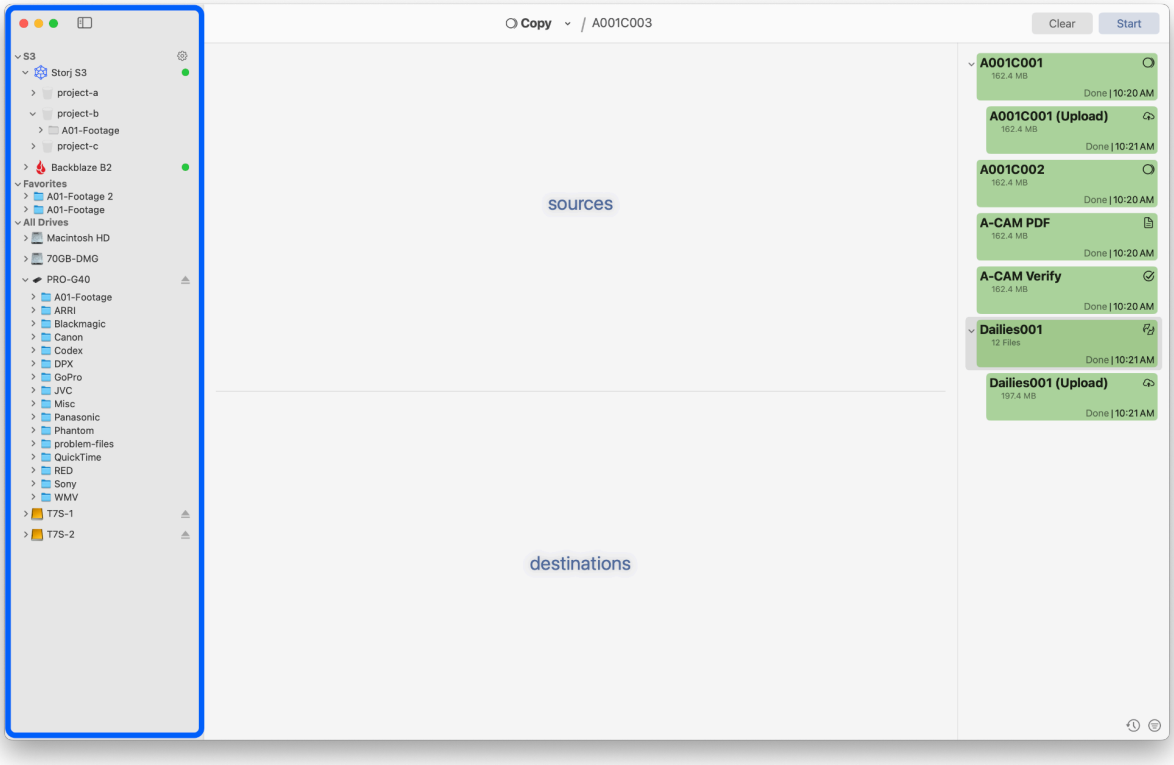
The software provides a comprehensive view of job tasks through progress bars and color-coded indicators to represent job status. Users can pause and resume copy processes, individually remove tasks, and access detailed reports with job metadata and previews. ShotPut Studio offers flexibility with presets, enabling easy switching between folder naming conventions and designated output locations.

With ShotPut Studio, users benefit from error checking features that prevent accidental overwriting of existing files and folders, as well as checks for available space at output locations. The software also offers convenient finishing touches such as playing notification sounds, automatically ejecting source cards, and sending notifications via text or email.

In summary, ShotPut Studio is a versatile workflow solution that combines the functionalities of multiple applications into a single, comprehensive tool. It streamlines the offloading and transcoding processes, ensuring secure and efficient media file management for professionals in the media and entertainment industry.

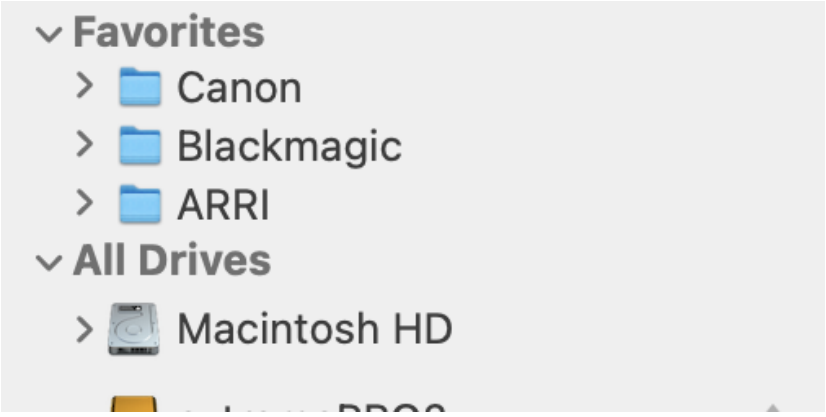
Connections List

On the left hand side is your *Connections List*. Your connections include connected drives or readers, and their contents, as well as your connected cloud buckets.



To quickly access often-used locations, add any device, folder, or file to your list of *Favorites*.

To add, *Right-Click* on an item in the *Connections List* and choose *Add to Favorites*, or drag the volume below the *Favorites* heading.

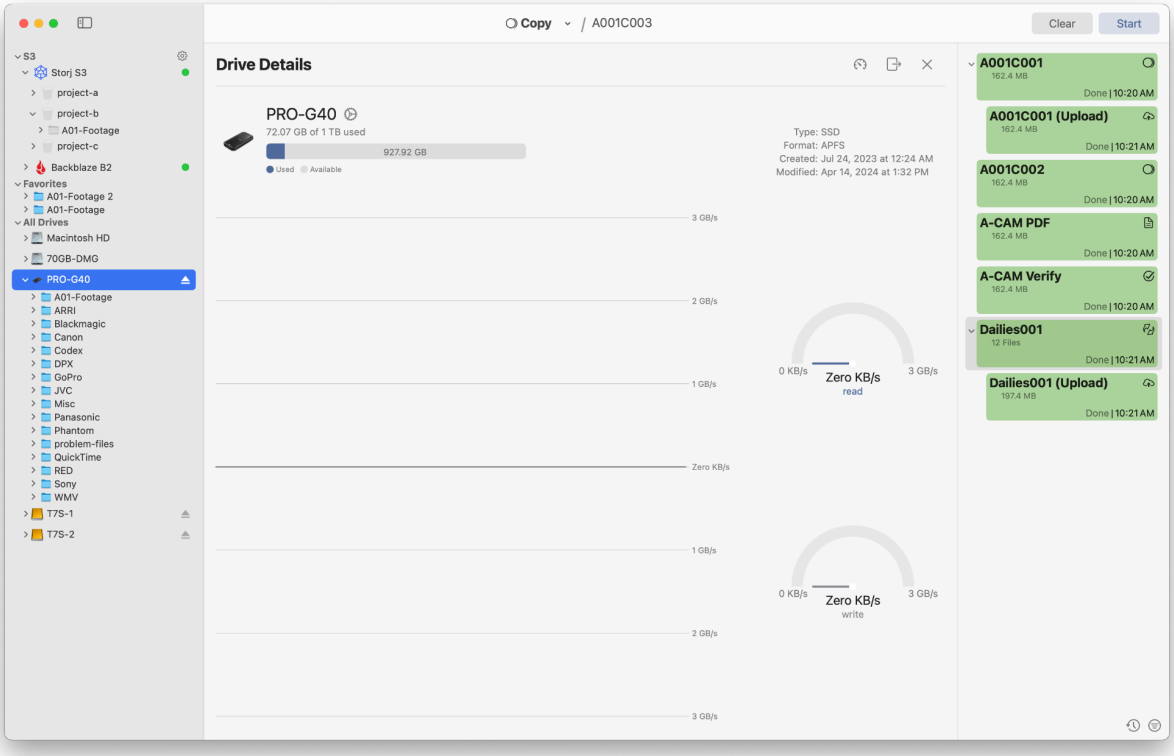


TIP: Media not currently in use may be Ejected from this list by clicking the *Eject* icon.

Drives

Drive Details

Click on a drive's representation in the left panel to open its details. Here you can view specific information about the drives read and write speeds. Selecting a drive that is currently in use will show speed information, updated in real time.

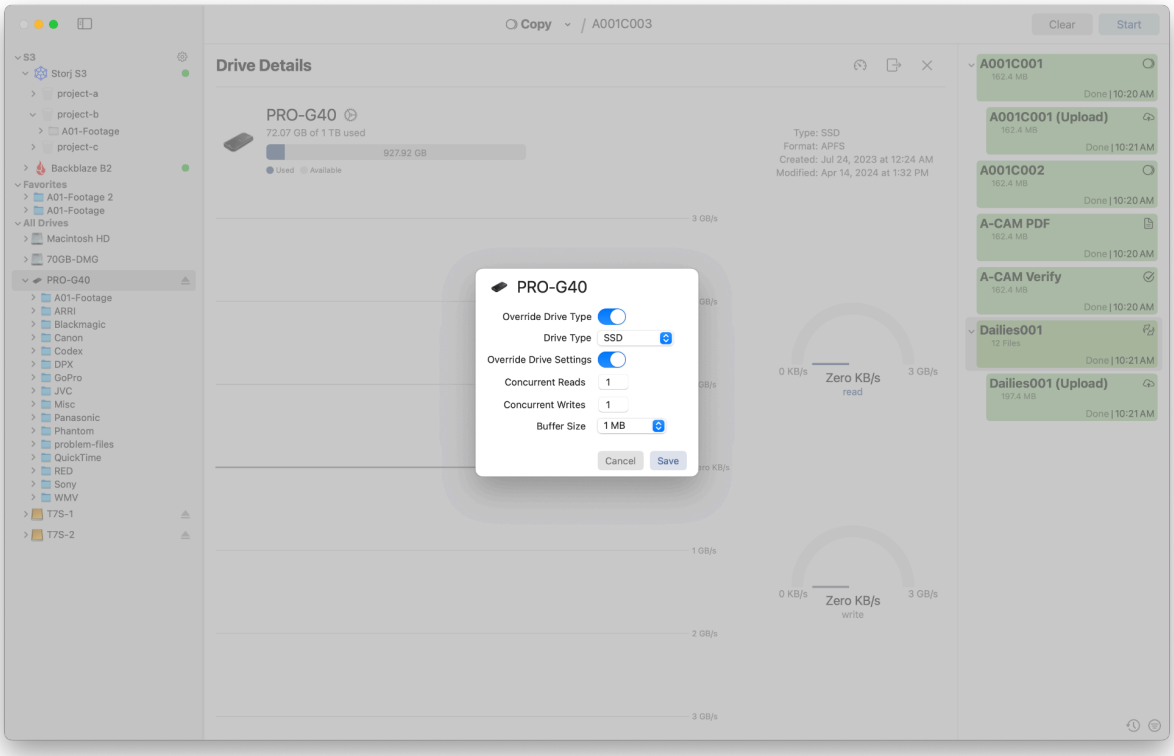


You can also see information including when the drive was *Created*, when it was last *Modified*, its total *Capacity*, the amount *Available* and the amount *Used.*

Clicking the icon directly to the left of the *X* icon, in the upper right corner of this window, will open the selected drive at its location in Finder.

Drive Type Specification

Select the *Gear* icon to the right of your drive name to edit its type, as well as other drive specific settings.



When performing a copy, ShotPut Studio optimizes the job based on the types of drives involved in the process. The drive type is found by gathering information provided by macOS, however this process is not always perfect and it is possible for the OS to misidentify the drive's type. Because of this, ShotPut Studio allows you to override the drive's type.

To override the drive type, select the toggle next to *Override Drive Type*. This will allow you to manually select a drive type from the dropdown list.

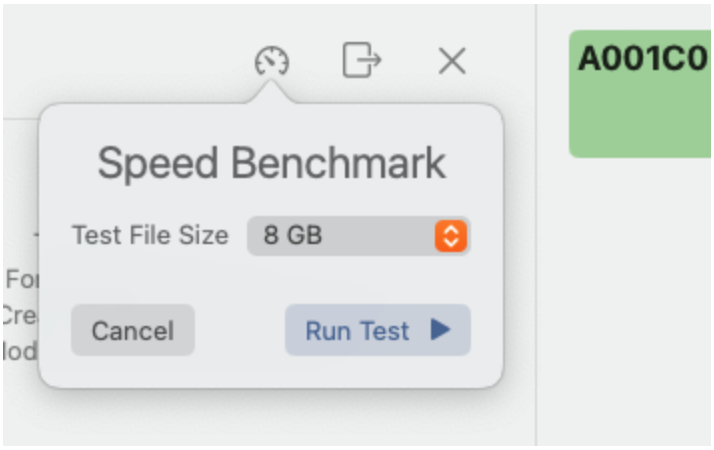
To instruct ShotPut Studio to use the default drive type, select the corresponding option from the list.

In this view, users also have the option to override *IO settings* including *Concurrent Reads, Concurrent Writes,* and *Buffer Size*.

NOTE: These settings are for advanced workflows. We recommend testing them using the built in speed test (detailed below) before finalizing your changes.

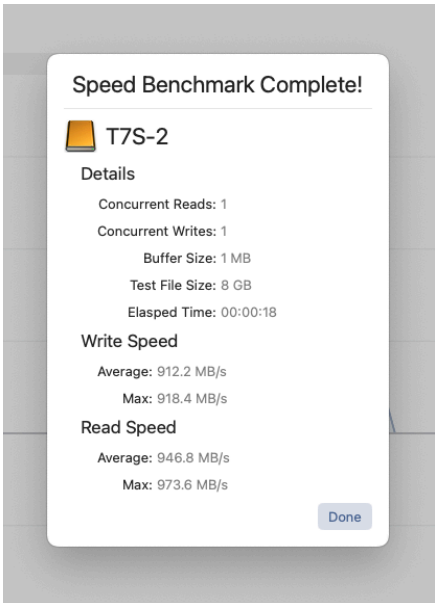
Speed Benchmarking

To benchmark the speed of your drive, select the *Speedometer* icon.



Selecting this icon will cause a flyout menu to appear allowing you to edit the *Test File Size* and *Verification Type*. To perform a speed test without verification, select the corresponding option from the dropdown menu.

After selecting *Run Test,* the test will begin and you will be able to monitor your drive's read and write speeds in real time. Upon completion, a pop-up will appear displaying information about the completed speed test.



TIP: Changing settings such as Concurrent Reads, Concurrent Writes, and Buffer Size may improve speeds. Always test these changes before implementing them into your workflow.

Cloud Upload

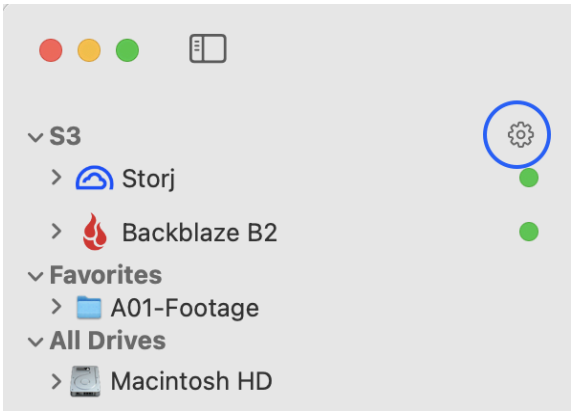
ShotPut Studio supports the connection of *S3 Cloud Providers* allowing users to upload their data to a chosen cloud bucket.

To utilize copying to a cloud in ShotPut Studio you must first connect with your chosen cloud provider.

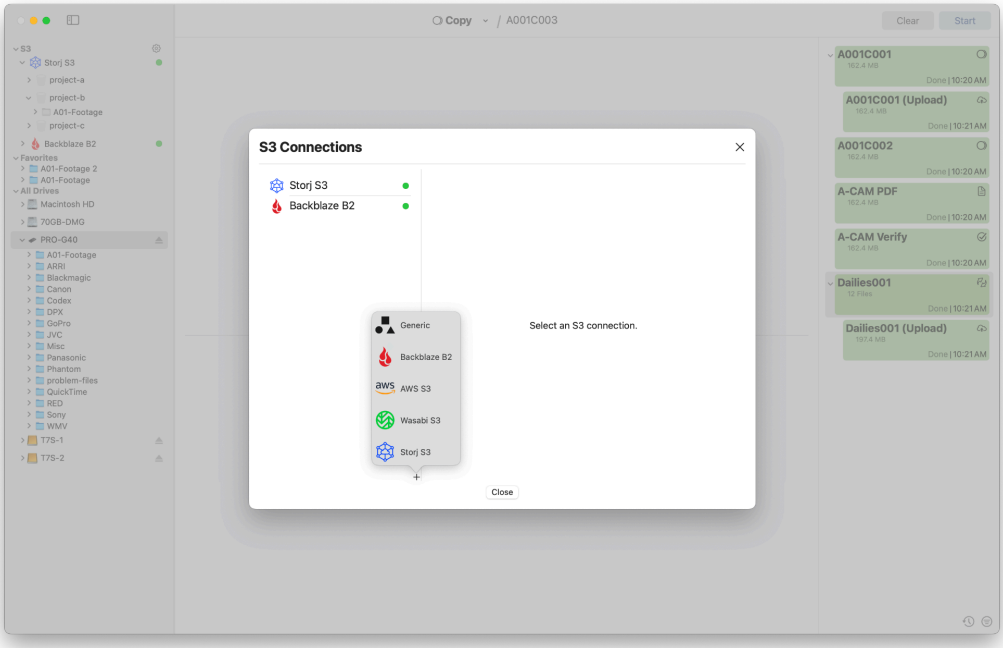
NOTE: A cloud can only be used as a destination and is not currently supported as a source.

Connecting a Cloud Provider

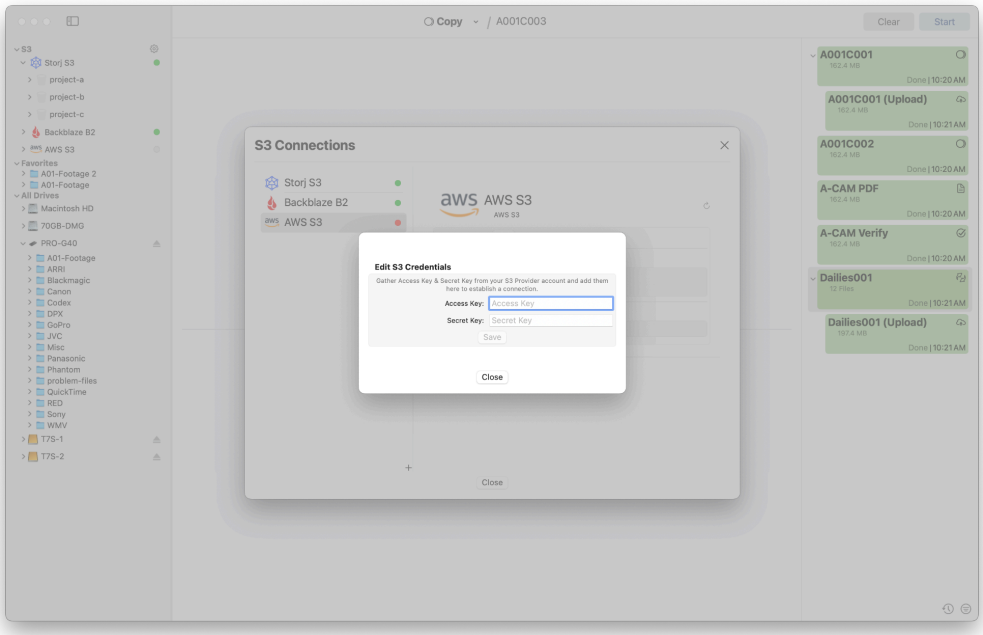
To establish a connection to your chosen cloud provider, first click the *Gear Icon* to the right of the *S3* category header.



After doing so, a pop-up will appear. Once you have added a provider, you can manage it in this pop-up. However, if you have not established any connections or would like to establish a new connection, click the **+** icon in the *S3 Connections View* and then select your provider.



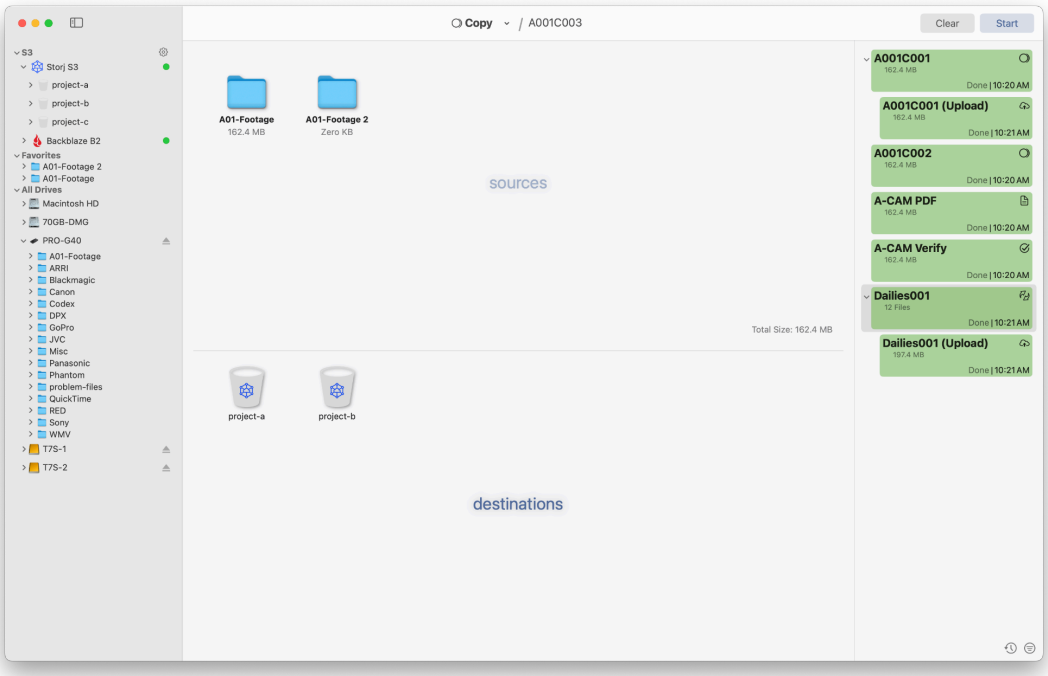
After this, click the *Edit* button to add the necessary credentials such as your Application Key and Application Key ID (ShotPut Studio will ask permission to access your Keychain when you save your credentials the first time. *Select Always Allow*.).



The connection status will then update automatically provided the details were entered correctly. Your available buckets will then populate underneath the corresponding provider icon. After this,

you can begin copying to the S3 bucket(s) or subfolders by dragging them into the central queue of the *Copy tool*.

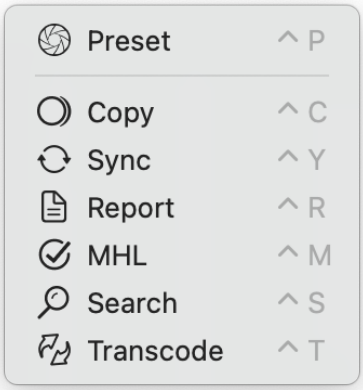
TIP: If your cloud buckets do not automatically populate, you may need to use the *Refresh* button located in the upper right of the pop-up.



NOTE: Despite the verification mechanism being used, S3 uploads will always verify using the S3 *etag* value. The item will not be downloaded again to verify the contents after replicating. The S3 standard handles generation of a checksum value for this item, which ShotPut Studio will then compare against, to verify the integrity of the upload.

Switching Tools

Users can access their *Toolkit*, the drop-down menu used to switch between tools, by selecting the arrow found directly to the right of the tool you are currently using.



The first option seen is Preset, which contains both *Copy* and *Transcode Presets*.

Each of the tools underneath this are what would be considered *Standalone Tools*, due to the fact that they perform one-off operations. However, because each performs a very different function they have been separated out.

TIP: Users can utilize shortcuts to quickly and easily switch between tools.

Standalone Tools

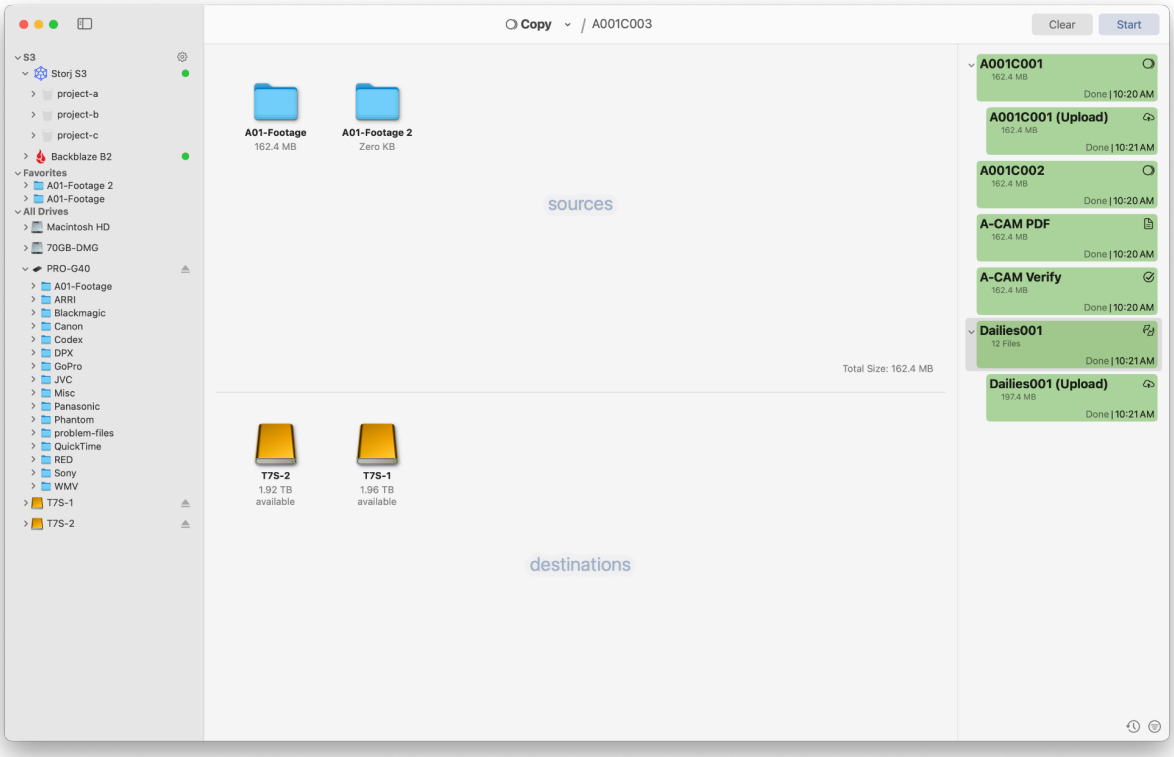
In ShotPut Studio, your standalone tools encompass a wide array of power data management tools that can be used to securely *Copy*, *Analyze*, *Transcode*, and *Upload* your media.

Standalone tools include; *Copy, MHL, Report,* and *Transcode*. The *Upload* tool can be utilized through *Copy*.

Each of these tools has a similar look to limit the learning curve when first using them, however, there are some minor differences. Learn more about each tool below.

Copy

Using the *Copy Tool* users can securely offload their data from their chosen source(s) to their chosen destination(s).



Simply drag files, folders or entire volumes from the left *Connections List* (or from *Finder*) into the top *Sources* queue area. Likewise, drag output destinations into the *Destinations* area. You may queue multiple items in each of the queues.

You can also right click and select *Browse for Items* to select media directly from Finder.

Items added to the *Sources* queue will display their size directly underneath their icon representation and name. The total size of all items added can be viewed in the bottom right of this queue.

Likewise, items added into the *Destinations* queue will display their size available.

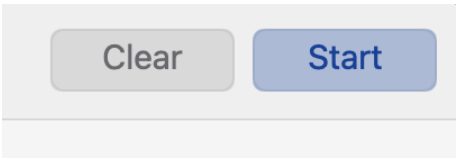
After selecting your source(s) and destination(s) press the button marked *Start* in the upper right to start the copy process.

TIP: In *Basic Preferences*, enable *Begin job upon entry to the queue* if you want to streamline your workflow by starting the copy without manually pressing the *Copy* button. To further

automate this process, select *Automatically add drives to sources queue* in *Basic Preferences*. Then drag destination(s) into the *Copy To* area before mounting a new volume. When these two settings are combined, connected drives or cards will immediately begin offloading when connected.

TIP: To remove an item from the queue highlight it then press the *Delete* key.

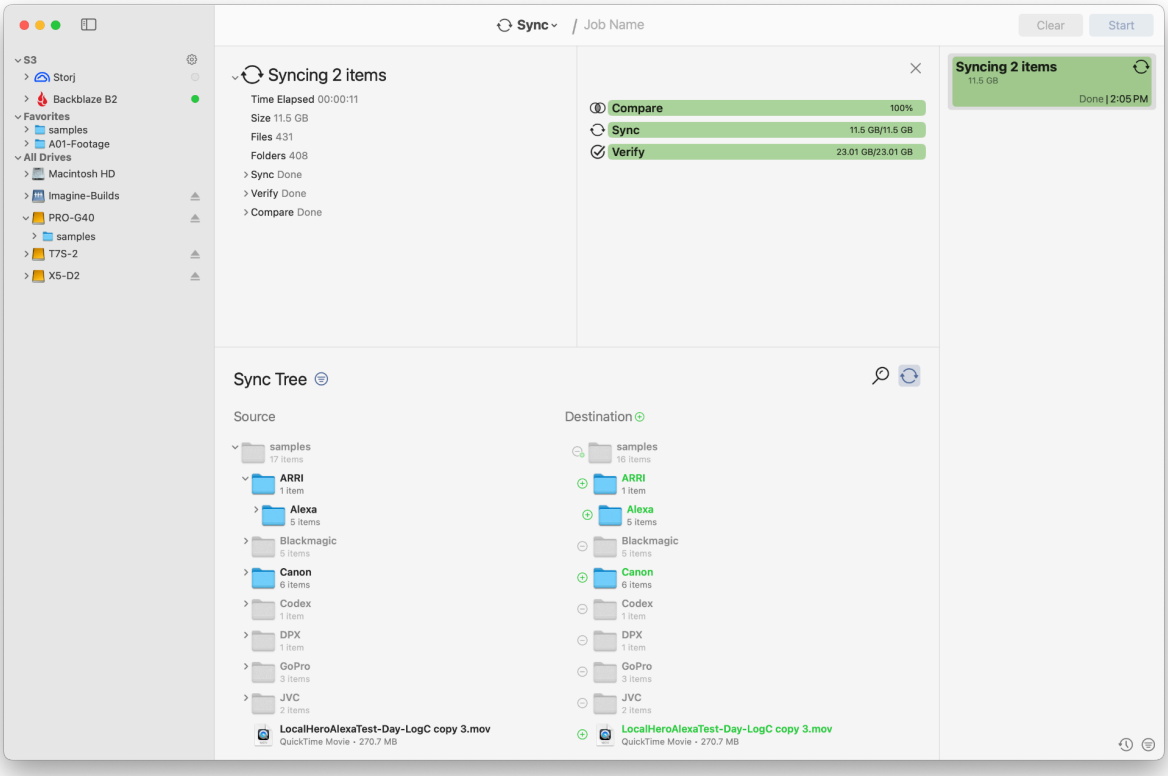
To clear entire queues, click the *Clear* button in the upper right, or right-click in the queue area and select *Clear All Items*.



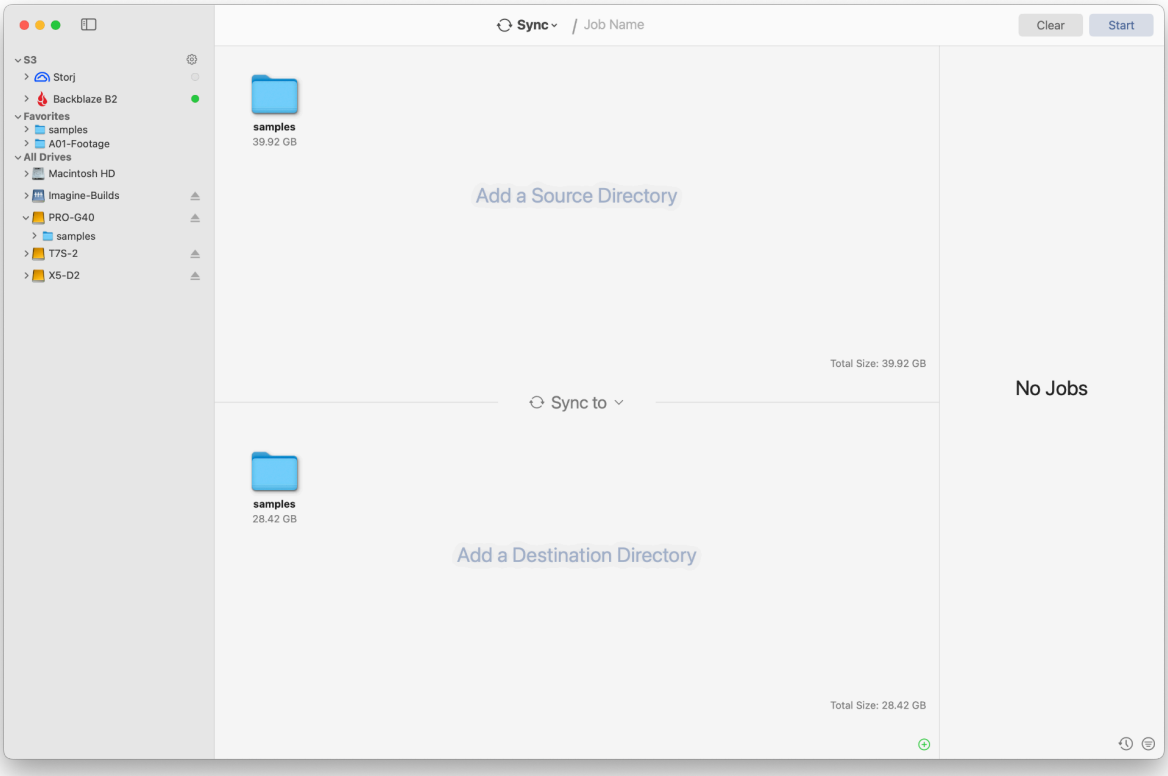
To learn about the *Copy Tool* results, navigate to the Completed Jobs section.

Sync

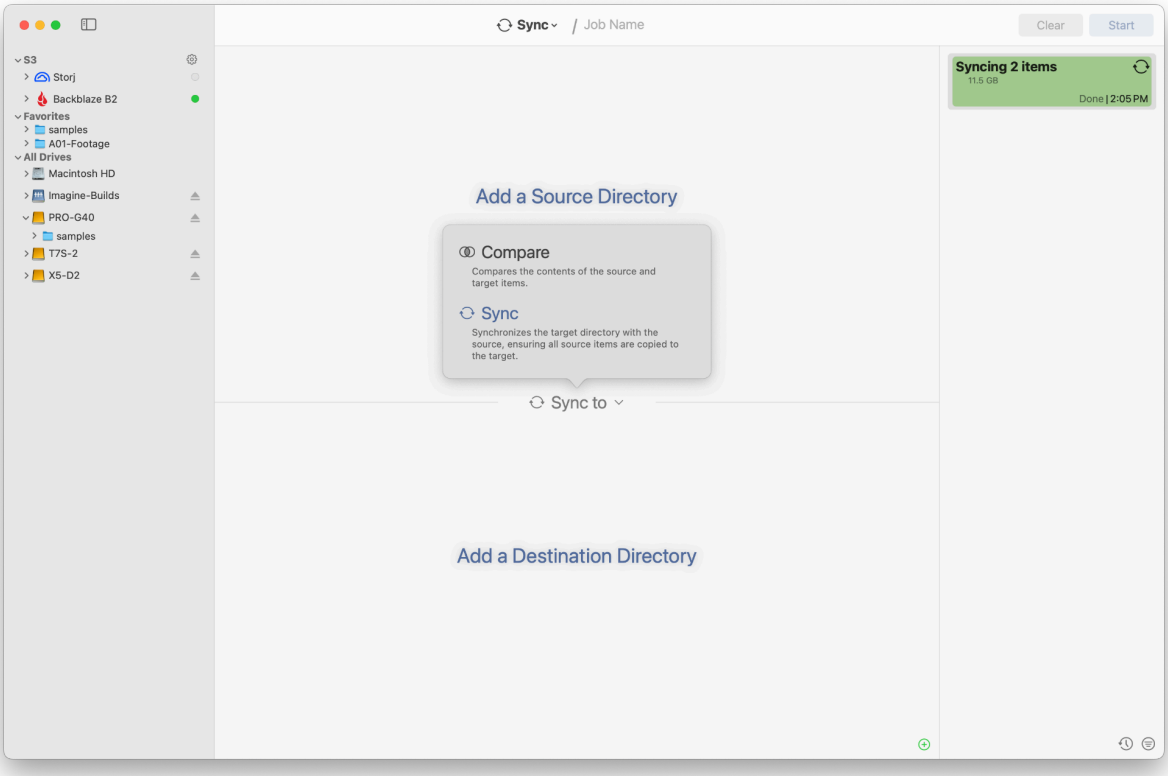
Using the *Sync Tool* users first specify two drives, a *Source* and a *Destination*. These two drives are then compared, and based on user preferences, the destination can then be synced with the source.



To begin, drag a folder into the top queue making it your source. Next, add a folder to the bottom queue, this is your destination.



Upon doing so, you can then select the operation that you would like to be performed using the dropdown menu in the center of the queue. You have two options available to you, either a *Sync* or a *Compare*.



Syncing Folders

A sync is when items currently found on your Source, that are not included on your Destination, are copied to it. A sync in ShotPut Studio is based on structure equality.

To learn about the *Sync Tool* results, navigate to the Completed Jobs section.

Structure Equality Sync

This sync type ensures the file structure of your destination matches that of your source. It takes file path into consideration when performing the sync.

This means that if a file is found in both items A and B, but in different locations, it will still be copied to item B to match the file structure of item A.

NOTE: If a file/folder is copied to item B in order to match the structure, but in doing so produces a duplicate file, the icon to the left of it will indicate it and the user can select it to show the file path of the duplicate item.

Comparing Files/Folders

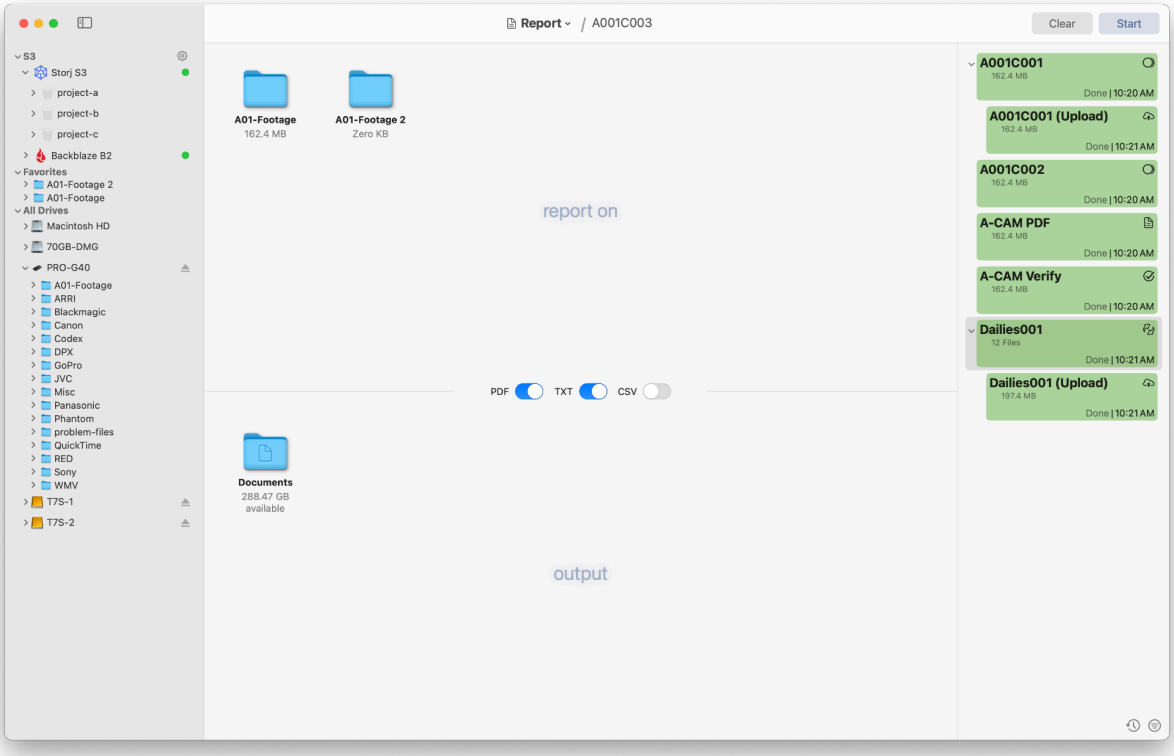
Compare lets you specify two files or folders whose structures are then compared with each other.

To get started, drag in the file or folder to the top queue. Next, depending on the item type dragged into the top queue, add a file or folder to the bottom queue. These two items are what will be compared. Then select *Start* to begin the comparison.

To learn about *Compare* results, navigate to the Completed Jobs section.

Report

While ShotPut Studio allows you to generate a report when running a job with the *Copy Tool*, the *Report Tool* allows you to quickly generate a report of any file, folder or volume without having to perform a copy.



Just drop in the item(s) you would like reports for, then toggle on the types of reports you want created. Finally, choose where you would like to output the reports to and click *Start*.

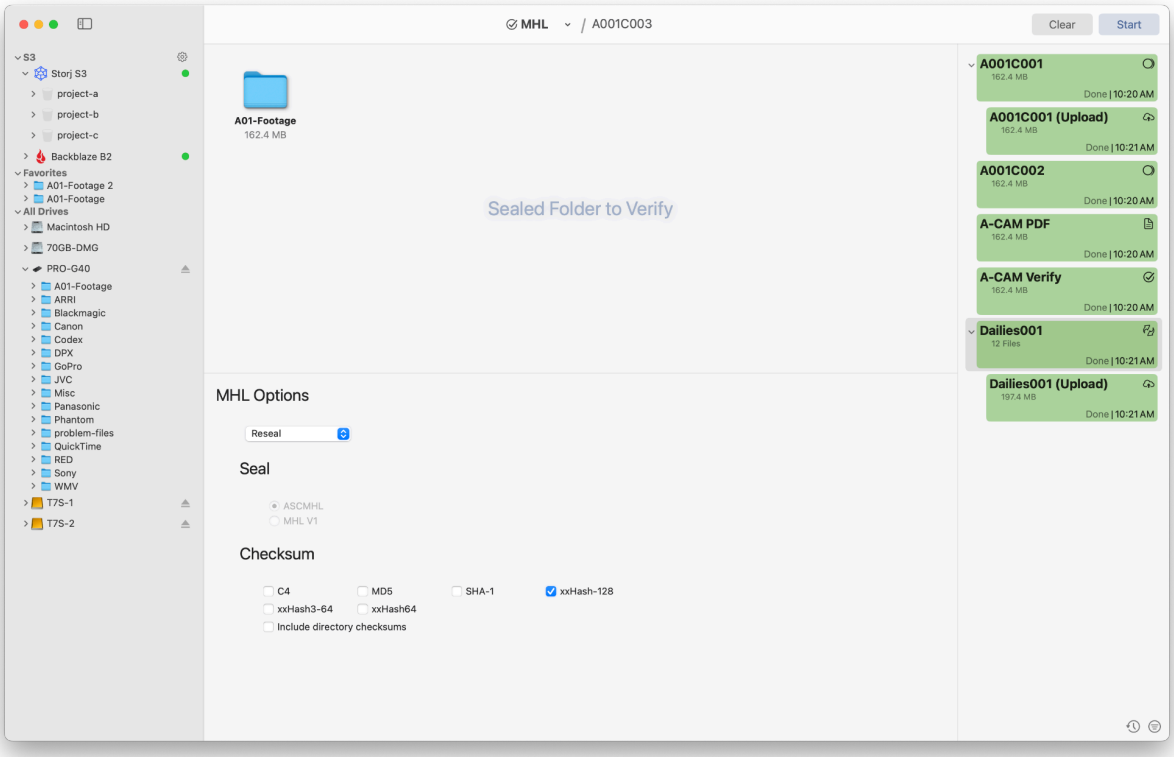
The reports will be named and formatted according to your *Report Preferences*.

TIP: Use the PDF format to include thumbnails and other metadata such as video format, frame rate, duration, audio tracks and more. TXT or CSV type reports give comprehensive summaries over the chosen item's contents.

To learn about the *Report Tool* results, navigate to the Completed Jobs section.

MHL

The *MHL Tool* encompasses operations to be performed with both MHL V.1 and ASC MHL seals. These operations include *Creating a New Seal, Resealing,* and *Verifying*.



To get started, drag in the file or folder you would like to perform one of the operations on. The options available to you will depend on the initial item added to the queue. For example, a file with an existing MHL seal will give you the options to *Reseal* or *Verify* the existing seal.

Create a New Seal

This option will appear when an item without an existing MHl seal is added to the queue. Once you have selected the option to *Create a New Seal,* you will be asked to select the type of seal created, either MHL V1 or ASC MHL.

If you select MHL V1 you will also be asked to select its placement. Your options are to include it as a *Sidecar* (outside of the referenced folder of files) or *Embedded* in the sealed directory.

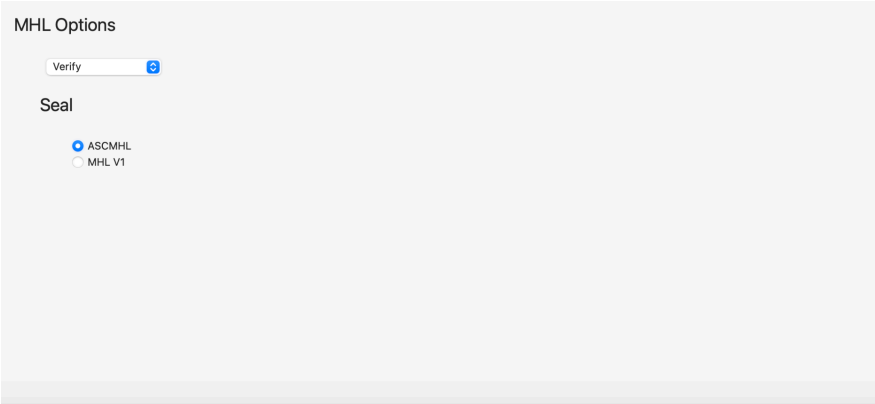
Finally, select the checksum type to use in the seal creation and click *Create Seal*.

Reseal

Resealing an item appears when adding an item with an already existing MHL seal into the queue. When resealing an item the type of seal must remain the same, but you will be able to make changes to the checksum types included.

If new checksum algorithms are added to a subsequent generation, at least one of the previous algorithms must be used to maintain the seal's integrity. This option will result in the creation of a new seal file.

Verify

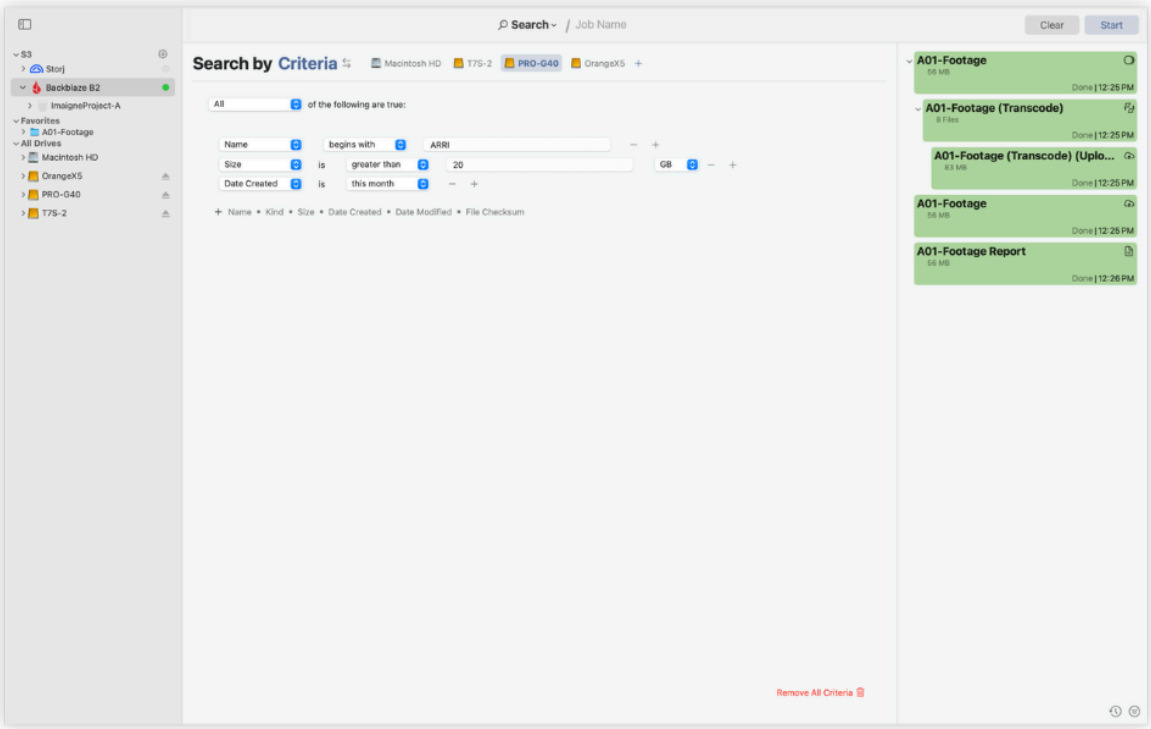


The *Verify* option appears similar to the *Reseal* option, when adding an item with an already existing MHL seal into the queue.

For this operation you are unable to change any of the settings but instead can perform a check to make sure the existing seal is still valid and has remained unbroken. This will report any detected issues with the seal but will not generate a new seal file.

Search

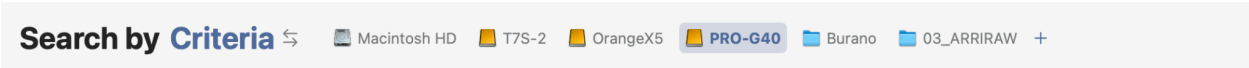
The *Search* Tool allows you to perform advanced searches on drives, cards, files, and more.



Advanced searches can be performed in two different ways, either with *Search by Criteria* or with *Search by Item*.

Search by Criteria

To begin a job using this method, first choose the location you want to search. You can add locations to this list by using the *Plus Icon* to the right or by dragging and dropping items from the connections list.

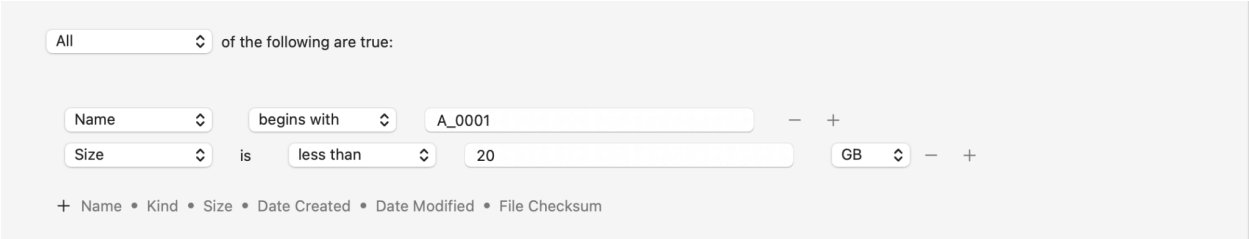


You can also remove folders added to this list by right clicking on them and selecting, *Remove*.

After selecting the location you would like to search, define whether you want the criteria you set to match with items based on *All*, *Any*, or *None* of it being true.

Next, you can begin to add your search criteria. When adding your first layer of criteria, use the *quick add options*.

To add further criteria, use the plus icon, or continue to use the quick add options.



If you would like to remove any previously added criteria, use the *Minus Icon* to the right of criteria you would like removed.

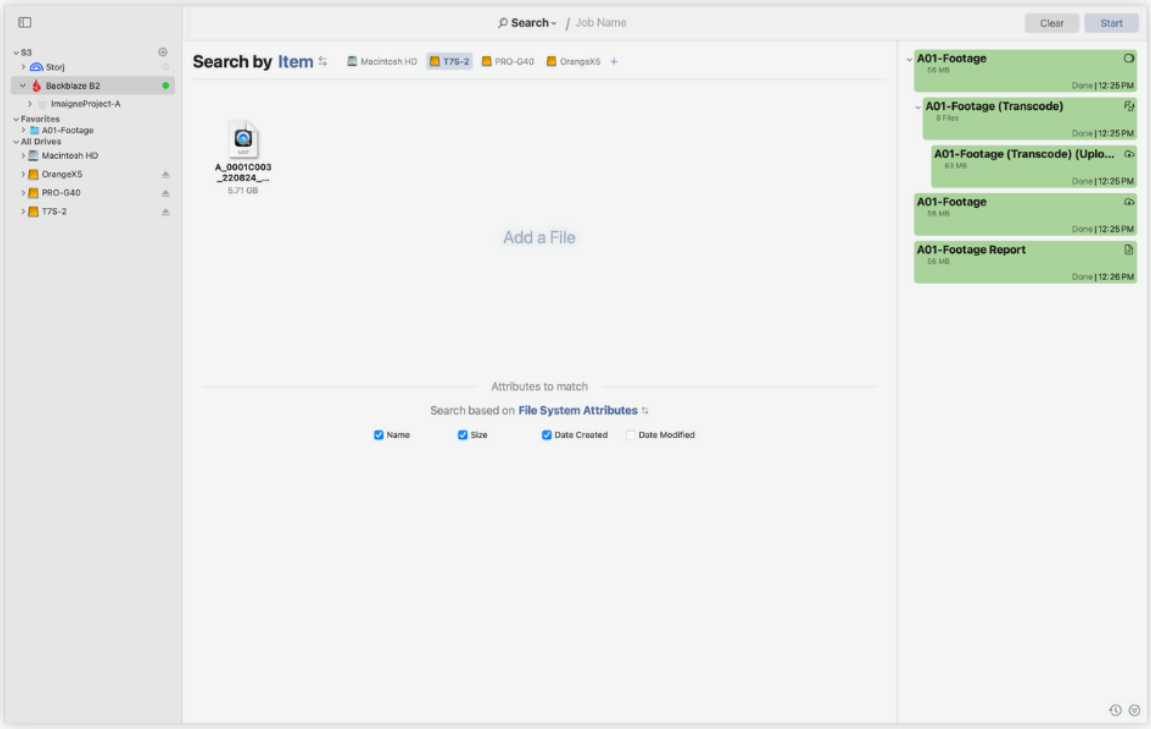
Criteria that is already added can be edited using the first dropdown menu.

Certain criteria types may also have additional options that can be changed to fit your search needs.

If you decide you want to restart your search, use the *Remove All* button at the bottom of the screen to clear any added criteria.

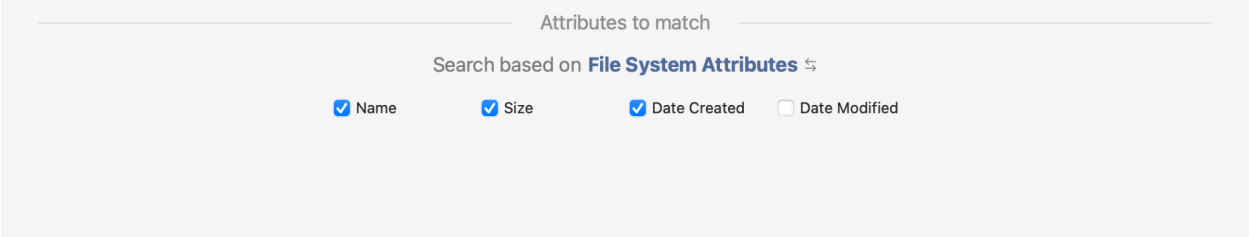
Search by Item

To switch the search type to *Search by Item* Now, use the toggle to the right A new staging screen will then appear.

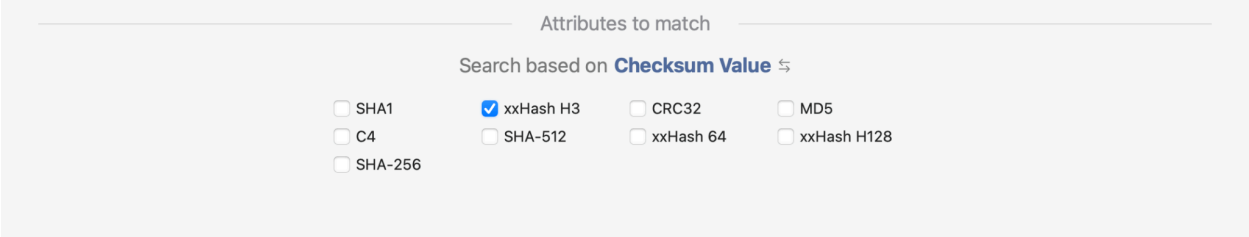


In this screen, a queue appears at the top, allowing you to drag in a single file you would like to search for.

After dragging in your selection, edit the attributes that must match the chosen file for it to appear in the search results.



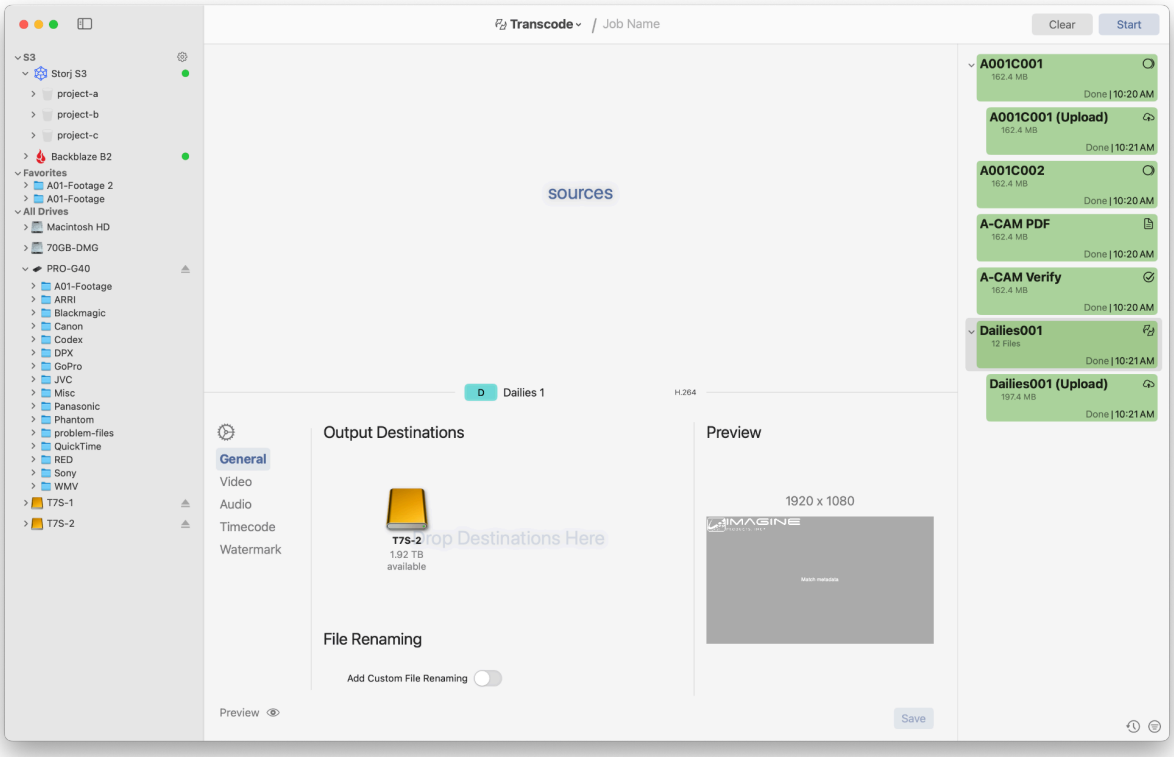
To ensure a file was copied to a destination with checksum verification, use the toggle to search by checksum.



After finalizing your search settings, click *Start* in the upper right corner.

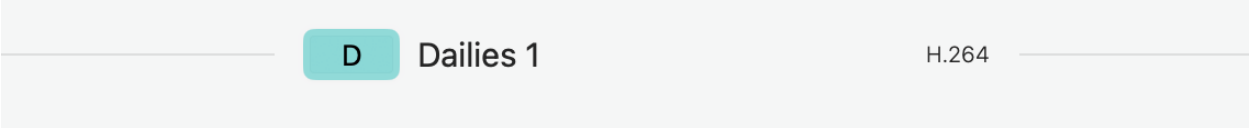
Transcode

The *Transcode Tool* allows users to quickly start transcode jobs from either *Custom Presets* that they have already created, or from *Preset Templates*.

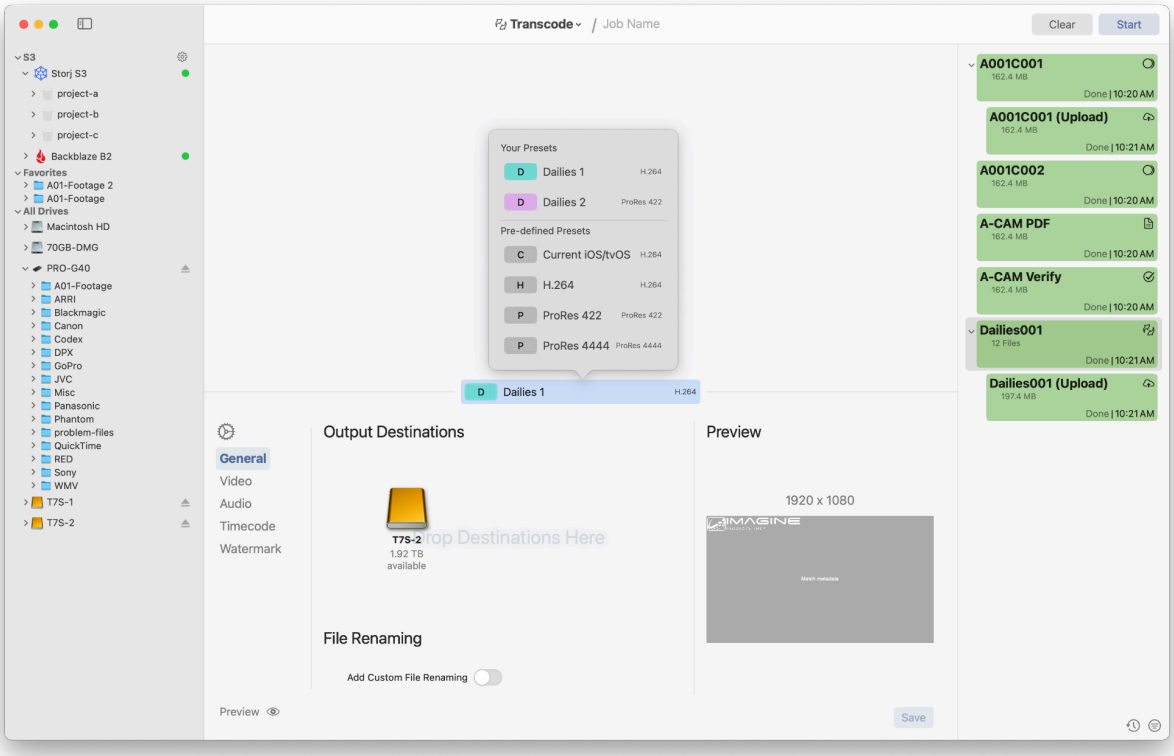


To begin, drag an item into the queue, marked *Sources,* that you would like to transcode.

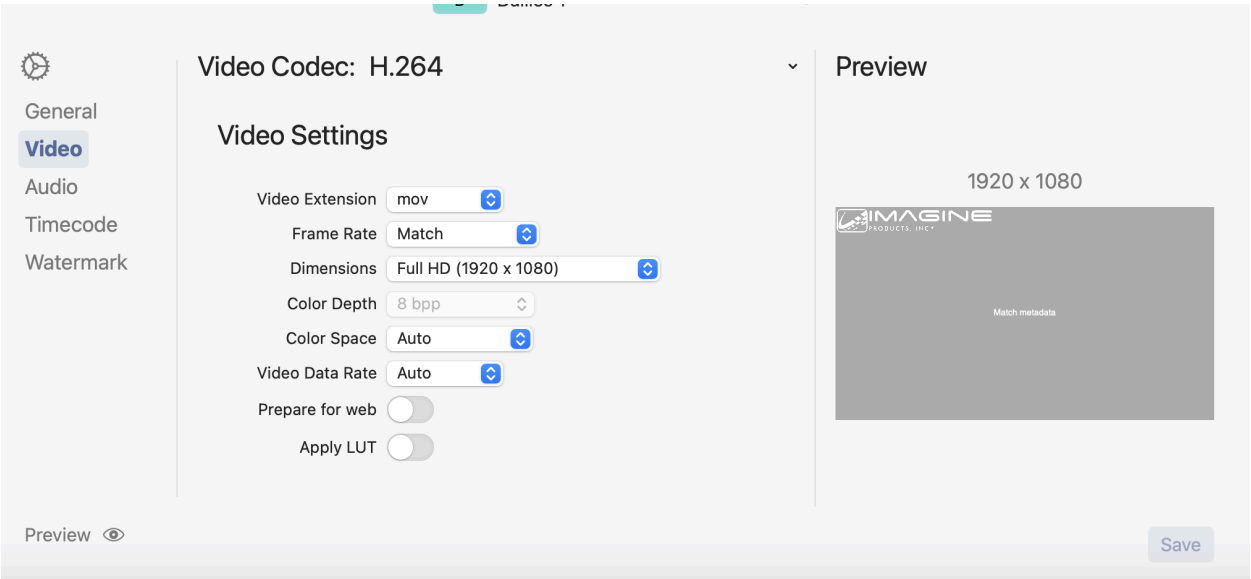
After doing so, the preset you would like used can be selected from the dropdown list in between the two queues.



The dropdown list that appears is broken down into two sections, *Custom* and *Templates*. If you have yet to create a custom transcode preset you can do so by navigating to the *Preset Tool*. More information on using this tool to create a preset can be found below.



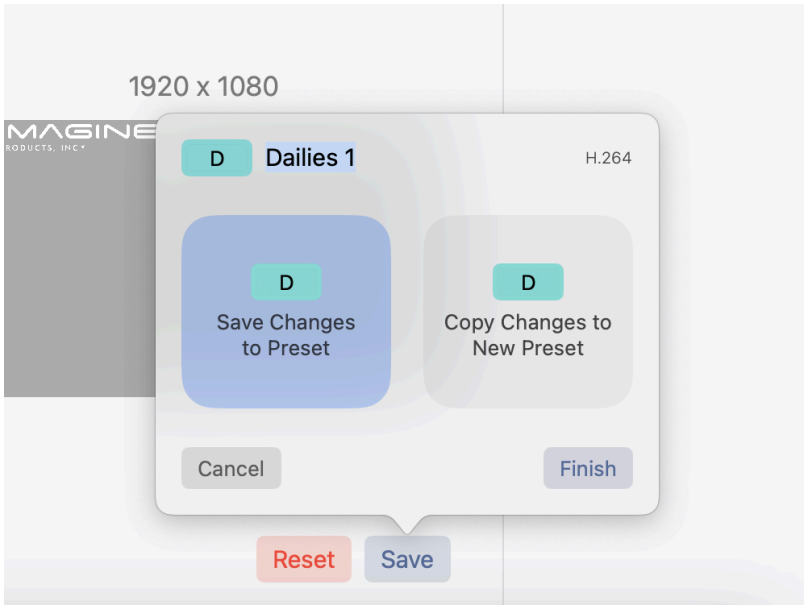
After selecting a preset, its corresponding settings will populate into the bottom section. These can be edited as needed.



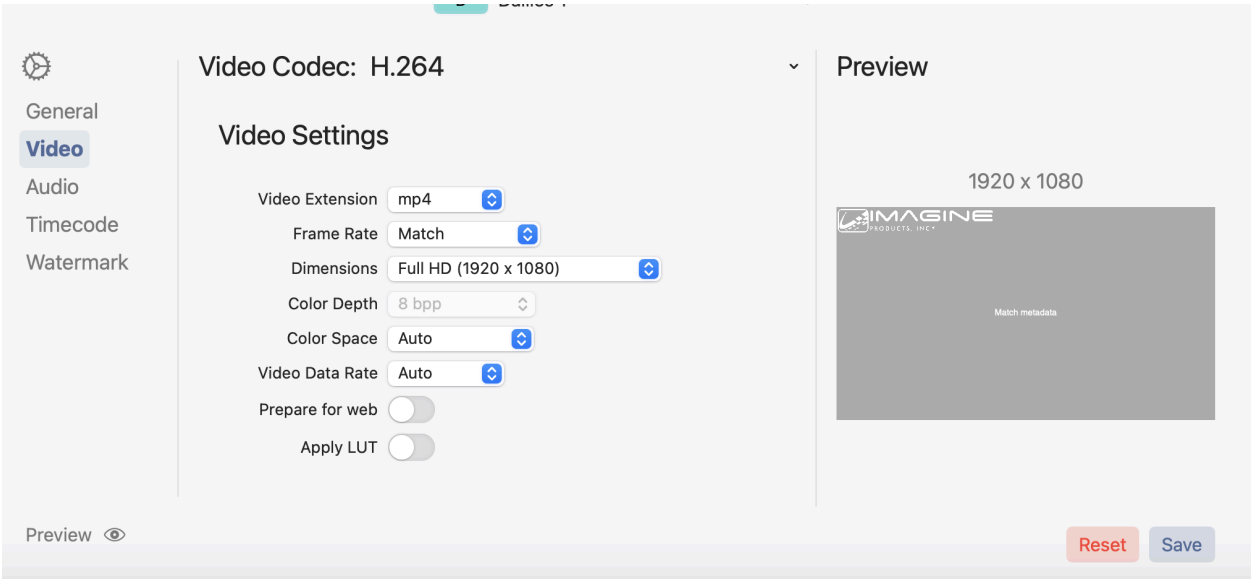
To learn more about the setting options for a Transcode Preset please review the section of the same name below.

Any changes you make to the settings in this section can be saved by selecting the corresponding button in the bottom right corner.

After clicking the *Save* button, a fly-out menu will appear allowing you to edit the *Preset Name* if desired, and then select whether to save the changes made by overriding the current preset or saving it as a new one.



If you would like to discard the changes you have made, click *Reset*.



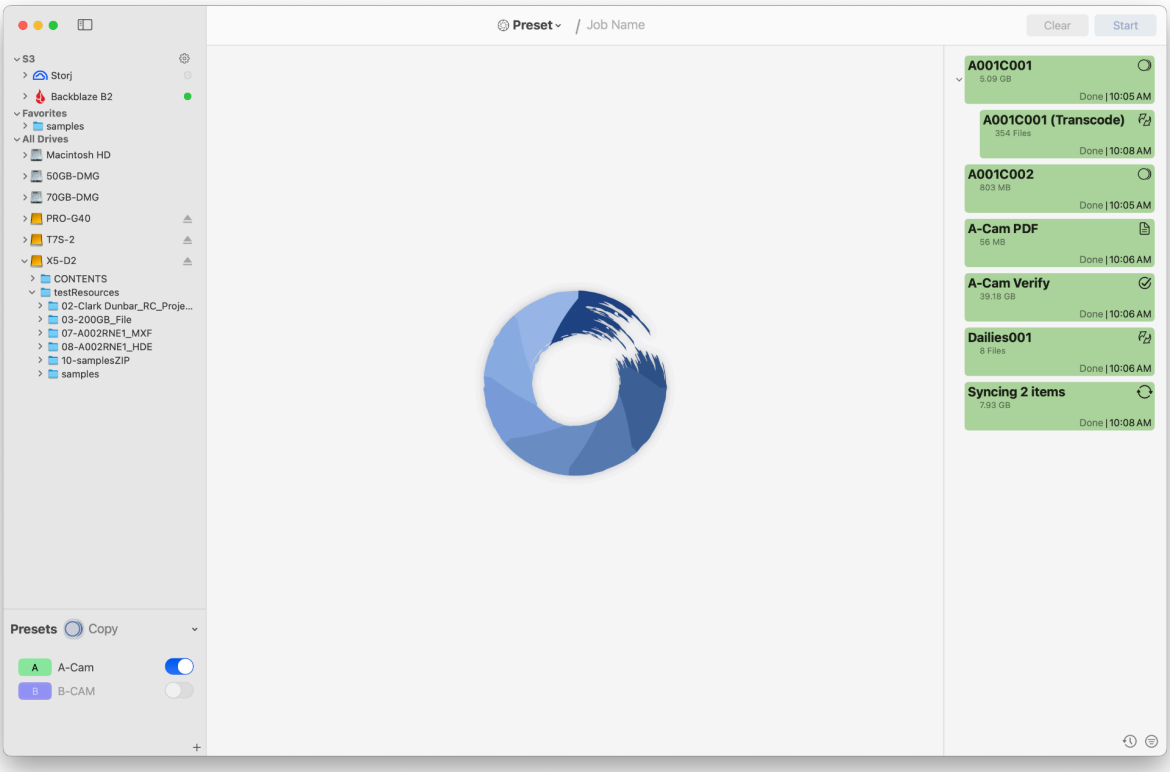
NOTE: Making changes to the settings without saving them will still apply them to the next job you run using the *Transcode Tool*. However, if you exit out of the application or switch tools, the settings will revert back to their original selections.

Preset Tool

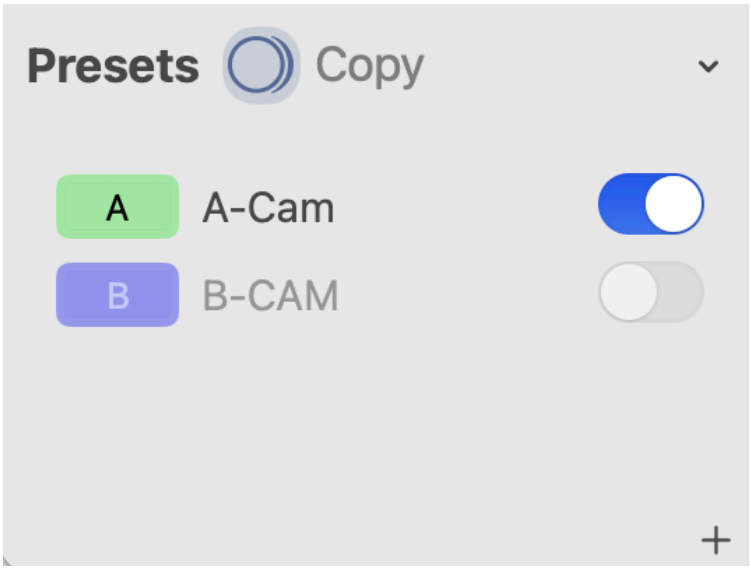
The *Preset Tool* allows you to create two types of Presets. The first of these is a *Copy Preset*, complete with selected destinations, naming scheme, and verification types. This allows you to quickly perform *Copy Jobs* without changing your settings.

The second of these types is a *Transcode Preset,* giving you the ability to tailor your transcode settings to your exact specifications.

To use *Presets*, switch to it using the Toolkit menu found in the center of the toolbar.



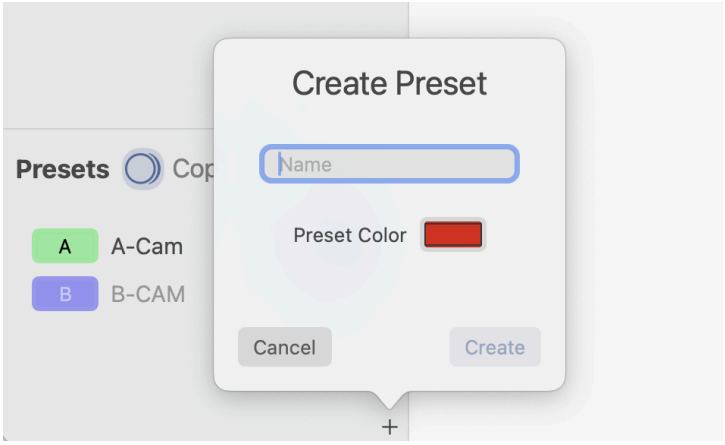
After doing so, you will now see a list of your *Presets* in the bottom left corner of the screen. To switch between the two Preset types, select the icon to the right of the Preset header or use the dropdown menu.



You can create your own preset by clicking the **+** icon or by *Right-Clicking* anywhere in the list and then selecting *Create Preset*. A fly-out menu will then appear.

Type in a name in the *Preset Name* box. Presets may be color coded for more distinction or grouping. Click the *Color Swatch* to open a color wheel dialog and select a color.

If you are creating a *Transcode Preset* this pop-up will also include the option to select the Codec type. This can then be edited later on.



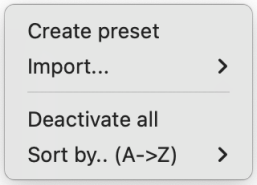
NOTE: The Preset type currently selected will decide what type is created.

After you have finished creating your preset it will appear in the list and its editor will automatically open. To begin editing any of your other Presets, select it from this list.

Depending on the type of preset created, this editor will look different. Learn more about each editor below.

Use the slider to the left of a preset to turn it ON and OFF.

To Delete a Preset, *Right-Click* on it and choose *Remove*, or highlight it and click the keyboard *Delete* button.

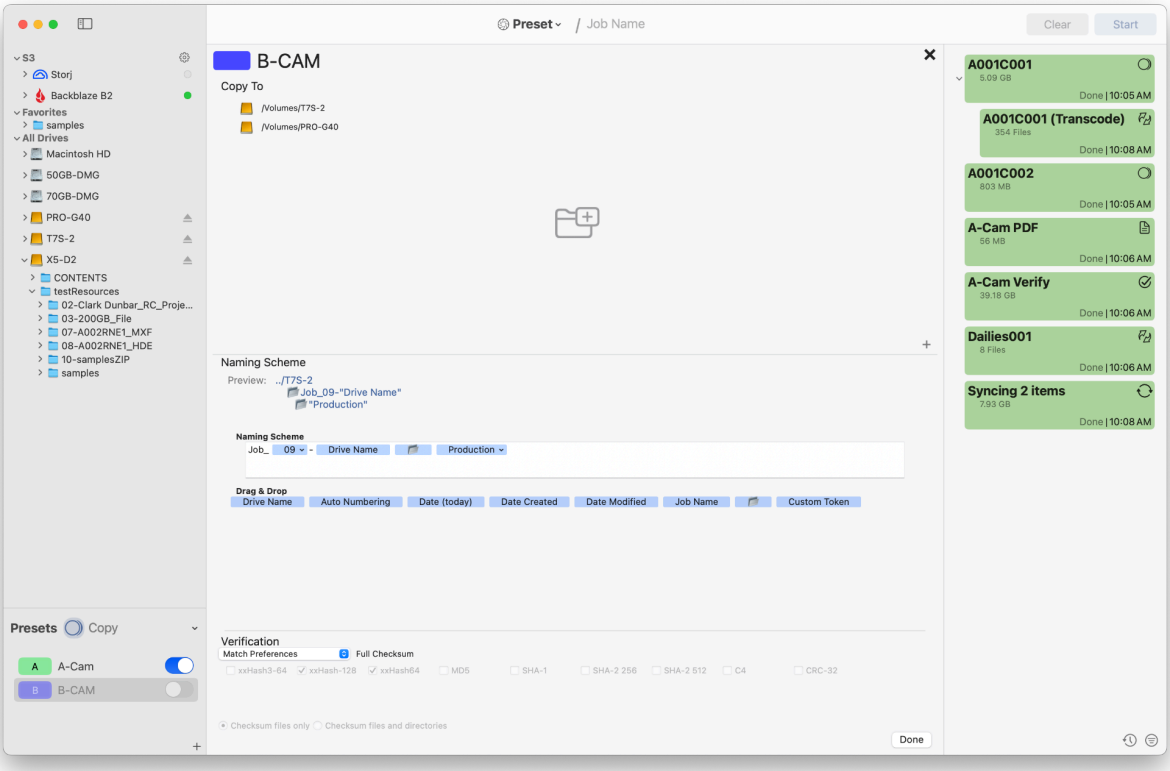


TIP: To easily duplicate complicated naming schemes, select *Copy* after right-clicking to make a copy of the selected preset. Then, change its settings to make it unique.

Presets may be sorted by *Name* and whether they are *Activated*.

TIP: You may import presets from other instances of ShotPut Studio or ShotPut Pro.

Copy Presets



After opening the *Copy Preset* editor the first options available are to rename the preset and assign it a new color if needed.

Underneath these options you will find the other settings.

Output Destinations

A Preset can be set to copy to one or more locations at once.

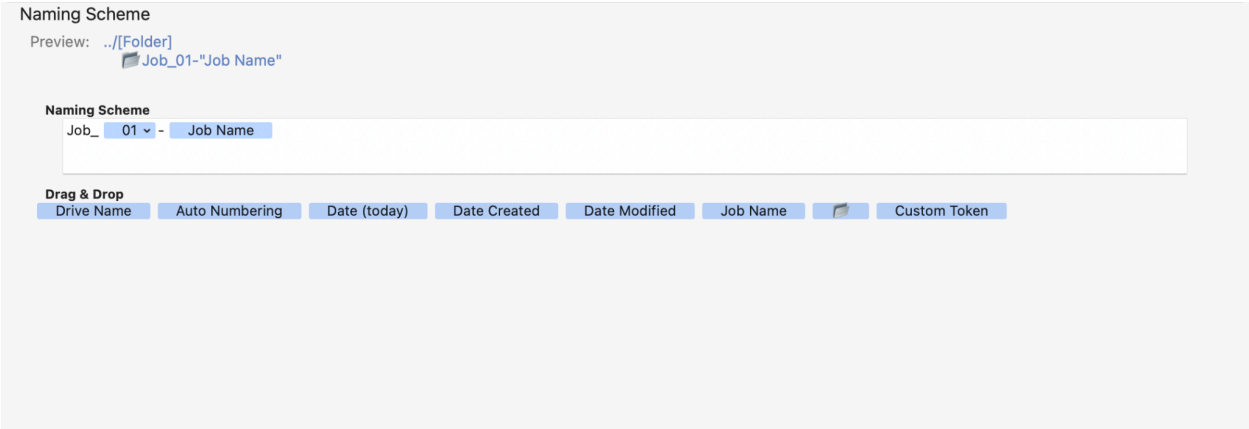
Click the **+** icon below the list to *Add* a root folder or drive where you would like sub-folders to be created.

You can also add locations by dragging and dropping into the area or by performing a right-click and then *Browse for Items*.

To remove a destination, right-click and select *Remove Selection,* or select it and press your keyboard's *Delete* button.

TIP: Avoid long path names (those approaching 100 characters or more). These may exceed the Operating System limits with the addition of the card's volume name, subfolders and file names within.

Naming Scheme



To create your naming scheme for output folders, double-click in the scheme design area to open the editor. (You may need to increase your application window size to expose all the options).

Drag and Drop the naming items into the *Output Naming Scheme* box. You may move them around at any time. To create a sub-folder structure, drag the folder icon into your naming scheme, and then type in a chosen name.

Another option is to select anywhere in the naming editor to begin typing custom text.

TIP: Autocomplete allows you to begin typing the name of a token to add to it to the naming scheme. This feature is only available if a token is directly before the autocomplete text (e.g. you cannot type a word or space and then type to use autocomplete).

NOTE: Invalid path characters are not allowed in the volume name (e.g. colon ":", "/", etc.).

Tokens

A *Custom Token* is a special naming field. When one is included in your naming structure, the application will prompt for user input at initiation of a copy job. This token is a useful way to prompt for input, such as Project Name, on job start.
ShotPut Studio will not automatically overwrite existing folders, so the naming, whether typed in or automatic, should be unique. If the same name is chosen, ShotPut Studio will prompt for user action.

Today's Date, *Date Drive Created*, and *Date Drive Modified* selections name the copy folder based on the date/time information. These can be useful ways to ensure unique labeling, as well as a way to organize your cards based on when they were filmed (provided that the card contains this information).

NOTE: Not all cards have *Volume Date* information. Should this happen, the software will attempt to acquire date information from folders and files within.

A preview of the structure is shown above this editor. Sub-folders are shown indented beneath their parent folder.

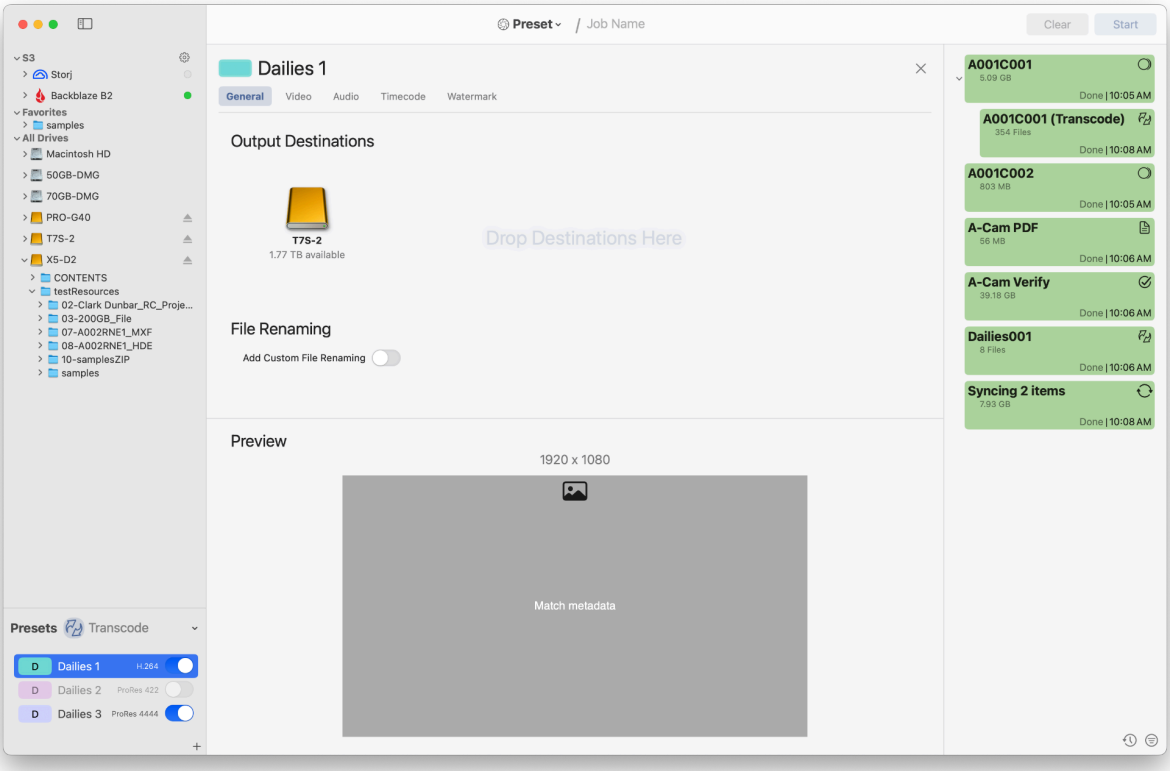
TIP: Click anywhere in the dialog to refresh the naming scheme preview. This will show you the name of the folder ShotPut Studio is going to create at the output destination(s). In the case of any time-stamped convention, a placeholder of the current time/date will appear in the preview.

Verification

You may override global verification preferences to customize individual presets.

Refer to the *Verification Preferences* section of this guide for detailed information about the various checksum types and options.

Transcode Presets



General Settings

In the *General* settings you can set your *Output Destinations*. These are the root folders where finished transcoded files will be placed. You may add one or more output locations to a single preset.

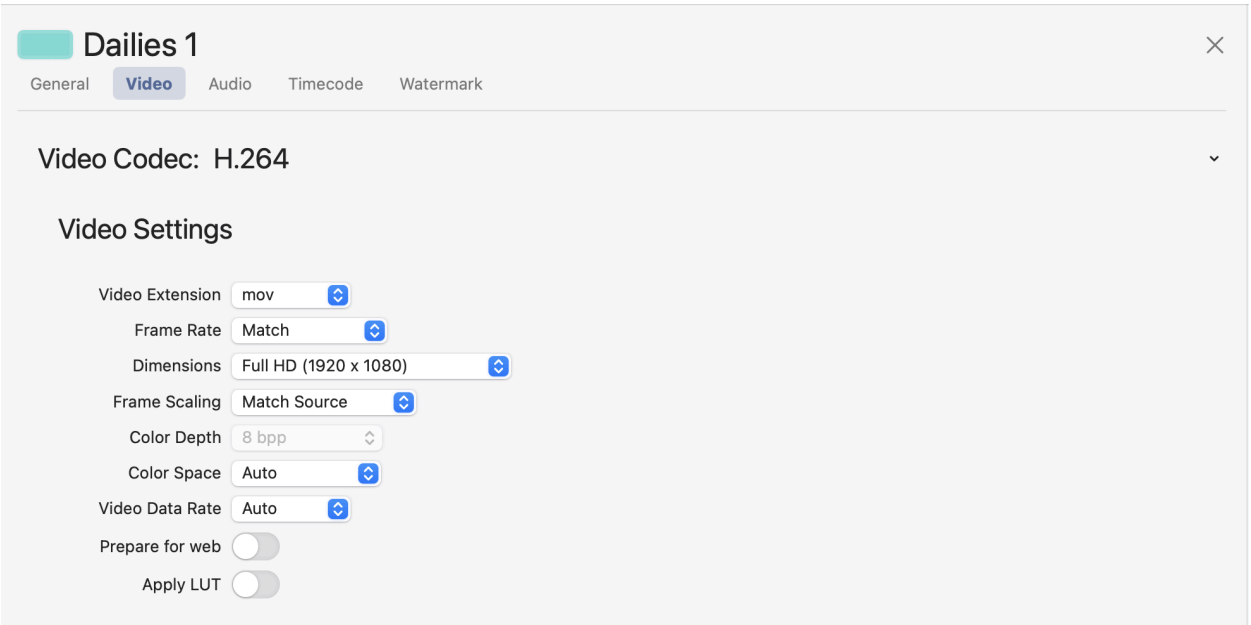
You can add locations by dragging and dropping into the area or by performing a right-click and then *Browse for Items*.

To remove a destination, right-click and select *Remove Selection,* or select it and press the keyboard *Delete* button.

Underneath your *Output Destinations* is the option to add either a *Prefix* or *Suffix* to your file name.

Simply type into one or both of the text boxes to edit the output filename. As you type, a preview will appear.

Video Settings



Choose the *Codec* (e.g. H.265, H.264, ProRes, etc.) and the *Video Extension* to apply to transcoded files if appropriate. You can adjust the desired *Frame Rate* or simply *Match Source* in most cases.

You can also select the *Dimensions* of the output file. The options available may vary depending upon the video format chosen. If you need a very specific size not listed you may choose *Custom* and set the pixel size manually.

Frame Scaling allows for the footage to be scaled when the input aspect ratio does not match the output ones.

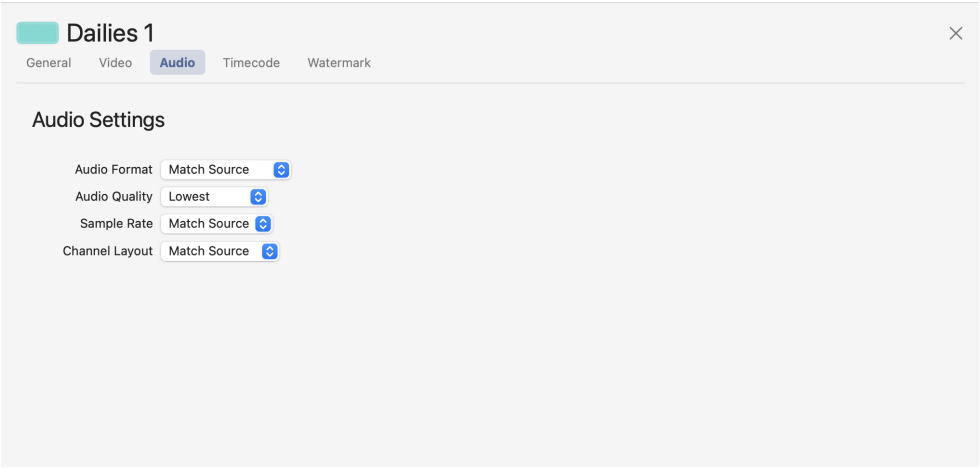
Other video settings include making adjustments to the Color Depth and Color Space. The Color Depth setting will allow you to adjust the bit depth of the transcoded files. Bit depths above 8 are recommended when high quality transcode output is required. The Color Space option allows for specification of common color spaces and gamuts to be applied to the video output of transcoded files.

Certain video formats (e.g. H.264) allow for further customization such as the *Video Data Rate*.

The option *Prepare for Web* ensures that needed information is included in the header so that it can be easily grabbed by web-based players, as opposed to it being in the footer.

The *Apply LUT* option allows you to add a 1D or 3D LUT file to be applied to the transcoded file. This option supports many of the common LUT file formats and will perform a runtime check of any specified file. If the supplied file could not be interpreted, a message will be displayed.

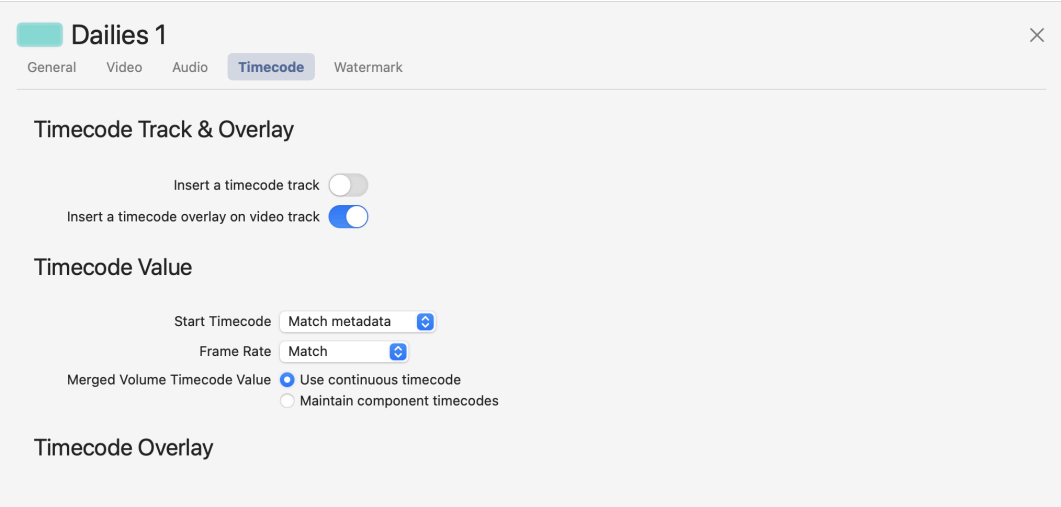
Audio Settings



In your *Audio Settings* you can first select the *Audio Format.* While the default option is set to *Match Source* you can also select from other format types such as *Best Fit, Apple Lossless, Linear PCM,* and *AAC*. Options may be restricted based on the video format chosen.

When you select a specific audio format, also choose the desired *Audio Quality*, *Sample Rate*, and *Channel Layout*.

Timecode Settings



There are several options for controlling how timecode information is inserted and presented in your transcoded clips.

Timecode Track & Overlay

Timecode information is independent of video tracks. While many Mac-based applications generally expect QuickTime timecode tracks, other file types may insert the information into the file header (e.g. MXF files).

Choose the *Insert a timecode track* option to include a timecode in the output file.

Insert a timecode overlay on the video track burns visible timecode numbers into the video frames. You can specify how the timecode will appear and where it will be located on the transcoded video.

CAUTION! A timecode overlay is a physical augmentation of the video track of the transcoded file. Unlike a QuickTime timecode track, a timecode overlay physically burns a timecode sequence into the video frames of the transcoded file that cannot be separated from the video track.

The location of the timecode burn can be adjusted by dragging and moving the timecode representation seen below in the *Preview*. This timecode will automatically snap to one of the 9 given quadrants.

If inserting a timecode track you will be able to then adjust settings under the header *Timecode Value*.

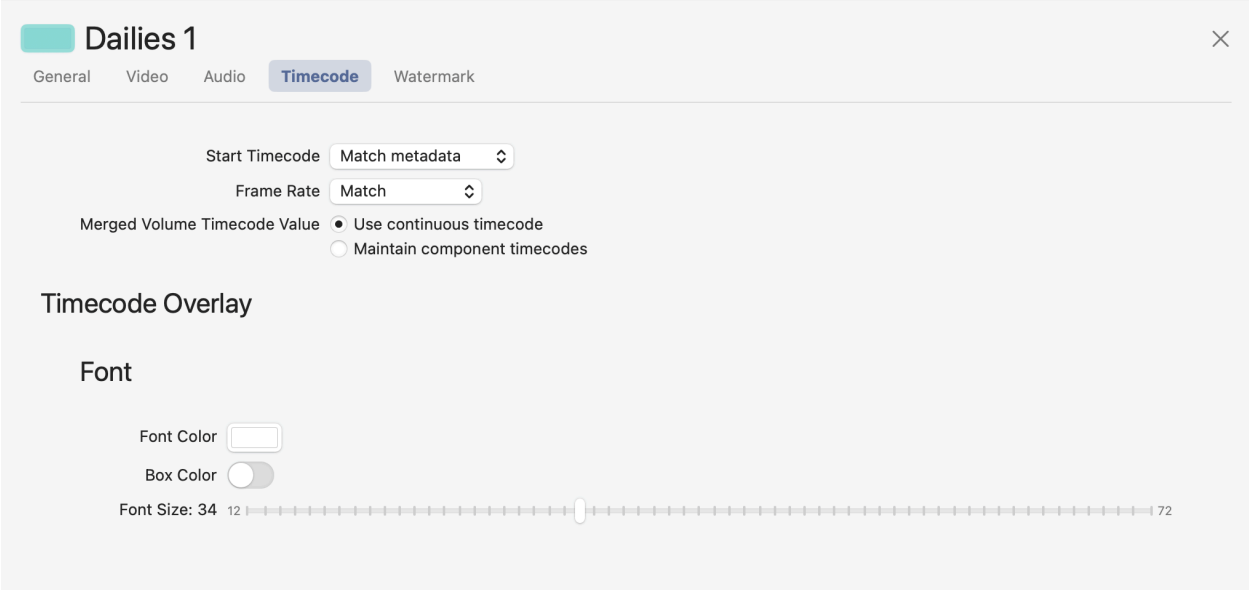
The first of these options lets you decide the *Timecode Start*. Select *Match Metadata* to base it on the source movie's properties and available metadata. Alternatively, you may choose a start time of zero, a custom input value, or use the source file’s creation date/time information.

Frame rate may also be gathered from the video source file, or forced to conform to the desired rate.

CAUTION! Forcing a frame rate will override any existing metadata of source files and therefore should not be used if a match-back workflow is expected.

The final option is to set a *Merged Volume Timecode Value.* If you're merging clips, the resulting merged file may have a continuous timecode track, or maintain component timecodes (which may or may not be contiguous).

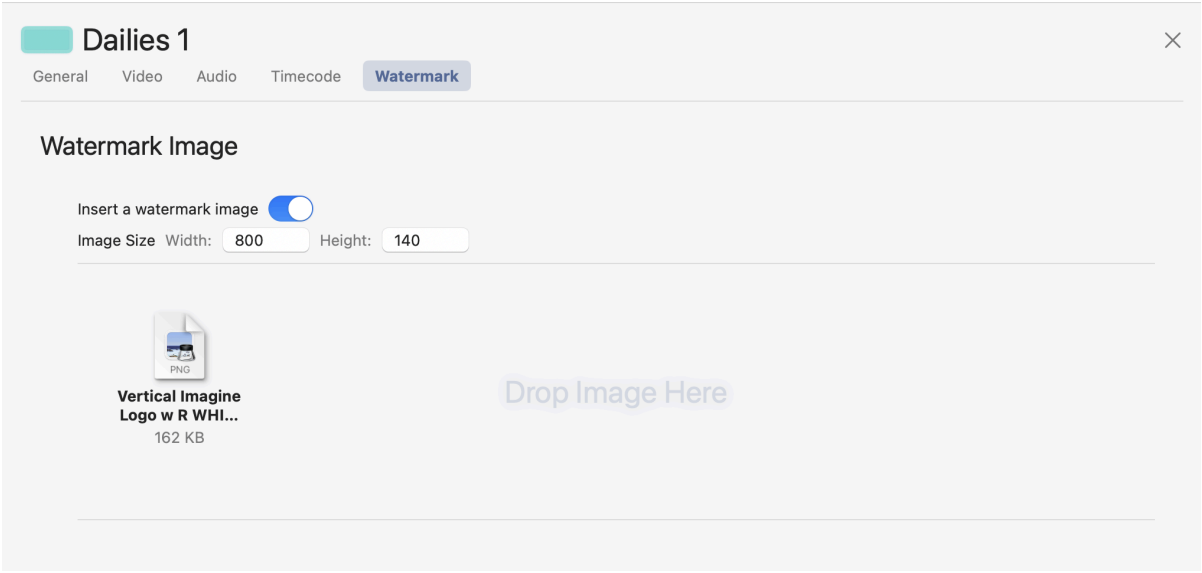
If you are choosing to *Insert a timecode overlay on the video track* you will have further options allowing you to adjust the *Font Color, Box Color* and *Font Size*. Click on the color icons to open the color selection window.



NOTE: All changes in Timecode Overlay Font and position options are visualized in the Preview below.

Watermark Settings

In the *Watermark Settings* users specify an image or text to be overlain (burned) into your transcoded movies.



Watermark Image

To add a watermark image, select *Insert a watermark image* and drop an image into the area marked *Drop Image Here*.

After adding an image, specify its anchor point by dragging it around on the *Preview* below.

Watermark Text

You may also burn text into the video frames. Select *Insert watermark text* and *Use filename* to insert the name of the source file (a handy visual match of proxies to source material).

Alternatively, select the *Custom Text* option and type into the textbox. Then specify how the text will appear and where it will be located on the transcoded video.

You can adjust the size, font, text color and background (Box Color). Drag the slider to change the text size. Click on the *Font Color* to open the color selection window.

Text may be displayed directly upon the video frame (transparent around the text), or you may specify a *Box Color* around it of a contrasting color.

The location of the text insert can be adjusted by setting the anchor point to one of the 9 areas of the frame in the *Preview*.

NOTE: Text overlay and position options are visualized in the Preview window (click ‘Preview’ tab and click in on the screen to refresh).

Preview

The *Preview* of your transcoded file can be seen in the bottom section of the *Transcode Preset Editor* at all times. It can be used to set the location of timecodes and watermarks added to the video file.

The Preview window aspect ratio matches that of your Preset settings.

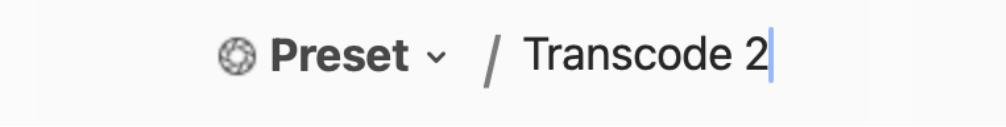
Running Jobs Using Presets

Once you've enabled your desired Preset(s) using its toggle button, *Drag and Drop* the items you want to copy or transcode into the queue. For easy identification, only items' names are shown, without their full file paths.

Before starting your job, type in the *Job Name* if desired, and then click the *Start* button in the upper right of the toolbar to begin your job.

If you do not assign a *Job Name*, ShotPut Studio will default to the name of the card or volume being copied. If multiple items are included in a job, they will be named based off of the source files.

For a Transcode, if you have included multiple destinations, multiple jobs are started. Each *Job Name* will then append the *Preset Name* being used in parentheses after it [e.g. *Job Name (Preset Name)*].

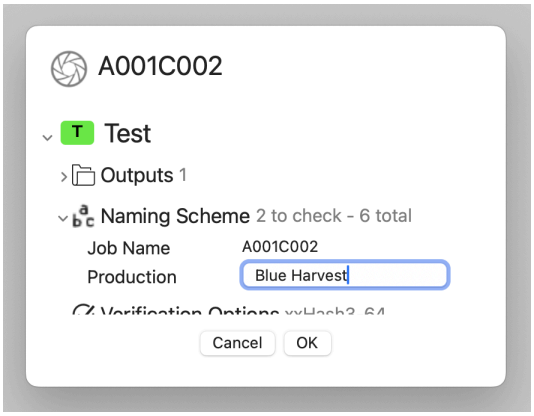


NOTE: Multiple presets can be activated at the same time. When this occurs, in a Copy preset, one job will be started with all activated presets included. The only time this will not occur is if one of your chosen presets has a destination set to an S3 location. In a Transcode preset, a job will be started for each of the presets turned on.

TIP: If you have set up automation copy options in *Basic Preferences*, just insert a card, and it will appear in the queue and begin copying automatically.

CAUTION: When selecting cards, be sure to select the card itself, not a sub-folder. This is to ensure all needed files are copied for a given format (e.g. P2 cards have a 'lastclip.txt' file outside of the Contents folder).

If a *Custom Token* is being used in a Copy job, the *Preset Preview* pop-up will appear.

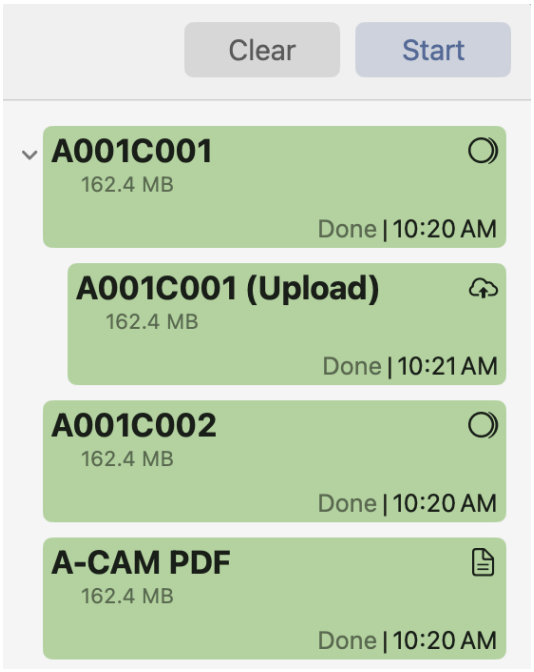


This preview allows you to enter an input for your custom token. It also shows output locations, naming schemes and verification options for all enabled presets, giving you the opportunity to cancel the job and make changes if needed.

NOTE: This pop-up will also appear if something is missing (e.g. no Job Name given when using a Job Name Token) or if the setting *Always Show Preset Preview* is turned on.

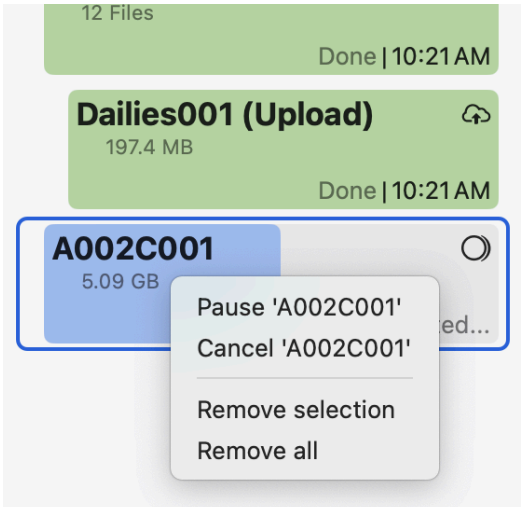
Job List

After starting any type of job(s), whether it be when using a standalone tool or a preset, it will then appear in the queue on the right hand side of the screen. This view gives a visual display of a job's progress.



Job Progress status is reflected by both color and text, and displays the estimated time remaining.

Right-Click on the progress bar while the job is running to access options including *Cancel*, *Pause*, *Resume*.

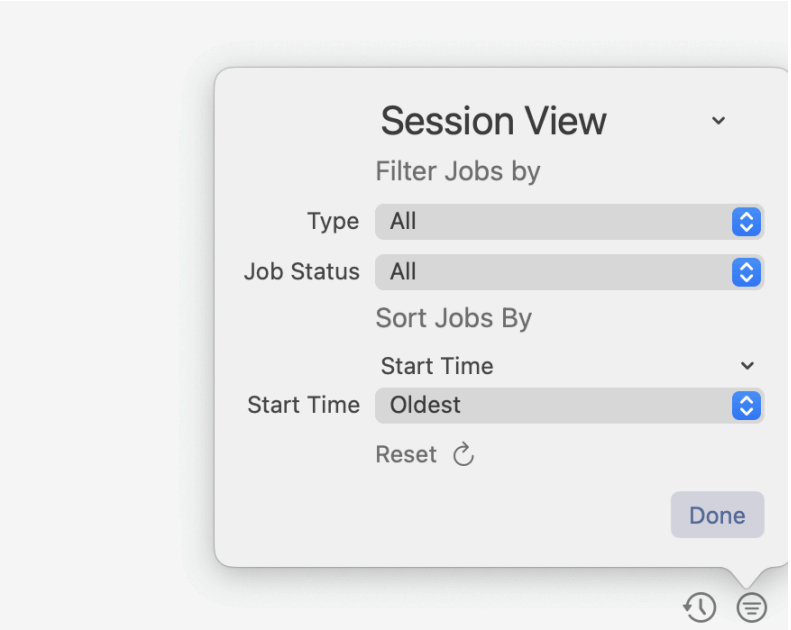


If you choose to *Pause* a job, the copy process will be suspended at a logical point (when the current file being copied is finished). Jobs may then be resumed at a later time.

TIP: You can resume a job that is interrupted unexpectedly (e.g. a cable becomes disconnected).

Filters & Order

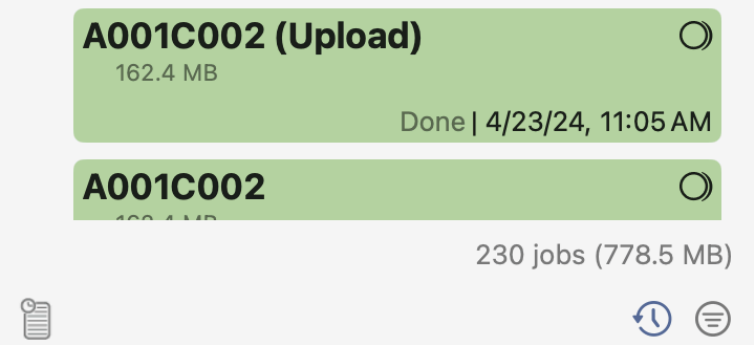
ShotPut Studio allows you to change how the *Job List* is displayed. Select the *Filter* icon at the bottom right corner of this queue and a pop-up will appear.



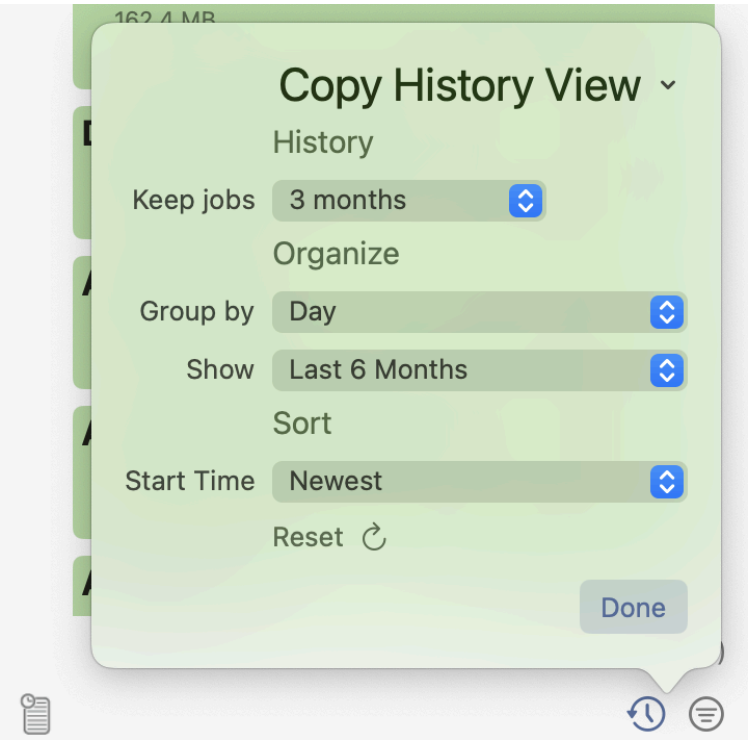
Using these filters you can choose to filter your list based on the *Job Type* and order them by their *Start Time*.

Copy Job History

To view past copy jobs run in ShotPut Studio, through both the Preset tool and the Copy tool, users can select the *History icon* to the left of the Filters icon.

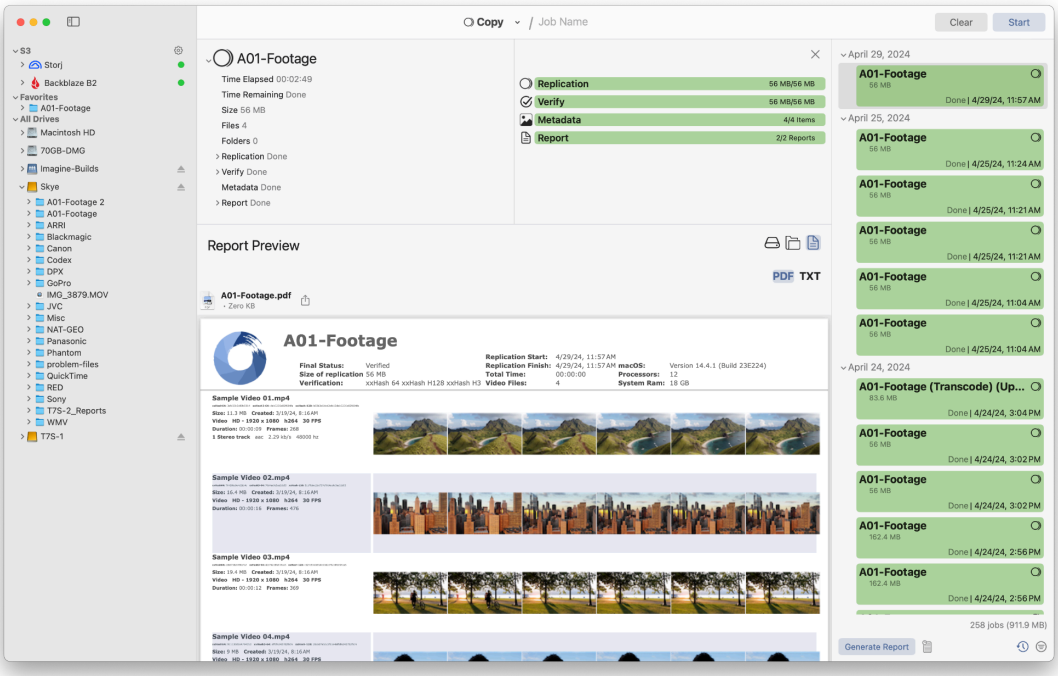


The jobs list will then change to show completed, errored, and canceled copy jobs from a chosen time period. By default, these jobs are grouped by the day in which they were finished. To edit both the length jobs are kept for as well as how they are grouped, select the *Filters icon*.

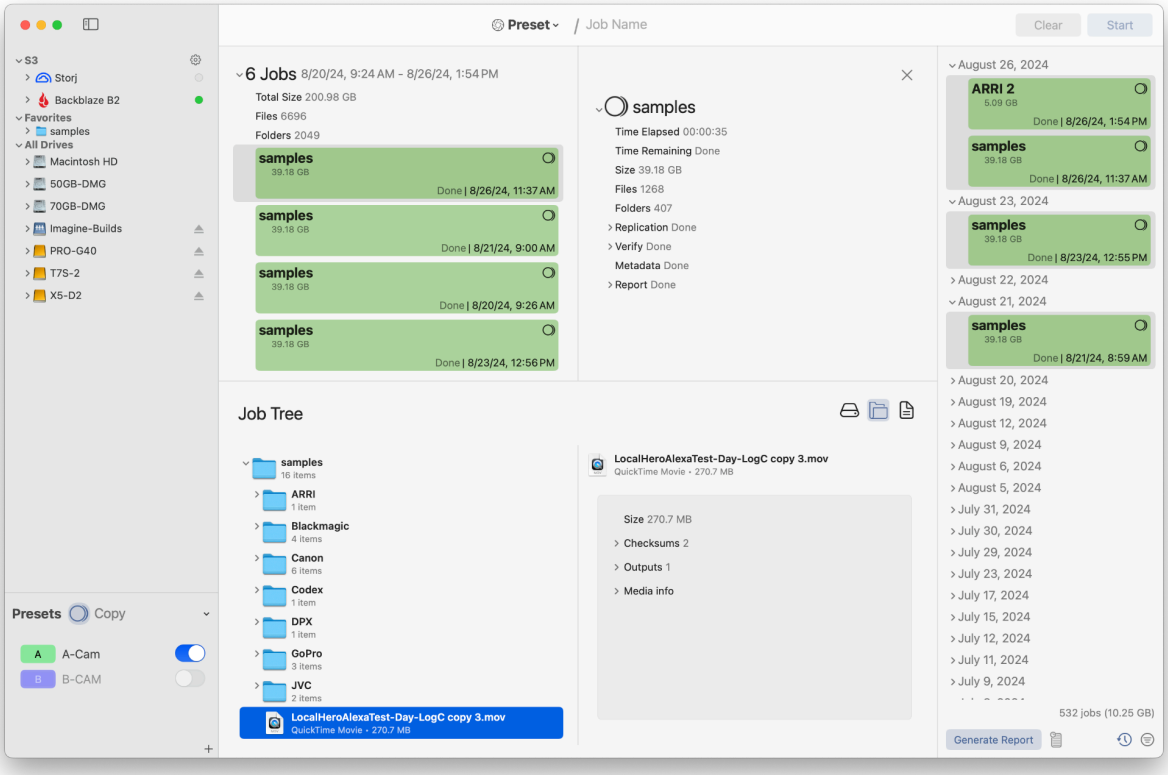


To view information about a job, select it from the list. Upon doing so the center queue will change to show the job's metadata.

Using the menu buttons in the upper right of the bottom section, users can switch between viewing the *Job Flow, Job Tree,* and the *Report Preview*, just as it is seen immediately after finishing a job.



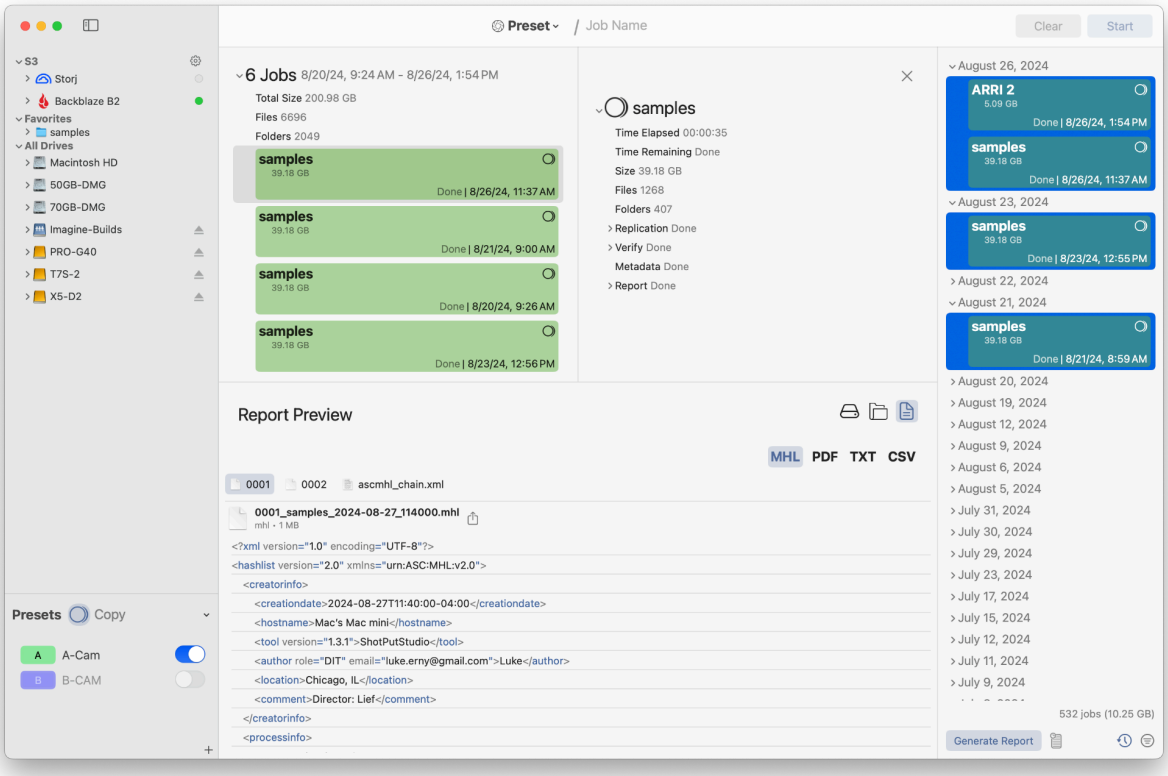
Users can also select a range of jobs, either by selecting the *Date Header* or by using a shortcut (*Shift + Click, Command + Click*).



When doing so, users will see aggregate information for the jobs selected, and can then select an individual job to view further information.

Wrap Reports

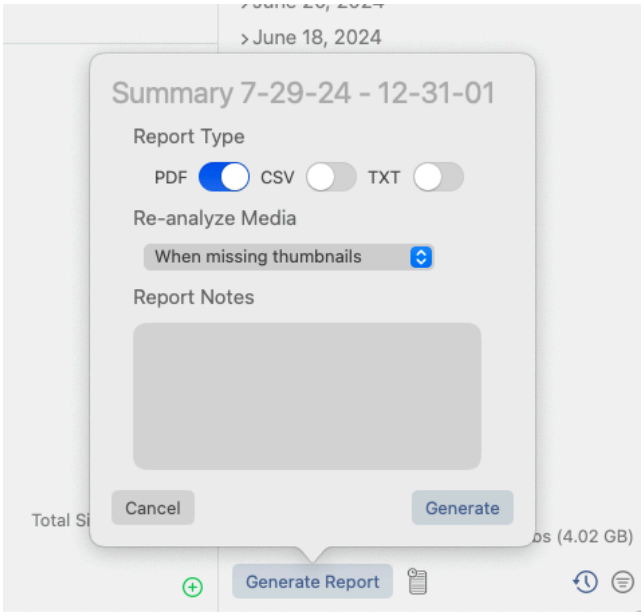
With either a single job, or range of jobs selected, users will be able to generate a *Wrap Report*.



This report type is perfect for wrapping up a shooting day or project, as it combines information from multiple copy jobs into a single detailed report.

After making the desired selection of jobs, click *Generate Report* at the bottom of the jobs list.

Upon doing so, a pop-up menu will appear allowing you to set a name and select the types of reports you would like to generate.



The name will default to *Summary (time range during which the jobs were run)*.

Report options include *PDF*, *CSV*, or *TXT*. This is also where you can re-run media analysis.

Selecting Always will collect new metadata and thumbnail images no matter what.

TIP: This is the option you would choose if you had previously selected to include thumbnails, but some were corrupted or appeared incorrectly.

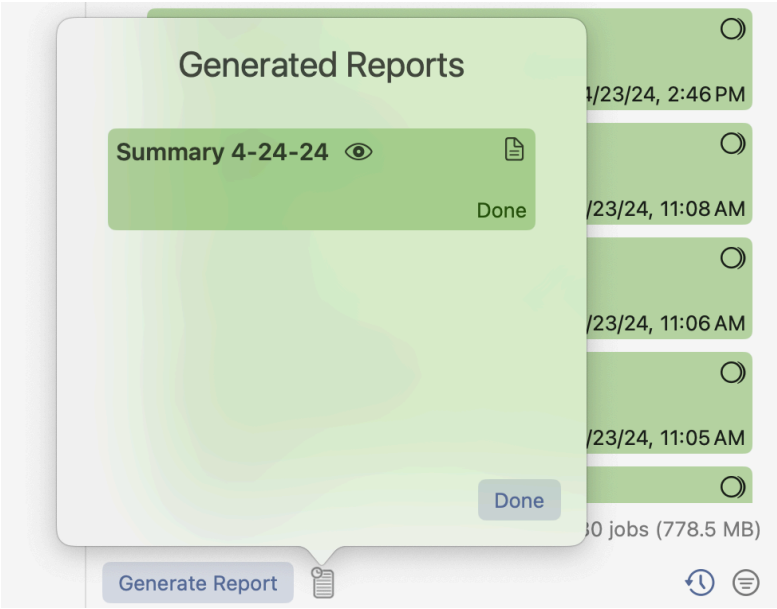
When Missing Thumbnails will only rerun the media analysis if there are no thumbnails found in the initial job.

TIP: This is the option you would select if you did not include thumbnails in your initial job or if you didn't originally generate any reports.

The last option is to *Never* Re-run Media Analysis. Using this option will create a PDF report but will only use known metadata information and thumbnails that were gathered the first time.

Finally, the *Report Notes* section. Here you can choose to include additional information in the report header such as Production info, DIT details, the project name etc…

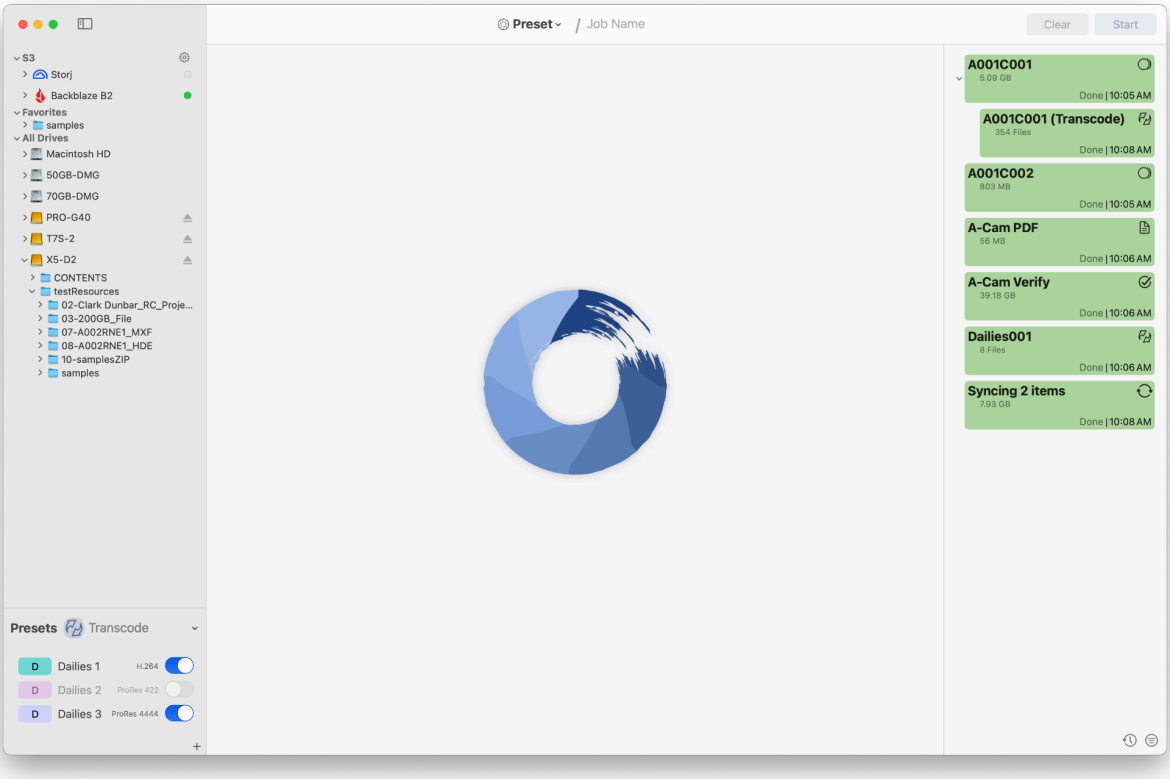
After you have chosen your options, selected *Generate*, and set the destination, you can view your report's progress by clicking the *Report Icon*.



Selecting the *Eye Icon*, will bring up the location the report was sent to. From here you can open and view your report.

Completed Jobs

After you have completed a job you can view further details and its results by selecting it from the right hand side. Additionally, some job types will offer specific actions when performing a *Right-Click*.



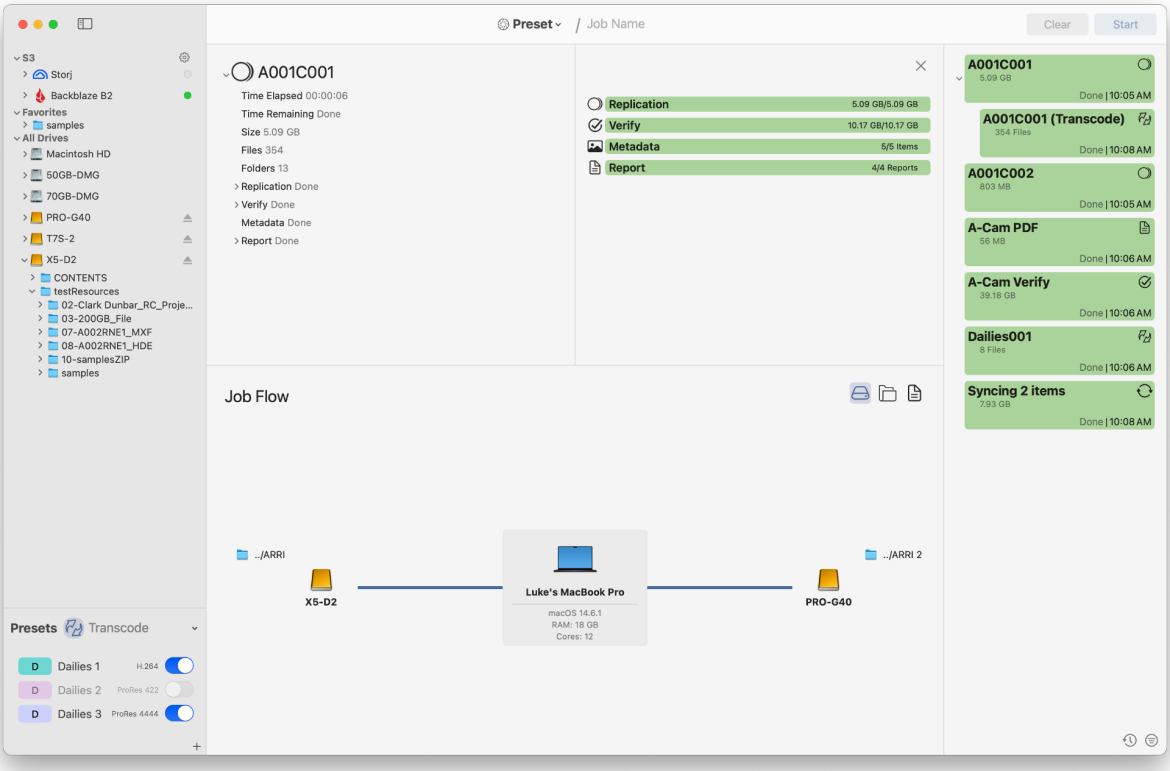
Each job type will yield different information when selecting it. For some job types, selecting it from the *Jobs List* is how you can access its results.

However, the layout for each will remain the same. Each completed job page will be divided into three different sections. The upper left will contain the job name as well as the job's metadata details. The upper right will contain progress, broken down by specific action, while the bottom section will be dynamic.

TIP: Selecting a job can also be done while the job is running to view its progress in greater detail.

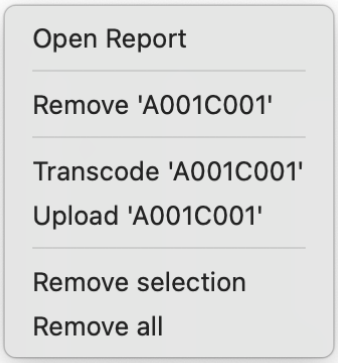
Copy Jobs

Selecting a completed *Copy Job* will show expanded details in the center window.



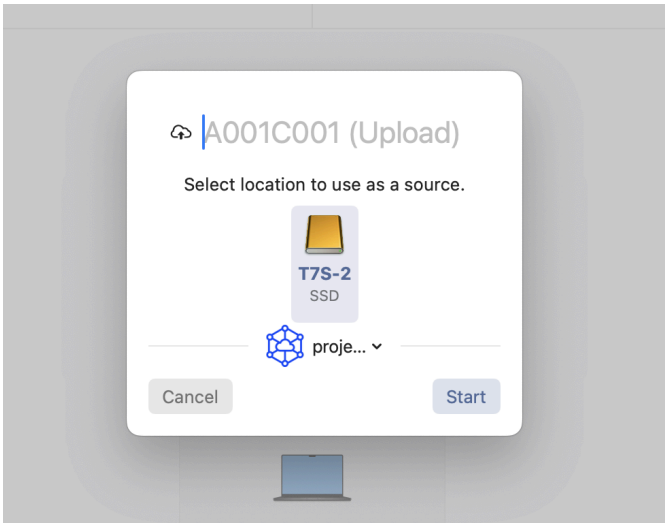
Right-Click Actions

A completed *Copy Job* offers multiple actions when *Right-Clicking* it.



Open Report will open the location of any generated reports in Finder. From here you can view, move, or send them.

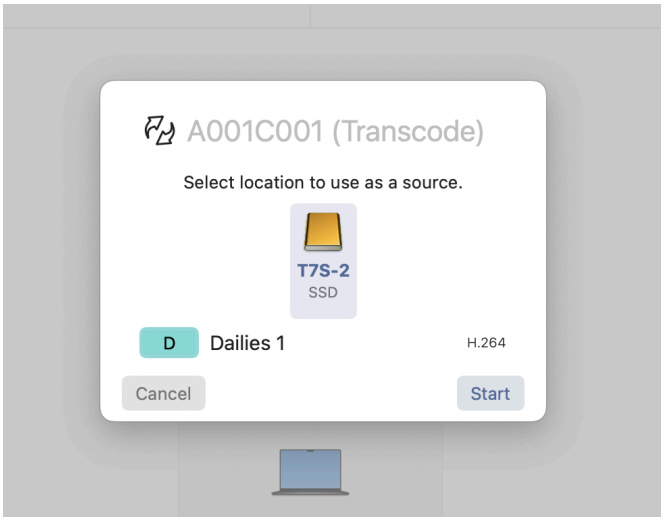
Upload will cause a pop-up to appear. In this pop-up users can provide the necessary information to then quickly start an *Upload* job.



At the top, a new *Job Name* can be given. Underneath this, the drive to use as the *Source* for the new job can be selected. This option will always be your *Destination* in the original job. If multiple destinations were used, users can select which one to use.

Finally, the desired cloud destination can be selected using the dropdown menu. Click *Start* to begin your upload.

Transcode behaves similarly to upload. After selecting it a pop-up will appear.



Again, users can give the *Transcode Job* a name and select the drive to use. The main difference is that instead of selecting a cloud bucket users instead select the *Transcode Preset* to use for the job.

This preset will dictate the settings used in the transcode.

Users will be able to view what drive the transcode will use. This option will always be your *Source*, but if multiple sources were used you will be able to select which one to use.

After the desired Transcode Preset to use has been selected from the dropdown menu, click *Start* to begin the transcode.

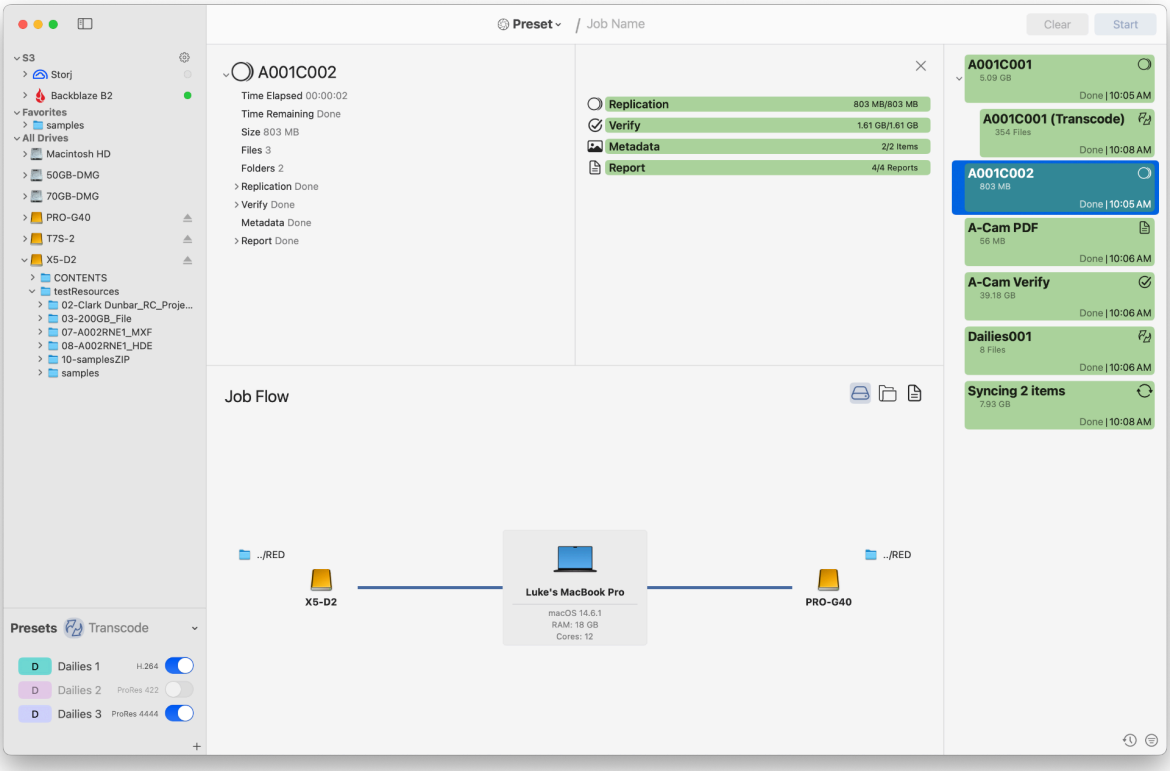
If a transcode preset has not been created, navigate to the Preset tool to create one.

NOTE: After performing either a *Transcode* or *Upload* using a right-click action, the new job will then appear as a sub-job beneath the original.

Finally, *Remove* will remove the completed job from the list.

Job Details

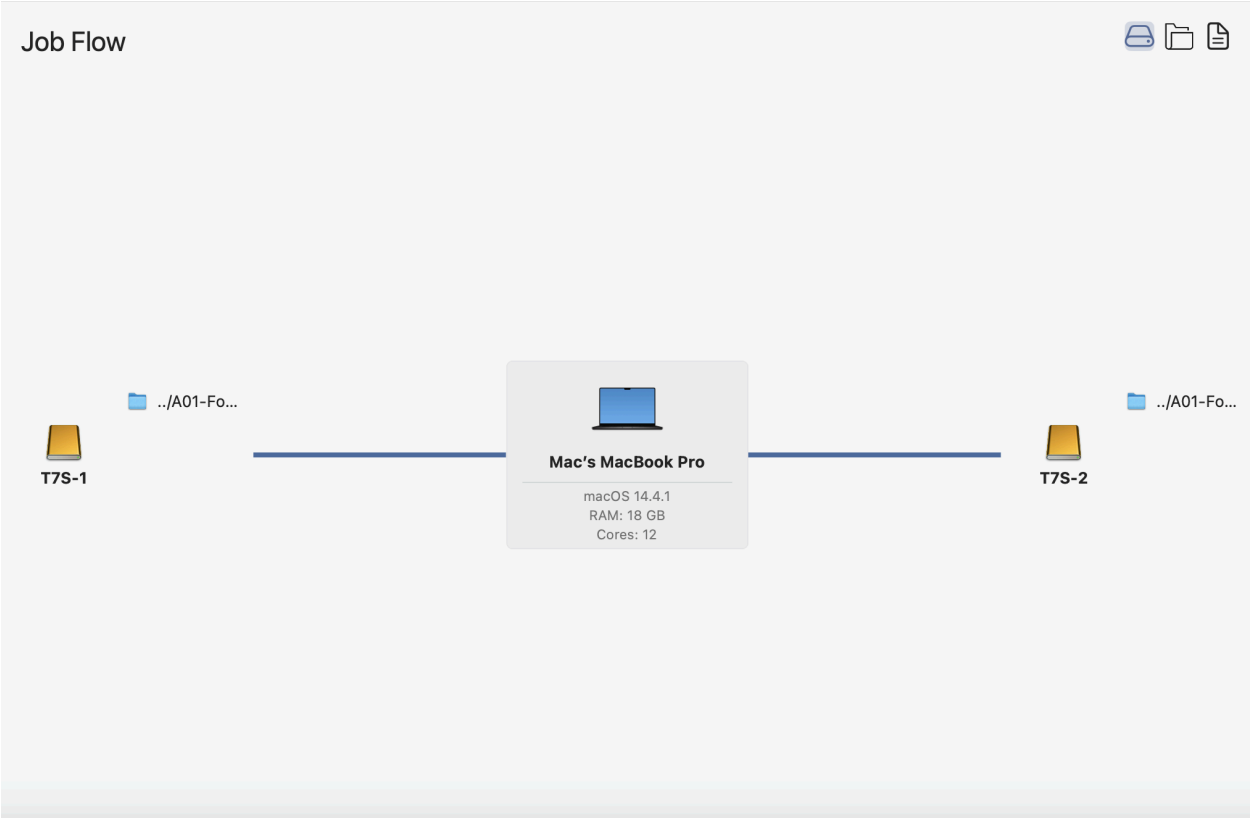
Selecting the job will bring up detailed information in the center area.



The upper left section displays the job type, as well as the job name. It also includes detailed metadata.

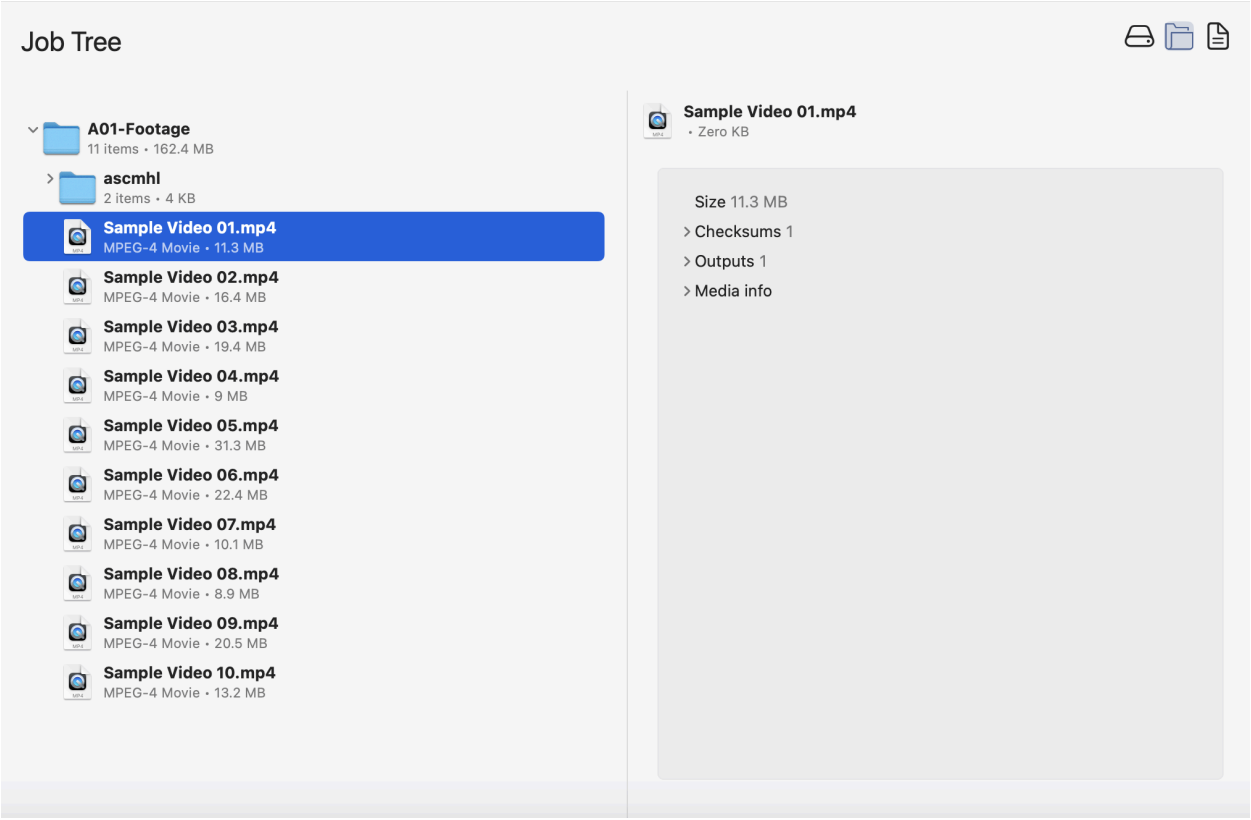
The upper right section breaks down the job's progress into each of its stages. If selected during the job's progress, these bars will be updated in real time.

The bottom section will default to the *Job Flow* displaying the sources and destinations of the job. This view gives a visual representation of the path the data took during the job.



Job Tree

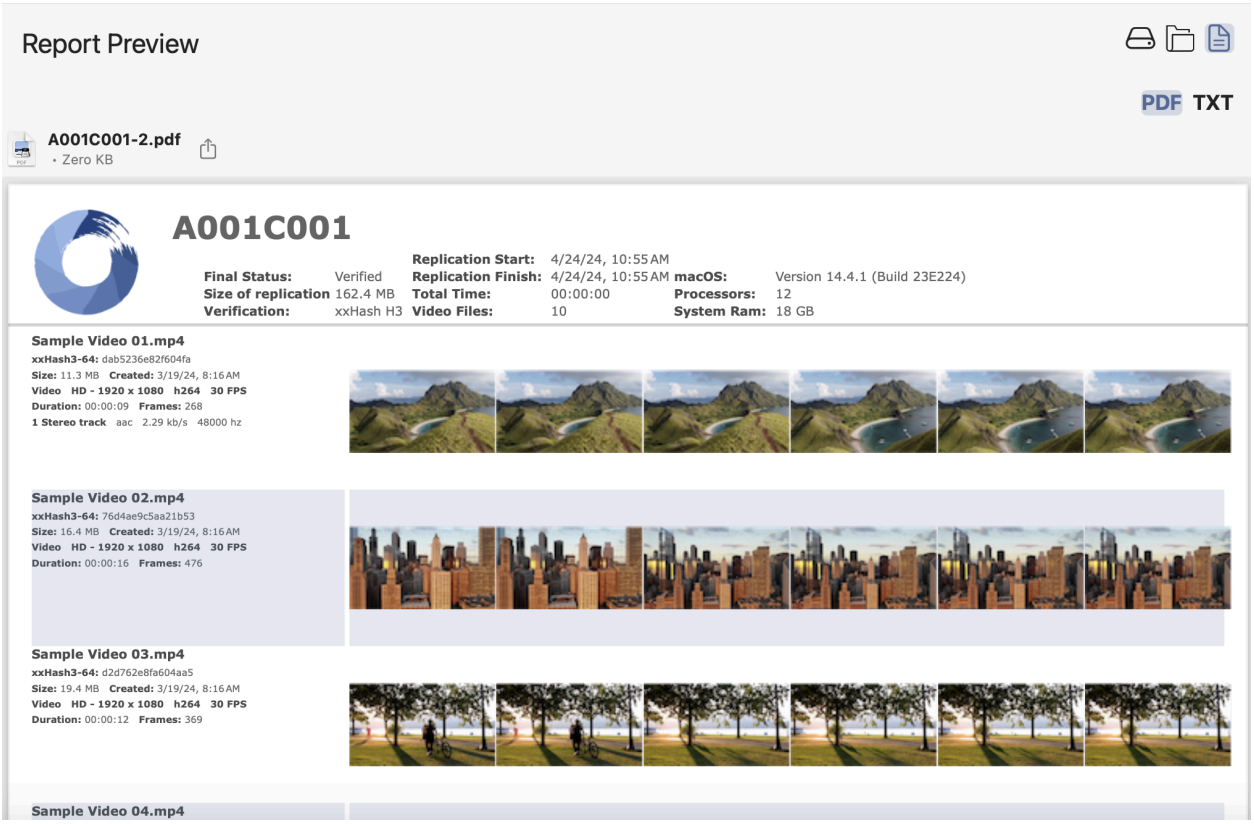
The *Job Tree* view allows you to view the folders and files that were copied.



Selecting the dropdown arrow to the left of the initial folder will reveal its contents. You can then continue to do so as needed to dive deeper into the data that was copied.

Report Preview

Selecting the *Report Icon* in the upper right of the bottom section will change the view seen in the bottom section to the *Report View*, provided reports were generated with the job.



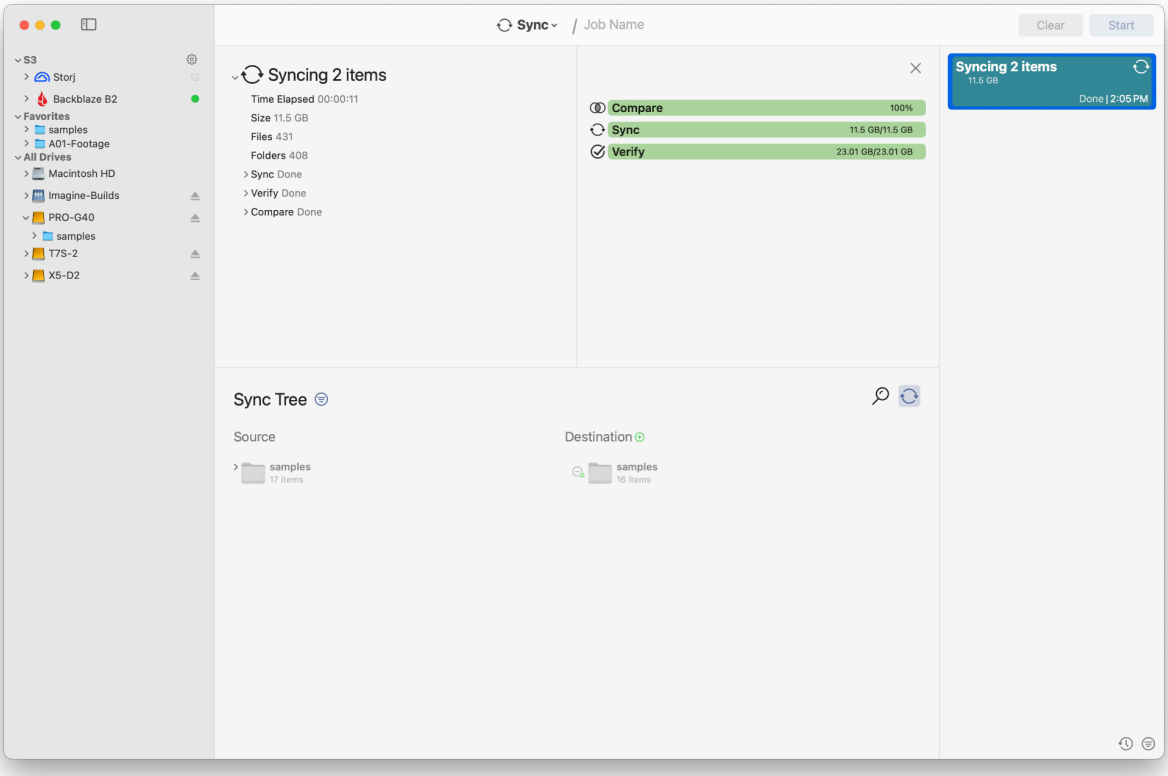
Underneath the *Report Icon*, select the desired report type to view it in this section. Click the *Browse* icon to the left of the report name to open its location in Finder.

Select the *Export Icon* to the right of its name to view different options for sharing your report.

TIP: Use the PDF report preview to quickly inspect completed jobs and make sure no clips were corrupted during the transfer.

Sync Jobs

Selecting a completed *Sync Job* will show expanded details in the center window.

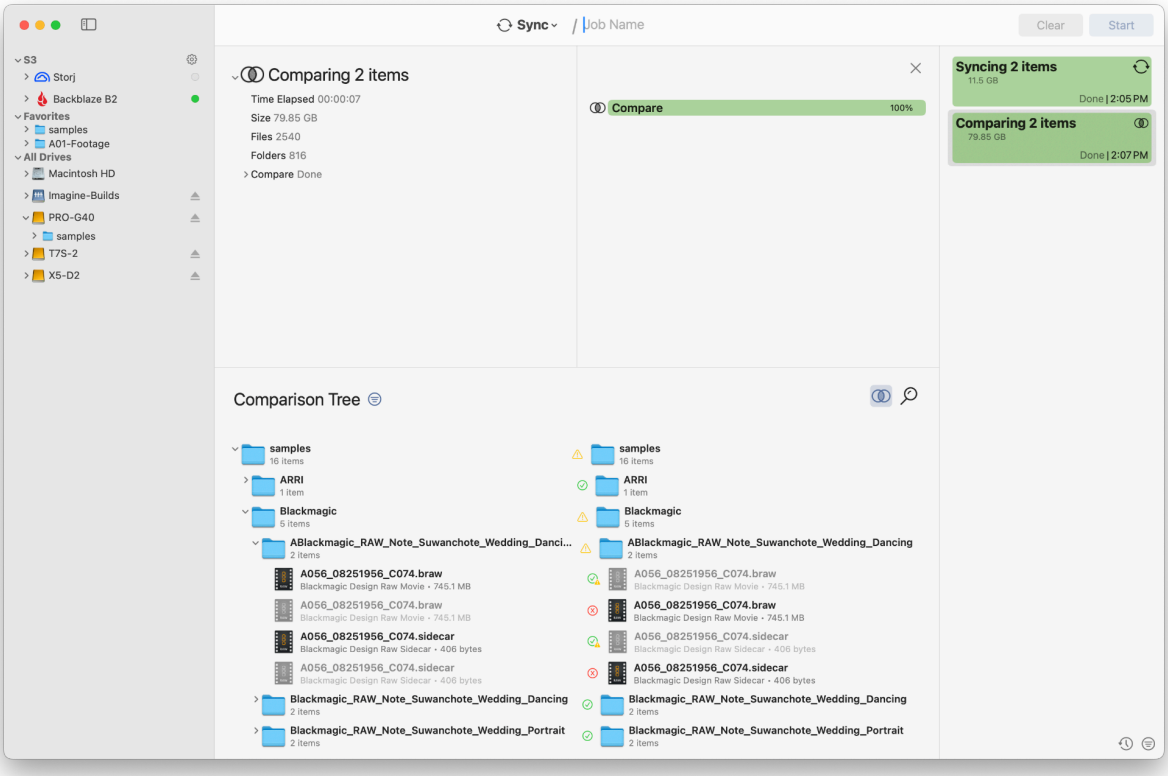


Comparison Details

Users can then view the results in two different ways. *Comparison Tree* displays a visual head-to-head comparison of the two folder structures. *Comparison Matches* allows for the selection of a file from the source, upon which matching items found in the destination will display.

Comparison Tree

When viewing your results in the *Comparison Tree*, items included in the source (top queue) will appear to the left, while items in the destination (bottom queue) will appear to the right.



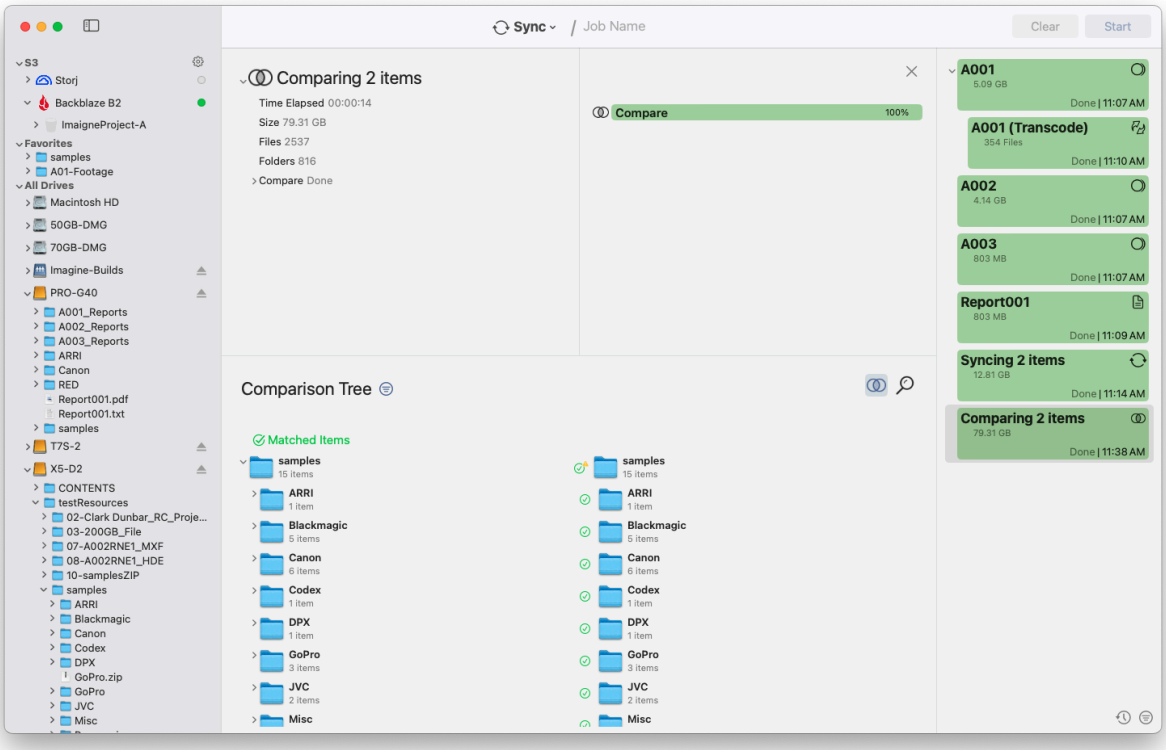
When viewing the two trees, there are three icons that could appear. A *Green Check* indicates that both items match completely. A *Yellow Caution* indicates a partial match. Finally, a *Red X* indicates the items do not match or an item is not present.

TIP: Hover your mouse over any of the icons to learn more information.

In the event that an item is missing from one of the compared folders, the item name will appear in gray text where it would be in the folder it is missing from.

This view can also be filtered using the icon directly to the right of the *Comparison Tree* header. Selecting this icon will cause a pop-up menu to appear.

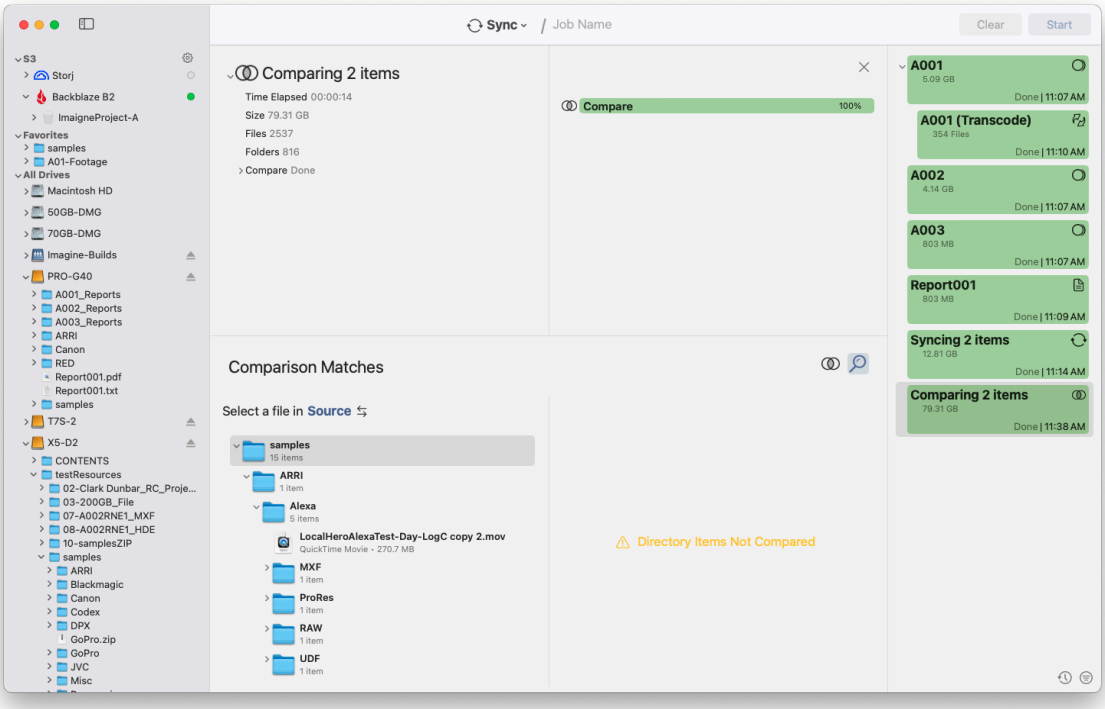
Filtering by *Matched* will only display the items that ShotPut Studio found to be matching, while *Mismatched* will do the exact opposite.



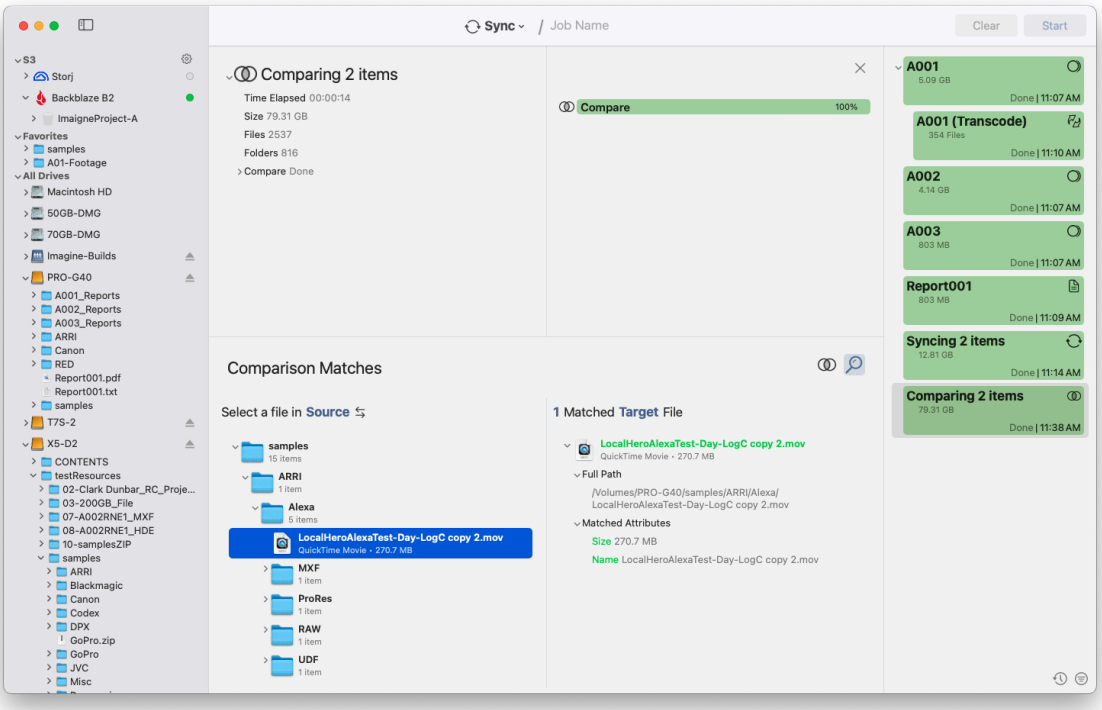
Partially Matched will show the items that matched at least one of the attributes but not all of them.

Comparison Matches

Select the second icon in the upper right of the bottom queue to switch the results view to *Comparison Matches*.



Once in this view, you can expand the file tree of the folder on the left hand side. Select any file from the tree to then view its matches, if any, on the right.



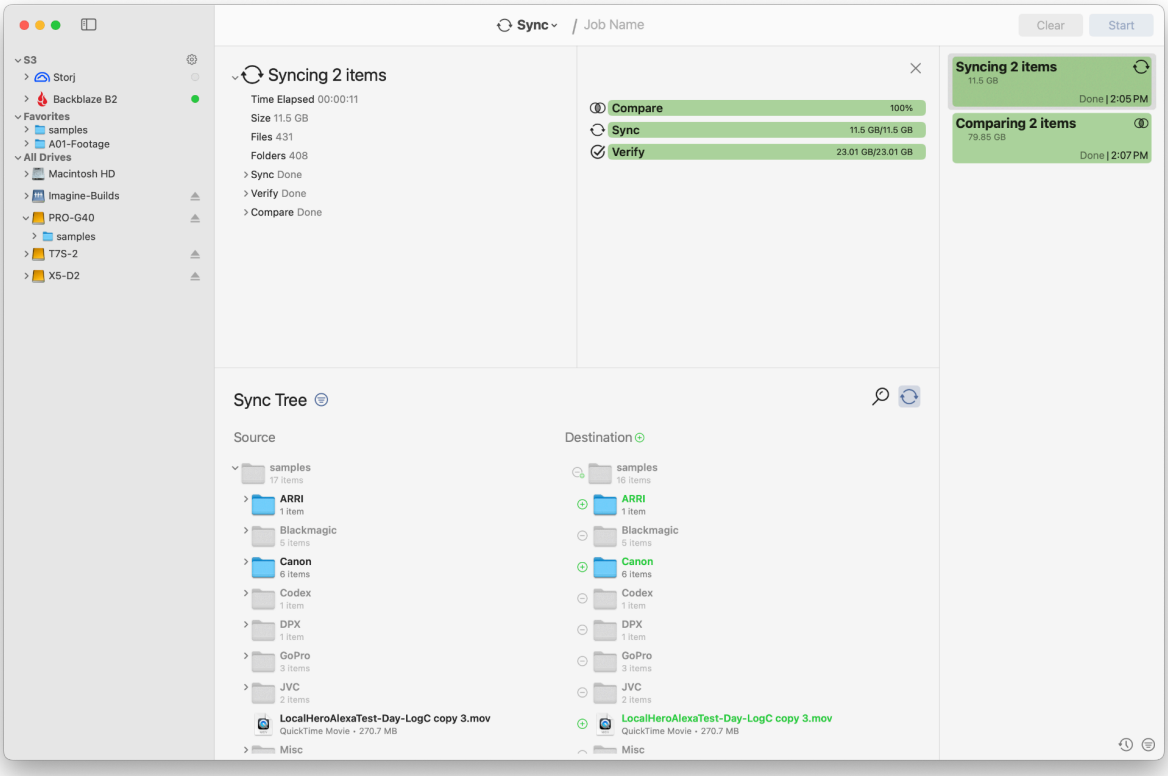
To see further details about any of the matched files, select the dropdown arrow to the left of it. Upon doing so, information such as the *Full File Path* and *Matched Attributes* are displayed.

If the file only matches partially, both *Matched* and *Mismatched Attributes* will be displayed.

Sync Details

If a sync job was performed, the job details are similar to those described above. Users can still make use of the *Comparison Matches* view to locate items, but now the view can be switched to show the *Sync Tree*.

The *Sync Tree* displays the file trees of both the source and the target.

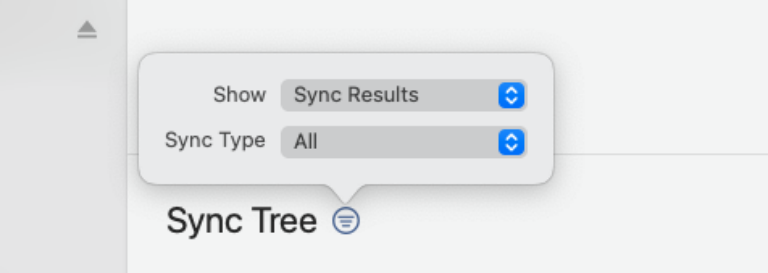


As shown above, the file tree of your source can be expanded to view all existing items. The file tree of your destination will then mirror what is seen in your source.

The difference is that all items that previously existed in the destination before the sync are shown in gray. Any new folders or files that were added after syncing are shown in color and are denoted by a *Green Plus Icon* to the left of it.

TIP: Users can hover over the plus icon to learn more information.

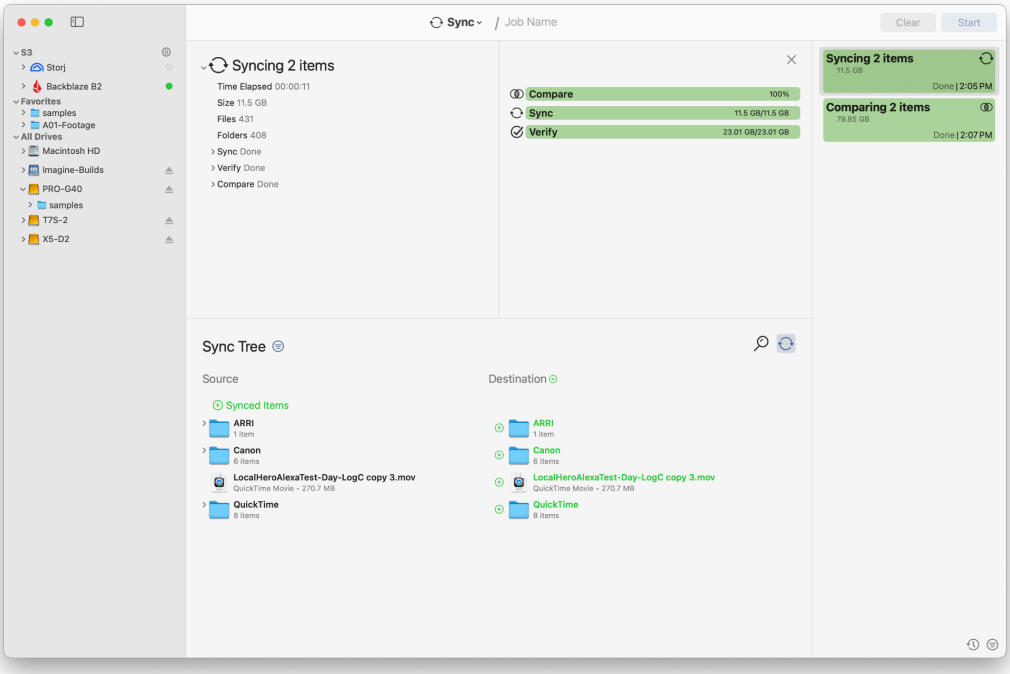
The filters icon directly to the right of the Sync Tree header can be utilized to change how, and what, results are displayed.



Show

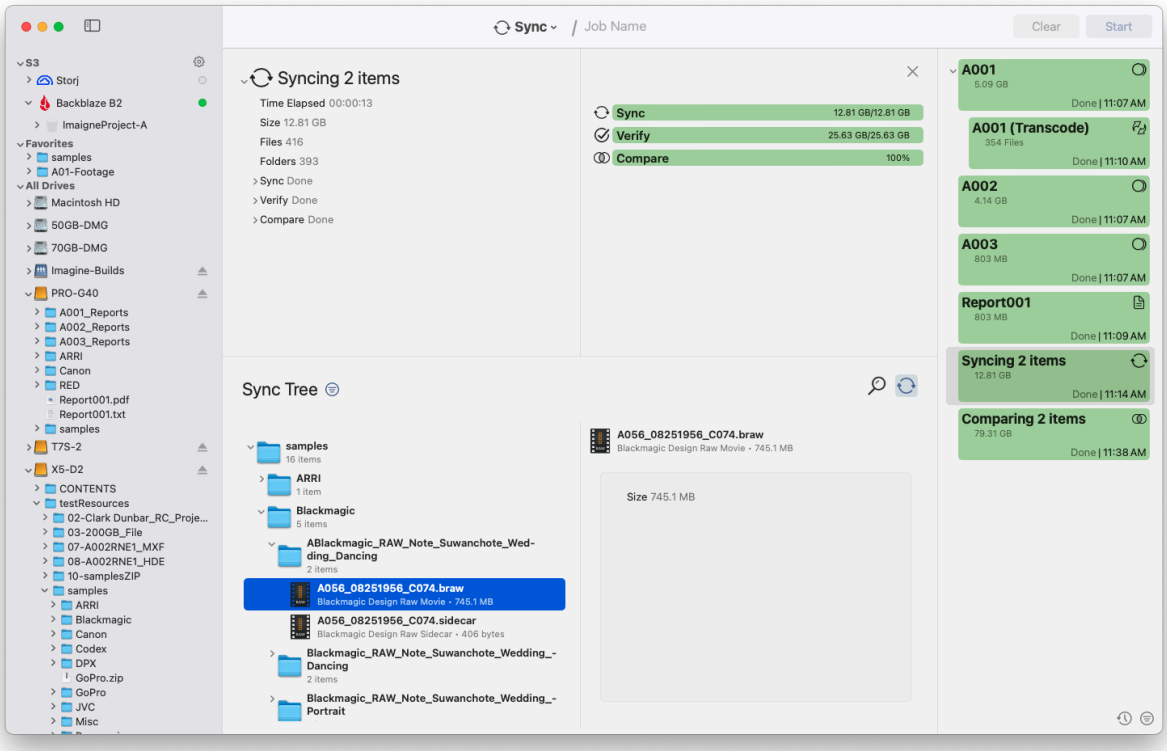
Using the *Show* filter, you can select which items they would like to be viewable. The first option, *Sync Results* are what is first seen when selecting this view.

Using the *Sync Type* filter below this, you can choose whether you would like to see the entire file tree for both the source and destination, or whether you would just like to see the items that were synced.



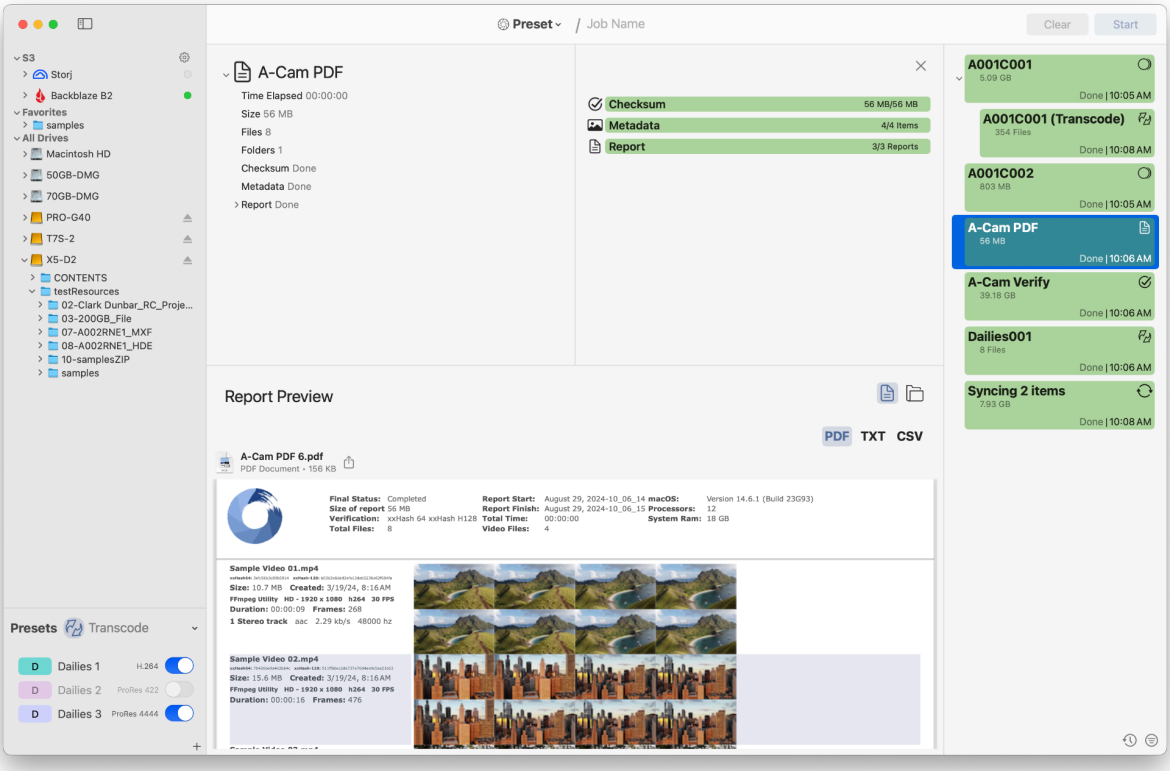
Comparison Results, the next option in the Show filters, allows you to view a comparison between the two items before the sync occurred. This view matches that of the one discussed above in the *Comparison Details* section, and can be filtered by the same options.

The final two options under Show are *Source* and *Destination*, both of which allow you to browse through all items located in them.



Report Jobs

Selecting a completed *Report Job* will show its results in the center window.



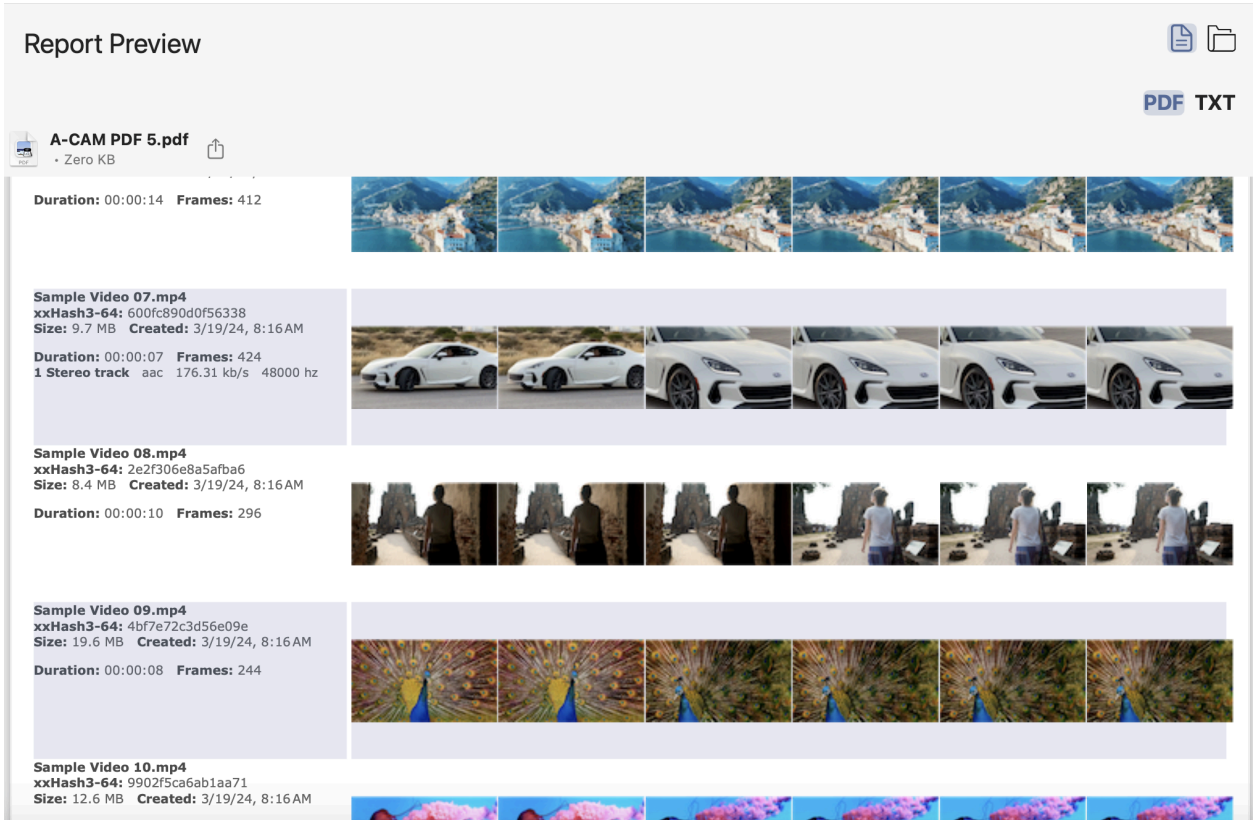
Job Details

The upper left section displays the job type, as well as the job name. It also included detailed metadata.

The upper right section breaks down the job's progress into each of its stages. If selected during the job's progress, these bars will be updated in real time.

Job Results

The bottom section will default to a preview of the *PDF Report* created. If no PDF report was created, it will default to either the CSV or TXT report.



Similar to a *Copy Job*, use the buttons corresponding with the report types to cycle through the report previews shown. Click the *Browse* icon to the left of the report name to open its location in Finder or the *Export* icon to share it.

Job Tree

Again, just like with Copy jobs, the *Job Tree* view allows you to view the folders and files that were involved in the report.

Selecting the dropdown arrow to the left of the initial folder will reveal its contents. You can then continue to do so as needed to dive deeper into the data that was reported on.

MHL Jobs

Selecting a completed *MHL Job* will show its results in the center window.

Job Details

The upper left section displays the job type, as well as the job name. It also includes detailed metadata.

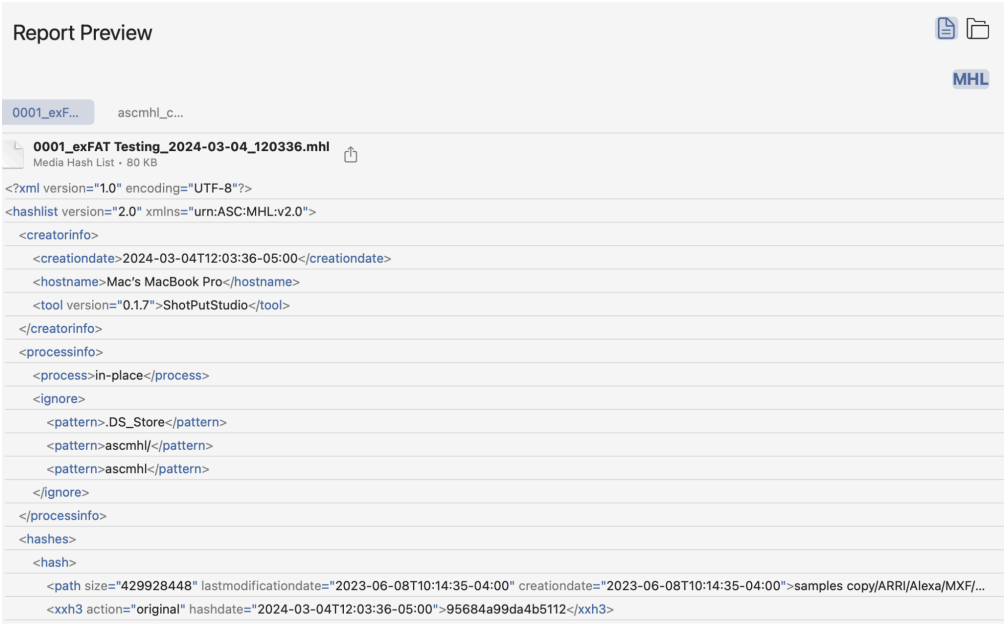
The upper right section breaks down the job's progress into each of its stages. If selected during the job's progress, these bars will be updated in real time.

Job Results

The bottom section's view will display the job results, but these results may look different depending on the task that was run.

Create Seal

After creating a new seal, there are two different ways to view job results. The first is by viewing a preview of its MHL file. This file can then be opened in Finder or exported directly from ShotPut Studio.

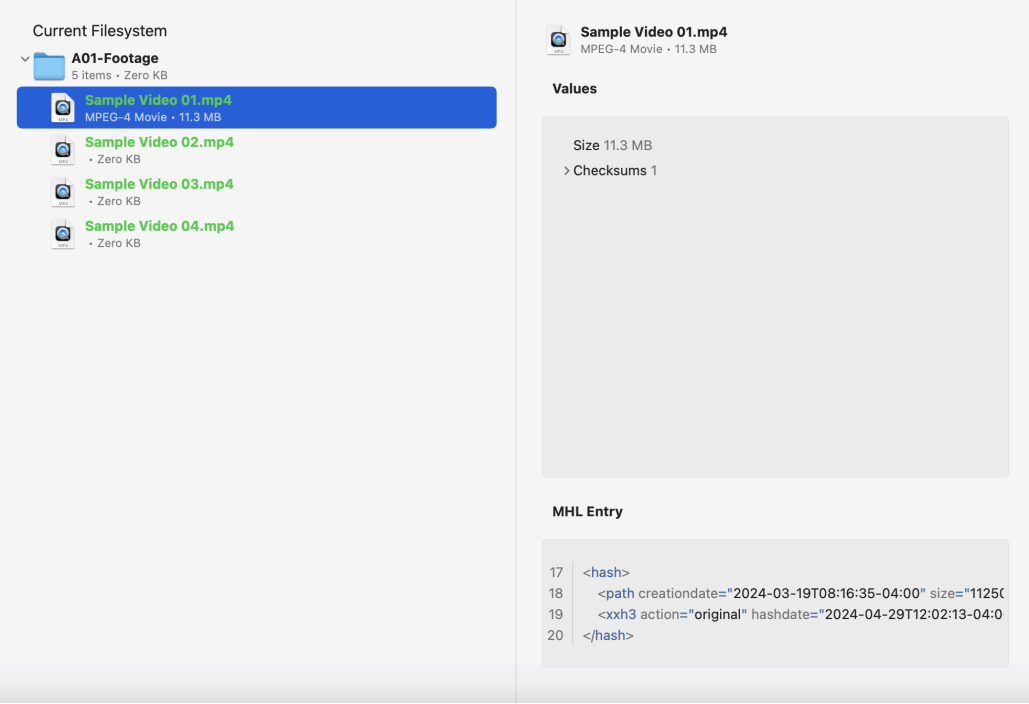


NOTE: If creating an ASC MHL seal, a second file will be produced and viewable. This is the ASC MHL chain file.

The second method for viewing job results is by looking at its file structure. Select a folder or file to view checksum information and its MHL entry in detail.

Reseal

Job results for resealing a file are very similar as when creating a new seal.

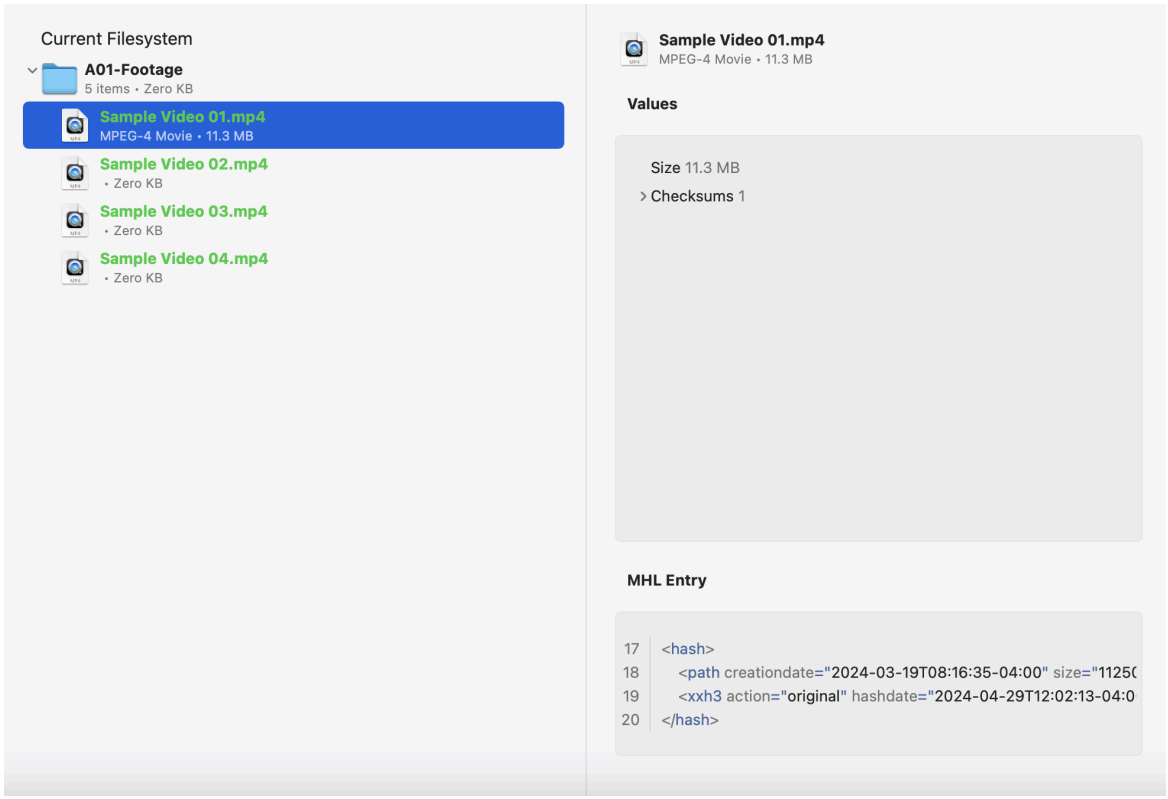


The only difference between the two is that when *Resealing* the previous iteration of the MHL seal is visible along with the new version.

View the section above for further information.

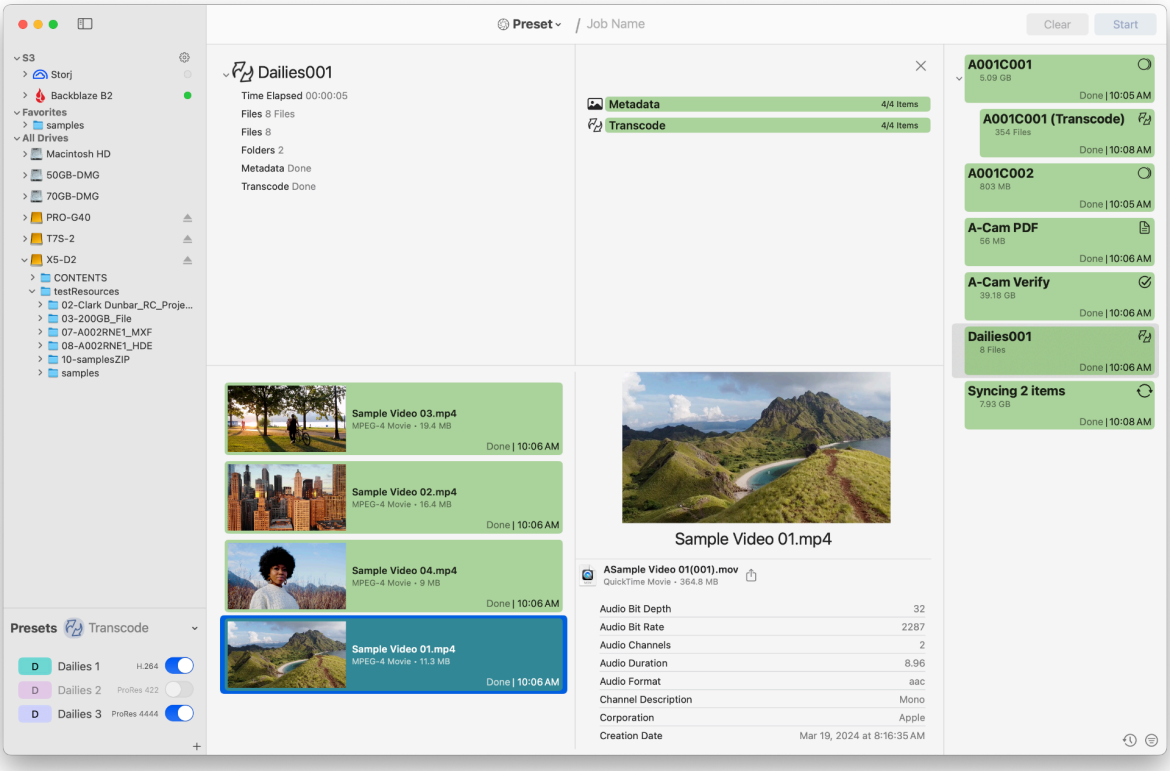
Verify

After verifying an existing seal, the file structure of the item that was used in the job will be seen in the bottom section. Select a folder or file to view checksum information and its MHL entry in detail.


Current Filesystem
A01-Footage
5 items • Zero KB
Sample Video 01.mp4
MPEG-4 Movie • 11.3 MB
Sample Video 02.mp4
• Zero KB
Sample Video 03.mp4
• Zero KB
Sample Video 04.mp4
• Zero KB
Sample Video 01.mp4
MPEG-4 Movie • 11.3 MB
Values
Size 11.3 MB
Checksums 1
MHL Entry
17 <hash>
18 <path creationdate="2024-03-19T08:16:35-04:00" size="1125(
19 <xxh3 action="original" hashdate="2024-04-29T12:02:13-04:0
20 </hash>

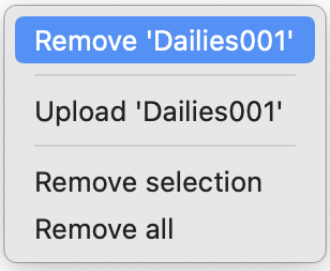
Transcode Jobs

Selecting a completed *Transcode Job* will show its results in the center window.

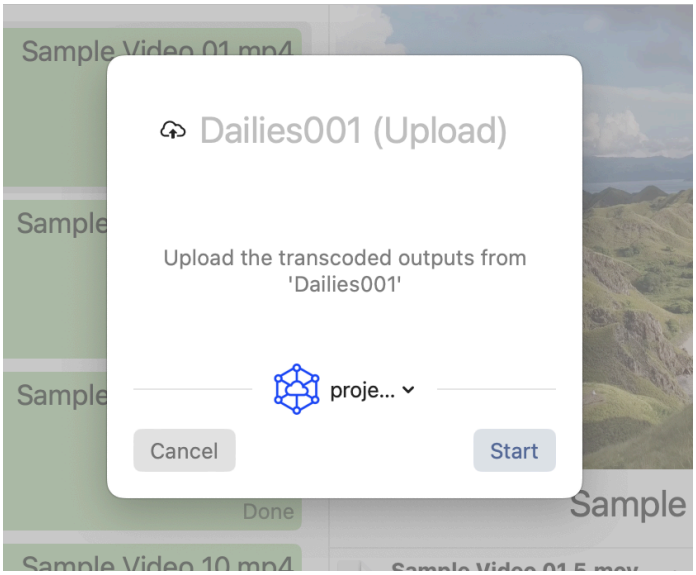


Right-Click Actions

A completed *Transcode Job* offers the option to *Right-Clicking* to quickly *Upload* the completed transcode to a chosen S3 Destination.



After selecting *Upload* a pop-up will appear, which will appear virtually identical to that found when uploading a *Copy Job*.



At the top, a new *Job Name* can be given. Underneath this, the user can select the desired cloud destination using the dropdown menu. Finally, click *Start* to begin your upload.

Unlike when uploading a Copy Job, there is no option to select the location to use as a source.

Job Details

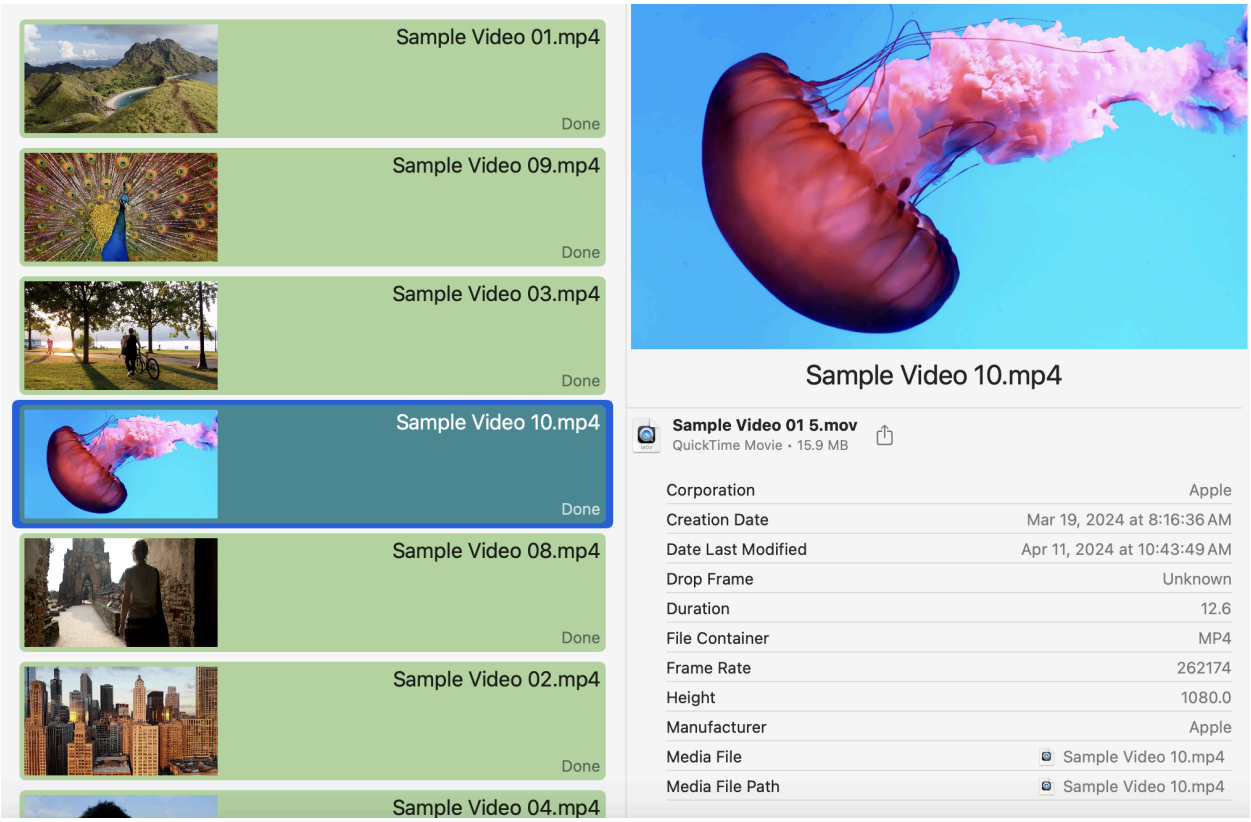
The upper left section displays the job type, as well as the job name. It also included detailed metadata.

The upper right section breaks down the job's progress into each of its stages. If selected during the job's progress, these bars will be updated in real time.

Clip Processing and Results

In the bottom section, to the left, you can find a representation of each of the files being transcoded. Each includes a thumbnail from the video for easy identification as well as the file name and processing progress.

Processing status is indicated both by the percentage value in the bottom right and through the colored bar behind the clip.



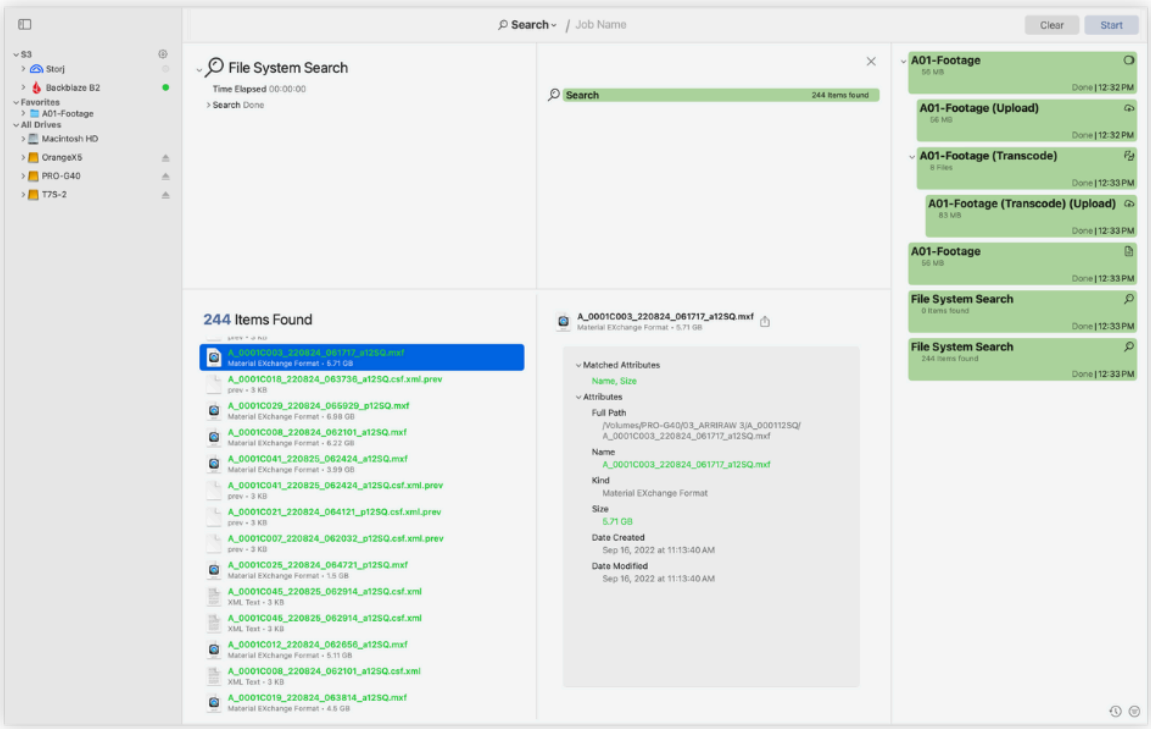
Click on the clip to open the *Details Panel* to the right. In the *Details Panel*, you can examine its metadata such as duration, timecode, size, date and format, etc.

Click the file representation of the clip directly to the left of the filename to then open the transcoded clip in Finder.

TIP: If a file fails the initial transcode, right click it and select *Reprocess* to try the transcode again without having to redo the entire job.

Search Jobs

Selecting a completed *Search Job* will show its results in the center window.



Job Details

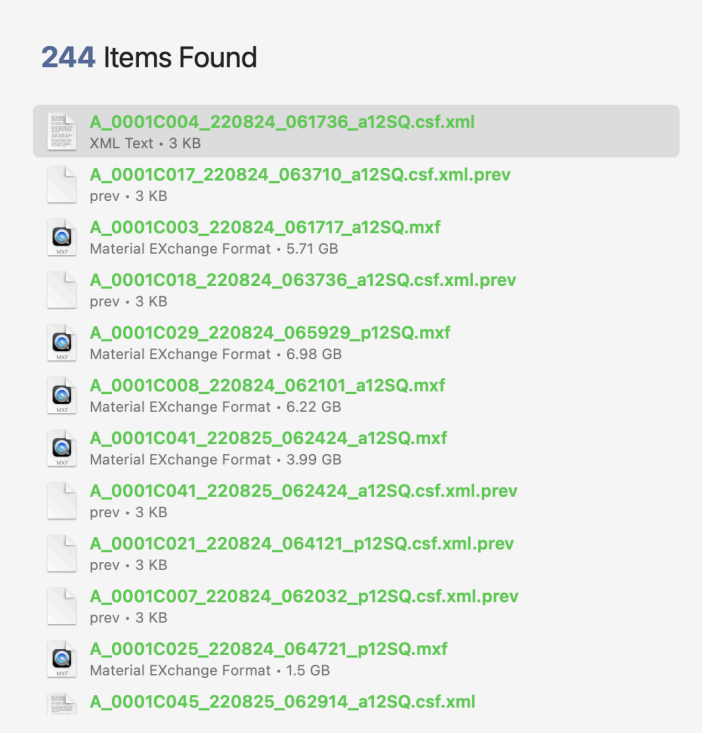
The upper left section displays the job type, as well as the job name. It also includes detailed metadata.

The upper right section breaks down the job's progress into each of its stages. If selected during the job's progress, these bars will be updated in real time.

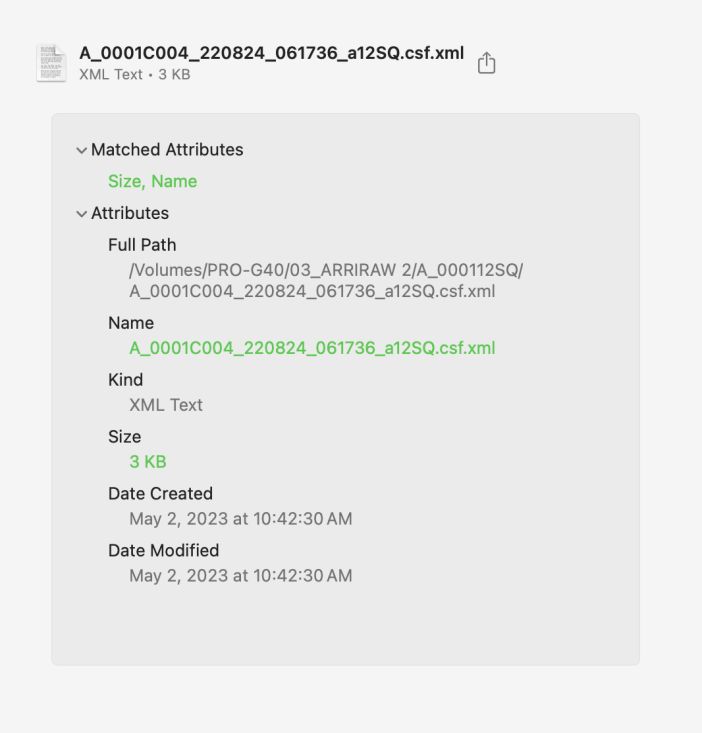
Job Results

Job results for a Search job will appear the same regardless of whether you completed your search job with Search by Item or Search by Criteria.

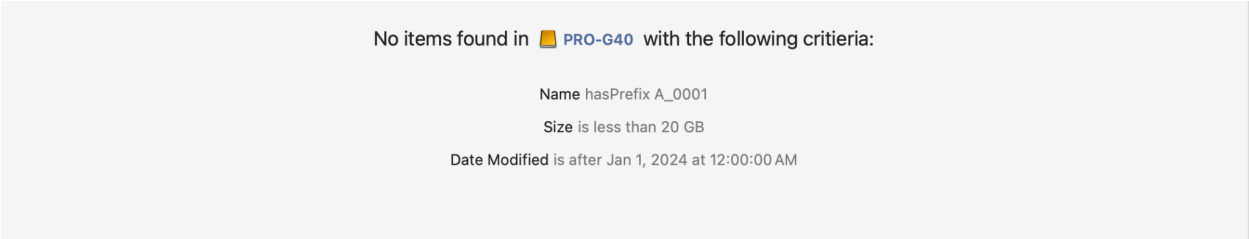
On the results page, you can see the number of matched items in the bottom left panel.



Selecting any of the items will populate the panel to the right with information including the matched attributes and metadata about the file or folder.



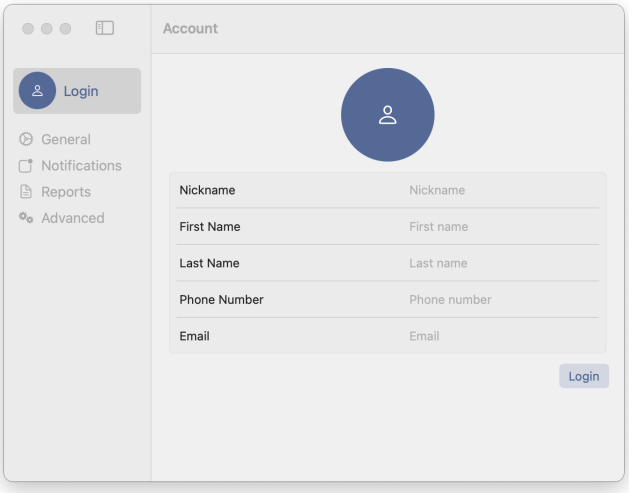
If the Search you perform yields no results, a corresponding message will be displayed.



Settings

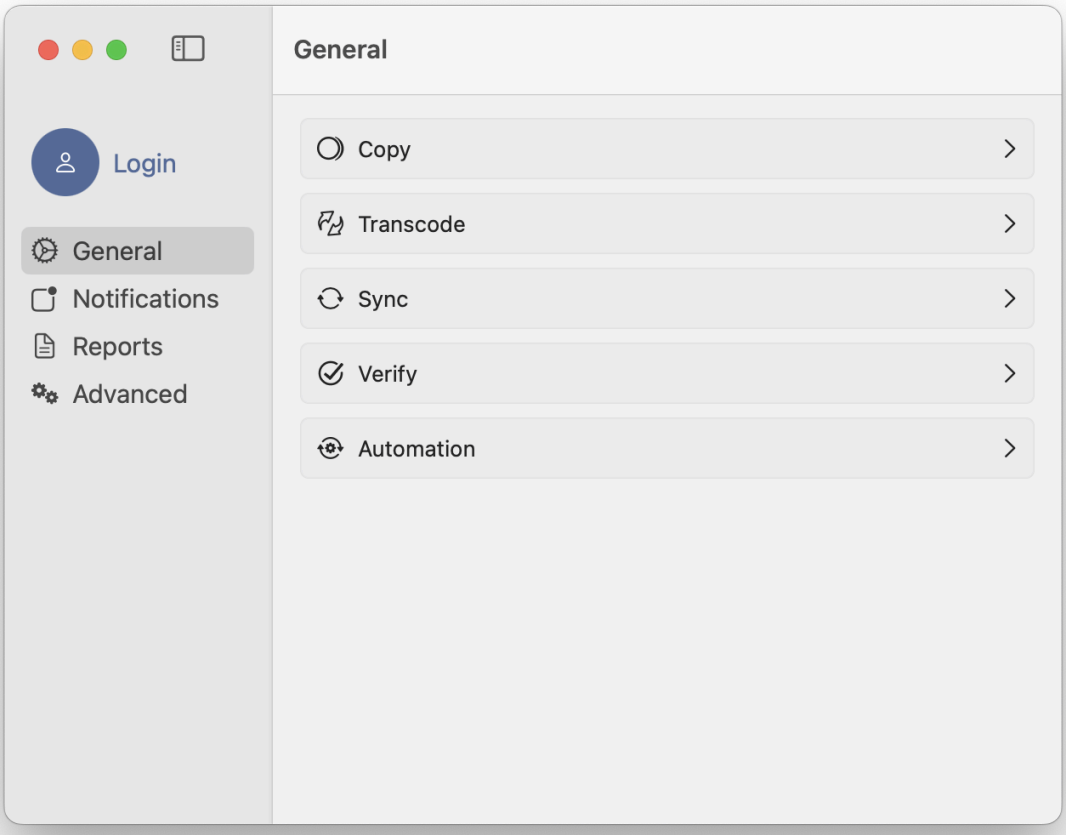
Account

Select *Login* to populate your account information. You must be logged into your ImagineProducts.com account to activate email and phone notifications.



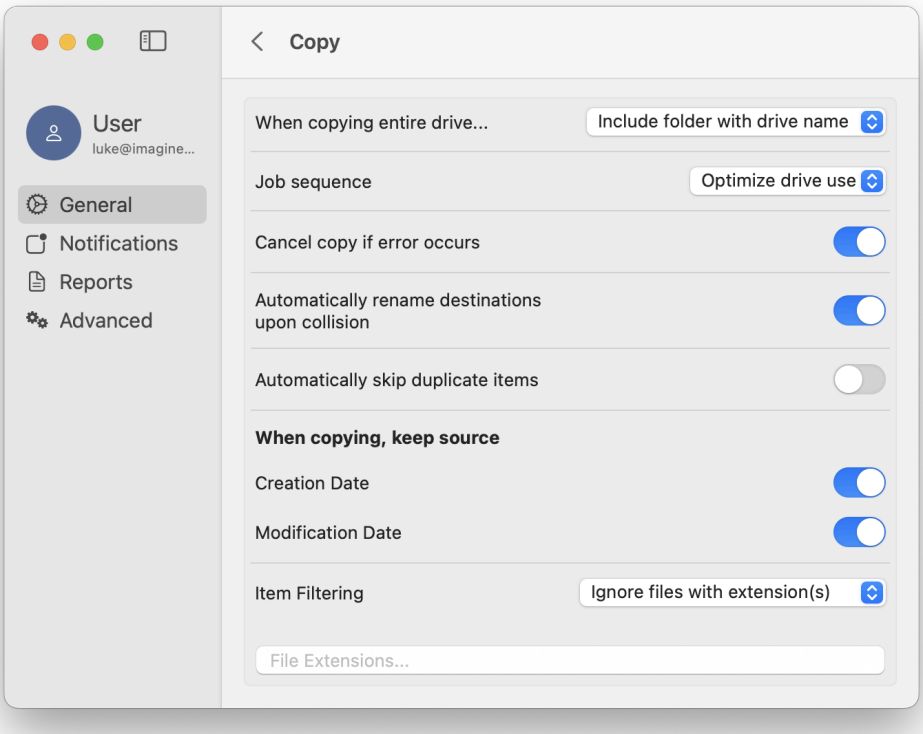
General Settings

Select *General* to set global options for multiple areas including, *Copy, Transcode, Verification,* and *Automation*.



Copy Options

The *Copy Options* determine how copying will be initiated and include further settings related to what should be copied.



When Copying Entire Drive

This option lets you choose whether volume names should be included as the top folder name in the copies, or if you simply want to ignore that and copy the contents only.

Job Sequence

Job Sequence allows you to specify when and how offload jobs are to begin. The following are the job sequence options you can select:

Optimize Drive Use instructs the application to use built-in technology which will allocate offload resources based on the drives involved. This will optimize throughput and allow concurrent IO when appropriate. Jobs which do not have access to sufficient IO resources will be queued and begin once these resources become available.

All at Once will begin each offload job immediately, regardless of any other ongoing replication job. If jobs have common IO resources, competition for these resources can occur and result in slower offload times and choppy throughput.

One at a Time will only permit one offload to occur at a time. This ensures there is no competition for IO resources, but will not permit jobs with disjoint IO needs from executing concurrently.

Cancel Copy if Error Occurs

Enable this option to immediately terminate the copy processes should a failure happen.

If it is not enabled, you will be alerted that an error occurred, but copying will be tried again until it skips and continues with the remainder of the copies.

NOTE: An error during the copy process will be indicated in the status and progress will turn red. If you've chosen not to cancel on errors, the copy will finish to the best of its ability. All reports, including checksum text files, will include *Error Warnings.*

If this option is not selected, the offload will be halted and resolution options will be displayed to the user. The user will have a predefined number of minutes to select an option on how to continue before the job will automatically retry copying or verification of the erred file.

Naming Collision Resolution

If you're copying multiple items to the same destination (output location), naming conflicts could occur. You can instruct ShotPut Studio to *Automatically Rename Destinations Upon Collision*. This option retains the same named items and differentiates with an extension (e.g. -2, -3, -4).

With this option OFF, you'll be warned whenever duplicates are found.

TIP: Avoid the potential for file/folder name collisions altogether by using unique folder naming schemes in the *Preset Copy Tool*.

Automatically Skip Duplicate Files

When *Automatically Skip Duplicate Items* is enabled, users can direct ShotPut Pro to automatically detect duplicate files between the copy source(s) and destination(s) based on matching criteria, and if they are found, it will skip them during the copy. This can speed up your offload, increase organization, and prevent unnecessary duplication. A file will be considered a duplicate under the following circumstances:

- A file already exists at the specified output path at each destination
- The modification dates for the source and existing output paths are equal
- The byte sizes for the source and existing output paths are equal

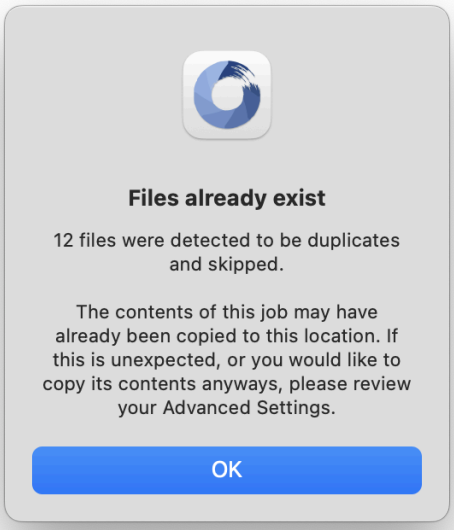
If the modification dates or sizes of the output file paths differ from that of the source, the outputs will not be considered duplicates and the actions taken will depend on the selections made in the app Settings.

NOTE: When this setting is enabled, ASC MHL seals will only produce partial results as items in the original source(s) that are being copied may not be copied to the destination(s) due to them already existing there.

NOTE: PDF and TXT reports will include a section which enumerates skipped file paths.

You will notice that when Automatically skip duplicate items is enabled certain settings are turned on and locked. This is because detection of duplicates relies on the information these settings provide. These settings include *Keep source creation date when copying* and *Keep source modification date when copying*. To turn these settings off, first disable Automatically skip duplicate items.

If every file in an attempted copy is deemed a duplicate, the job will be canceled and you will be met with the following pop-up message.



Date Options

Files copied from external devices or cards often incorporate the date the file was copied to the output destination, rather than original file information.

You may choose to *Keep Source Creation Date When Copying* and/or *Keep Source Modification Date When Copying*.

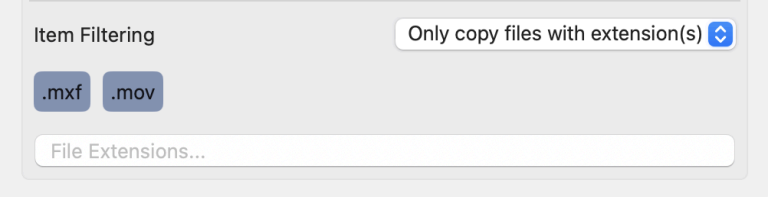
These options instruct ShotPut Studio to override the system default of today's date (when the copy was performed) with those gathered from the source file information.

NOTE: Not all cameras apply *Volume Date* information to files or cards. Please check the card information in Finder before using either of these options.

Copy/Ignore by File Extension

Users can direct ShotPut Pro to *Ignore by File Extension* during the copy process, meaning any file with the extension the user specified in the input box will not be copied during the replication process. If offload sources frequently contain unwanted files, enabling this setting will prevent these files from being copied to the output destinations

Inversely, you can use the dropdown arrow to change the settings to *Only Copy by File Extension*. This means only files with the file extension(s) specified in the box below this setting will be copied during the replication process.

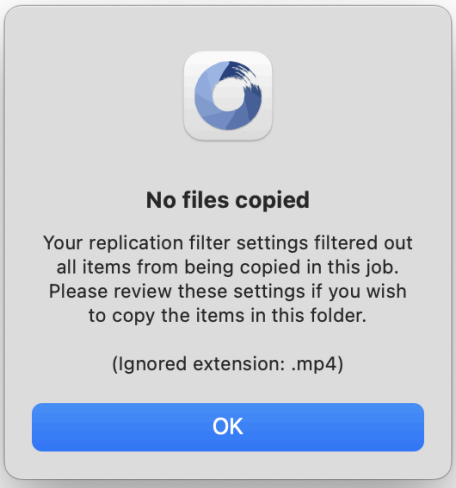


To utilize either of these functions, simply begin typing the desired file extensions in the box below. After each file extension either click *Enter* or type a *Space* to confirm the extension.

NOTE: PDF and TXT reports will include a section which enumerates ignored file paths.

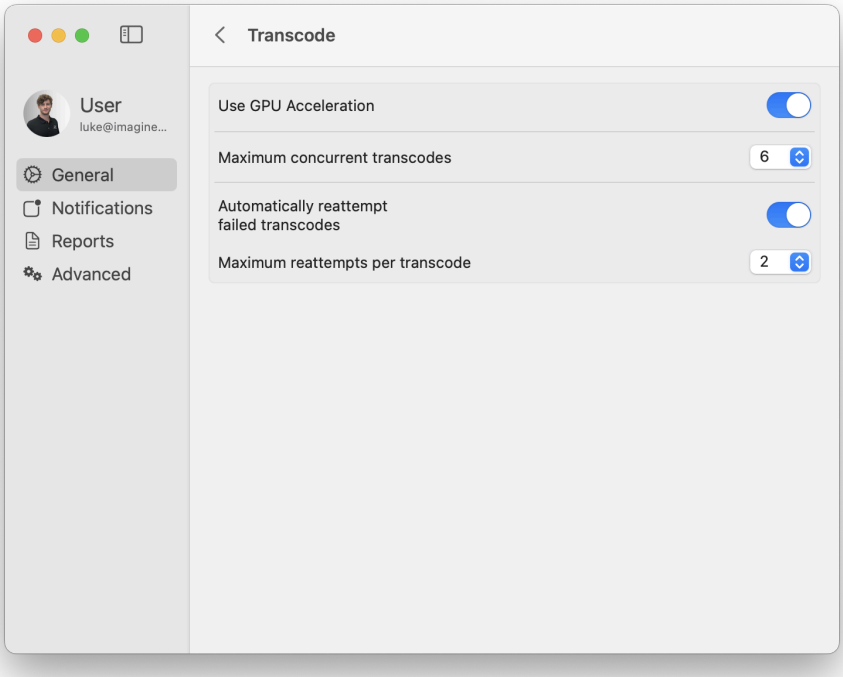
CAUTION: When this setting is enabled, source files will be omitted from the replication process and will likely be permanently lost when the source drives are reformatted and reused.

If the specified file extensions omit every file in an attempted copy, the job will be canceled and you will be met with the following pop-up message.



Transcode Options

These options are those that directly pertain to the overall Transcode feature. Individual settings for transcodes can be found in both the *Preset Tool* and the *Transcode Tool*.



GPU Acceleration

When *GPU Acceleration* is enabled, transcoding will utilize the computer's GPU to speed up transcode processing.

Concurrent Transcodes

Setting a value for this option instructs ShotPut Studio to only allow as many concurrent transcodes as selected. This can help prevent longer transcodes times and in certain situations may prevent crashes.

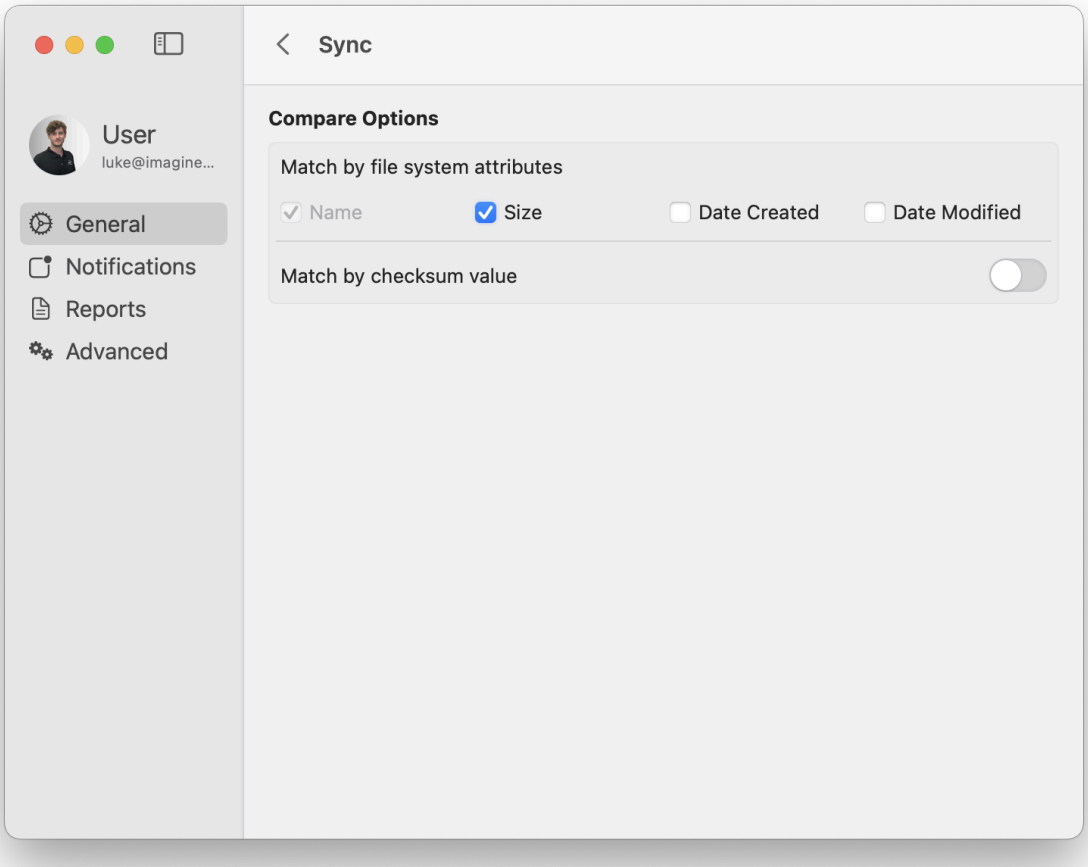
Automatically Reattempt Transcodes

If this option is turned on, ShotPut Studio will then allow you to set the maximum number of times to reattempt a transcode before it is marked as failed.

Keep in mind that the higher number of reattempts chosen, the longer the job may take if multiple files fail the initial transcode.

Sync Options

The options found in this section directly pertain to the *Sync Tool*.



Compare Options

The options under this section determine what constitutes a match when performing a comparison and/or sync.

Match by File System Attributes

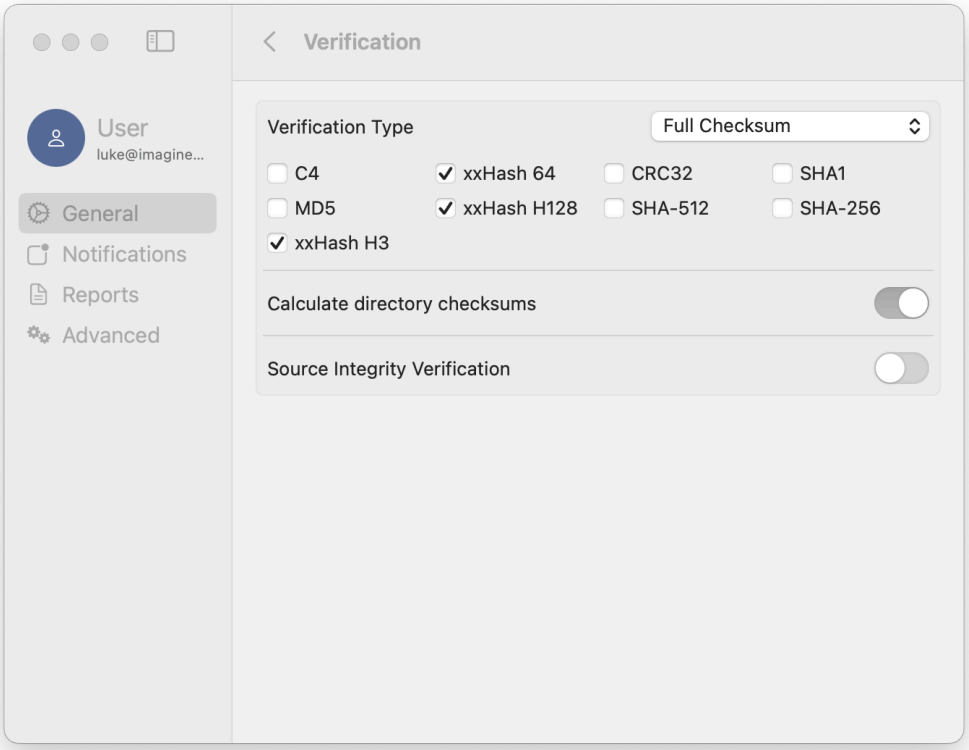
When one or more of these attributes are selected, files in your source will only be flagged as matching if the attributes selected match that of a file in your destination.

Match by Checksum Value

When this option is selected, a checksum value will be used to determine whether an item is matching or not.

Verification Options

ShotPut Studio offers a number of verification types to choose from depending on you and your client's needs.



TIP: You may override verification settings within individual presets without changing options in your global preferences.

Verification Type

File Size – Source Checksum offers the fastest checksum as it is a less intensive verification option than full checksum comparisons. This option relies on the operating system's report that the files made it to the output destinations correctly. It does not compare checksums of copies to source files.

However, *File Size* does obtain checksum values from the source(s) while reading the files. These values are included in reports and may be used for downstream file checking.

Full Checksum causes a read back of the copied files from the output destinations to acquire checksum values, and then compares those to the source values obtained during the copy process. This is a more thorough verification than relying only upon file size comparisons.

File Size Only compares the file size of the source to the copy and is faster than the checksum options.

NOTE: While our apps can detect some transit problems during the replication process, only a full checksum verification can ensure the bytes read match the bytes copied.

Checksum Types

Checksum verifications (such as XXHash, MD5 & SHA) use algorithms that calculate a binary value for the bytes of a file. The idea of checksums is to also identify any misplaced or changed byte positions in which case a file size may match but a checksum would not.

Choose between the various checksum hash types, or any combinations of them, for comparison purposes. These values are then included in reports and Media Hash Lists (MHLs).

In general, *xxHash3-64* is the newest and fastest option. Therefore, it is set as the default for ShotPut Studio.

xxHash-128 may be specified by clients in cases where the files will be aggregated with many others. Because it uses 128-bit processing, it will take longer than xxHash3-64, but there is less of a chance of data collisions (where the same hash value applies to two different files).

Other checksum types may be required by clients as deliverables (e.g. where an asset management system is designed around a specific standard.)

Calculate Directory Checksums

You may also specify that a checksum value be calculated for entire directories (folders) of files. This value type is a way to compare large quantities of data sets without having to drill down to the individual file level. Currently this option is only added to *ASC MHL*, *PDF*, and *TXT* reports.

TIP: Enable Media Hash Lists (MHLs) under *Report Preferences* to Seal output copies. MHL files contain checksum file path information that allow analysis of copied files in downstream workflows to track any changes and determine that the contents still match originals.

Learn more about Media Hash Lists under *Report Preferences*.

Source Integrity Verification

Sometimes media card readers overheat, begin to fail, or the cabling is faulty. The *Source Integrity Verification* option instructs ShotPut Studio to read the source a second time at the end of the backup session to ensure what it was initially given to copy has not changed.

TIP: Hardware failures may be detected in this manner. A matching checksum is not likely if anything is intermittent or changing. This option adds more time to read the source again, but is a strong insurance against corrupt incoming files.

This option is only available when *Full Checksum* is selected.

Automation Options

Automatically Add Drives to Sources Queue

This option places the contents of any newly detected removable drive or card into the queue for you, ready for copying. When this setting is enabled, ShotPut Studio will ignore already connected drives and mounted cards.

Begin Job Upon Entry to the Queue

This option starts copying without manually pressing the *Begin* button on the main window.

CAUTION: Do not connect any external media while the two automatic settings above are enabled unless you intend to copy its entire contents.

Automatically Open Details

Enable this option to automatically open the Job Details page every time you start a new job.

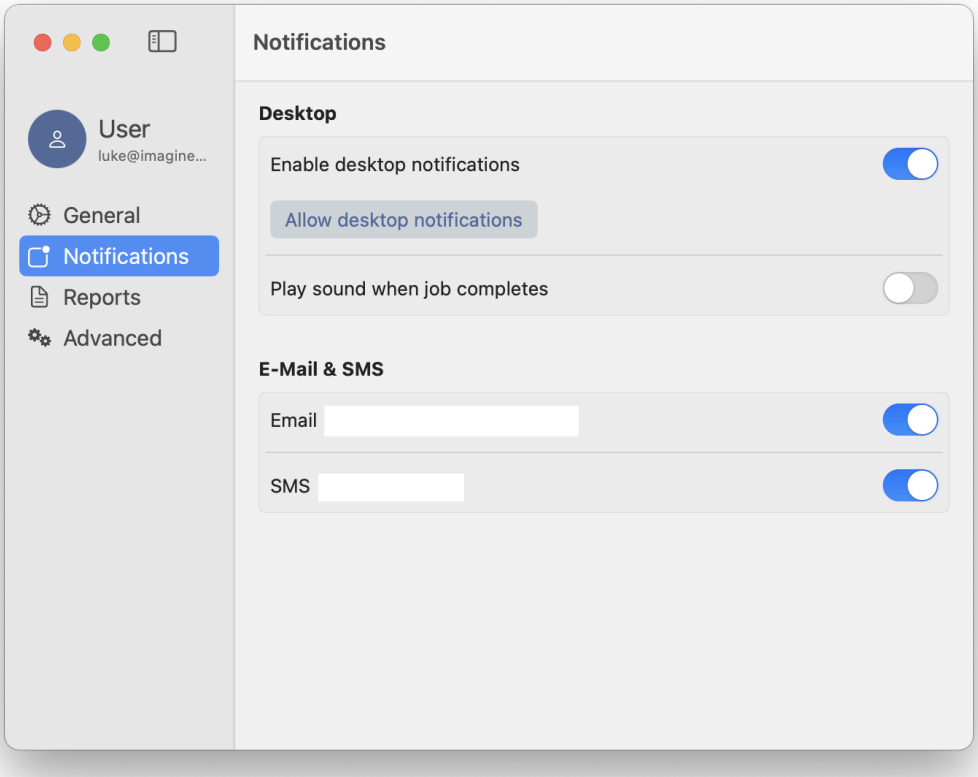
Auto Eject Source Upon Completion

When enabled your source will eject upon completion of the job allowing it to be unplugged from your computer (it does not physically eject cards from readers).

NOTE: This option may not eject until Reports are complete.

Notifications

ShotPut Studio features several automated notifications to inform you about job progress.



Desktop

Enable Desktop Notifications will present a textual message when the application is ‘not in focus’.

You may also choose sound alerts for completion and errors.

TIP: With sound options off, enabling *Desktop Notifications* will present a pop-up notice of activity, even when the application is minimized.

Email and SMS

You may send an Email or an SMS text message to yourself upon job completion, cancellation, or error.

NOTE: An Imagine Cloud account and up to date software are required. You must have an active (unexpired) Update Plan associated with your ShotPut Studio license to utilize Email and SMS features. Notifications are only available for use on macOS 10.15 and newer.

TIP: You may check the status of your license in the *About* screen, or from your Account on ImagineProducts.com by selecting *View Licenses* after signing in.

To set up notifications, ensure you have an Internet connection. Click the *Login* button. The email associated with your license will automatically populate.

Enter or edit other account information. If you intend to use SMS notifications you must add a phone number.

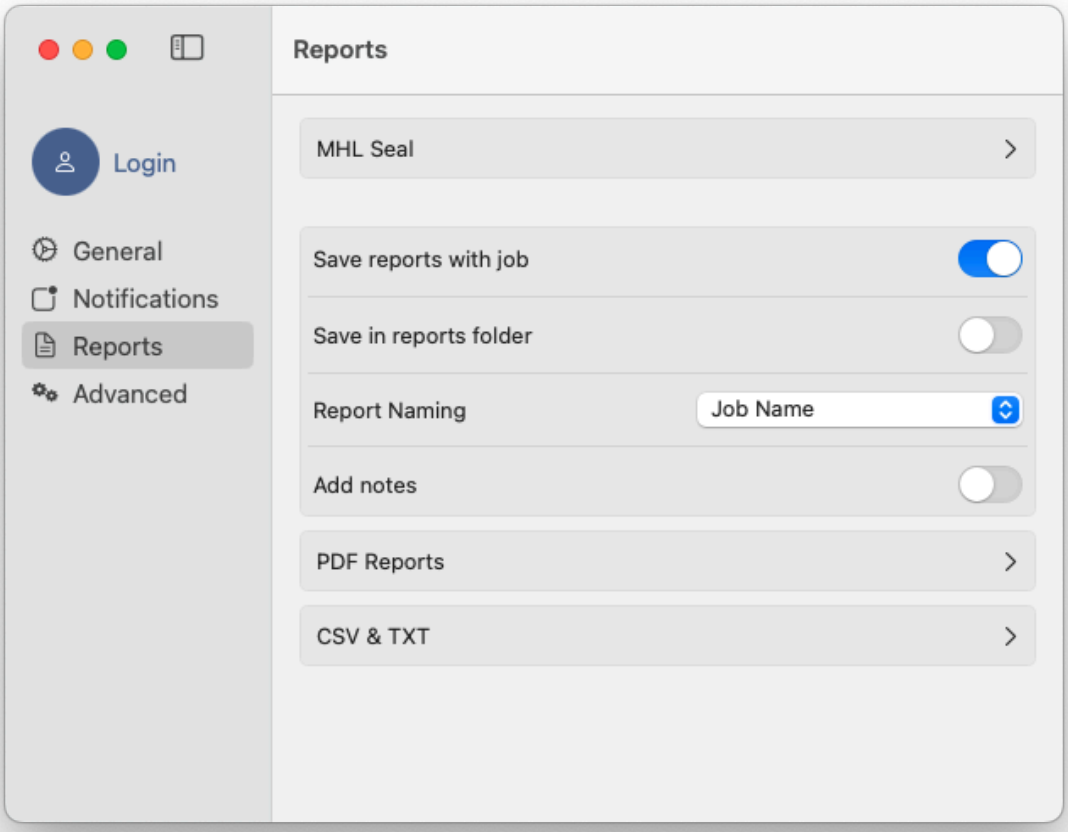
You must *Verify* the added phone number. A two-factor verification code will be sent to your phone. Once received, enter it and press *OK*.

TIP: Verification codes have a limited use time. If it has expired, clicking the *Refresh* button will send a new code.

NOTE: ShotPut Studio is a *send only* application. It will have no effect upon your other email or texting applications. Depending upon the receiving phone's data plan, you may incur additional charges for SMS messaging.

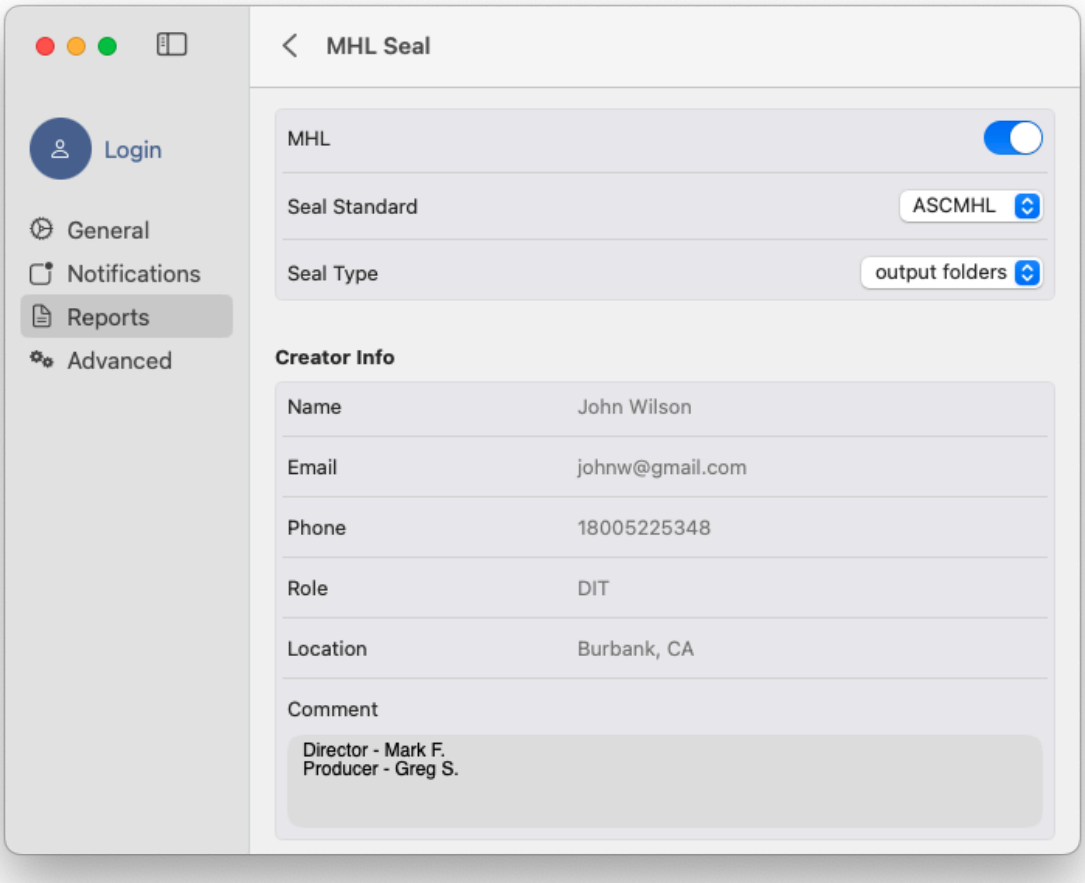
Reports

Reports can be an important bookkeeping tool and even used for simple offline search indices. Click the *Reports* button to choose your settings.



MHL Seal

ShotPut Studio can output two different types of checksum verification files, also known as *Seals*. The default is the new American Society of Cinematographers (ASC) industry standard Media Hash List (ASC MHL).



ASC MHL files adhere to the organization's formatting and naming standards (see www.mediahashlist.org/mhl-specification). These XML lists contain relative paths to data files and folders, and their original checksum values. These are always saved with output copies inside the Destination location(s).

Version 1 MHL style seals place the XML file as a 'sidecar' (outside of the referenced folder of files) or embedded in the sealed directory. This older MHL form is less robust than ASC MHL, but is still common and may be a requirement for some clients.

With either of these type files, you can check the integrity of data files at any time to ensure they still match the originals.

Seal Type

You may customize the locations being sealed with either MHL seal type. Seal root items will generate an individual seal for each item being offloaded. For example, if multiple directories are being offloaded a seal will be generated for each directory at the offload destination.

Seal output folders will generate a single seal for all of the items at each offload location. For example, if multiple items are offloaded to a single folder called “OffloadDestination” a single seal will be generated for “OffloadDestination”, regardless of the number of items offloaded.

NOTE: MHL seals will only contain information pertaining to items involved in the offload process. Existing items at the offload location and reports generated and saved to the offload location will not be included in the seal information.

Creator Info

This is an optional section that can only be filled out when generating an ASCMHL seal. It allows you to fill in information about who is creating the seal, which will then be included in the seal itself.

This provides an extra step of protection if the seal becomes corrupted, as you can then trace it back to the Creator of the corrupted seal.

Ignore Patterns

This is another section that only appears when generating an ASCMHL seal.

Ignore patterns are a way to specify items that should not be included in the ASCMHL seal.

Files which are not relevant to the integrity of the data, such as system files, can be omitted to prevent the seal from being incorrectly flagged as broken; the *.DS_Store* files present on macOS are another example of files which should be ignored.

Report Location

Save Reports with Job places reports in a *Report Folder* at the root of the copy destination(s).

Save in Reports Folder allows you to browse to an existing location on your computer (or attached drive) to save all your reports together.

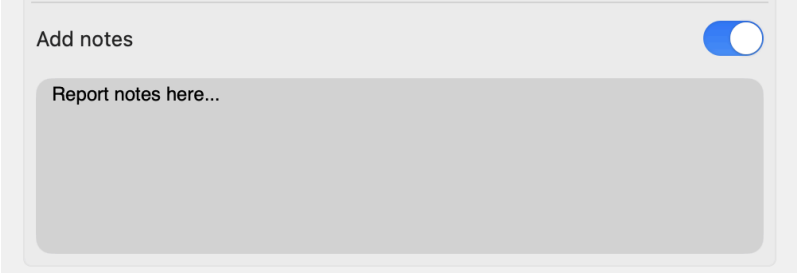
TIP: You may choose to save a report in both places - with the job and in a common reports folder.

Report Naming

Reports can be labeled automatically by the *Job Name*, or you can set a *Custom Name*.

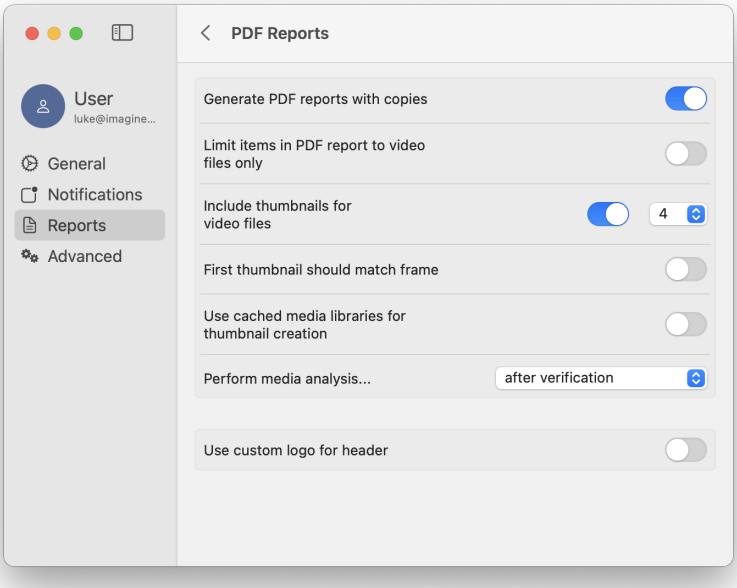
Add Notes

Here you can choose to include additional information in the report header such as Production info, DIT details, the project name etc…



PDF Reports

ShotPut Studio offers several job report formats, including *PDF*.



When selecting a report type, it will automatically be generated without further prompting after copying has finished.

PDF Formatting

ShotPut Studio is ‘video aware’ and can extract file metadata and thumbnails for over 20 different camera/video formats, including MOV, MXF, MTS, MPEG, DPX, ARI, AVI, and more.

With PDF report type enabled, choose between including information about all files in the copy job, or *Video Files Only.*

All Files means the report may have thumbs and metadata for video files as well as textual metadata information about non-video files that were copied.

Thumbnails for videos are optional. Choose up to 10 sampled video frames to be included for each video file. The thumbs are sampled based on percentages within the clip.

Normally the first thumb is grabbed multiple frames into the clip to avoid potential black or useless frames. However, you can select the option *First Thumbnail Should Match Frame* if using a clapboard or other logging tool.

NOTE: Image sequence files such as RAW will be treated as one continuous clip and will be sampled accordingly.

Use Cached Media Libraries

Selected by default, this option allows the user to select whether or not to cache media libraries into RAM when performing media analysis for the fastest possible result. Because media analysis utilizes multiple third party SDKs, it is possible to experience performance degradation and memory bloating after continued use of the same in-memory libraries.
If you are experiencing media issues with media analysis, we recommend unchecking this option. When this option is unchecked, each media analysis operation will utilize freshly loaded media libraries and remove them from RAM once the analysis is complete.

NOTE: While this option is slower, it can be more reliable if media analysis is failing while using the *Cached Media Libraries*.

Perform Media Analysis

Media analysis is the extraction of video file metadata and thumbnail generation. There are four options available when performing it, *Before Replication, Concurrent with Replication, Concurrent with Verification*, or *After Verification*.

To ensure a quick replication and verification time a user would want to select the last of these options. However, the fastest option overall is to analyze it *Concurrently with Replication*.

Use Custom Logo for Header

You may include a custom logo in your PDF reports.Enable *Use Custom Logo for Header* and browse to the image file you want to use.

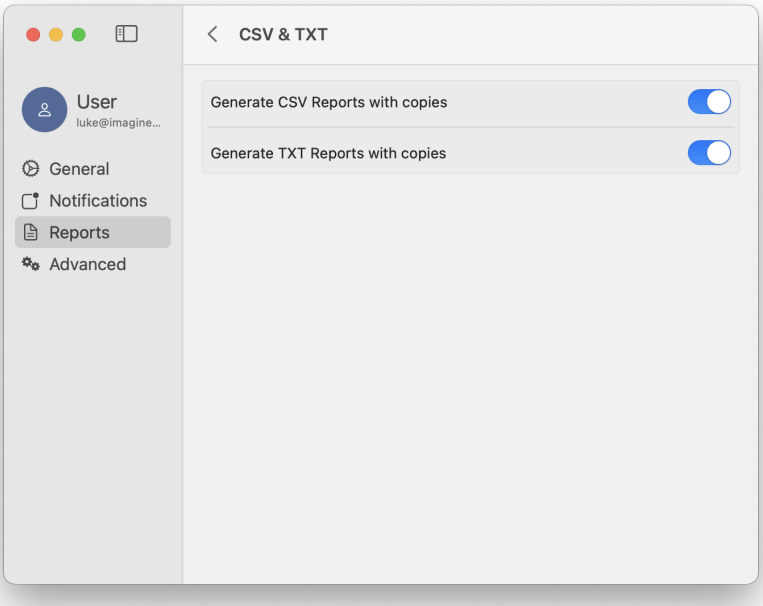
To replace the ShotPut Studio logo, your new image must be formatted as PNG, JPG, TIF, GIF, or BMP file type and be 128 by 128 pixels. Larger files will be resized appropriately. Non-square files may be cropped or stretched to fit.

TIP: To remove the header image, replace it with a new file. To revert back to the ShotPut Studio logo, uncheck *Use Custom Logo*.

CSV & TXT

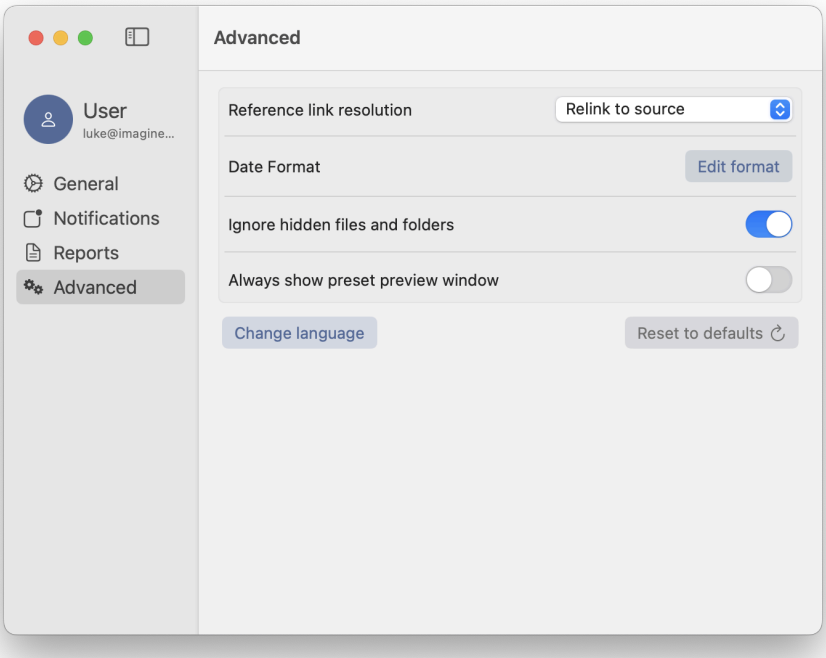
In this window, you can select to generate CSV and/or TXT reports.

Simply use the slider beside the corresponding report type to have it automatically generated when running jobs with both the Copy and Report tools.


CSV & TXT
User
luke@imagine...
General
Notifications
Reports
Advanced
Generate CSV Reports with copies
Generate TXT Reports with copies

Advanced Settings

Click the **Advanced** button to open the panel. Settings here are generally changed infrequently.



Reference Link Resolution

Symbolic Links (B-reference links) are files containing path information such as references to other media files, etc. Often symbolic links are ‘absolute paths’ meaning when copied, they are no longer valid (because they’re not relative paths).

While it’s unlikely your data will contain such files, you can instruct ShotPut Studio how to handle these type files should they be encountered.

Relink to Source

This option recreates the link after the copy is complete to point back to the original source.

NOTE: Links to any drives that were not copied will break if the drives lose connection to each other.

Due to changes within the reference file, verification of it is skipped because the resulting link file contents are no longer the same as the original link file.

Relink to Replicated Source

If the original item was part of the copy, this option will recreate a link to the newly copied item.

If the item is not part of the copy, then the original link file will be copied.

Due to changes within the reference file, verification of it is skipped because the resulting link file contents are no longer the same as the original link file.

Copy original

Use this option to find the linked file or directory and copy it instead of the link.

Copy original link

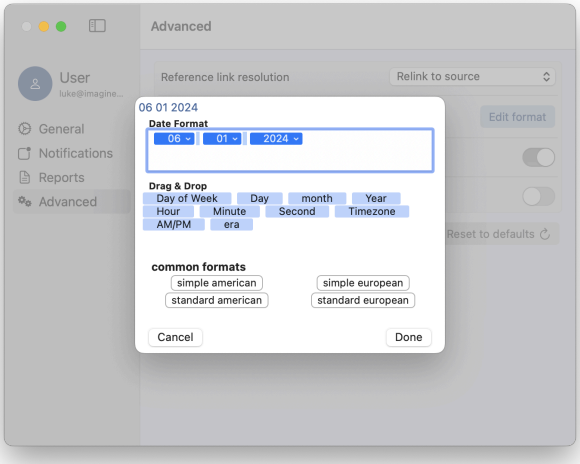
Use this option to copy the reference link ‘as is’ without any changes/resolution.

While the copied and original link files will be byte equivalent, there is no checking of links contained therein (so some references may be broken).

Date Format

Click *Edit Format* to change the style used in *Reports* and *Notifications*.

The preview is shown at the top of the dialog.



Select from one of the popular *Common Formats*. Alternatively, design your own format by dragging the items (month, day, year etc.) to the top area. You may also type in separators such as colons and commas.

To remove an item simply select it and press the *Delete* button on your keyboard.

Ignore Hidden Files and Folders

File systems can contain hidden files and folders. The function of these files vary from important os system files to simple indexing files used to make Spotlight function more efficiently. For media offloads, it is often desirable not to include these items as they often have no relevance to the integrity of the offload. This setting is turned on by default.

NOTE: Spotlight's ".DS_Store" files are ignored regardless of the option selection as copying these files can cause issues with verification.

Always Show Preset Preview Window causes a pop-up when starting a job with the *Preset Tool*. This window will also open if you are missing information, regardless of your preferences.

Change Language

ShotPut Studio supports localization for certain languages. Click the *Change Language* button to open macOS System Preferences.

Under the *General* tab you can change your preferred language for the computer.

Click the *Apps* tab to choose ShotPut Studio. Select from System Default or other supported languages in the drop down menu.

Reset to Defaults

Click the *Reset to Defaults* button to change all *Preferences* back to default values.

CAUTION: Reset applies to ALL Preferences, not just *Advanced*. Be sure to review *Basic*, *Notifications* and *Report* Preferences after using this function.

TIP: ShotPut Studio will match your system display preferences. To turn on *Dark Mode* use the Operating System's General Preferences.

Appendix A - Installation

This section details the initial required steps before using ShotPut Studio for Macintosh. Included in this section are instructions on installing the program, system requirements and registration. Skip this section if a registered copy of ShotPut Studio is already installed on your system.

Installing the Software

Download the installer to your computer and double click to run. You may be asked for the administration password for the computer. Save the folder of items to a temporary location on your computer such as Desktop. Refer to the README file inside for further instructions.

Since some of the components are subject to independent EULAs (end user license agreements), apart from Imagine Products' EULA, you'll be prompted to accept the terms of each.

The ShotPut Studio installer items folder will include:

- README.rtf
- ShotPut Studio application

Place the ShotPut Studio application into the 'Applications' folder. You may be asked for the administration password for the computer.

The application will periodically check for newer versions, but you can manually check at any time by clicking the 'Check for Updates' link under the application menu.

System Requirements

The minimum Macintosh configuration is:

- macOS 13 or newer
- 4 GB RAM
- 16 GB free disk space

Activation

ShotPut Studio activation requires web access to our server to register the software for use. When you purchased the application, a ShotPut Studio seat was added to your account on our

website. Upon first launch, the software will attempt to connect to our server and prompt for you to activate.

TIP: Activation information is stored on the system level independent of user preferences, so multiple profiles on the same computer may access the application as long as you install under the ADMIN user profile for your computer.

Just enter your account email and password for fast, easy activation, or enter the license number.

ShotPut Studio is a single user license. If you're upgrading to a new computer or need to transfer the software, be sure to ‘Deactivate’ from the ‘Application menu’, just above ‘Quit’.

How to Register

If you’ve purchased from our webstore, you’re already registered in our system. If you purchased from a reseller or other method, the reseller or Imagine can transfer ownership to you. You must have an account on our website to run the software and receive customer support.

Upgrades are released from time to time and the only way you'll get these is to be registered.

We may also send you periodic electronic news. Generally, we only notify of new products and trade shows, commentary and stories of interest from other users just like you. Let us know what you’re up to (publishing your stories is an inexpensive way to network within the production community).

Follow us on Social Media for timely and helpful information. On Twitter: @imagineproduct

Appendix B - Troubleshooting

Throughout the program, reminders and error checks help to anticipate trouble spots in the program while preventing inadvertent data loss. If a message appears that is unclear, check the Help topics or refer to the appropriate section of this guide for further explanation.

Technical Support

This product was designed to be easy to use and we want you to feel at home as you navigate through it. This guide should address the most often asked questions along the way. However, should you need support the specialists at Imagine can provide answers quickly and in terminology that you can understand.

Contacting Imagine Products

Visit Imagine's Website to fill out a problem report http://www.imagineproducts.com/ for fast, free service.

Updated news and patches will be available on the page, as well as Frequently Asked Questions under the Support tab on our site.

Alternatively you may email support @ imagineproducts.com

Check for Updates

From the *Application* menu, select *Check For Updates* to manually check for any updates.

Diagnostic Logs

Should you experience crashes or other system problems you may be asked to supply us with the *Diagnostic* logs. You'll find them here, under the *Help* menu.