



Confero

Your Image Sorting and Analysis Solution



2.0 User's Manual

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Introduction

Key Features

- Powerful automatic sorting options include: QR codes, time stamps, and GPS coordinates
- Save hours of your time by naming your files in a batch process
- Perform advanced sorting and / or analysis by outputting your images' Exif data to a spreadsheet
- Automatically output compressed PDFs *and* backup your original images in separate directories with the same name
- Preserve your images by converting them into TIFFs

Confero Licensing

The [End User License Agreement](#) for Confero 2.0 grants a non-exclusive license to install Confero on up to 2 computers at a time.

System Requirements

- Windows 7, 8 and 10 (64 bit); OS X
- Java 8
- 4 GB RAM
- Internet access during installation

Installing Confero

Download Confero at waterlooinnovations.com/download/. Run the msi (Windows) or .mpkg (Mac) file and follow the prompts.

Before running the installer, Please download the latest version of Java for free at java.com/download/.

Java Installation Problem Solving

The vast majority of our users already have Java installed on their computers or install Java without encountering any problems. If your Java is up to date, but you still receive an error message, the Java installer is not working correctly.

Many users can resolve this problem by installing the 64-bit "offline" installer available for download [here](#). This installer tends to be more robust than its 32-bit counterpart.

If java still does not run, you are probably running an anti-virus program or third party firewall software during the Java installation. Oracle [recommends](#) that you temporarily turn off these security programs, reinstall either of the aforementioned Java versions, reboot your computer, and re-enable your security software.

Mac Installation Problem Solving

If you are running OSX and receive the following error message, you need to adjust your computer's security settings. By default, OSX does not trust third party applications that are not purchased on Apple's App Store. To allow Confero to run, go to System Preferences → Security & Privacy → and under the "Allow Apps downloaded from:" section select "Anywhere."



Checking for Software Updates

If you subscribe to Waterloo Innovations emails, we will notify you of updates. You can also download the latest version of Confero any time at waterlooinnovations.com/download/.

Uninstalling Confero

Windows

Navigate to the Control Panel, click “Add / Remove Programs” and remove Confero.

Mac

Navigate to your Applications folder and delete the “Confero” directory.

Preparing for QR Code Organizing

You can use QR codes to help Confero separate your session into useful sets. This section describes several different ways you can obtain and use QR codes with Confero. Regardless of the type of QR code you use, only photograph it after you finish photographing your subject or file. Confero treats images containing QR codes as markers and discards them during its sorting process.

To utilize Confero's built-in QR code:

1. Run Confero.
2. Click File → "Save QR code."
3. Select a directory, such as the desktop, to save the file ConferoQRCode.jpg.
 - If you are using a scanner, print ConferoQRCode.jpg and scan it after you finish scanning each set of documents
 - If you are using a camera, copy ConferoQRCode.jpg to your smartphone and ensure that you can display it.

Because Confero can read the data stored in QR codes, you can also download cell phone apps to create unique QR codes. Consult "Import Images" on page 12 to learn how Confero can extract text from QR codes and use it to automatically label your image sets.

Optimal QR Code Recognition:

For optimal performance, ensure that your images comply with the following guidelines:

1. Always photograph your QR code at a perpendicular angle.



2. If you use your cell phone to display the QR code, ensure that the camera does not capture glare from overhead lighting (shown below).



3. Position the QR code so that it is straight. Confero sometimes fails to recognize rotated QR codes (shown below).



4. Ensure that there are no folds in your QR code paper. Folded paper can compromise Confero's QR code recognition (shown below).



5. Ensure that your printer has plenty of ink. A partially faded QR code can compromise recognition.



Preparing for Other Import Organizing Techniques

Preparing to Sort Your Set By Time Interval

Confero can examine when your images were captured and sort them according to time gaps. Preparing for this function is easy, determine a minimum time interval between photographing or scanning document sets for yourself in advance, wait this period before proceeding the next set, and then follow the instructions described in “grouping by GPS distance” described on page 13.

Preparing to Sort Your Set By Geographic Distance

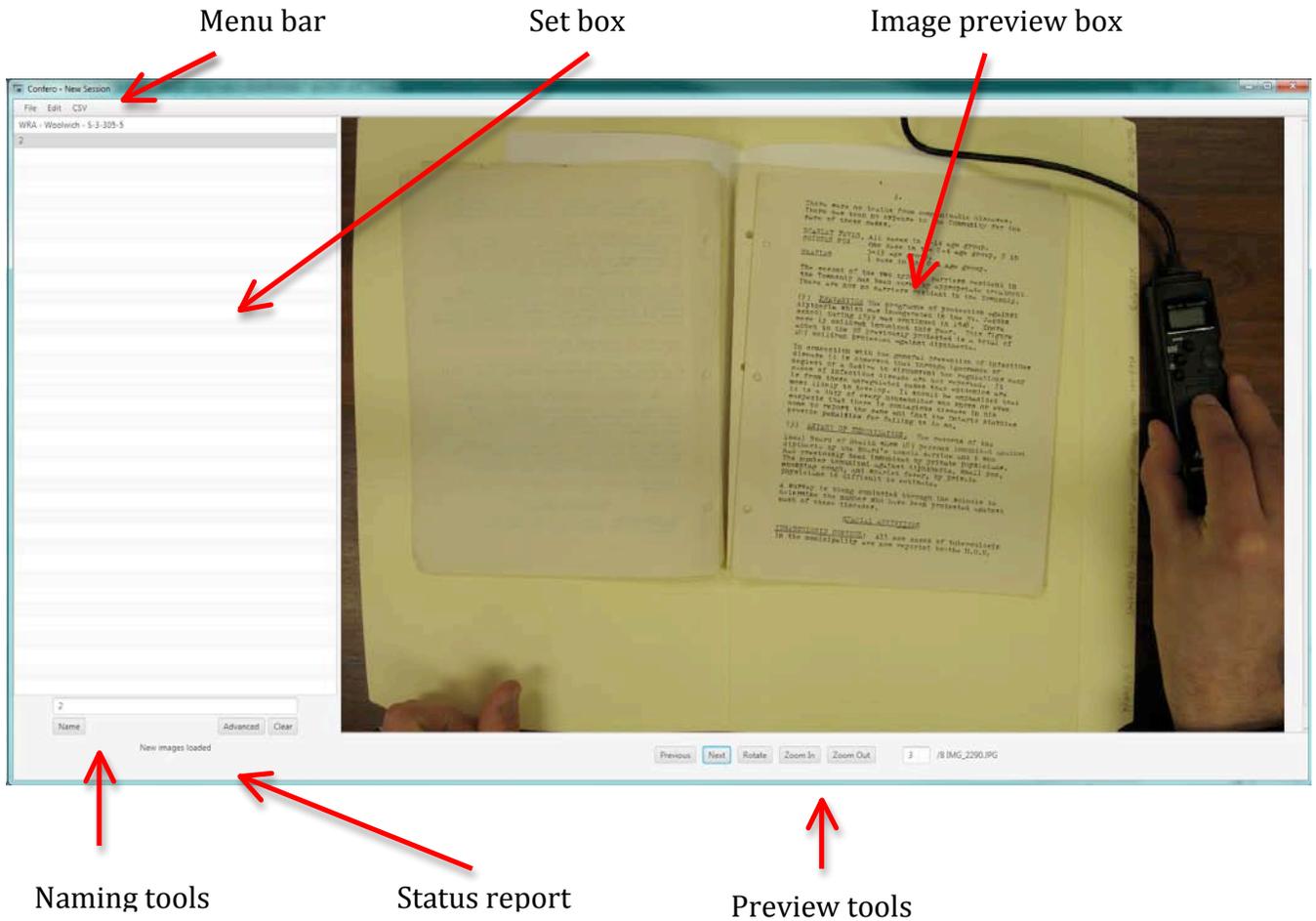
If your camera has a GPS chip, or if your camera can gather GPS data from a local wifi connection with your smartphone, Confero can scan this data and group your images according to a user-inputted distance interval. To learn more about this function consult “grouping by GPS distance” on page 13. By default, Confero calculates the distances in serial. For example, it will calculate the distance between image A and B, as well as the distance between images B and C, but it will not calculate the distance between images A and C. The latter sort can be accomplished by using the “Export to CSV” described on page 17.

Preparing for Advanced Organizing via CSV

Confero can facilitate advanced sorting functions by extracting the Exif data from your images and exporting it to a CSV file that can be opened in most major spreadsheet programs. Exif data can include camera type, image resolute, time stamps, GPS coordinates, and a host of other variables. You can read more about this function on page 17, but it is important to be aware of this functionality before beginning your photography or scanning.

Using Confero

This section will show you how to use the main Confero window (shown below) to view, name, and edit your image sets.



Menu Bar: File

New Session

Clears all current session data.

Save Session

You can save your work to a *.cfo file. You can open this file at a later date by using the “Load Session” function (consult below).

Load Session

This menu item allows you to resume a previous Confero session by calling a file browser window and allowing you to select a *.cfo file.

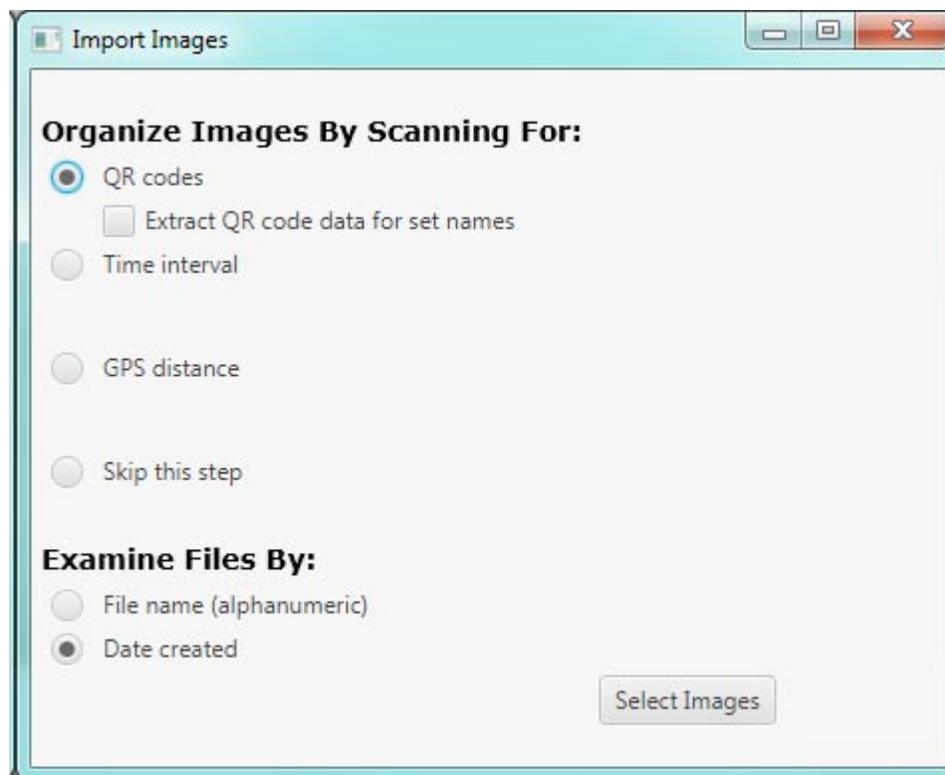
Import Images

Confero relies on stable directory structures. Do not move or rename files and folders until you finish your Confero session.

To import your images from a camera or scanner, click File → import. The import window will appear and allow you to organize images by:

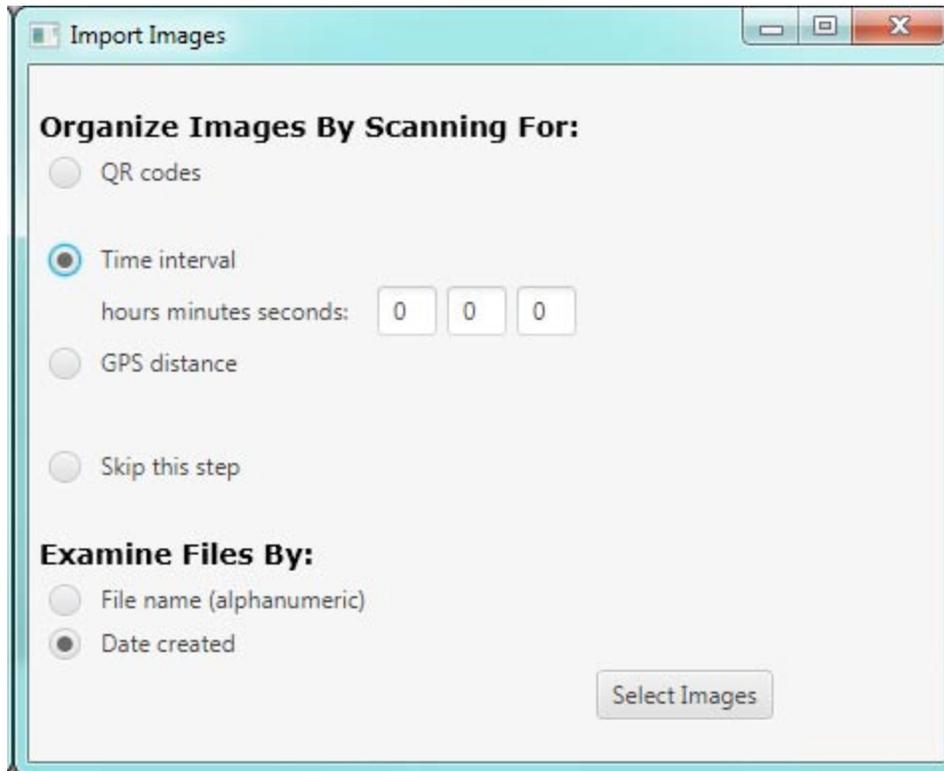
1. QR codes

This option (shown below) will scan every image in your batch for a QR code and begin gathering a new set whenever it finds one. If you check “Extract QR code data for set names,” Confero will use the data within each QR code to name the set.



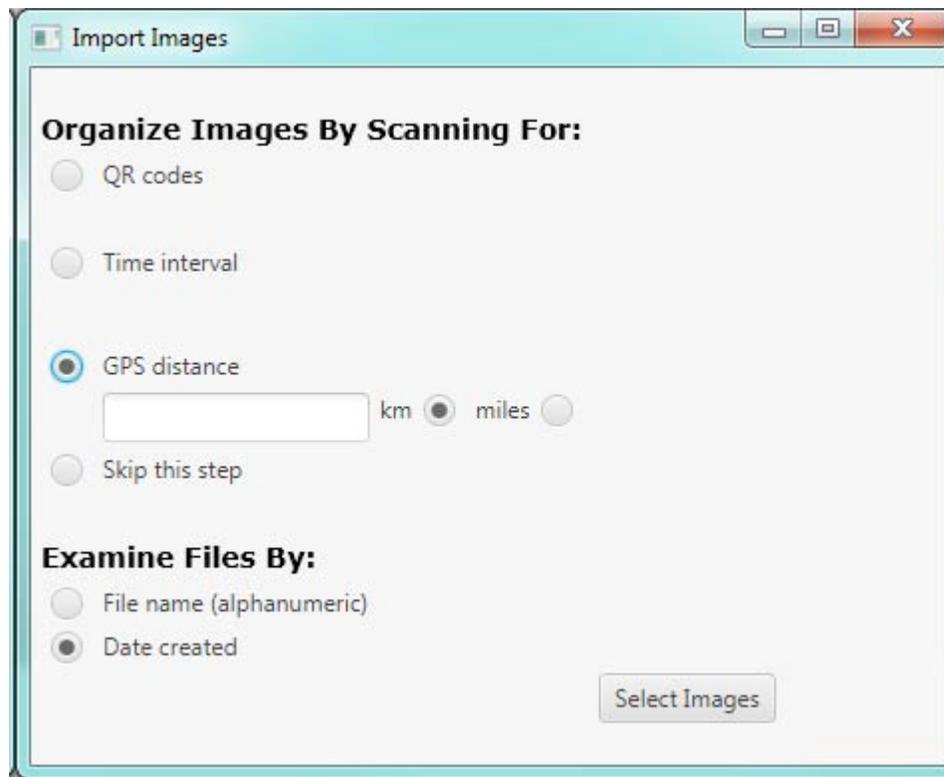
2. time interval

If you select this option (shown below) and input numeric values, Confero will compare every image's time created data. If your images have no Exif data, Confero uses each file's date-created time-stamp. When the time interval between two images is larger than your inputted value, Confero will create a new set.



3. GPS distance

If your images have Exif GPS coordinates, select this option (shown below). Input a distance and select the appropriate unit of measurement. If the distance between two images is larger than your inputted value, Confero will create a new set. Before using this function, consult "Preparing to Sort Your Set By Geographic Distance" on pg 9.



4. skip this step:

This imports your entire batch of images into a single set in the set box.

Examine Files by:



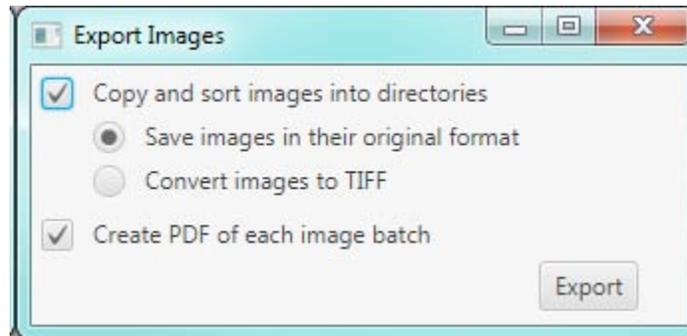
- **File name (alphanumeric):** Confero will examine the batch of images in alphanumeric order. This function is useful if you added files to the batch or modified image file names.
- **Date created:** This function will use the images' Exif data to sort your files. If your images lack Exif data, Confero will use the image files' date created metadata.

When you are finished selecting your options, click the “Select Images” button, navigate to your image batch directory, highlight your images by clicking the first and last files while holding the “shift” key, and then click “Open.”

A loading bar will appear at the bottom left-hand corner of the window to show Confero's progress.

Export Images

When you are finished manipulating and naming your image sets, select File → Export Images. The popup window (shown below) gives you the option to create PDFs, copy your image set(s) to new directories, or create TIFFs copies of your images.



After you click “Export” and select a directory to store your new files, a loading bar will appear at the bottom left-hand corner of the window to show Confero’s progress.

Save QR Code

Select this option to save a pre-made QR code to your computer called ConferoQRCode.jpg. You can either print this file, or save it to your smartphone.

Menu Bar: Edit

The edit menu allows users to modify their session and / or sets using the following options:

Split Image Set

To split an image set, use the “Previous” and “Next” buttons or the page number textbox to navigate to the image that you want to begin your new set. Then click Edit → Split Image Set.

Merge Image Set(s)

To merge multiple image sets, click the applicable rows in the set box while holding the “Shift” or “Control” (OSX “Command”) key and then click Edit → Merge Image Set(s).

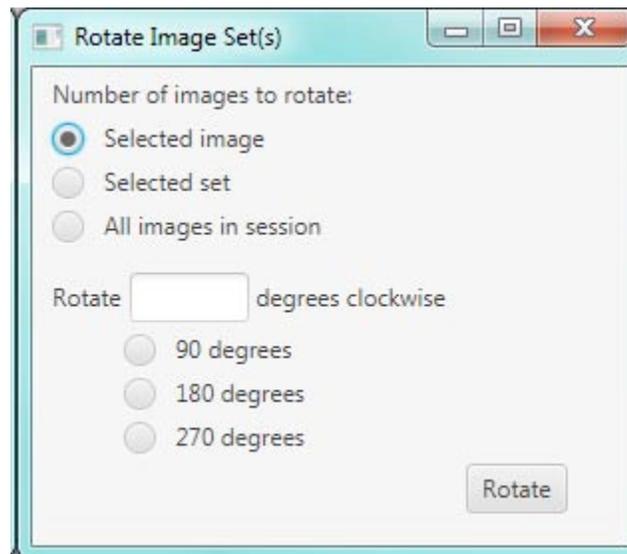
Delete Image Set(s)

To delete one or multiple image sets, click the applicable rows in the set box while holding the “Shift” or “Control” (OSX “Command”) key key and then click Edit → Delete Image Set(s).

Rotate Image Set(s)

To rotate the previewed image(s) and the images you will later export, go to the File Menu and click Edit → Rotate Image Set(s).

The Rotate Image Set(s) popup window will appear (shown below). You can choose how many images to rotate. You can also enter the precise number of degrees to rotate clockwise, or choose one of the listed options. Click the “Rotate” button when you are ready.



NOTE: Pressing “Return” or “Enter” while this window is open is like hitting the “Rotate” button with your mouse.

Menu Bar: CSV

Export to CSV

This function is useful for doing image analysis based on Exif data, or recognizing your images into novel sets. Begin by going to the File Menu and clicking CSV → Export to CSV. After you enter a file name and select a directory using the file browser, Confero will export images' Exif data to a CSV file that can be opened in most major spreadsheet program. A loading bar will appear at the bottom left-hand corner of the window to show Confero's progress. The bar will be replaced with "CSV exported" when Confero finishes creating the CSV file. Thereafter, you can develop formulas to perform complex sorts.

When you are finished sorting in the CSV file, rename the cells in the "Set Name" column so reflect your new sets. When you are finished renaming your sets, save your changes, return to a new session of Confero and perform the Import from CSV function (consult below).

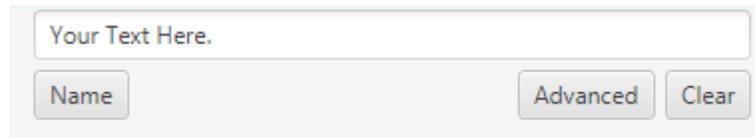
Note: Confero's Import from CSV function (consult "Import from CSV" for more information) only requires the first three columns ("Set Name," "File," and "Path") to function. The remaining CSV columns will vary depending on the camera(s) or scanner(s) that captured the images.

Import from CSV

After using the Export to CSV function (consult above), you must import the modified CSV file back into Confero. To this, go to the Menu Bar and select CSV → Import from CSV. After navigating to the correct directory, click "open." Your sets will appear in the set box.

Naming Tools

When you first run Confero, a textbox appears with phrase “Your Text Here” (shown below). This is where you type all of your set names.

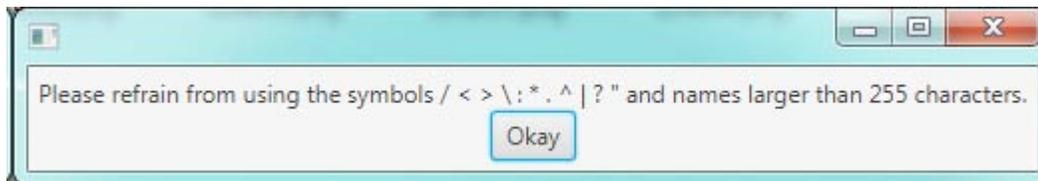


This portion of the interface has several important buttons.

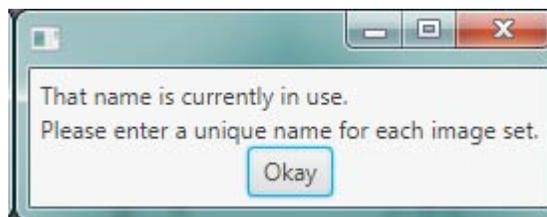
Name

When you have finished typing a file name into the textbox, press “Return” on your keyboard or click the “Name” button to label the set. The new name will display in the set box.

If the name you typed has illegal characters or is too long for your computer’s file system, a popup message will appear (shown below) describing correct file naming parameters.



If the name you typed is already assigned to another entry, a popup message will appear (shown below) explaining that you have already given a set that name.



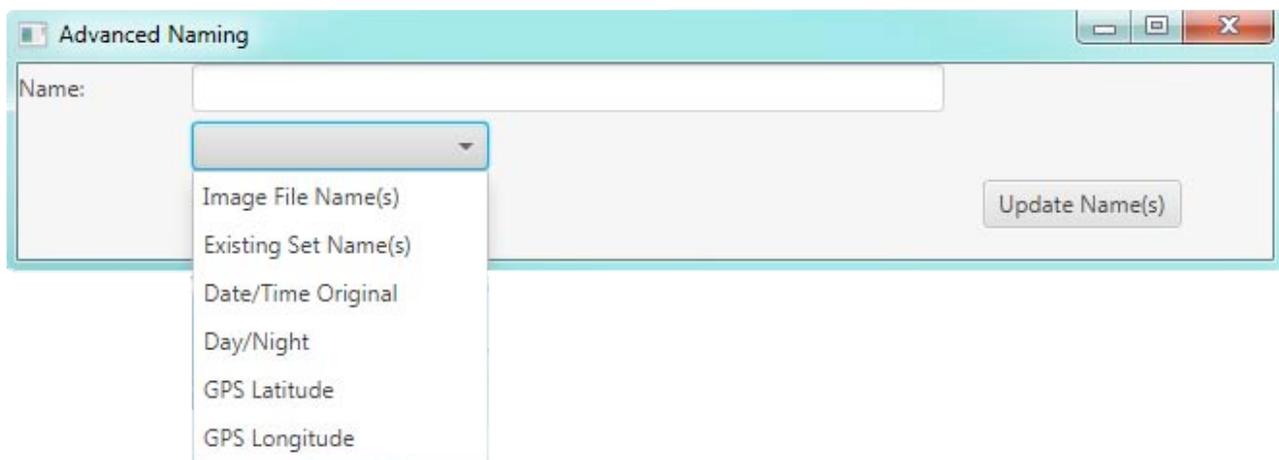
Clear

The clear button removes all text from the textbox.

Advanced

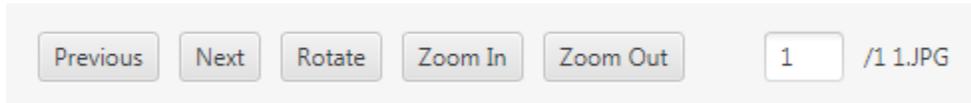
To name multiple sets simultaneously, or use Exif data to automatically name each of your sets.

1. Highlight multiple items from the set box.
2. Click the “Advanced” button.
3. A new window will appear (shown below).



4. Input custom text and/or use the dropdown menu to add Exif variables to your set names.
Note: you can resize the textbox by resizing the window.
5. Click the “Update Name(s)” button to update the set box display.

Preview Tools



Previous

Click this button to make the image preview box display the preceding image in the set.

Next

Click this button to make the image preview box display the next image in the set.

Rotate

Click this button to rotate the image currently displayed in the image preview box. Note: this function, unlike Edit → Rotate Image Set(s), is temporary and will reset as soon as you view another image. To permanently rotate your preview or export image(s), consult “Rotate Image Set(s)” on page 16.

Zoom In

Click this button to make the image preview box to zoom in.

Zoom Out

Click this button to make the image preview box to zoom out.

Page Number Textbox

Enter a number into this field to skip to the corresponding image in the set.

Glossary

Batch: a series of sets that Confero processes together.

CFO: the file format Confero uses to store your session when you click File → Save Session.

CSV file: A comma-separated values file. Confero uses this file format to facilitate advanced sorting or analysis of images via most major spreadsheet programs.

Exif: Exchangeable image file format data is encoded in most image files. Confero can use this data for advanced naming or sorting functions.

Java: A software language developed by Oracle that Confero requires to run (consult “System Requirements” on page 3).

JPG: (also JPEG), an acronym for Joint Photographic Experts Group compresses images to reduce their file size. This process impacts image quality, but most users will not notice the difference.

QR Code: An acronym for “Quick Response” code. Confero uses them because they are easy for software to spot in photographs. QR codes store data that can be used to create file names.

Set: a series of images that will be grouped into a directory or multipage PDF.

TIFF: An acronym for Tagged Image File Format. These images are better than JPGs at preserving an image’s data over time because they do not support significant compression. TIFF are consequently much larger files than equivalent JPGs.