

# Jobs

*Central to the Timestone Software applications are jobs and job files.*

## What are jobs and job files?

One of the main advantages of the Timestone Software workflow is the use of jobs or job files to save all the work performed. The job is a self-contained entity that contains all the information regarding data, images, matching, ordering and more.

Jobs can be given a name and saved, meaning there is no need to complete the job in one session. Opening a saved job allows the user to continue working from where he or she left off, without the need to repeat any of the tasks performed up to that point.

Jobs can be stored on a central server and opened by users across the network. Furthermore Jobs can be sent from one location to another, notably for example, from a photographer to a lab. After production jobs can be archived and opened at any time in the future.

## The tnj job file – Version 3 and prior

For all applications prior to Version 4, jobs are saved as a single file with an extension of tnj – *Timestone Neo Job*. For this reason the terms job file and tnj file are often used interchangeably.

The tnj file contains all the information regarding a job. This includes such things as:

- The images imported into the software
- All fields and data
- Editing information performed on the images
- Order information entered into the software
- Pose labels
- Print queues
- Matching information
- Chroma Key (green screen) tasks

## The MySQL job – Version 4 and later

Version 4 saw a major upgrade to the software where all the job information is stored in tables inside a MySQL database rather than in a single tnj file.

With Version 4, the job name is stored in a table that relates to other tables as needed. For this reason it is incorrect to refer to a job in Version 4 as a job *file* since there is no file as such.

Unless noted otherwise, throughout this document we shall use the term “job” to refer to both a tnj job file for versions prior to Version 4 as well as job in the MySQL version – Version 4 and later.

### MORE INFORMATION

#### Job files and Jobs

The tnj file is actually a Microsoft Compound File into which is written all the information required. This includes the storage of images as displayed in Images Mode - a fact that has important implications with regards to the size of the tnj file.

Information inside a Microsoft Compound File (and hence the tnj job file) is “closed” requiring programming in the host application to read and write information to it.

In Version 4 job information is stored in fields across several tables of a MySQL database. This information is “open” for all to access and can therefore be used by any third party application capable of working with a MySQL database. The job name itself is stored in a table called “Jobs” in a field called “name”

## Limitations on tnj file size

Windows sets a limit to the size of a Microsoft Compound File – tnj files. In Windows 2000 this limit is a maximum of 2 gigabytes whereas in Windows XP the limit is 4 gigabytes. In reality the workable limit of such a file is far less than the quoted maximum and performance and stability issues arise well before the limit is reached.

A tnj file can vary in size from a few megabytes to well over a gigabyte depending on the number of images imported into the software and their size. For very large jobs, with possibly thousands of images, it is possible to approach the compound file size limitation. With this in mind, the images imported into such jobs should be done so at low resolution to keep the file size down.

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Note: To keep job file sizes down images are generally imported as thumbnails, the size of which can be set by the user.

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Since jobs in Version 4 are not a single file, no such limitations exist. However to optimise performance it is recommended the images still be imported as thumbnails at a size no larger than necessary.

## Starting a new job

In many cases it is possible to begin working in the software without actually starting a new job first with one of the File>New commands listed below.

When the software is launched for example or after closing an existing job, it is possible to begin work then save the job at an appropriate time. In these situations the user has no need to invoke one of the File>New ... commands.

Exceptions exist however and the File>New ... command must be used if workspaces are enabled and must always be used in Version 4.

### The File>New commands

When starting a new job the user is presented with choices such as whether the job will be created inside a workspace or from a master job or simply from the current program defaults.

New jobs are started from the File Menu in any mode other than Design Mode. (In Design Mode a File>New action will create a new template not a new job.) Essentially three new file actions are available prior to Version 4 while a further method for starting a job is available in Version 4.

- **File>New ...** Starts a new job with program default settings or within a workspace if enabled
- **File>New from ...** Starts a new job based on another job
- **File>New from PSPA.** Starts a new job based on a PSPA CD export
- **File>New from tnj.** Version 4 only. Starts a new job by importing an existing tnj job file

### File>New ...

The **File>New ...** command starts a new job using the current set of program defaults and options. These include but are not limited to:

- The Detail Fields used to hold data
- Paths to images, templates and graphics files
- Aspect ratio and head size guides to assist in image editing
- Size of previews (thumbnails) used when importing images

For a detailed description of the various program defaults refer to Chapter 2 - Configuration

The **File>New ...** command requires no further action – the user can begin working on the job and then save it at any time. However two exceptions require further user input after invoking a **File>New ...** command:

1. A job is already open and has not been saved - the user will be prompted to save the current job before continuing.
2. Workspaces are enabled - the user will be prompted for a workspace to use before continuing.

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Note: A File>New command does not name or save a job. It is strongly recommended the user save the new job immediately and thereafter save the job frequently.

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### File>New... with Workspaces

Workspaces allow the user to start new jobs inside a specific working environment where certain parameters have been pre-defined. These include:

1. **Detail fields.** The fields that will be used for jobs created with this workspaces
2. **Template paths.** The path to the templates that will be available in the production modes of the software
3. **Aspect ratios and head size guides.** A set of guide lines to assist the user when cropping images

Users tend to create different workspaces for the different types of jobs they handle. A sports photographer, for example, may create a workspace for each of the different sports he or she photographs. Each workspace may use a different set of fields and templates. A school photographer may use different workspaces for different seasons or school districts.

To create a new workspace:

1. Select **File>Workspaces ...** in any mode other than Design Mode

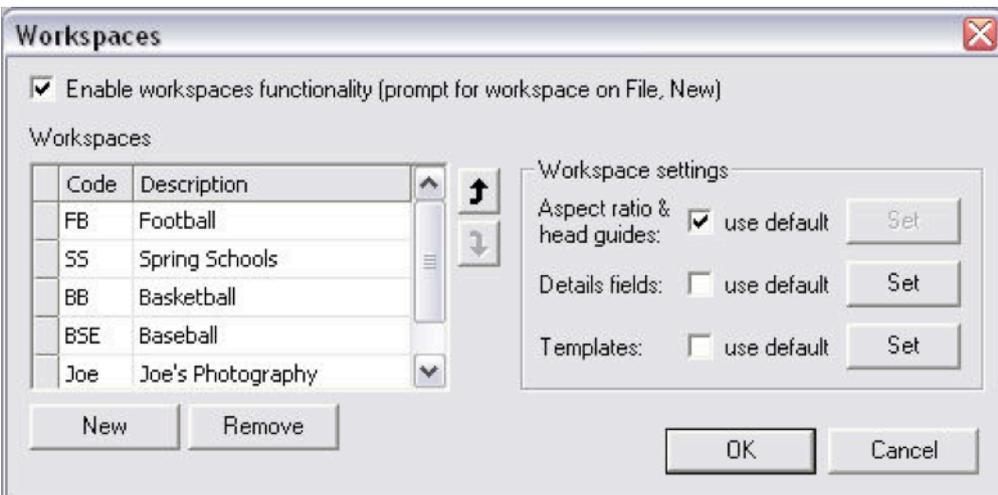
The Workspaces window appears. This window is used to create, modify and enable workspaces.

2. Click the **New** button to define a new workspace
3. Enter a code and description for the workspace

Initially the use default option is checked for each of the three workspace settings. This means the workspace will use the program default values for these parameters as defined in File>Options.

4. Uncheck the **use default** option in order to enable the **Set** button for a given parameter

5. Click the **Set** button to bring up the relevant window for each parameter
6. Define a set of aspect ratio guides, fields or template paths as required
7. Workspaces can be on (enabled) or off. Click the **Enable workspaces functionality** check box to turn on workspaces
8. Click OK to accept all the changes and close the Workspaces window



*The Workspaces window where workspaces can be added, removed and modified.*

*A workspace can use the program default settings for Aspect ratio guides, Detail fields and Template paths by leaving the use default option checked. Alternatively clicking the Set button will allow you to enter specific settings for each of these parameters.*

Once workspaces are enabled, a **File>New ...** action will prompt the user to select a workspace or continue working without a workspace. If the latter is chosen the software will use the current program defaults for Aspect ratio guides, Detail fields and Template paths.

## File>New from File – Using Master jobs

A popular method of starting a new job is to use a master job as a starting point.

The **File>New from File ...** command enables the user to start a new job based on all the settings, defaults and options of the master job. In fact the action is akin to opening the master job (File>Open) with the important distinction that the new job is untitled ready to be saved. In this way the master job can never be overwritten.

### MORE INFORMATION

#### Why use Master jobs?

Master jobs offer considerable benefits over the other new job actions due to the number of defaults, options and settings that are “inherited” by the new job.

As we have seen a normal File>New ... action will use the current program defaults while workspaces takes this a step further by allowing different defaults for aspect ration guides, fields and template paths. Both methods save the user time by avoiding repetitive tasks while workspaces ensure a consistent working environment for similar job types.

Master jobs allow a new job to be created with not only the current program defaults but also many settings that are job specific. Some of the repetitive tasks that are avoided by using master jobs include:

- Defining fields
- Entering values into field, notably file and folder fields
- Importing graphics into fields
- The mapping of fields when importing or exporting a text file
- Selecting the appropriate folder of templates to be used
- Sorting of the print queue
- Manually created folders

## Creating a master job

It is important to understand that *any* job can act as a master job. Invoking a **File>New from File...** action will allow the user to browse to any job and “open” it. The new job will essentially be a clone of the original but without a job name.

In reality using any saved job as a master is not practical since the original job is likely to be full of unwanted images and data. A better approach is to create jobs that will act specifically as masters. This can be done by opening a saved job, removing images and data, and then saving the job with a new name.

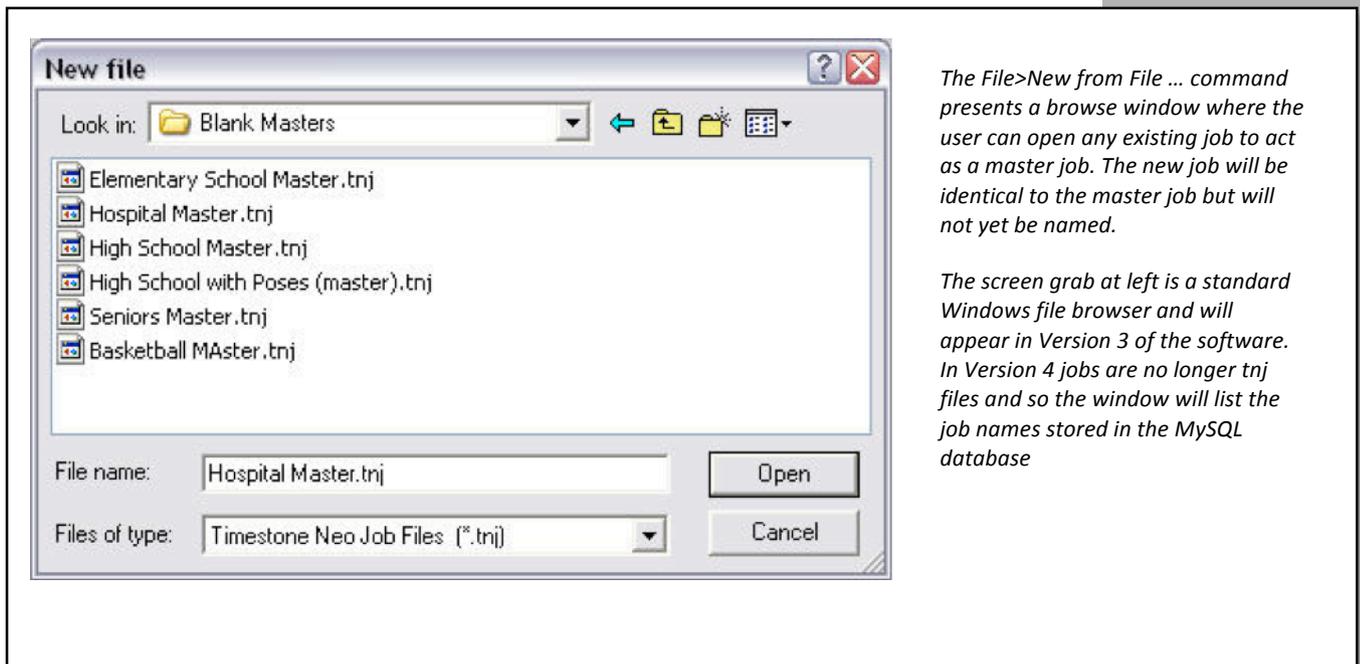
Alternatively the master job can be started from scratch, proceeding through the entire workflow process to make sure as many of the options and settings as possible are selected. These settings (for example the field mapping when importing a text file) will be “remembered” when the job is saved and will already be set when a new job is started based on this master.

## Using a master job

To start a new job based on another (master) job:

1. Select File>New from File ...
2. Browse to the desired master job and click open

A new job will be created and the title bar will show “untitled”. The job can be given a name (and saved to a new location if desired) with the File>Save ... command.



*The File>New from File ... command presents a browse window where the user can open any existing job to act as a master job. The new job will be identical to the master job but will not yet be named.*

*The screen grab at left is a standard Windows file browser and will appear in Version 3 of the software. In Version 4 jobs are no longer tnj files and so the window will list the job names stored in the MySQL database*

## File New from PSPA CD

Although seldom used, a job file can be created by importing a PSPA CD.

The **File>New from PSPA CD ...** command will present a window whereby the user can browse to the PSPA CD root folder, usually called PSPAi, containing the export's index.txt file.

The procedure can be considered a reversal of creating a PSPA export from the software. Instead the **File>New from PSPA CD ...** command will import data and images, create folders and match the images to the data. The new job will be unnamed allowing the user the opportunity to name it using the File>Save command.

## Importing tnj files into Version 4 – File>New from tnj ...

In addition to the new file options discussed so far, Version 4 allows new jobs to be created by importing tnj files.

In this way, Version 4 users can “bring in” their old Version 3 (and earlier) jobs into the centralized MySQL database. All aspects of the tnj file are converted into values in the various database tables.

To import a tnj file into Version 4 select **File>New from TNJ file ...** then browse to and select the desired tnj file.

## Working with jobs and job files

One of the key features of jobs and job files is that the same job can be opened by many of the Timestone Software applications. This means a job can be created in one program and then opened in another, a fact that creates important workflow opportunities.

A typical workflow scenario utilizing several Timestone Software programs could be:

- A job is created in PackBuilder where fields are setup and data imported. Barcoded shoot cards are printed.
- The job is opened by CapturePost on photography day where the photographer finds subjects by scanning their barcode then photographs them with CapturePost automatically matching the images to the subject.
- The job is returned to the studio where image editing is performed back in PackBuilder. Orders can be entered. Exports for yearbooks etc can be performed.
- The job is sent to a lab that opens the job in NeoPack/Professional to print packages and many other products. The lab also opens the job in NeoComposite where composite pages are printed.

The above is a simplified description of one possible workflow scenario with the intention of demonstrating how a Timestone Software job can be opened by several applications. This saves the user having to repeat tasks that are common to each production process. Importing, editing and matching of data and images, for example, needs to be only carried out once.

## Saving tnj job files

Job files are saved with the **File>Save** command where the file is given a name with an extension of tnj. Generally job files are saved with the name of the job at hand which is often the name of the school, league or whatever name allows the user to easily identify the job.

The **File>Save as ...** command allows the job file to be saved with a different name essentially duplicating the job file.

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Note: Some users elect to never save job files, preferring to use the software as a production module only, having no need to keep the job after printing.

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## Saving work with Version 4 jobs

When working in Version 4, data is being constantly written to the MySQL tables. In this way the job can be considered to be “auto-saving”.

## Opening jobs

Job files are opened with the **File>New** command where the user is presented with a browse window to find and open the desired job file.

Although it is possible to use the Windows file association feature to map tnj files so they opened by a specific Timestone Software application, this is of limited use since tnj files can be opened by several applications.

In Version 4 the **File>Open** command presents an alphabetical list of the jobs stored in the database. To open the job either select it from the list or enter the job's name into Job window.

### MORE INFORMATION

#### Single user tnj files and multi-user jobs

TNJ job files are single user only. If a job file is already open, it cannot be opened again until the job file is closed.

Version 4 jobs are multi-user. The same job can be opened multiple times. This offers considerable workflow advantages over the single user tnj files. For example two people can be working on the same job at the same time, one entering orders while the other crops images or, again from the same job, packages can be printed from NeoPack/Professional while composites are being printed with NeoComposite.

## Closing jobs

To close a tnj job select **File>Close** from the main menu. If the job file has not been saved, the user is asked to save the job before continuing.

Version 4 jobs are also closed with the **File>Close** command but since job edits are constantly being saved to the database tables there is no need to prompt the user to save the job.

## Compacting a job file

As we learnt earlier in this chapter the main contributor to the size of the tnj job file is the number and size of the images imported into it.

If images are deleted from a tnj job file, they are not physically removed meaning the job file size stays the same. To completely remove the deleted images select **File>Close & Compact** from the main menu. This action takes a little longer than merely closing the file but results in a smaller file size.

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Note: There is no harm in not compacting a job – the job file is simply larger than it might otherwise be. It is recommended a job file be compacted after deleting many images and before archiving.

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Since Version 4 does not use loose job files, **File>Close & Compact** has no effect on Version 4 jobs.

## Merging job files

A powerful feature of Timestone Software is the ability to merge jobs.

The most common use of merging jobs is seen with CapturePost users where two likely scenarios could be:

- A school, league or event requires several cameras at a shoot. Each photographer works independently with his or her copy of the tnj file. After the shoot the multiple job files are merged into a single job file
- At a school shoot, different job files are used for the original shoot day and the retake or absentee day. The job files are then merged once all photo shoots have been completed.

### Preparing the job files

Preparing job files that will be merged later on makes use of the **File>Save as ...** command where essentially clones of the original job file are created each with a different name.

We shall use the above-mentioned multi-camera CapturePost shoot as an example where three cameras will be used.

1. Create a new job file in the normal way, defining the fields as required and importing data. Each subject should have a value for the unique field
2. Save the job file as a “master”. For example Master\_CHS.tnj
3. Using the **File>Save as ...** command, save three copies of the master file. Name them in an appropriate manner for each of the cameras/photographers. For example Cam1\_CHS.tnj, Cam2\_CHS.tnj and Cam3\_CHS.tnj
4. Distribute the three tnj files to each of the photographers

The photographers use their own copy of the job file in the normal way. Since each job file has the complete set of data, subjects can approach any camera to be photographed. In fact subjects can be photographed at more than one camera and, as we shall see, there are options available to handle these situations.

## Merging the files

To merge the three job files after the shoot:

1. Open either the master job file (Master\_CHS.tnj) or any of the three copies eg Cam1\_CHS.tnj.
2. Select **File>Merge ...** from the main menu
3. From the **Merge file** window, browse to the location of the other job files
4. Select the job file and click **Open** to begin the merge
5. Repeat steps 2-4 for each of the job files to be merged
6. Save the newly merged job with the **File>Save as ...** command. It is recommended the merged file be saved with a distinctive name (eg CHS\_Merged.tnj) so that the original job files remain intact.

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Note: The steps above merged one job file at a time. It is also possible to select all job files for merging in one step. In the Merge file window simply select the files to be merged using Control-Click or Shift-Click

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## When data is changed in one of the jobs

There may be situations where data is changed in one (or more) of the job files prior to merging.

Upon merging, the rule that applies is “The latter overwrites the former”. In other words, data from the incoming job will replace data from the already open job if it is different.

## Image paths after a merge

Consideration will need to be given to the location of the images after a merge. Image paths in the merged job will need to find all the images. This may require editing the current image path in the program defaults. CapturePost users will need to copy all the images from the original jobname#images folders.

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Note: For more information on Image Paths see the Image Paths section in the Images chapter

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## Merging jobs with orders and multiple images

Special options are available for merging jobs where a subject may have images or orders in more than one job. This situation could arise if a subject is photographed by more than one camera for example, or perhaps was photographed on the original photo shoot day as well as retake day,

### Merging images for a subject

Three options are available to handle the primary or main image when a subject has images in more than one job.

- **Set the primary image to that from the incoming file.** This is the default setting where the primary image will be set to the image in the last incoming file.
- **Don't change the primary image.** The incoming file will not change the primary image set in the open file
- **Reset to no primary image.** Resets the images so that no image has an explicit primary image

### Merging orders

As per merging multiple images, three options exist to handle the merging of orders.

- **Update if there is no existing order.** The default setting where if the open job does not have any orders, the orders from the incoming file will be added - otherwise they will be ignored
- **Replace existing orders.** Any orders in the open file will be replaced with orders in the incoming file
- **Add to existing orders.** Any orders in the incoming file will be added to orders in the open file.

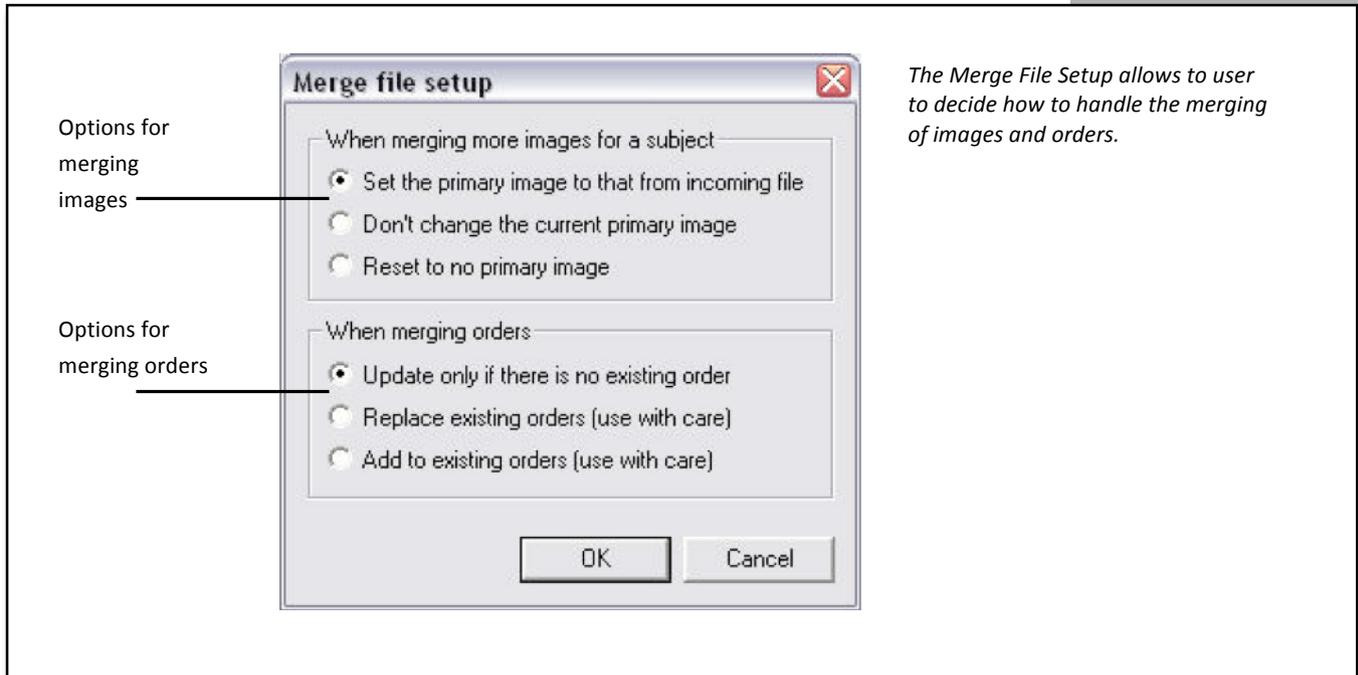
### The Merge File Setup window

The above options are set in the **Merge file setup** window, which is accessed by clicking the **Setup** button from the **Merge file** window.

To set the options:

1. Open one of the jobs to be merged
2. Select **File>Merge ...** from the main menu
3. From the **Merge file** window, click the **Setup** button. The **Merge file setup** window appears.
4. Select how to handle the primary image when multiple images are to be merged

5. Select how to handle merged orders
6. Click OK to dismiss the **Merge file setup** window and continue with the merge process



## Archiving jobs

Once a job has been completed, users may wish to archive their work in such a way that the job can be opened again in the future and have immediate access to all the images, graphics and templates required for the job without the need to set paths.

The above can be achieved by making use of special folders the software always searches for images, graphics and templates provided these folders are in the same directory as the job file.

To archive a job:

1. Create the following three folders where *jobname* is the name of the job (without extension) to be archived.
  - *Jobname#images*
  - *Jobname#graphics*
  - *Jobname#templates*
2. Copy or move all the images, templates and graphics required for the job into their respective folder
3. Copy or move the job file into the same directory as the three folders
4. Archive the job file together with the three folders to DVD or disk.

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Note: As we shall soon see the steps above are essentially the same action as that performed by the Send to Lab feature of OutPost, PackBuilder and CompositeBuilder. Users of these programs may prefer to use this feature as an automated method of creating the same archive as the steps described above.

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## Sending a job to the lab

The procedure for a photographer sending a job to the lab varies according to which Timestone Software application the photographer uses.

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Note: Photographers do not necessarily need one of the Timestone Software photographer programs in order to send work to the lab. They can, instead, send images and data for the lab to prepare a job. However this discussion will focus on situations where the photographer has used one of the Timestone Software applications and will therefore send the lab a job file.

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### CapturePost only

Since CapturePost has no ability to create new jobs a photographer who only owns CapturePost will most likely have had the job file created for them by their lab.

After photography, the photographer will need to send the lab the job file together with the *jobname#images* folder which is created by CapturePost.

### DataPost

A photographer using DataPost (with or without CapturePost) will be able to create their own job files but not templates.

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Note: Actually, DataPost can create certain types of templates, item design templates, which are mainly used by DataPost users for printing shoot cards and occasionally proof sheets.

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The photographer will need to send to the lab the job file together with the images. If CapturePost was also used, subject images will be in the *jobname#images* folder. If CapturePost was not used the photographer can either create a *jobname#images* folder (recommended) or send the images in some other folder with instructions to the lab as to their location.

If the photographer has used any referenced graphics in their fields they will need to also send these graphics to the lab. Again, it is recommended the photographer create a *Jobname#graphics* folder for this purpose.

## PackBuilder, CompositeBuilder and GroupBuilder

With respect to sending jobs to a lab, the above programs, collectively known as “The Builders” differ from DataPost in a couple of ways.

- The photographer is able to create his or her own templates which will need to be sent to the lab
- The programs have a **Send to lab** feature to automate the sending of jobs to the lab

Photographers may use any combination of the three Builders, opening the tnj file in each application as needed.

### The Send to lab feature

The Send to lab feature in the Builders performs a similar function to that of archiving jobs as discussed in the previous section

The Send to lab feature will create the following three folders and populate them with subject images, graphics and templates as noted below.

- **Jobname#images.** All subject images in the job file whether they have been ordered from or not. Additionally any group images used in GroupBuilder will also be included in this folder.
- **Jobname#templates.** Any templates that have been ordered
- **Jobname#graphics.** Any graphics that have either been imported directly onto a template or imported into a graphic type File or Folder field.

The above folders are then sent to the lab together with the job file.

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Note: It is important to understand the **Send to lab** function needs only be performed in any *one* of the Builders even if the job file has been used in each of them. The **Send to lab** function will know to collect images, graphics and templates needed by any of the Builder programs.

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### Configuring the Send to lab function

When using the Send to lab feature, the photographer has the option of sending the three folders and job file as a single zip file or in a parent folder. Furthermore the user has the option of automatically sending the job to the lab via FTP or saving the zip file or folder to disk first.

To configure the Send to lab function:

1. Select File>Options from the main menu. The Options window is presented
2. Select the Send File tab
3. Select whether to create a ZIP file or folder

4. Optionally, enter a prefix for the ZIP file or folder name
5. If desired check the option to automatically have the zip or folder sent to the lab via FTP
6. If using the FTP feature, enter the FTP credentials as supplied by the lab
7. Click OK

Create either a zip file or a folder

Optionally enter a prefix for the ZIP file or folder name

Enter credentials if sending by FTP

*Configuring the Send to lab function*

## Sending the job

To the send the job to the lab:

1. Save the job
2. Select File>Send to lab. If the FTP feature has been set in the options, the zip file or folder will be created and sent to the lab via FTP. This may take some time.
3. If not sending the job via FTP a window will be presented allowing the user to select the destination of the zip file or folder.

### MORE INFORMATION

#### ZIP files, folders and FTP

Users often ask whether there is an advantage to creating a ZIP file rather than a folder and then whether they should send automatically by FTP or save to disk and send by some other method. As with many things, each method has its own advantages and disadvantages.

Creating a single ZIP file has the advantage of being just that – a single file. However zipping a very large number of images takes time with the added consideration that there is a limit to the size of a ZIP file. For this reason many users prefer to create a folder rather than a ZIP file especially for large jobs.

Likewise, whereas sending the ZIP or folder automatically with the FTP feature has its appeal, many users prefer not to do so since the FTP transfer can take some time during which the program cannot be used. For this reason it is often more efficient to save the ZIP file or folder to disk. A third party FTP client such as FTP Explorer or FileZilla can then be used to send the job.

## OutPost

Like the “Builders”, OutPost also has a Send to lab feature with the only difference being that OutPost only sends images that have been ordered from.