

Getting Started with AISBackup

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Getting Started with AISBackup

Introduction

AISBackup is a backup utility that can backup data files, the complete Windows system and files from normally hidden Windows system partitions from a Windows PC or Windows Server.

Backups made from any previous versions of AISBackup may be used to restore files using the current version of AISBackup. The earliest legacy versions of Windows that AISBackup supports is Windows 98 and NT4 Server.

Backup destinations

AISBackup can backup to disk, external drives, USB flash drives, cloud drives that are accessible using a drive letter, FTP, FTPS, SFTP, CD, DVD Blu-ray and Microsoft OneDrive.

The Backup Process

AISBackup uses backup jobs that define what is to be backed up and several backup jobs may be defined. The first time a backup job is run everything selected is backed up. The next time the same backup job is run only the differences are backed up, differences include new files, changed files and deleted files; this is similar to incremental backups. However, when you restore from AISBackup everything that existed on the PC at the time of the backup is available for restore, this is the same as a full backup. Logically AISBackup always makes a full backup but only actually backs up differences. Each backup using the same backup job is called a backup session.

AISBackup may be set to only retain a set number of backup sessions, once a session has expired the backup data that is no longer in any backup session is automatically removed from the backup media, this process is called pruning.

Over time a backup session may include different versions of Windows, and it is possible for example, for a backup job to hold the both the Windows 7 and Windows 10 operating systems.

Restoring from AISBackup

AISBackup may be used to restore individual files or complete operating systems. You are not restricted to restoring files to their original location, in fact you can drag and drop files to any supported disk partition and folder.

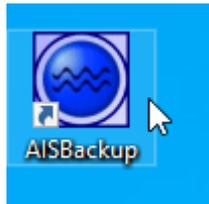
Copying files

AISBackup uses a compressed file format based on Zip files for regular backups, however there is an option to copy files from one folder to another, or the running Windows Operating System to a new partition. You may use AISBackup to upgrade a disk in a laptop using this file copy option. The copy option optionally supports synchronisation, so that is possible to keep the latest version of each file across different PCs or a cloud drive.

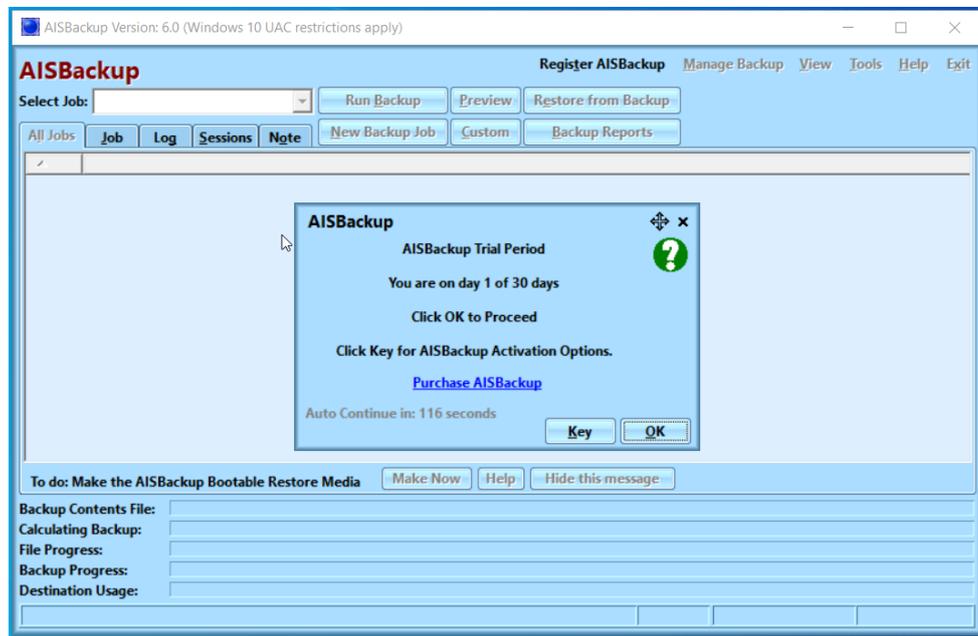
Other options

There are many options for backup and restore that are covered in more detail in the documentation and help file.

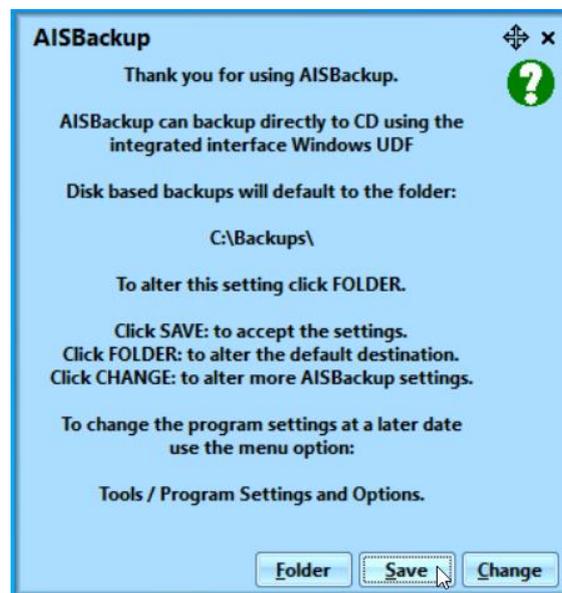
Making a Backup of Windows



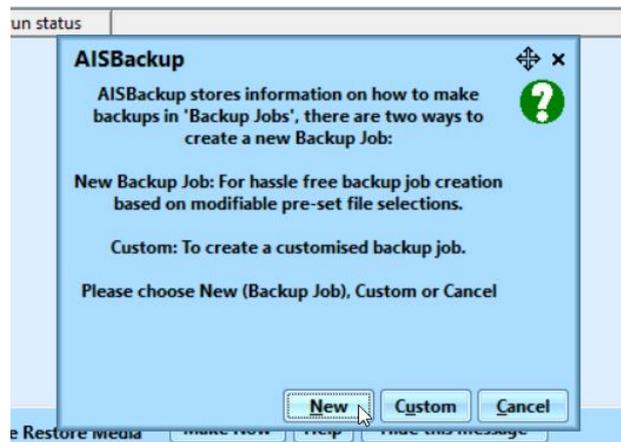
After installing AISBackup double click the desktop icon to start.



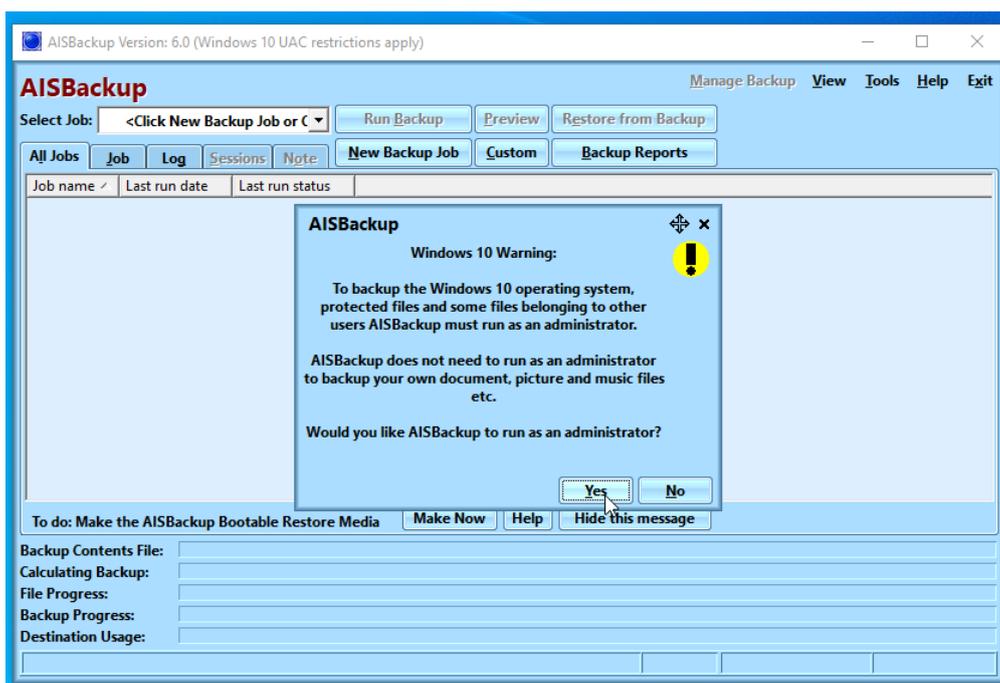
Click **OK**. If you have previously purchased AISBackup the registration process will be documented later.



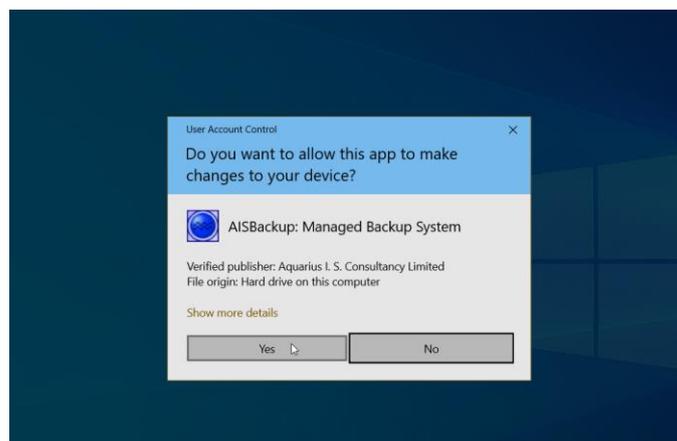
Click **Save** to accept the default settings, to review the settings click **Change**.



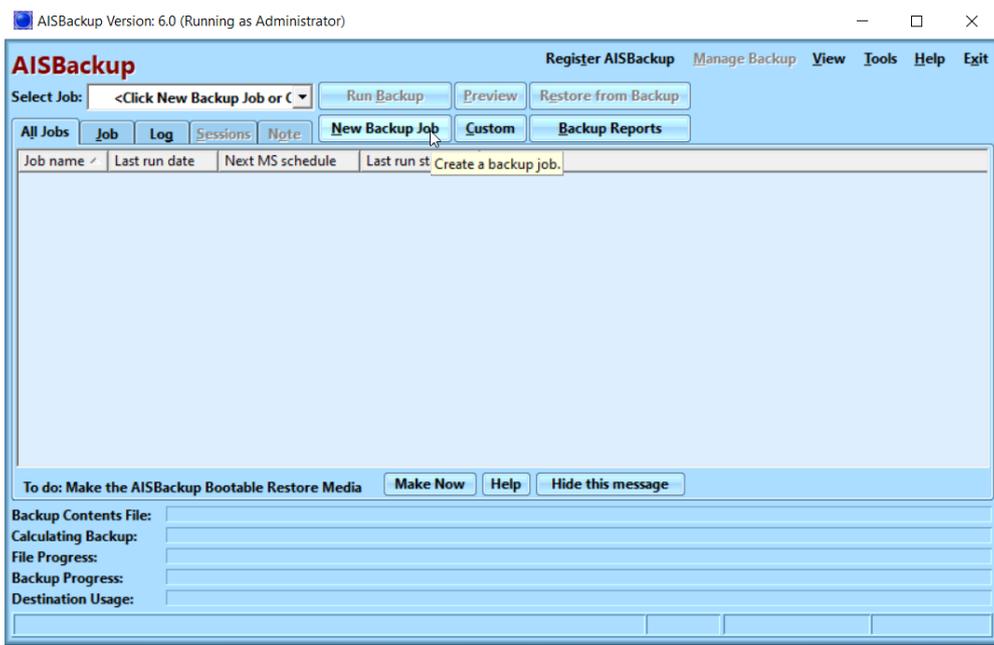
To make a new backup, called a backup job, click **New**.



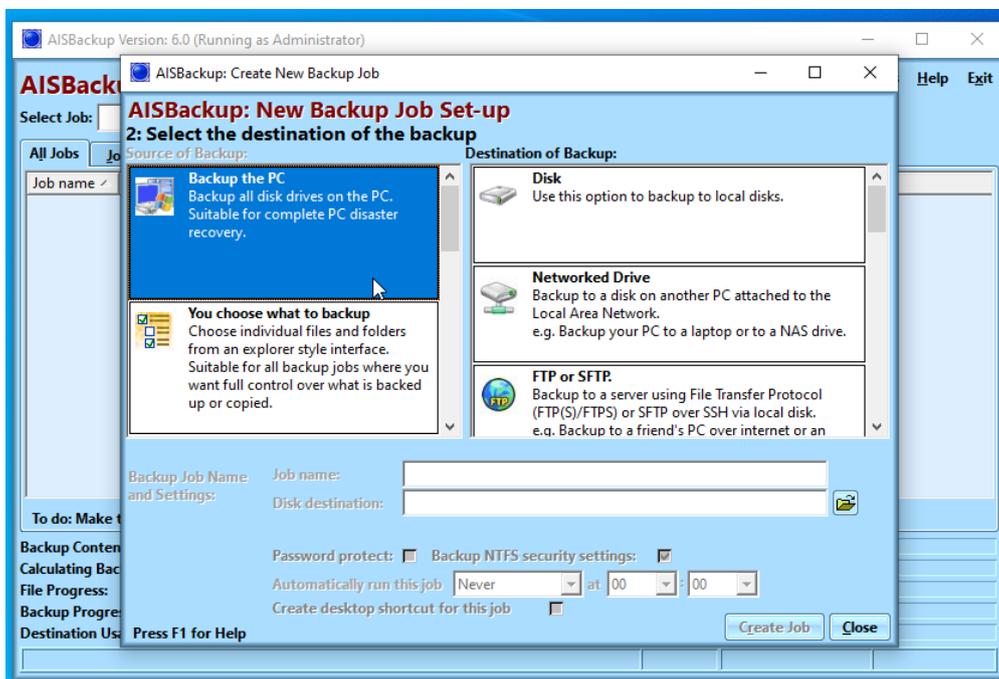
This backup is to be the Windows operating system, for this to work AISBackup must run as an administrator, click **Yes**.



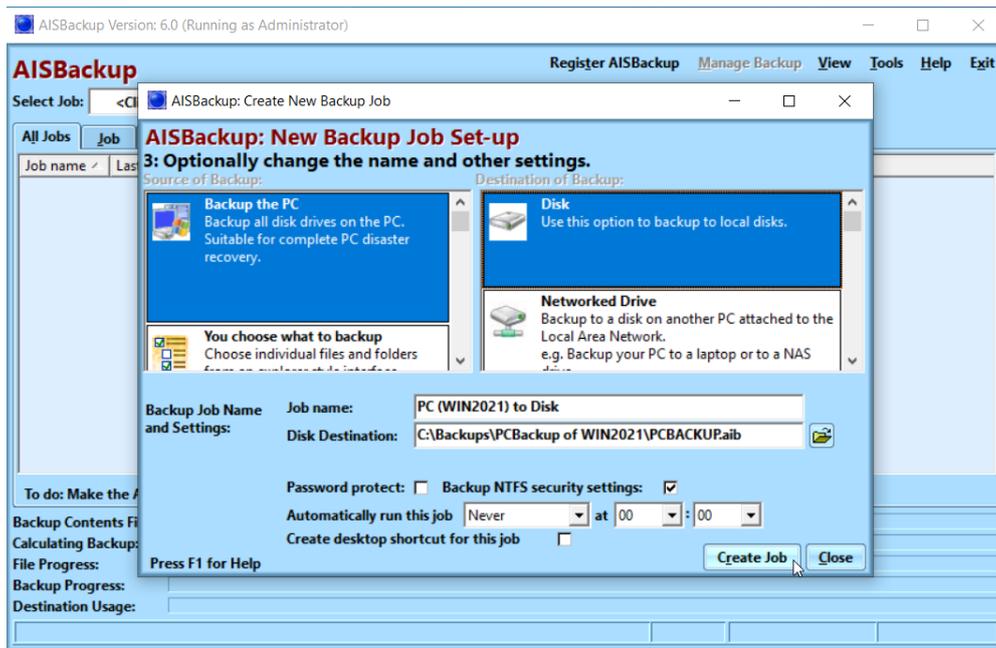
Acknowledge *Run as administrator* by clicking **Yes**.



Once AISBackup restarts click **New Backup Job**.

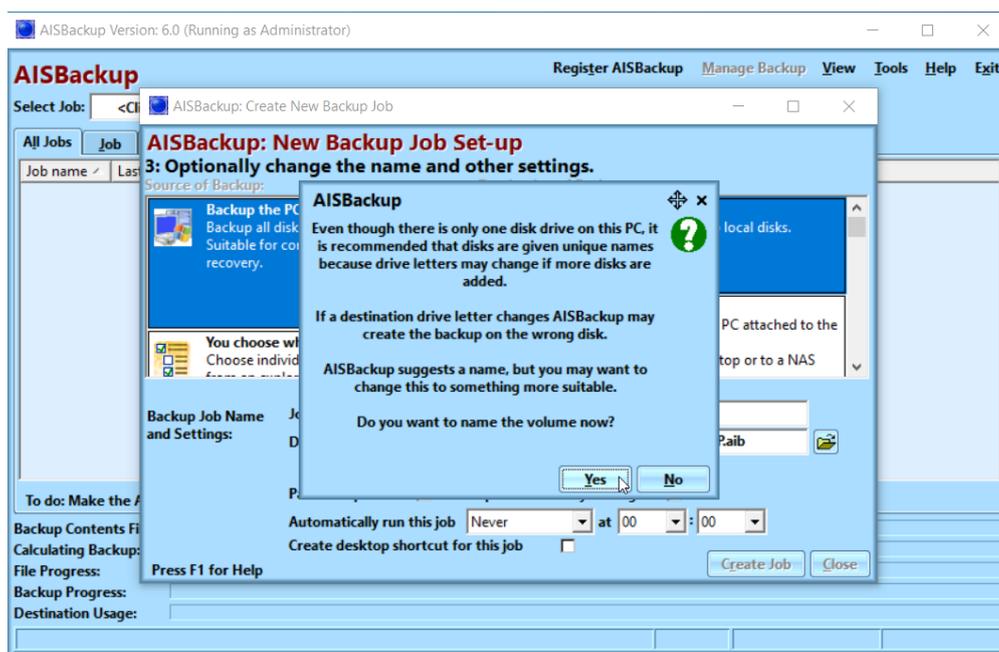


Select **Backup the PC**.

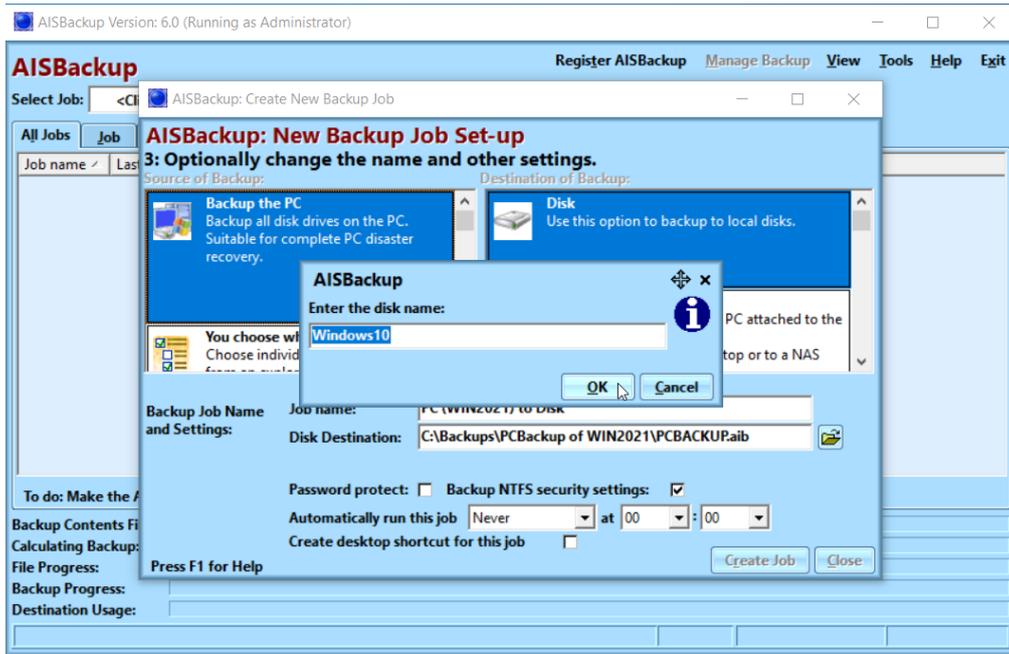


Click the backup destination **Disk**. In this example the backup destination is the 'C' drive, different backup destinations will be used after this example.

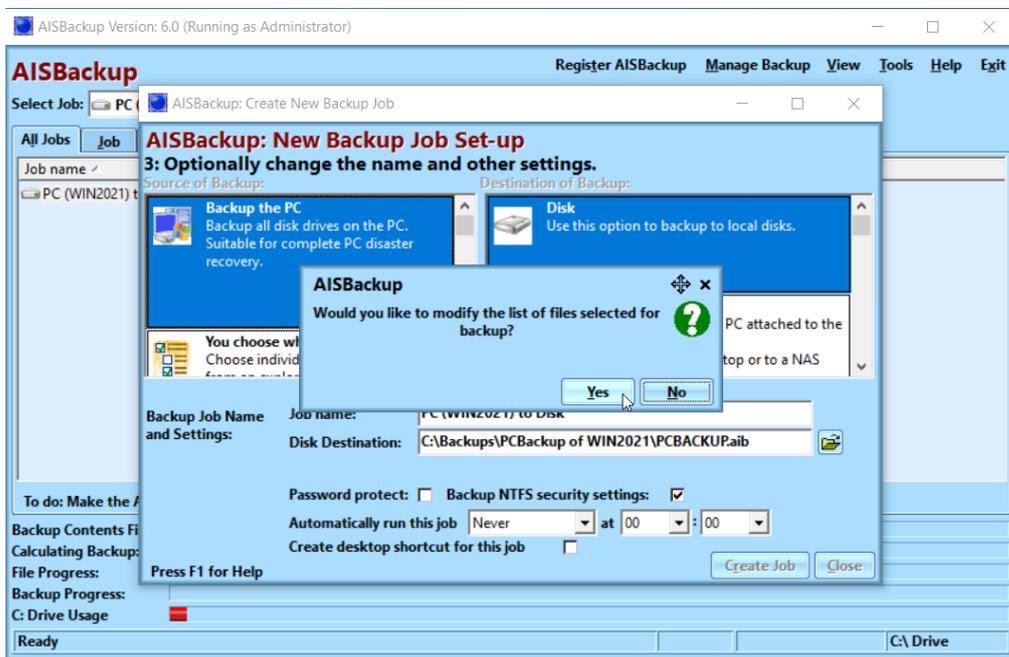
Making backups to destinations other than the 'C' drive is recommended, as too is making more than one backup to different backup destinations, e.g. external drive, network drive, SFTP etc. and for important data an offsite backup, for example a cloud drive.



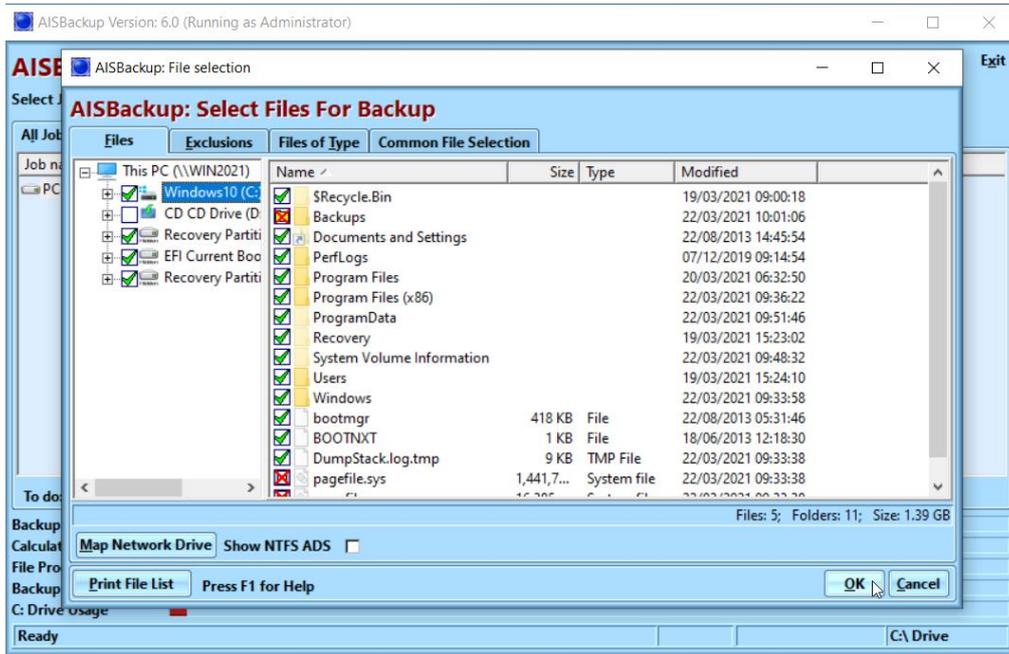
If the disk (C drive) does not have a volume label AISBackup will offer to set one up. Optionally click **Yes**.



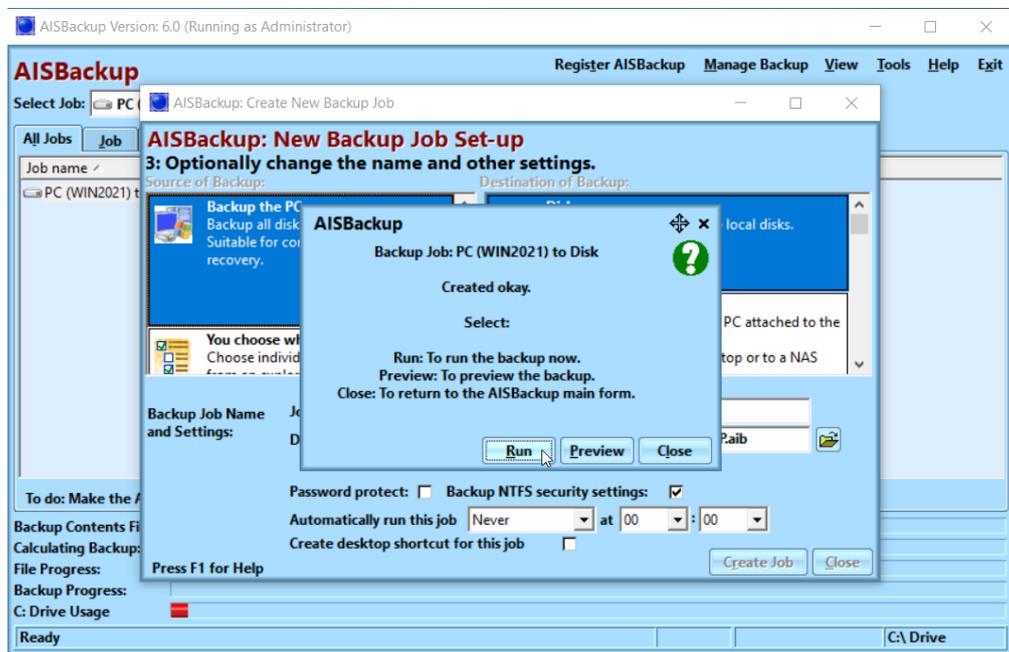
Either accept the suggested name or type your own, then click **Yes**.



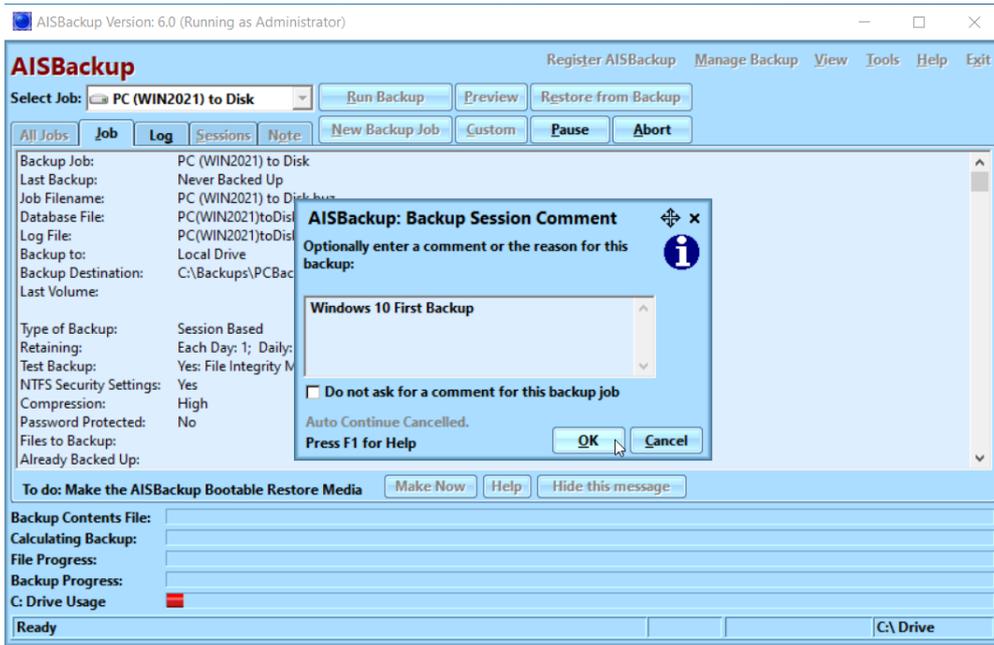
To the **Would you like to modify the list of files selected for backup?** optionally click **Yes**.



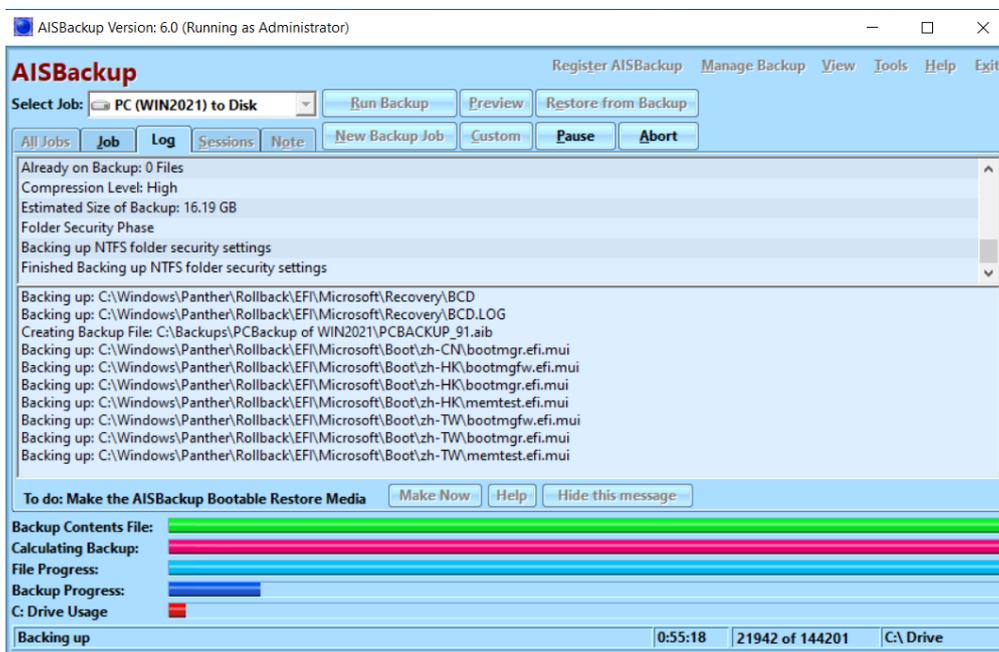
Make any changes then click **OK**.



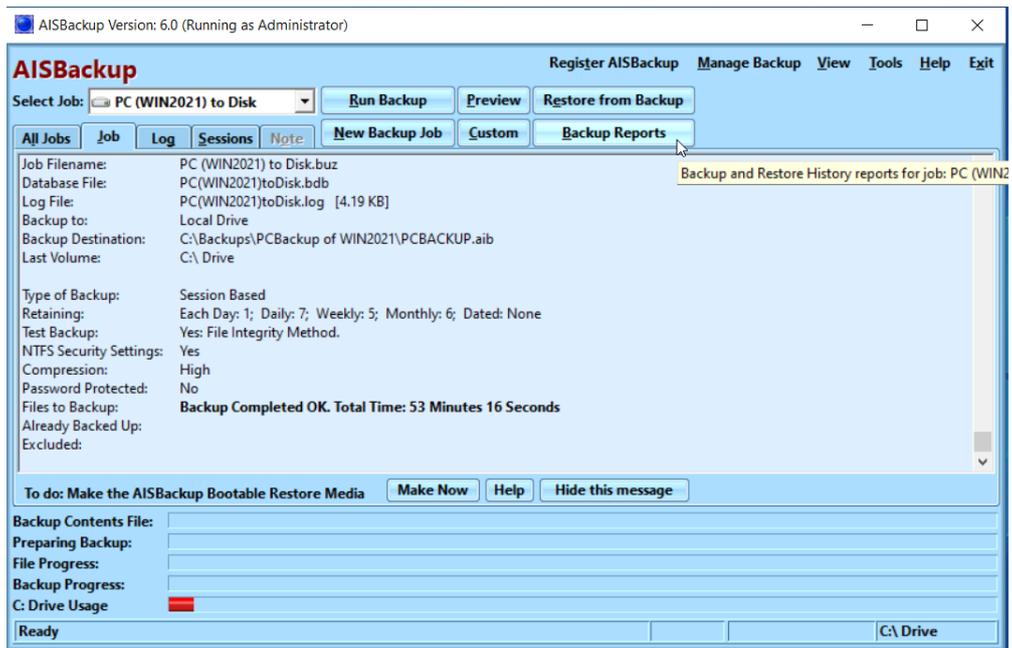
To run the backup now click **Run**.



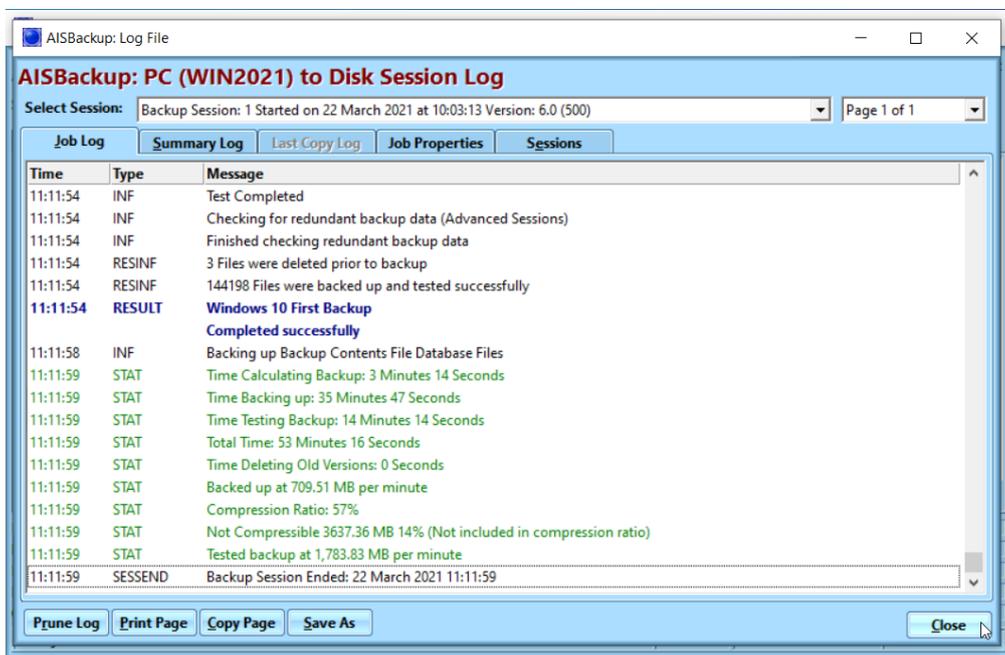
Optionally enter a comment for the backup, then click **OK**.



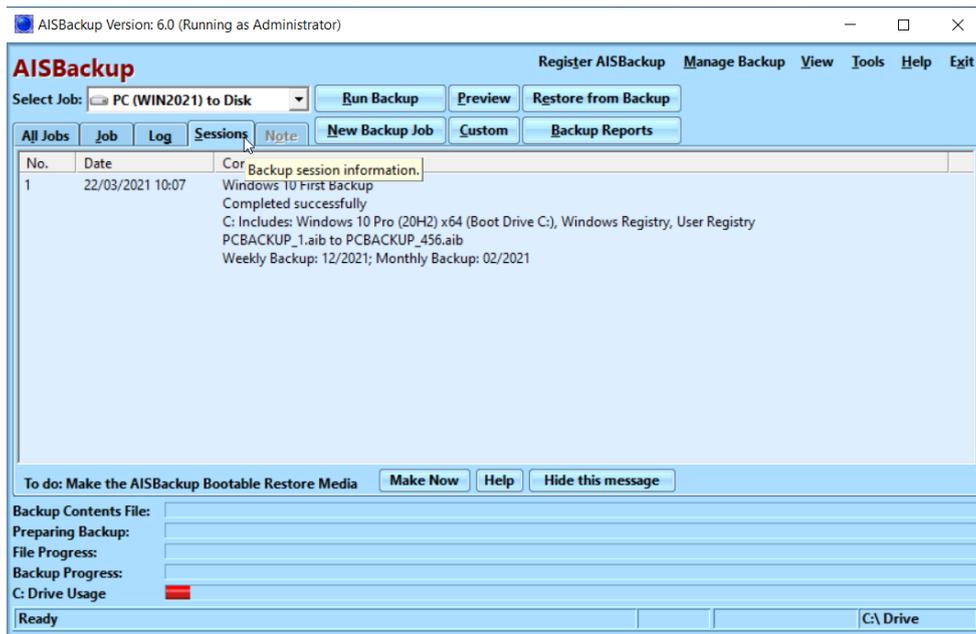
Here is a screenshot of the backup progressing.



The backup has completed, click **Backup reports** to see the backup log.



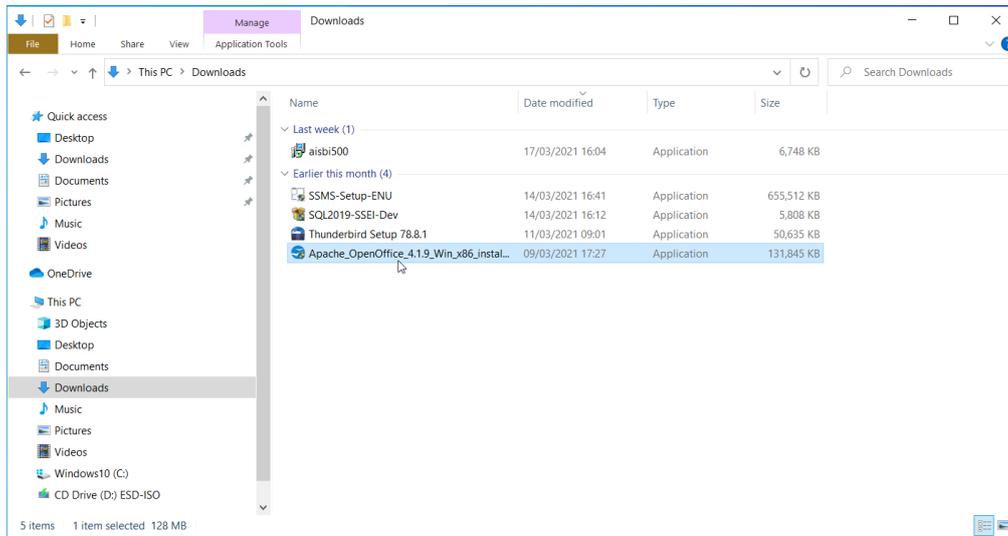
Click **Close** to dismiss the session log form.



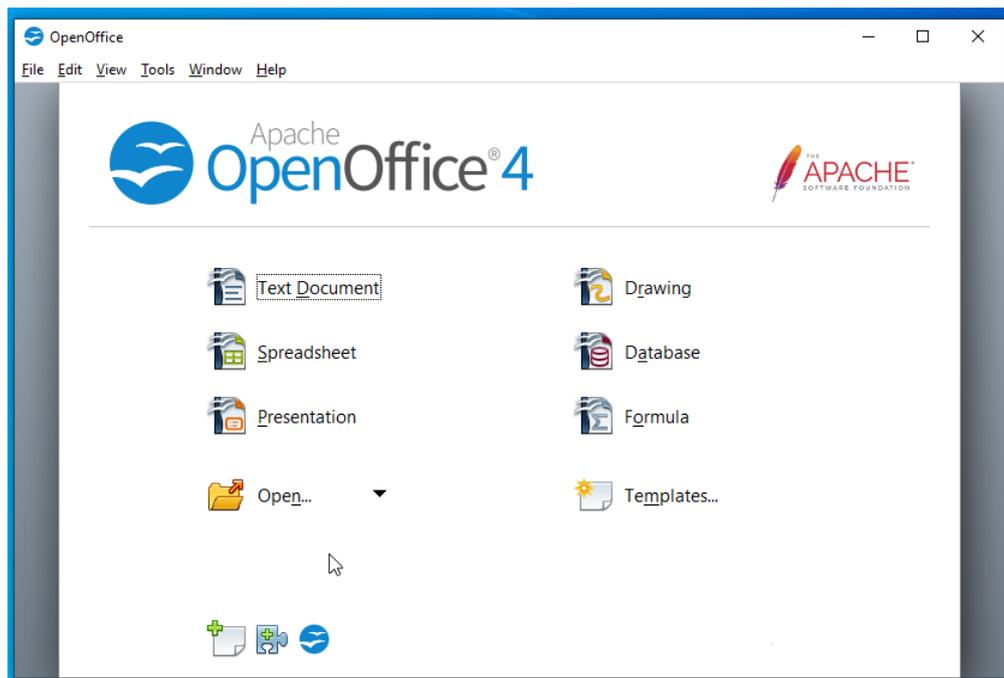
Click the **Sessions** tab to see the dated sessions contained in the backup. Backup sessions show you what has been backed up, whether the files were backed up because they were new or modified and those files that no longer exist on the PC (Deleted).

Making Changes to Windows and Backing up the Changes

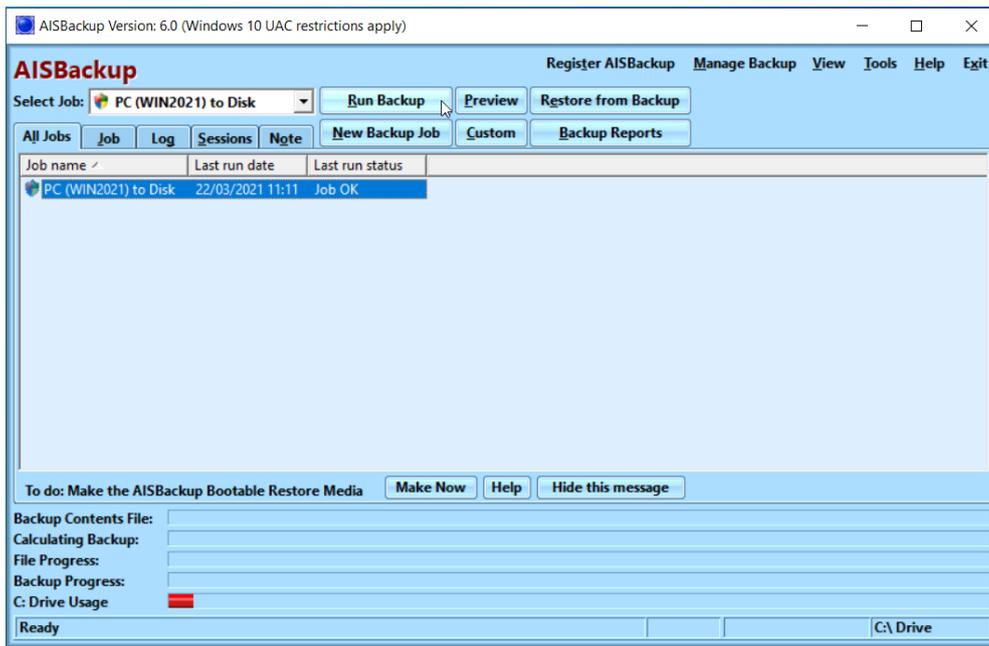
Some changes are now made to the PC. Apache Open Office and Mozilla Thunderbird e-mail will be installed.



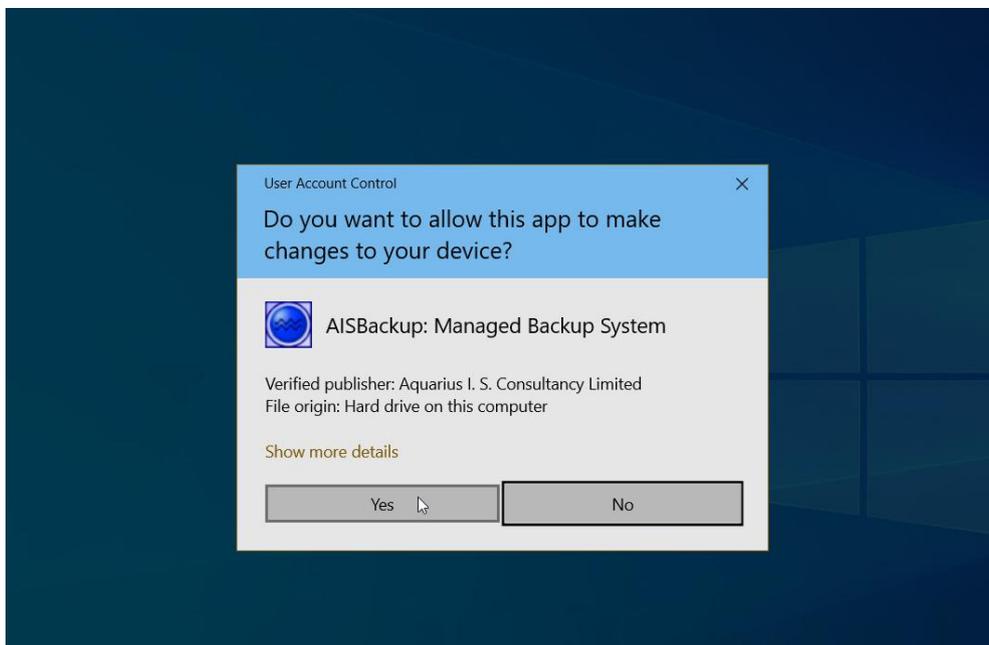
Open Office and Thunderbird have been downloaded and will be installed.



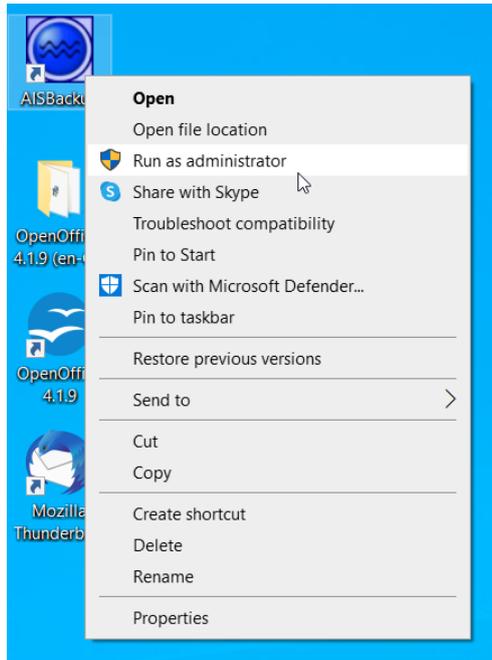
A screen shot of Open Office after installation.



Restart AISBackup, select the backup job then click **Run Backup**.



This backup job needs to run as an administrator, click **Yes**.

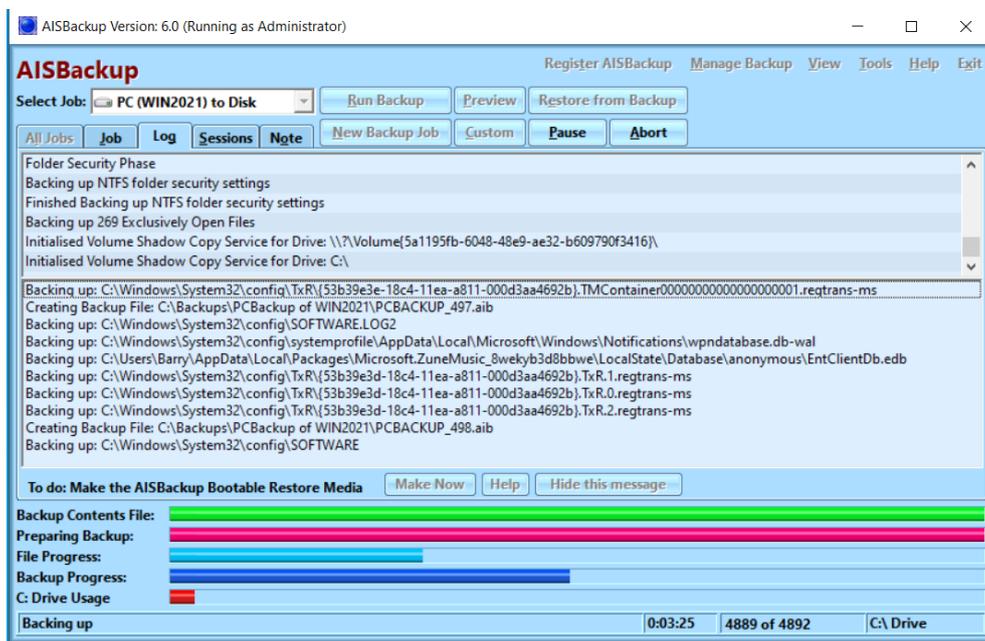


Alternatively right click the AISBackup icon and choose **Run as administrator**.

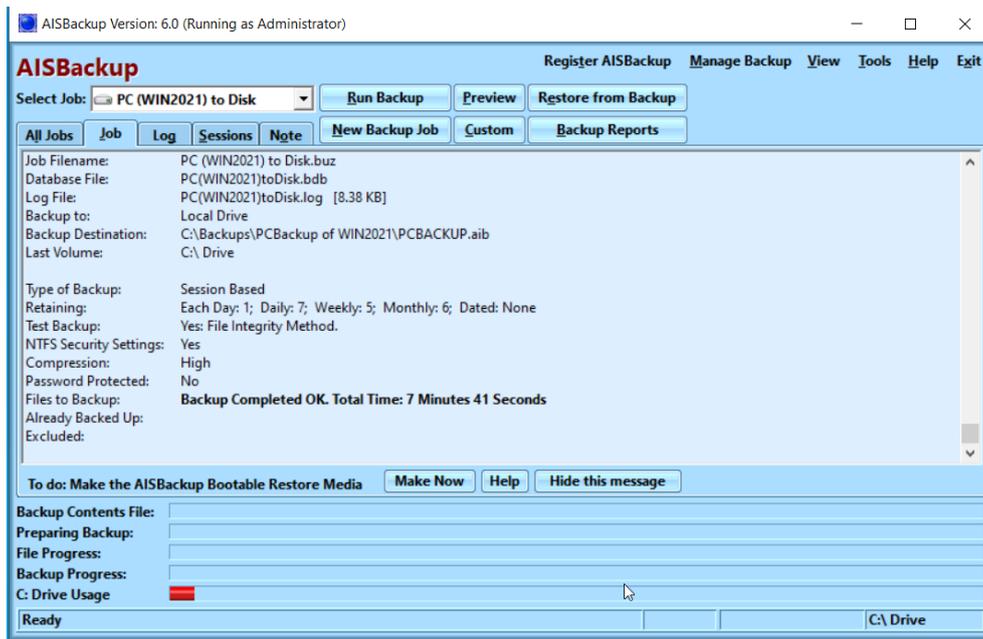
Optionally enter a comment for this backup session, then click **OK**.

AISBackup will now load the contents of the previous backup and compare them with the current file contents of the PC and make a note of all differences, including new files, changed files and files that were deleted since the previous backup session was run.

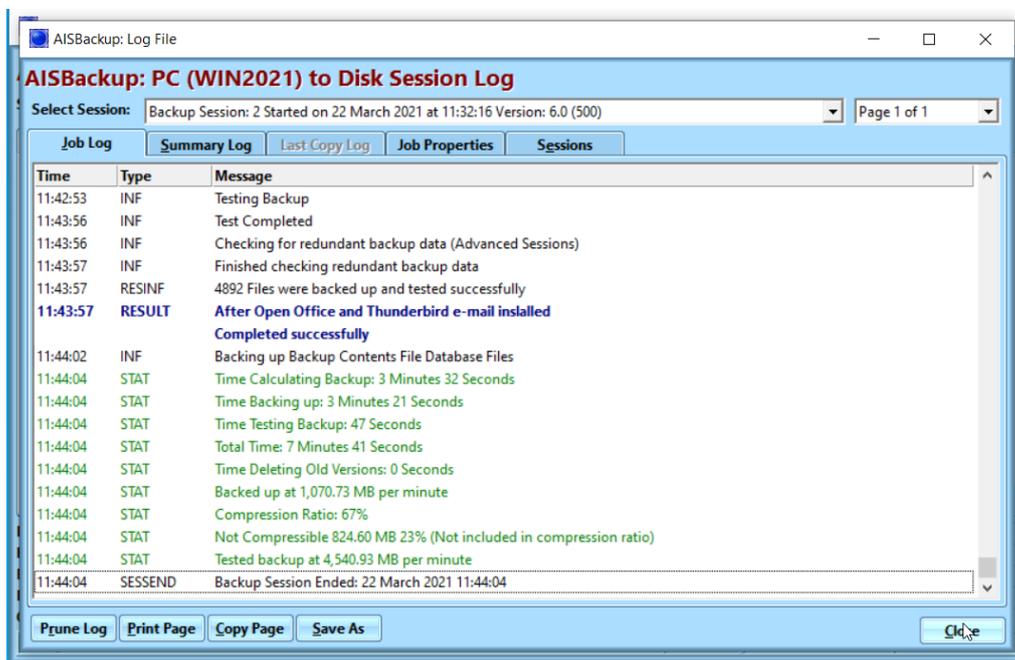
Changed and deleted files are flagged as deleted in this new backup session, but retained in the backup because they belong in one or more previously run backups. This way you can restore a previously changed or deleted version of a file.



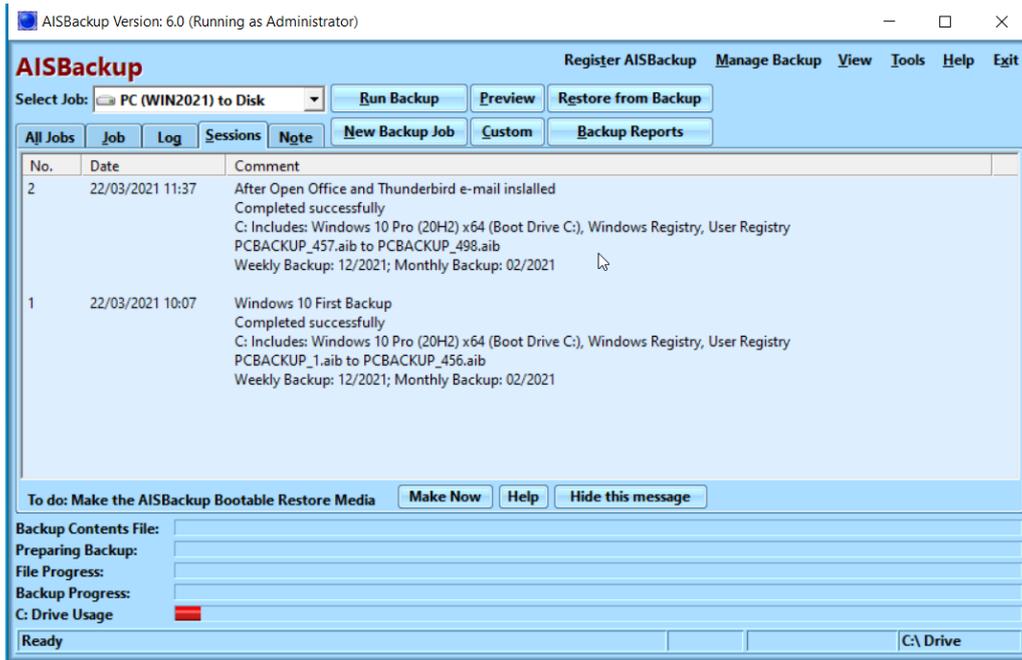
This screen shot shows the progress of the second backup session.



The backup of session 2 completed much quicker than the previous full backup, however the second backup is equivalent to a full backup, i.e. it contains all files on the PC, not just those backed up.



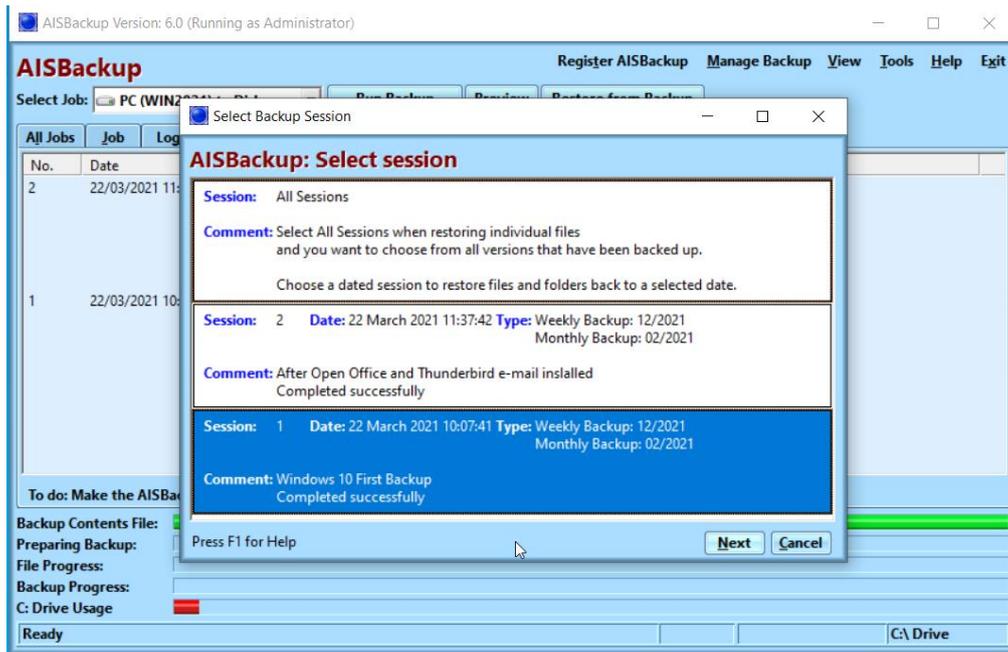
Here is a screen shot of the backup report.



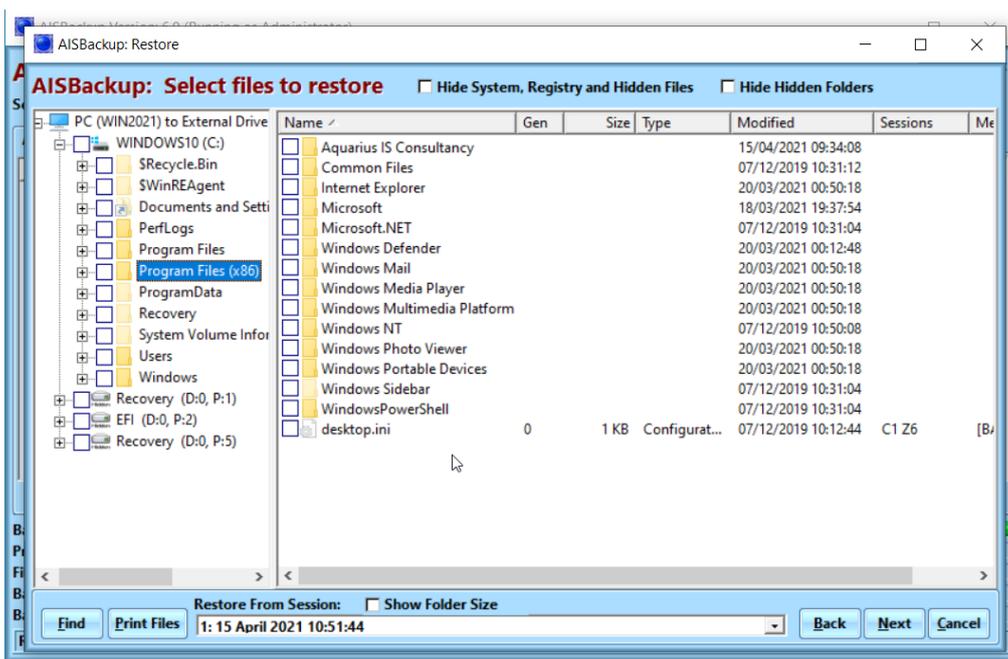
The **Sessions** tab shows two backup sessions, each session is a full backup of the PC.

Looking At What Has Been Backed Up.

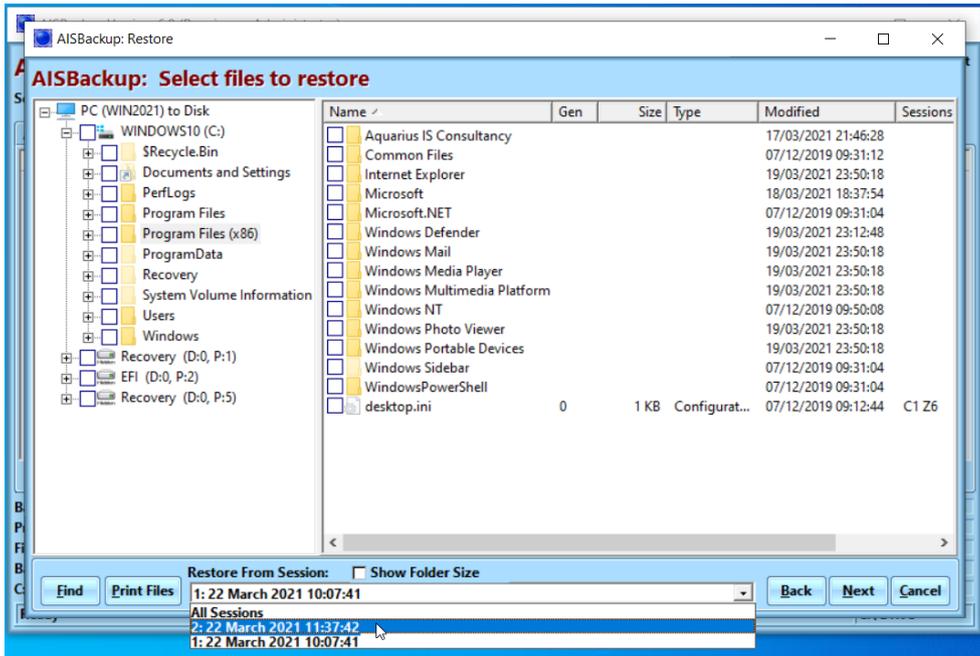
To look at the contents of the backup click **Restore from Backup**.



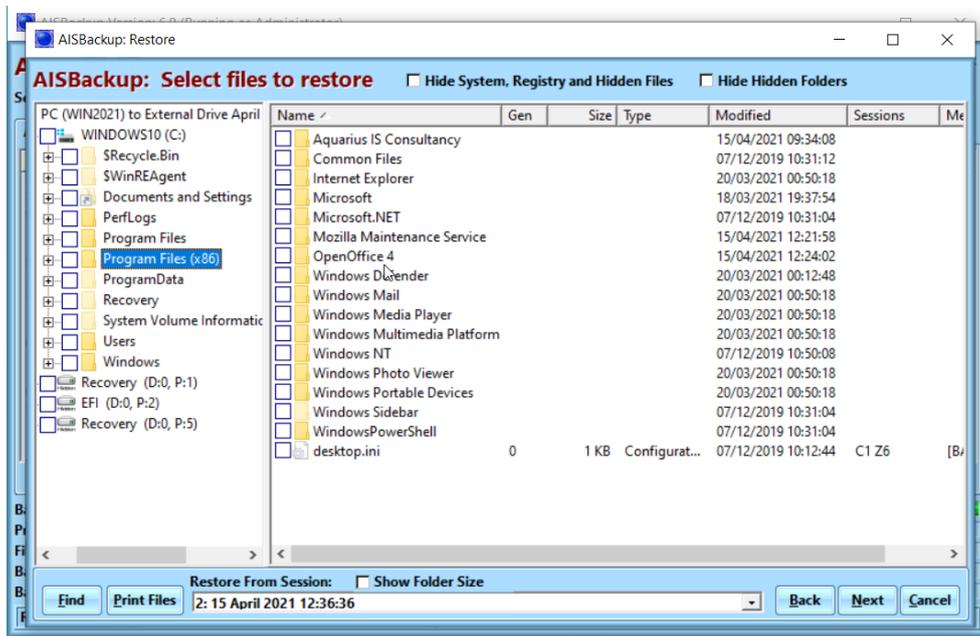
Select the session to open then click **Next**. In this example session 1 is selected. You may also double click the session.



Notice that session 1 does not contain Open Office.



Sessions may be changed by using the **Restore From Sessions** drop down list at the bottom of the form. Here session 2 is selected.



Session 2 contains Open Office and all the other files and folders backed up in session 1.

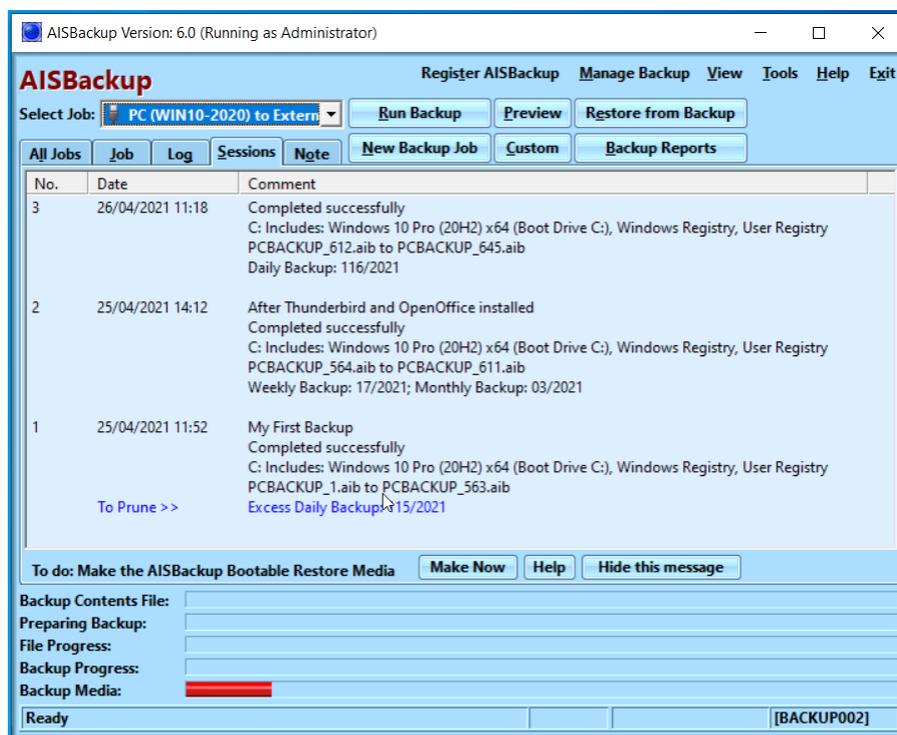
An Introduction to Backup Sessions

AISBackup maintains backup sessions where data within the backup will expire as sessions are removed from the backup. Any data held within the backup that is no longer required in any backup session is automatically removed to free up disk space on the backup destination; this process is called *pruning*.

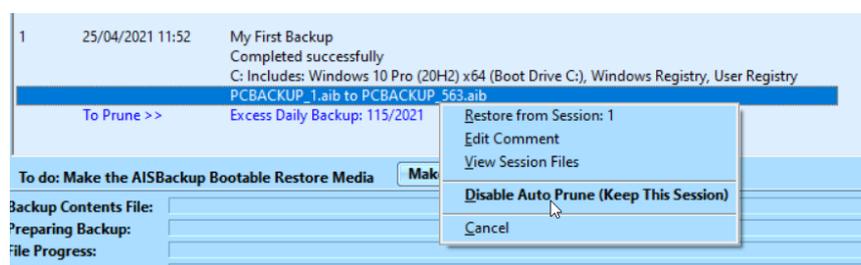
Warning: Manually deleting files from the backup media yourself, even if they were made years ago, are those backup files that contain files that did not changed since they were backed up; these files are required to maintain the integrity of the backup.

The default session method is called **Advanced Session Management** and this method retains a pre-defined number of daily, weekly and monthly backups.

Sessions work by AISBackup setting a session number within the files database to when a new or changed file is backed up and if a file was deleted or modified, for example if a file is modified the previous session's file is set to deleted 'this session'. Session numbers are updated within the files database if the created session or deleted session is removed from the backup. Only when a file no longer exists in any session it is marked for physical deletion during the *prune* process.



In the above screenshot you can see that session 1 will be removed the next time this backup job is run. If you would like to retain a backup session you may right click the session and choose **Disable Auto Prune (Keep This Session)**.

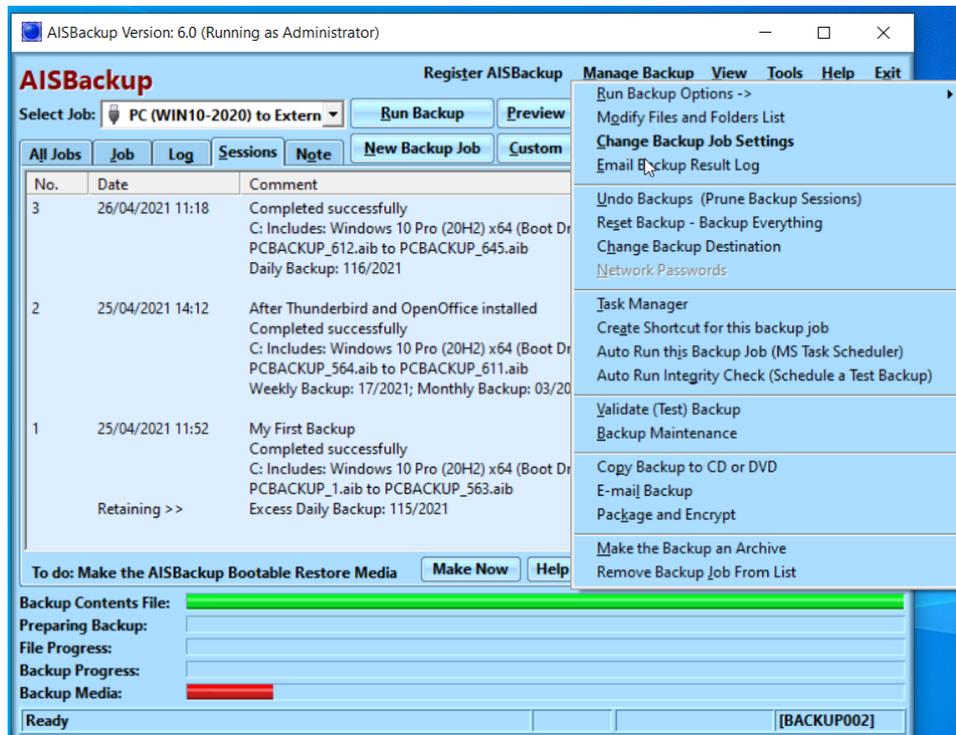


Disable Auto Prune example.

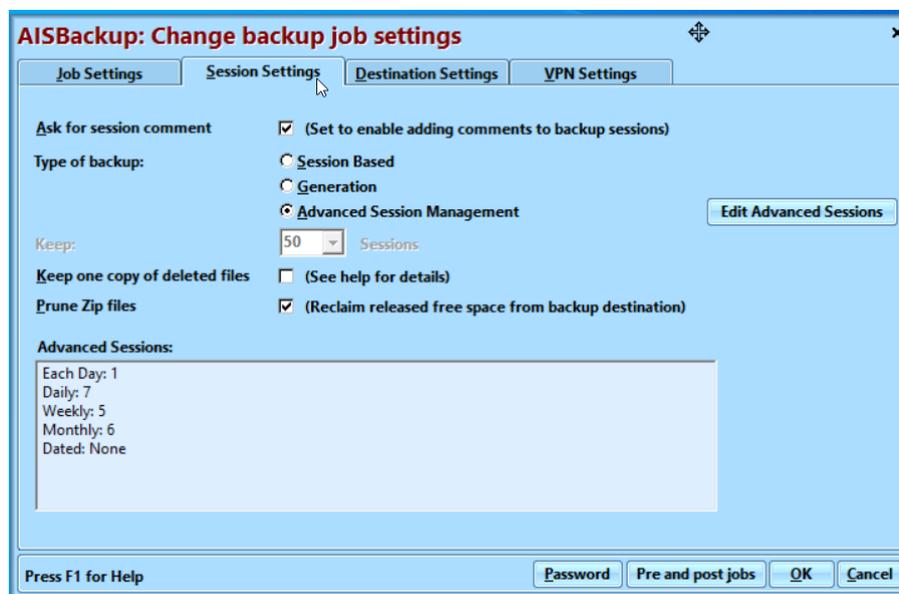
1	25/04/2021 11:52	My First Backup Completed successfully C: Includes: Windows 10 Pro (20H2) x64 (Boot Drive C:), Windows Registry, User Registry PCBACKUP_1.aib to PCBACKUP_563.aib Excess Daily Backup: 115/2021
	Retaining >>	

If pruning has been disabled for a backup session the session will be marked with *Retaining >>*.

If you change your mind, right click the session and choose **Enable Auto Prune**.



To change the backup session rules choose the menu option **Manage Backup / Change Backup Job Settings**.

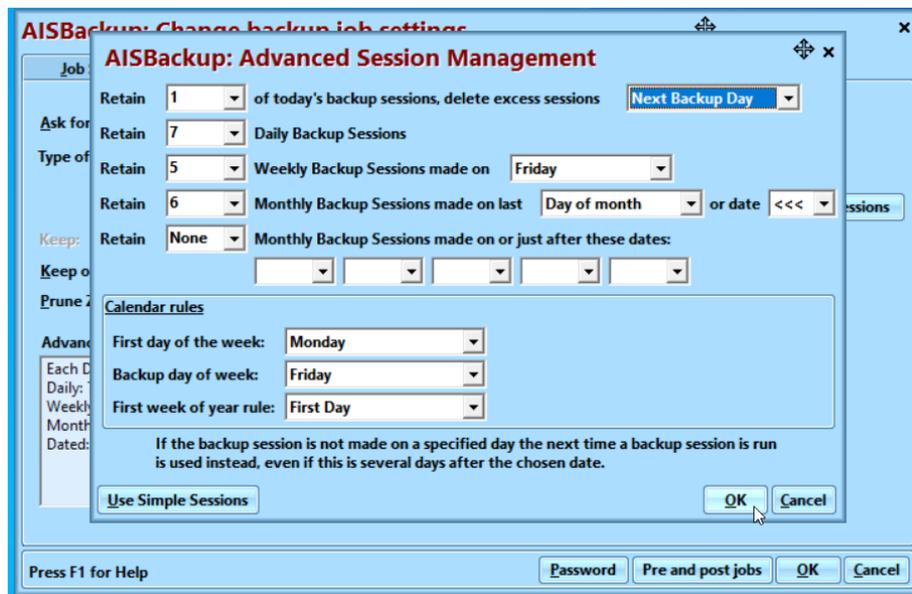


Then click the **Session Settings** tab.

Session Based: Session based backups retain one or more backups run for each backup job.

Generation: A generation style backup keeps the specified number of file versions for each file in the backup. The generation style backup is not compatible with restoring a computer back to a specified date.

Advanced Session Management: This is the default setting. A backup based on advanced sessions retains the specified number of today's, daily, weekly and monthly backups or on specified dates (or nearest date after the specified date).



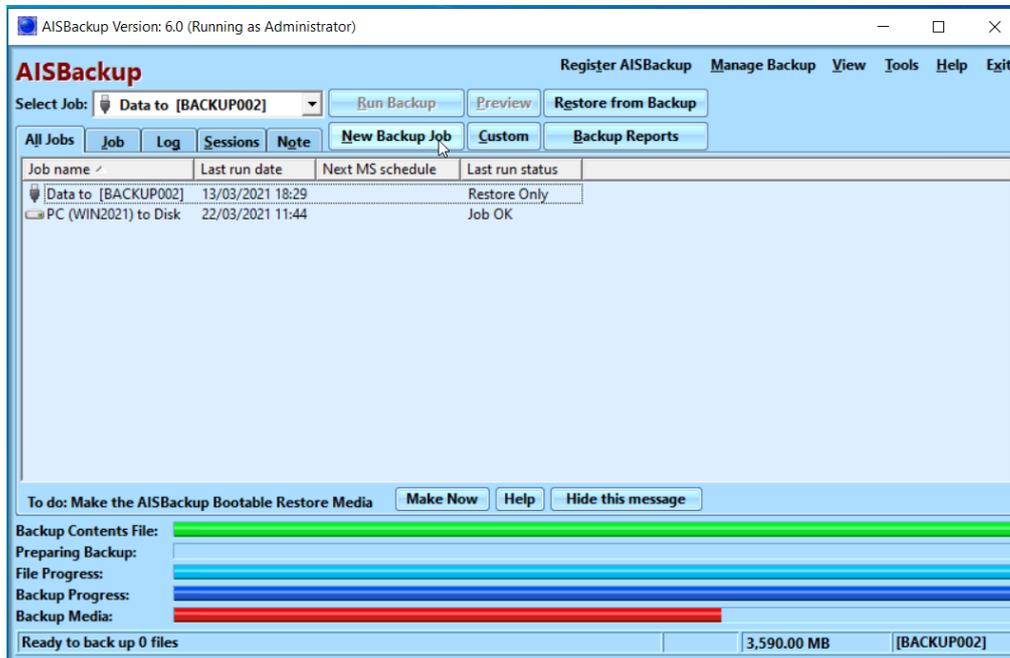
The default advanced session management settings are Each Day: 1 and delete excess backups made on this day tomorrow, Daily: 7, Weekly: 5 and Monthly: 6.

Backup sessions may be pruned manually by using the **Manage Backup / Undo Backups (Prune Backup Sessions)** option.

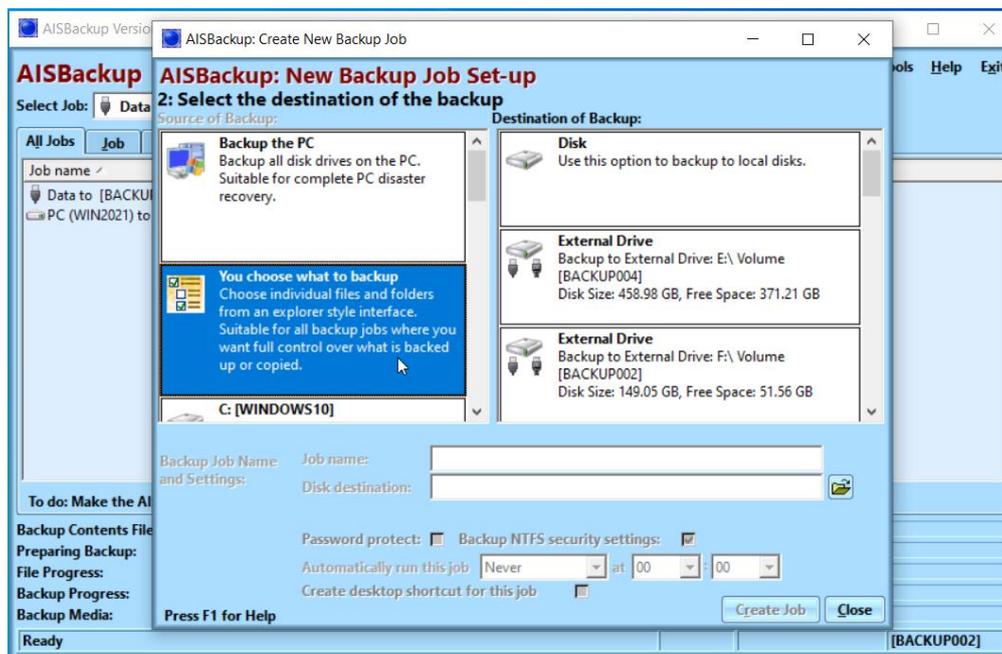
Making a Backup of Data, Documents, Music and Pictures etc.

In this example a backup of the data folders will be made to an external drive named BACKUP004.

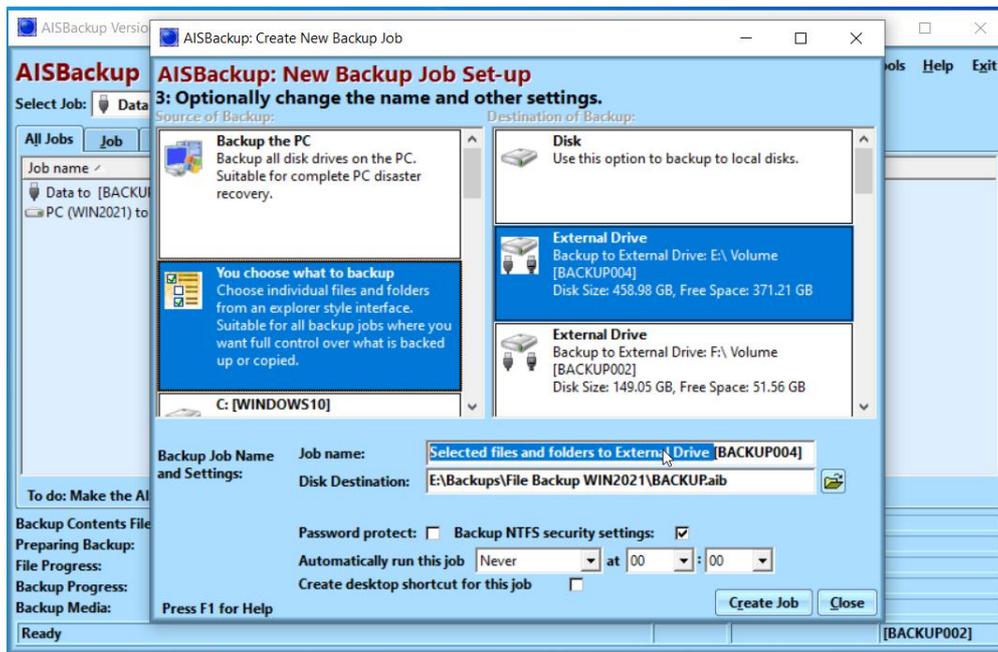
External drives should be labelled with a unique volume name. AISBackup uses the volume name to identify the backup media as there is no guarantee that the disk will be mounted using the same drive letter.



This PC already contains a backup of the PC and a Restore only backup from another PC. To make a new backup job click **New Backup Job**.

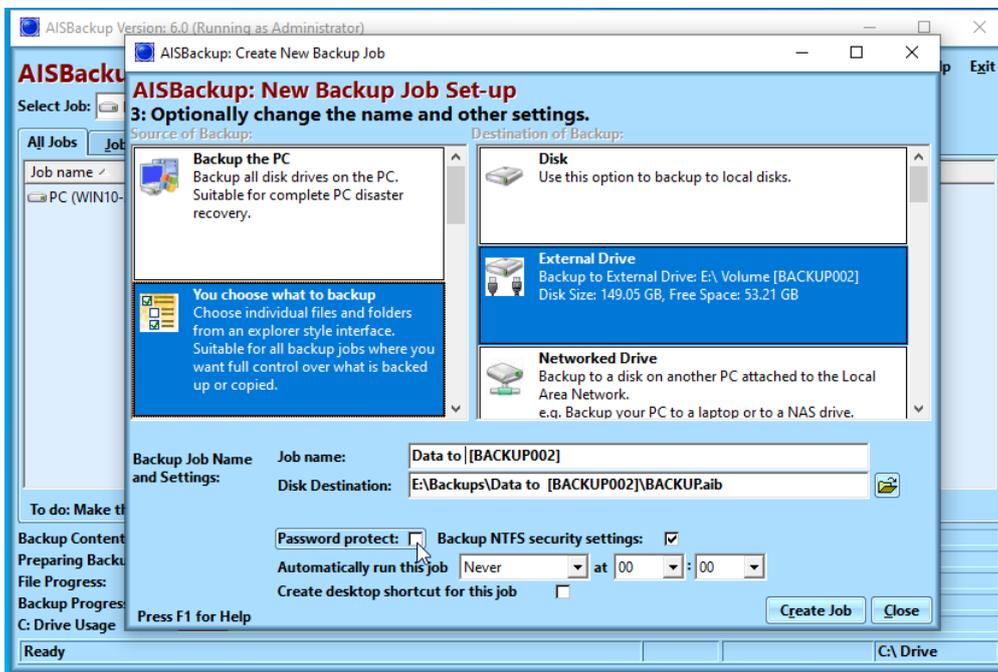


Click the option **You choose what to backup**

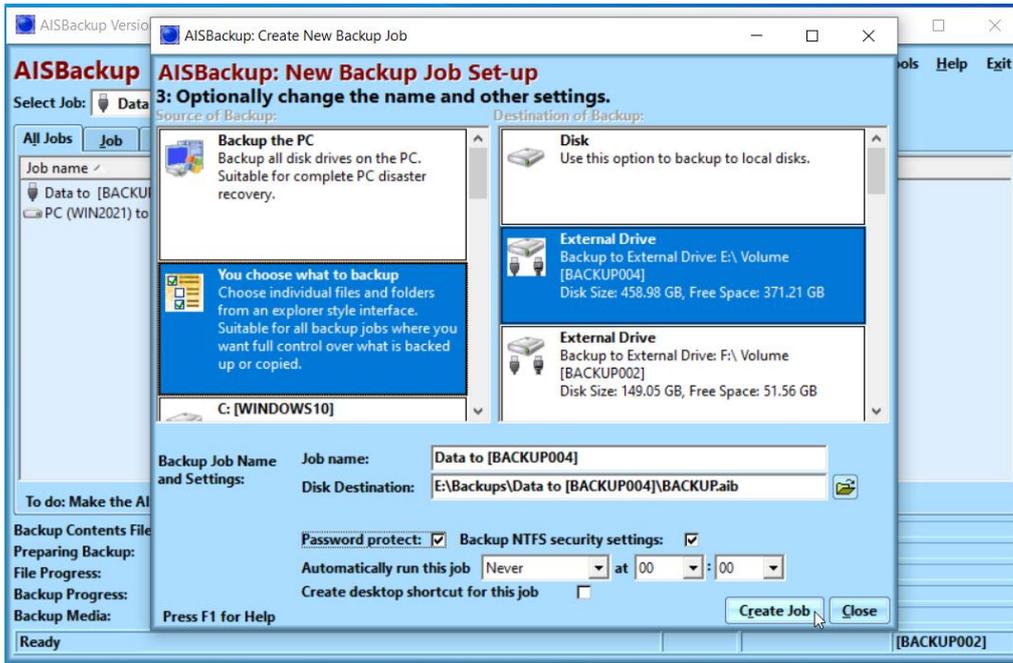


Click the External Drive [BACKUP004].

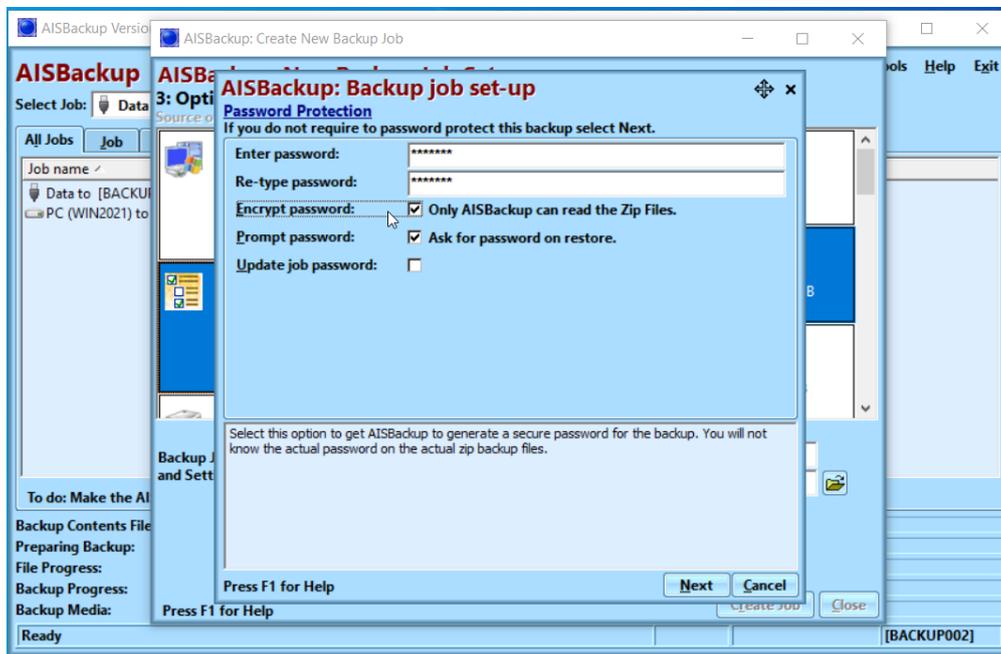
You will probably want to rename the backup job by changing the **Job Name** field, in this example the name was changed to Data to [BACKUP004].



Optionally select **Password Protect** to password protect the backup.

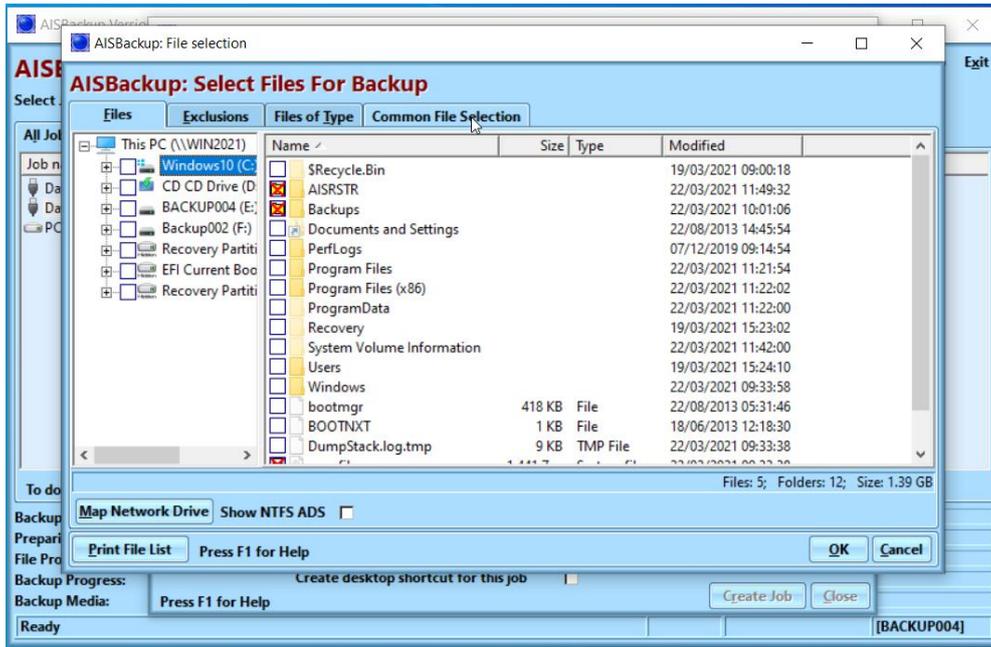


Click **Create Job**.

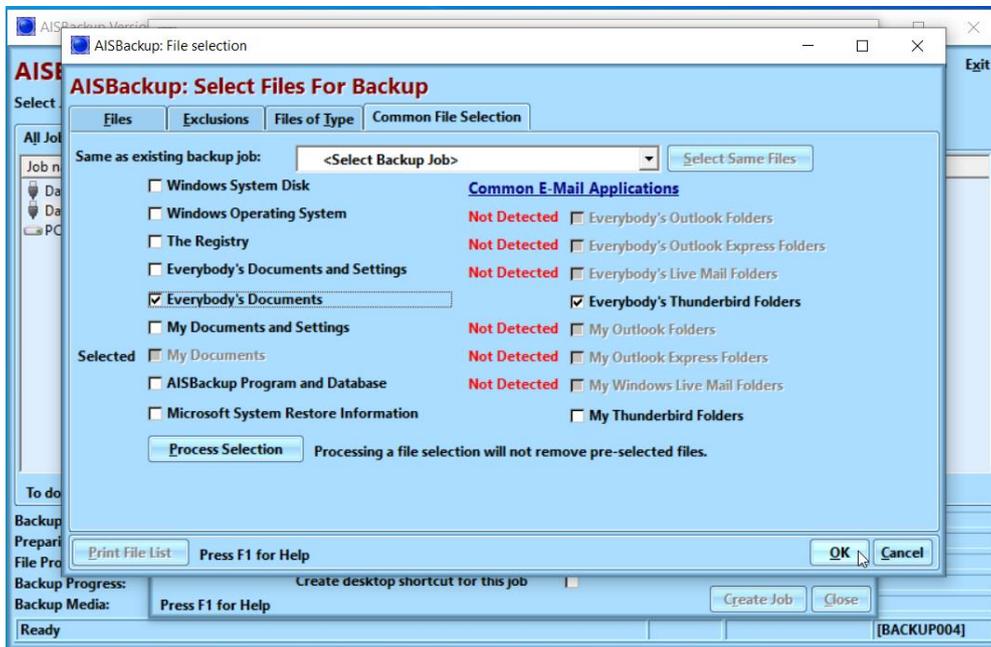


If the **Password protect** option was selected enter the password and optionally click **Encrypt password**. Encrypting the password changes the password you entered to a 40 character password that is actually used to encrypt the backup data. The password encryption is one way and the original password cannot be derived from the encrypted version.

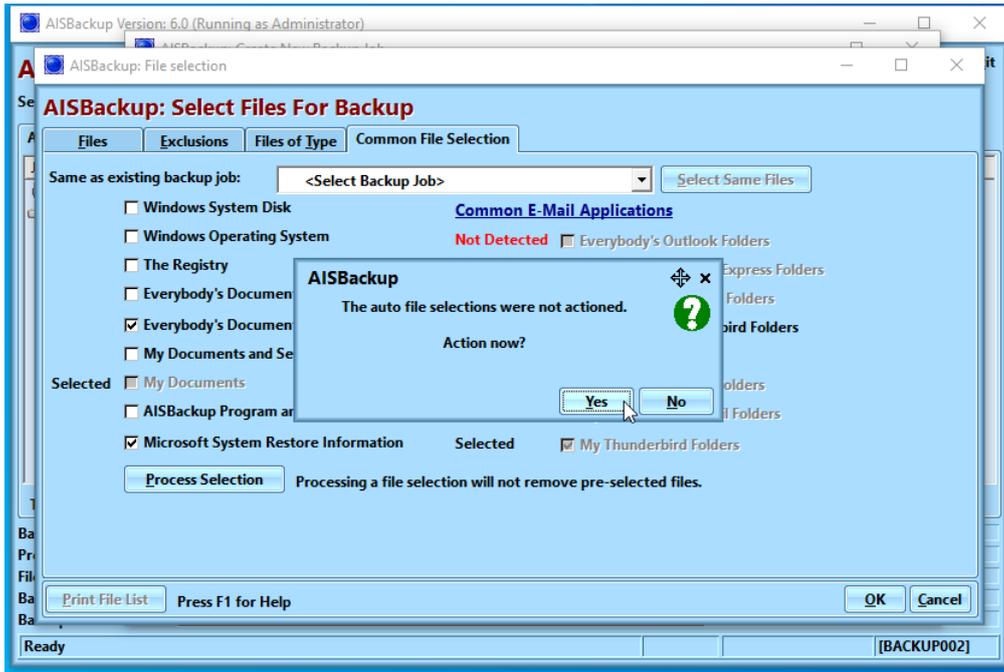
AISBackup uses the standard zip file password protection, however, you can backup to encrypted drives, for example, by using BitLocker encryption (included with Windows 10 Pro and Enterprise).



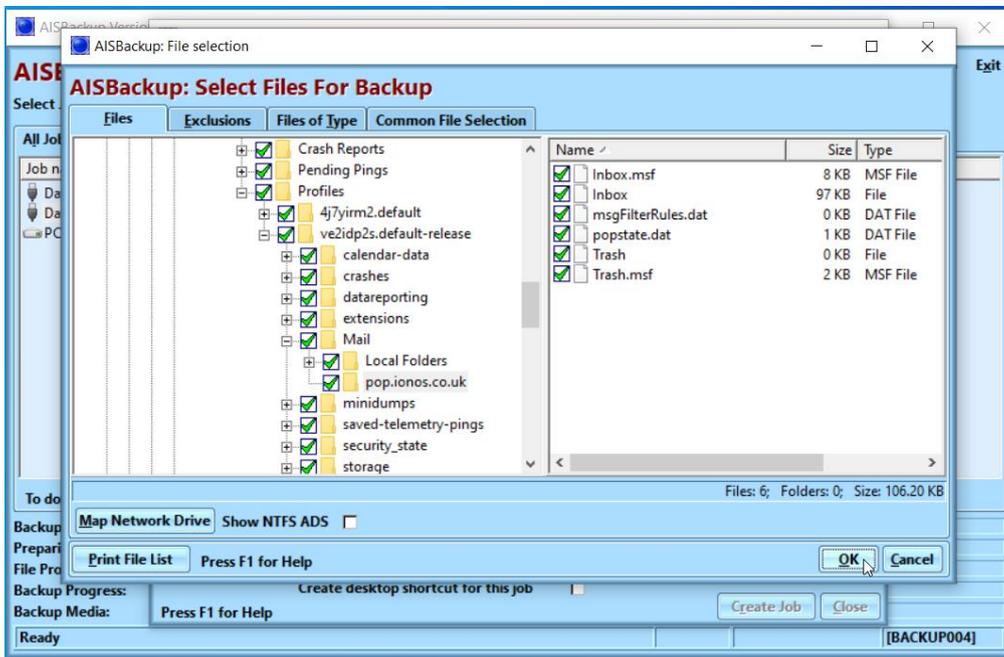
AISBackup can make some common file selections, click the **Common File Selection** tab.



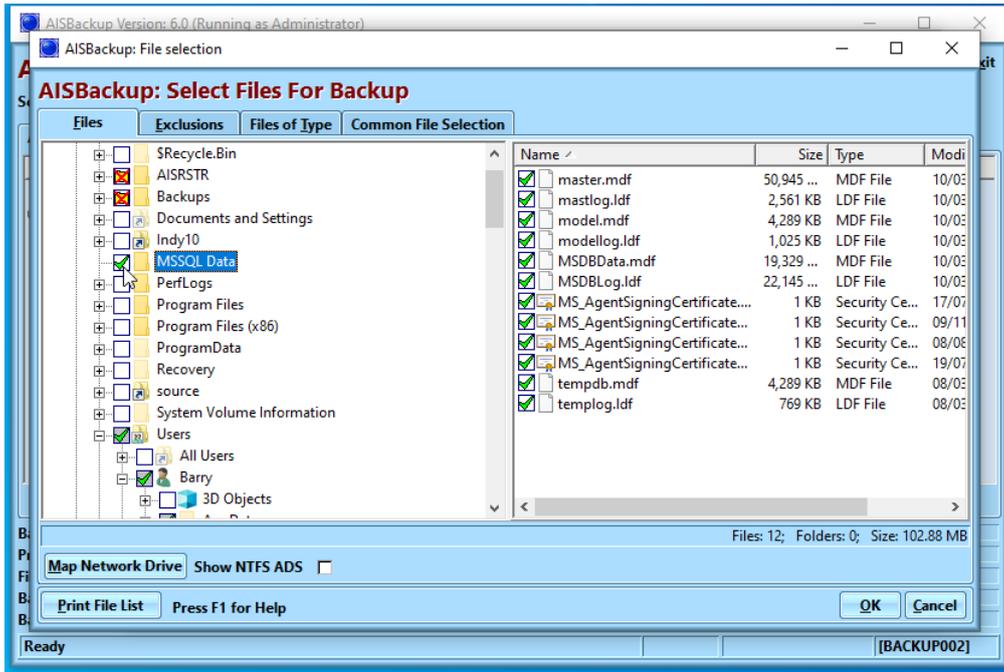
In this example Everybody's Documents (which included pictures, desktop etc.) and Everybody's Thunderbird Folders have been selected. Click **Process Selection** and then **OK** to continue.



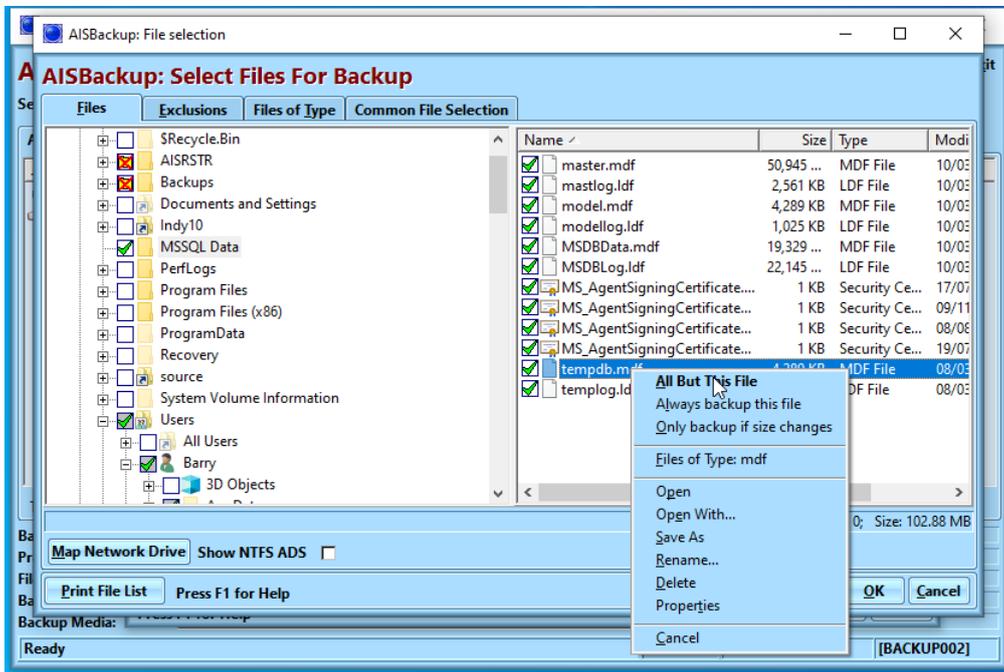
If you forget to click **Process Selection** AISBackup will remind you, click **Yes** to continue.



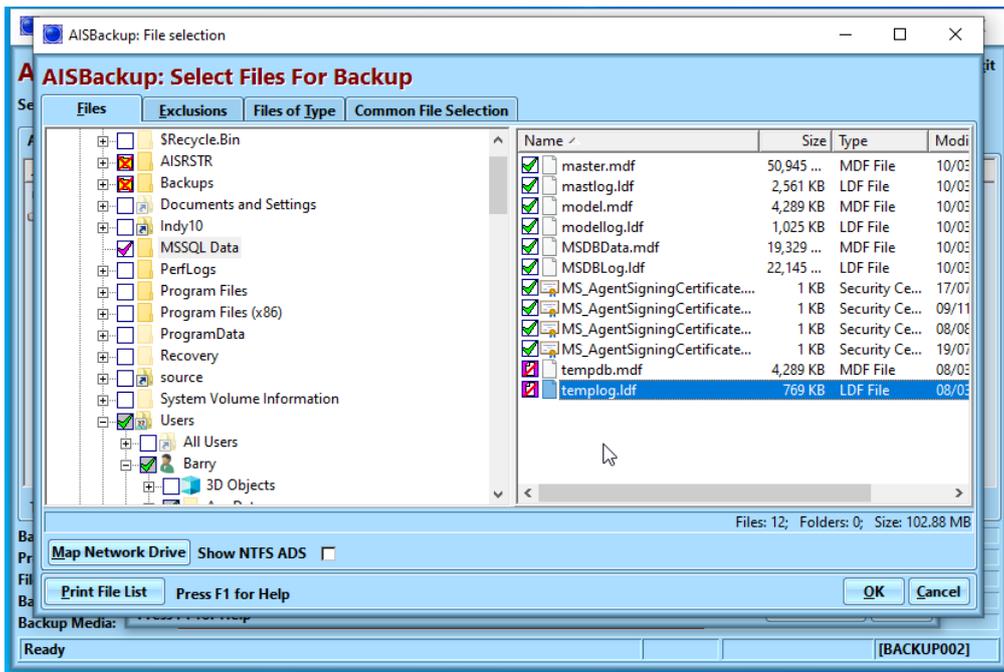
Manually select any data folders that AISBackup does not know about then click **OK** to continue.



Here is an example of selecting a folder AISBackup does not know about.

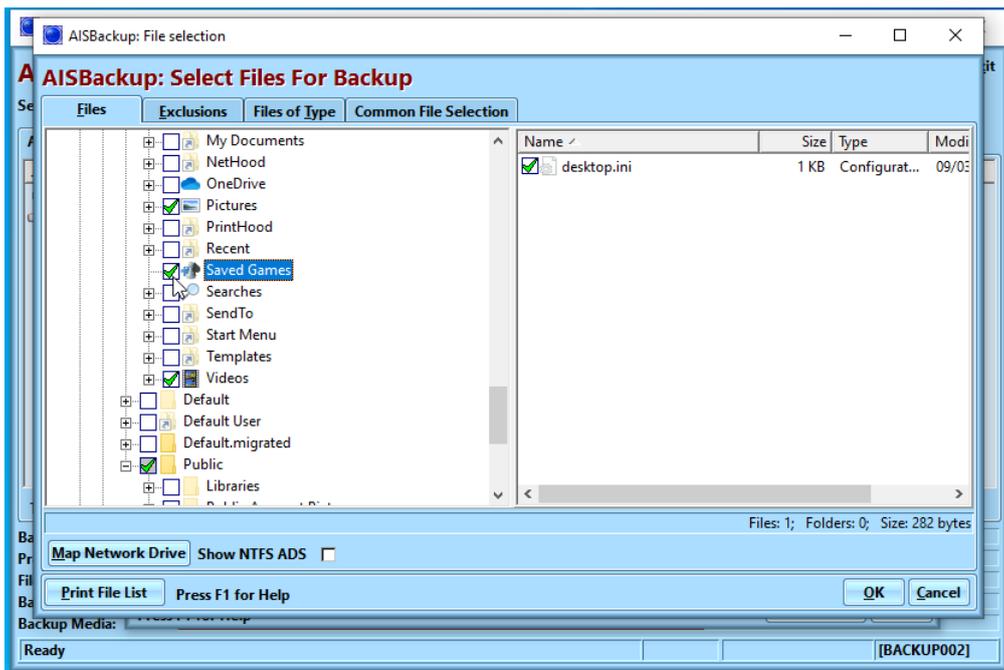


If you would like to exclude a file from a folder that has been selected for backup rather than de-selecting the file use right click / **All But This File** instead, otherwise any new files and folders added to this folder will also be excluded.

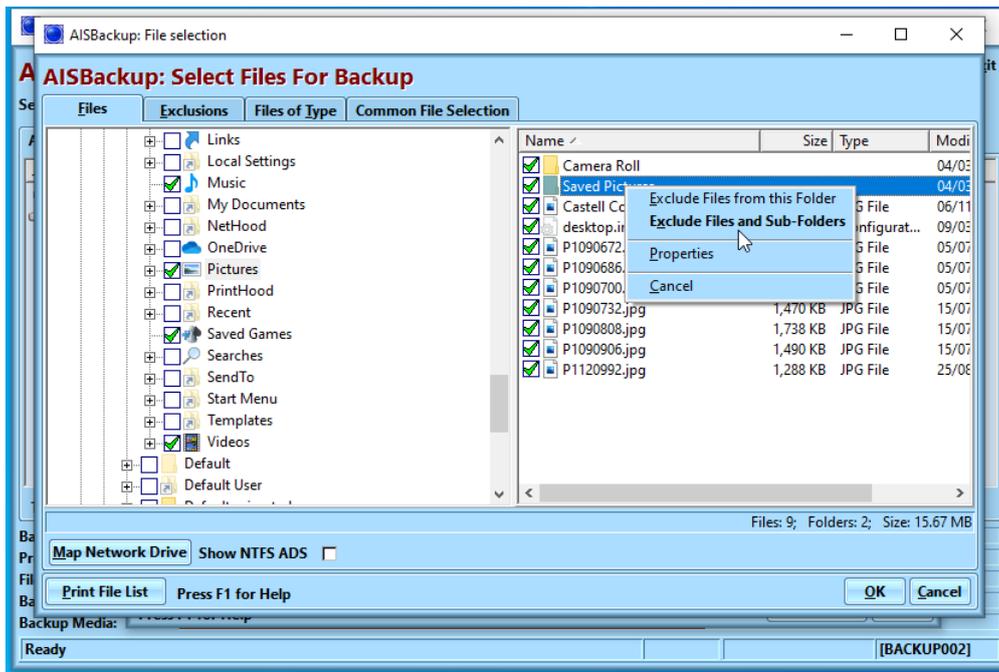


Clicking additional selected files will exclude them from the backup, click the file selection box again to toggle between selected and excluded.

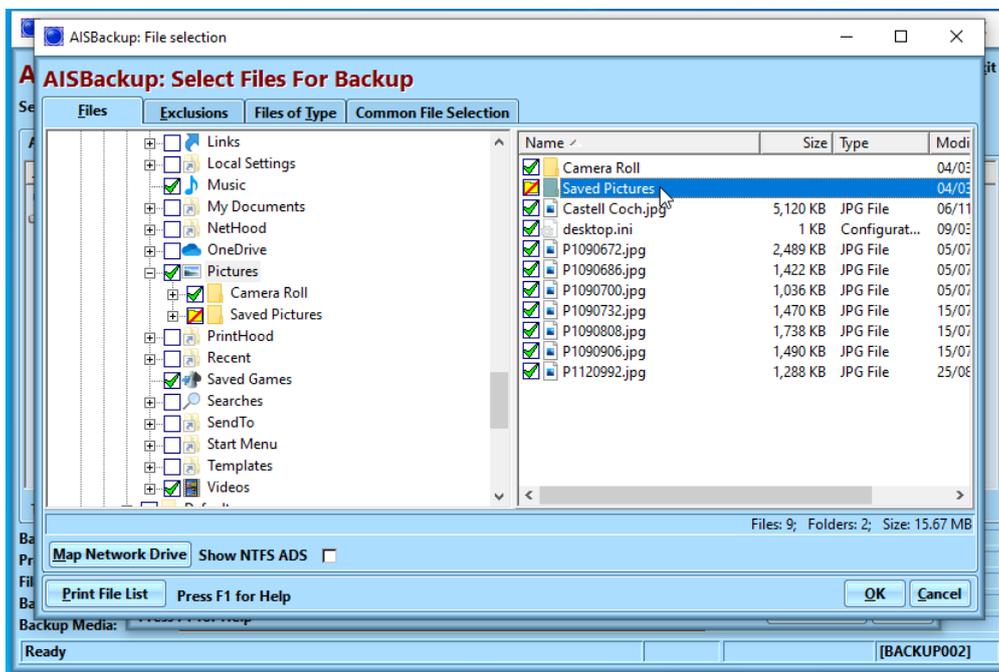
Files should be excluded rather than de-selected otherwise any new files added to the folder will not be selected for backup.



Additional folders may be selected, for example from the Users\Account Name folder.

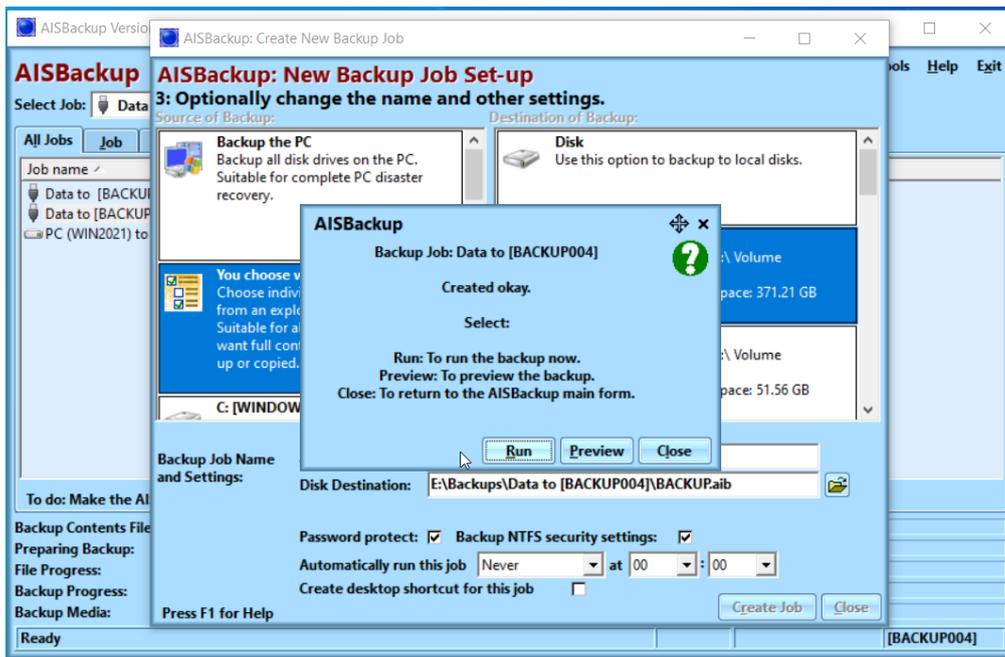


To exclude a sub-folder from a selected folder use the right click **Exclude Files and Sub Folders** option, otherwise, as stated above, any new files and folders added to the parent folders will not be selected for backup.

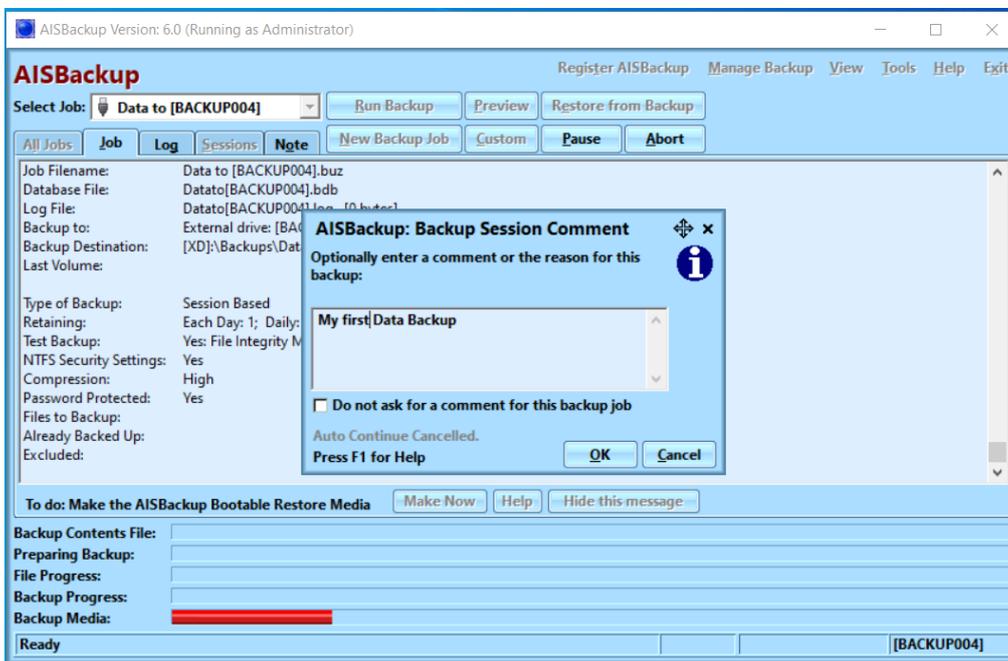


Example of a folder excluded from the backup.

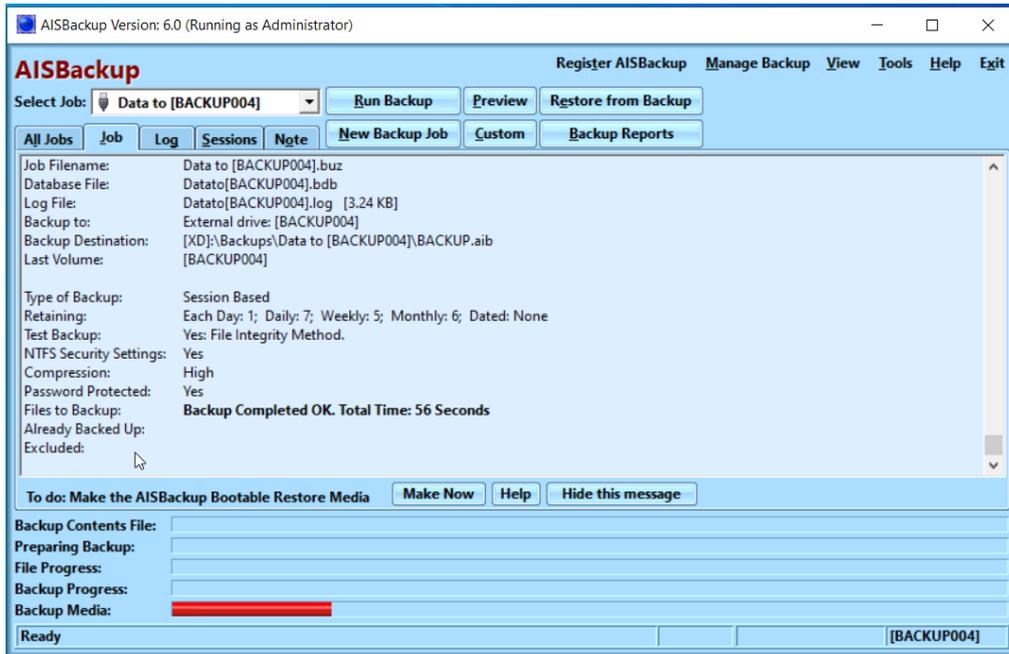
Once the file selection has been completed click **OK**.



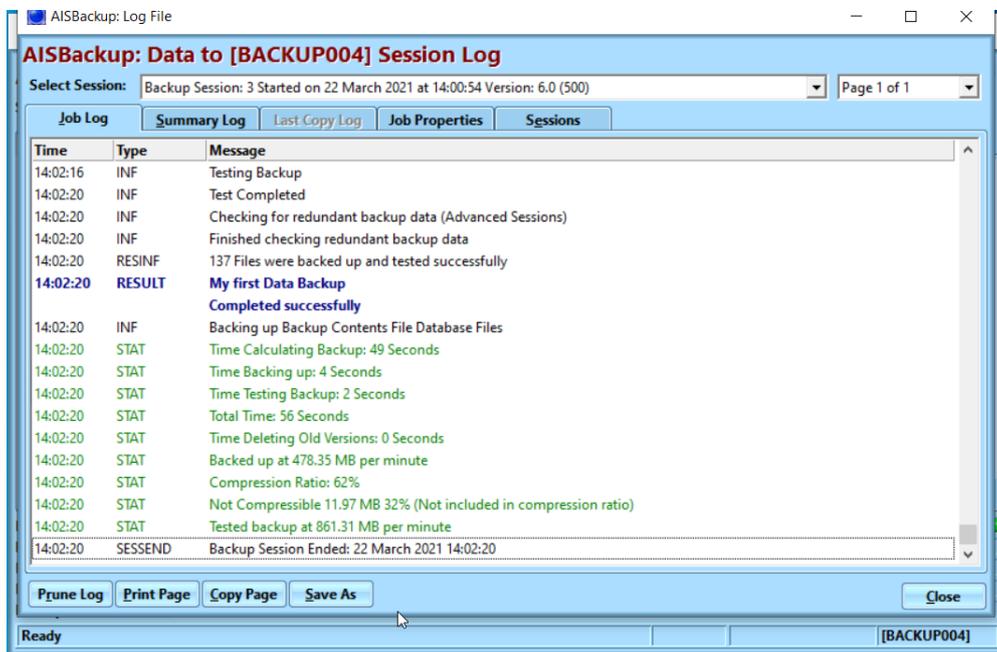
Click **Run** to run the backup now.



Optionally enter a description of this backup then click **OK**.



A screenshot of the form after the backup completed.



Here is the backup log from the data backup.

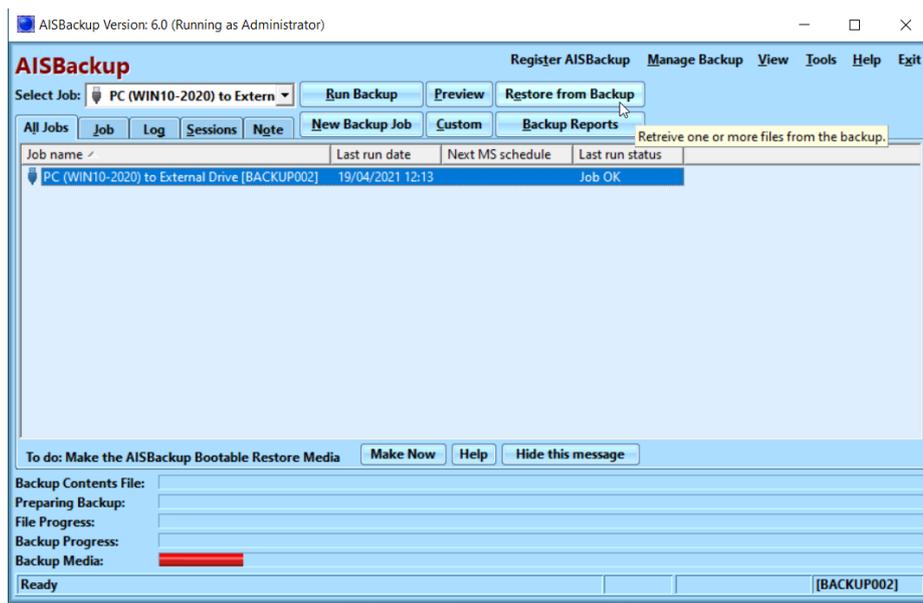
Quick Overview of Restoring a File or Files.

Restoring a document

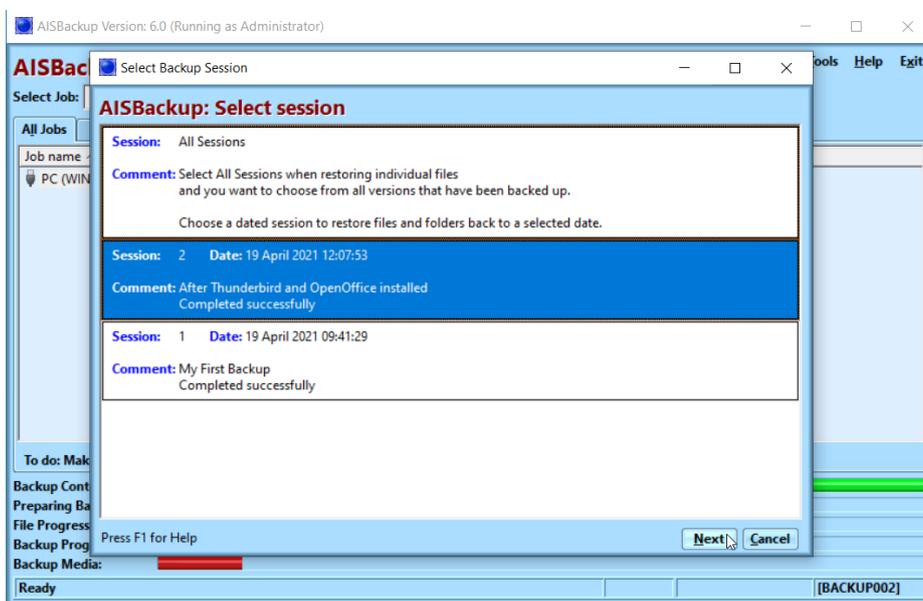
The first example shows you how to restore a document that has been overwritten by accident.

The second example covers restoring a backup made on a different PC but also covers things like opening a file directly from the backup and drag and drop restore.

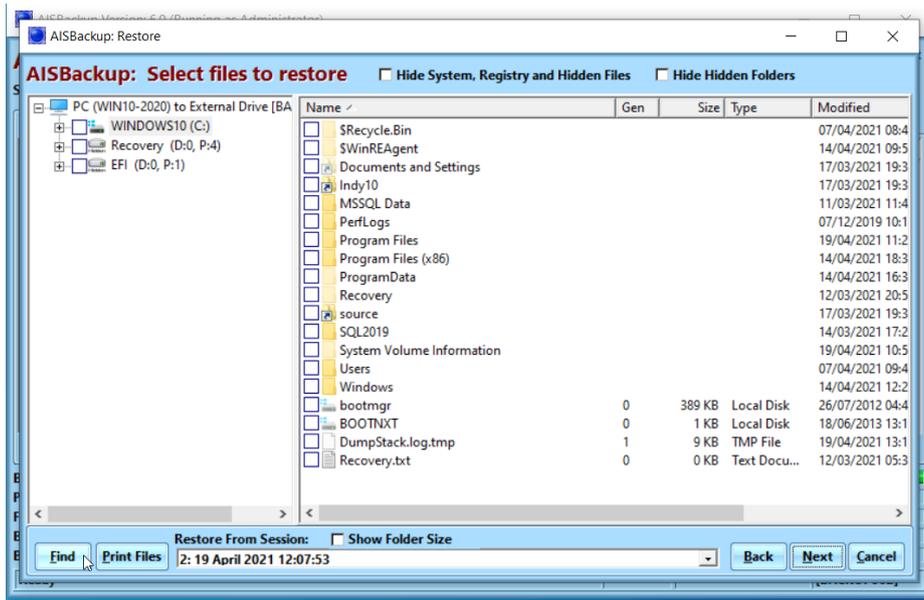
I have on a few occasions over the years opened an existing document from which to base a new document on, and then clicked **Save** where I meant to click **Save As**. Obviously it is not too late to use **Save As** to save the document under a new name, but then I want to restore the original document.



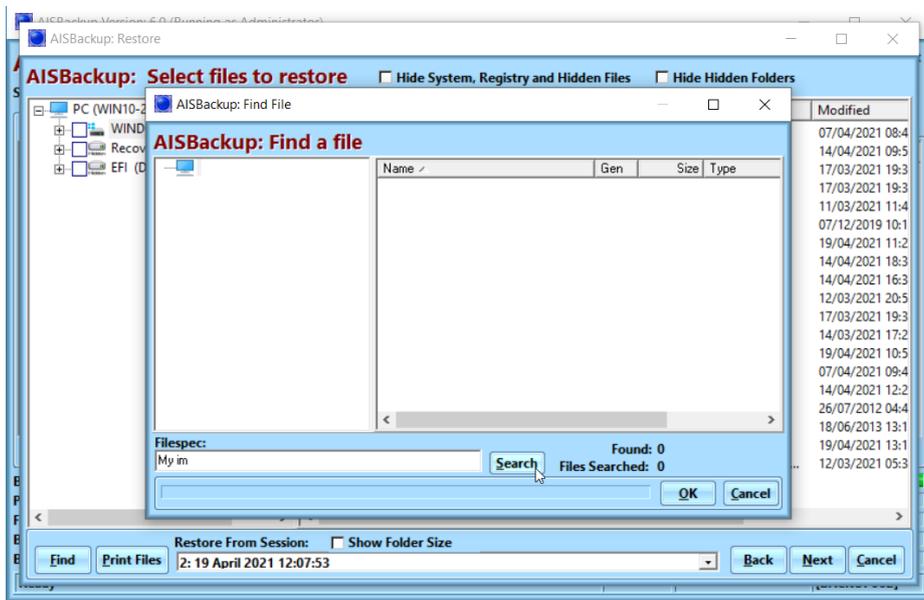
Select the backup job from which to make the restore then click **Restore from Backup**.



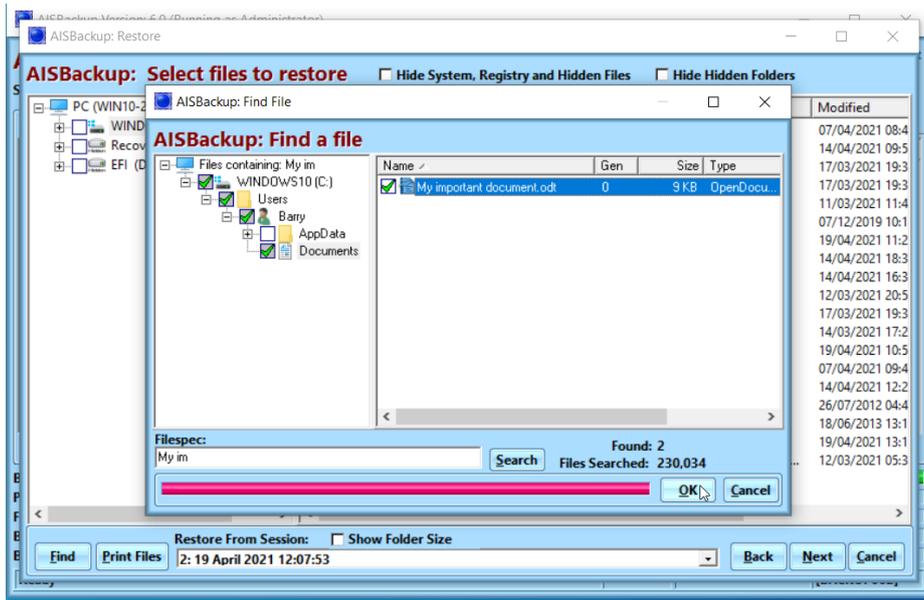
Select the dated backup session from which to make the restore and then click **Next** (or double click the session).



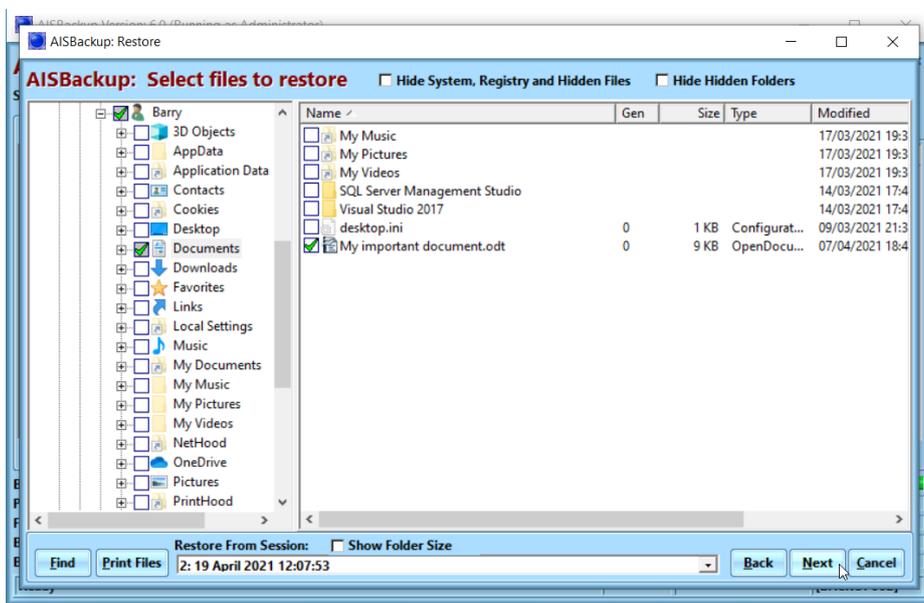
If you know the name of the file, but are unsure of the location you may click **Find**.



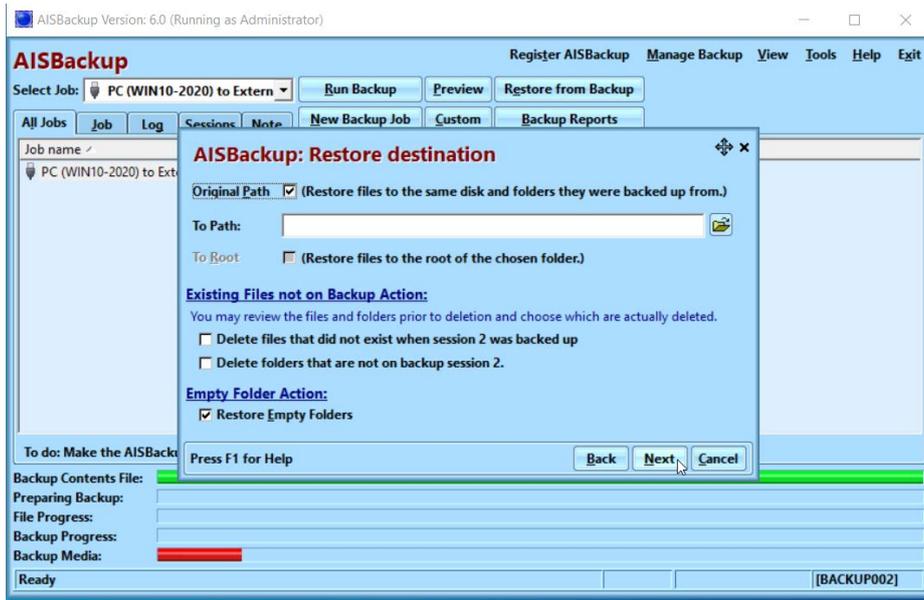
Type all or part of the name in the **Filespec** text box then click **Search**.



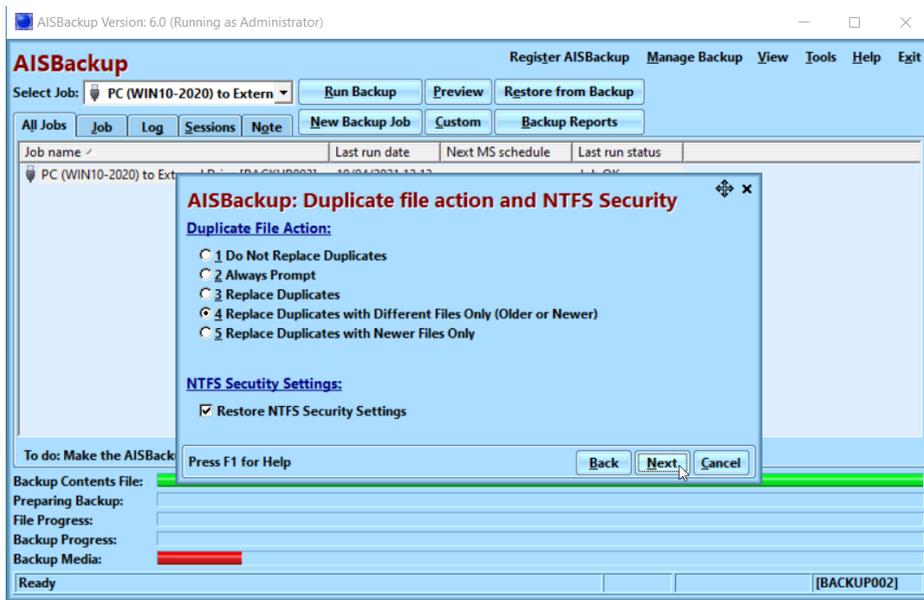
From the *Find a file* form drill down, by double clicking the folders, to your file then select it and click **OK**.



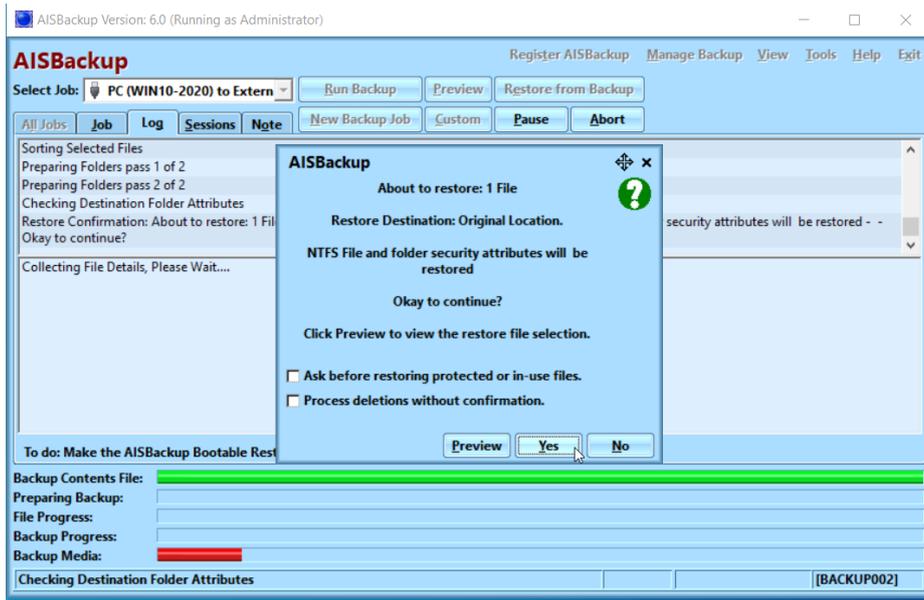
The file to restore has now been selected, you could have used the *Select files to restore* form to navigate to the documents folder and selected the file without using the **Find** option. Once the file has been selected click **Next**.



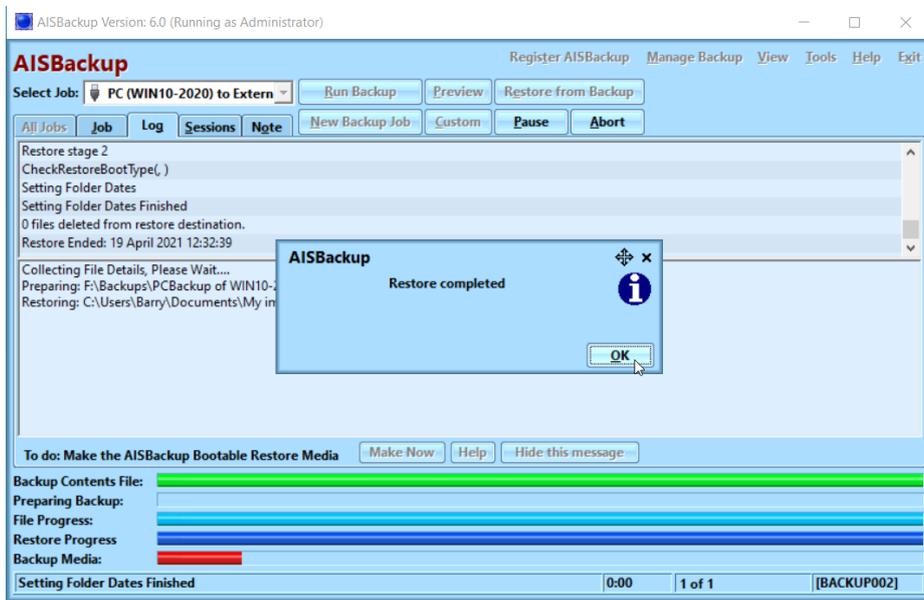
The file is to be restored to its original location (overwriting the version saved by mistake), click **Next**.



The default duplicate file action is to replace any existing file on the PC, for a description of the other duplicate file actions press F1 on the keyboard for help.

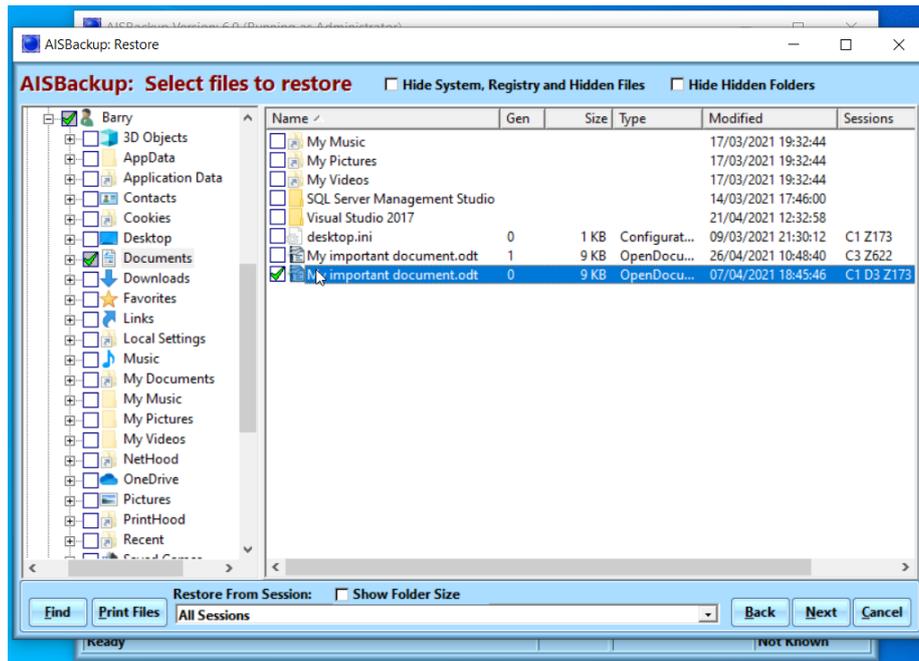


Confirm the restore by clicking **Yes**. If you would like to view the files that have been selected for restore click **Preview**.



To finish click **OK**.

If a file has been modified or deleted, and you are not sure when this was done, then selecting **All Sessions** may be more appropriate.

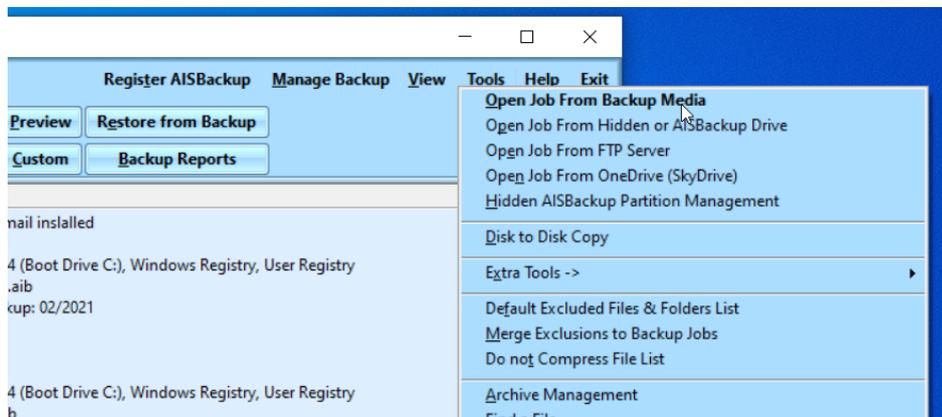


With **All Sessions** you will see all versions of a file that exists in the backup, the date modified may help identify the file you are looking for. Again, for files that have been registered to a Windows application you may double click the file to check its contents prior to restore. Only one version of the same file may be selected for restore when using **All Sessions**.

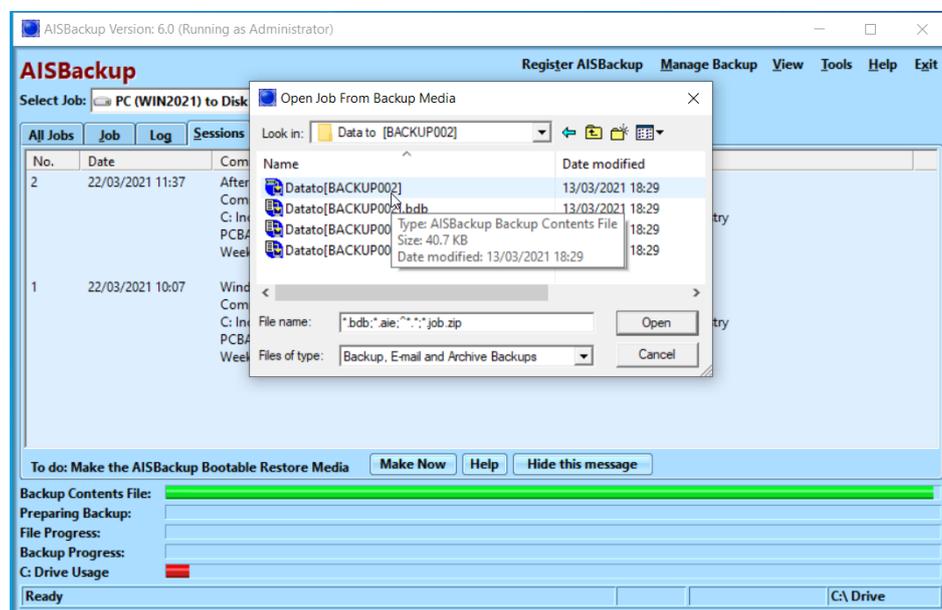
The **All Sessions** view of a backup is not compatible with restoring the Windows operating system, this must be done from a dated backup session.

Opening a backup job from a different PC.

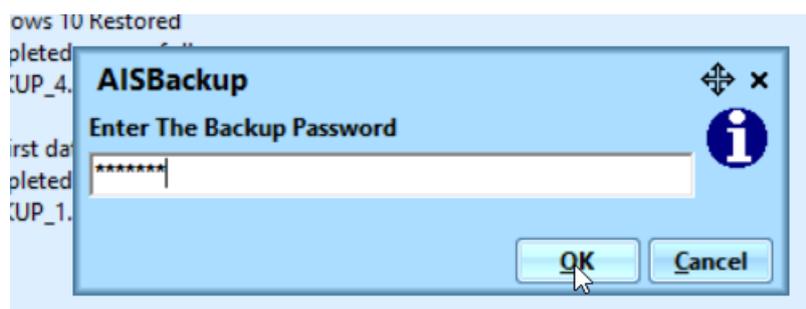
In this example the restore is being made from a backup made on a different computer, the backup was made to an external disk drive. This backup is opened and installed in the list of backups on this PC and the backup made restore only, so that it cannot be used to make a backup from this, the wrong, PC.



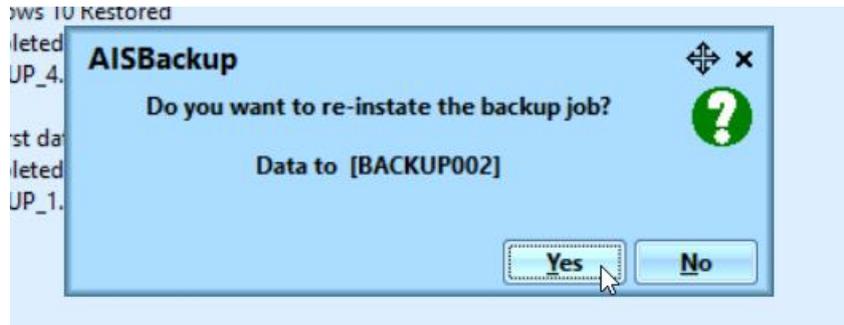
Choose the menu options **Tools / Open Job from Backup Media**.



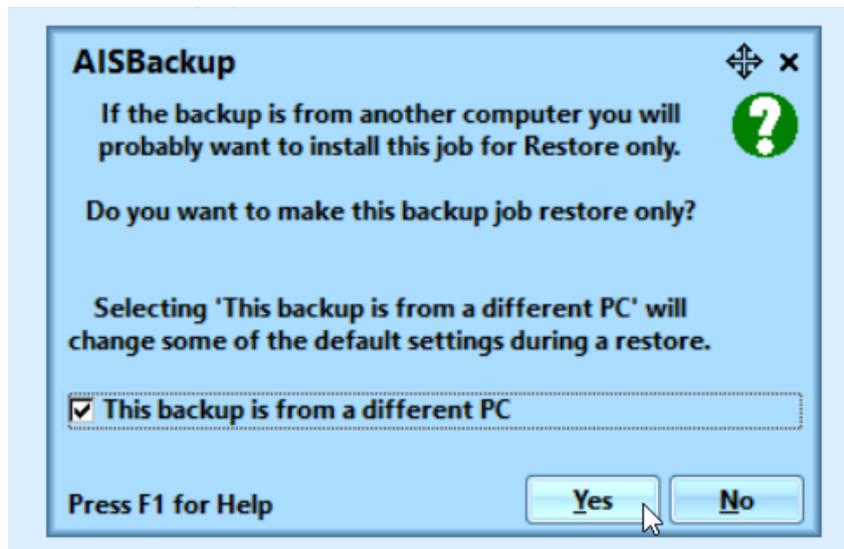
Navigate to the folder containing the backup then double click any one of the displayed files, or single click and choose **Open**.



If the backup was password protected, enter the password then click **OK**.

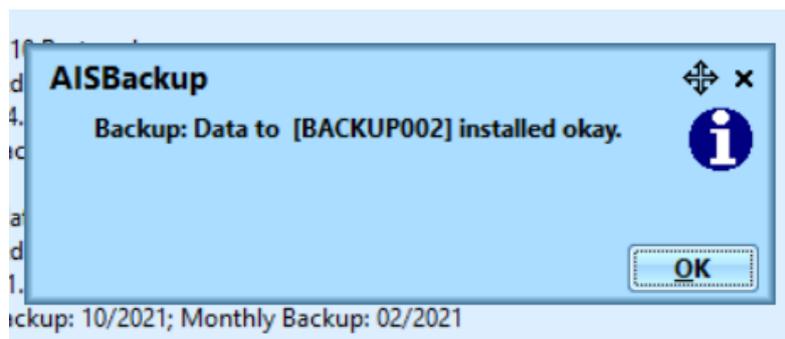


If you are likely to be restoring more than one set of files and folders, optionally, click **Yes** to the re-instate question.



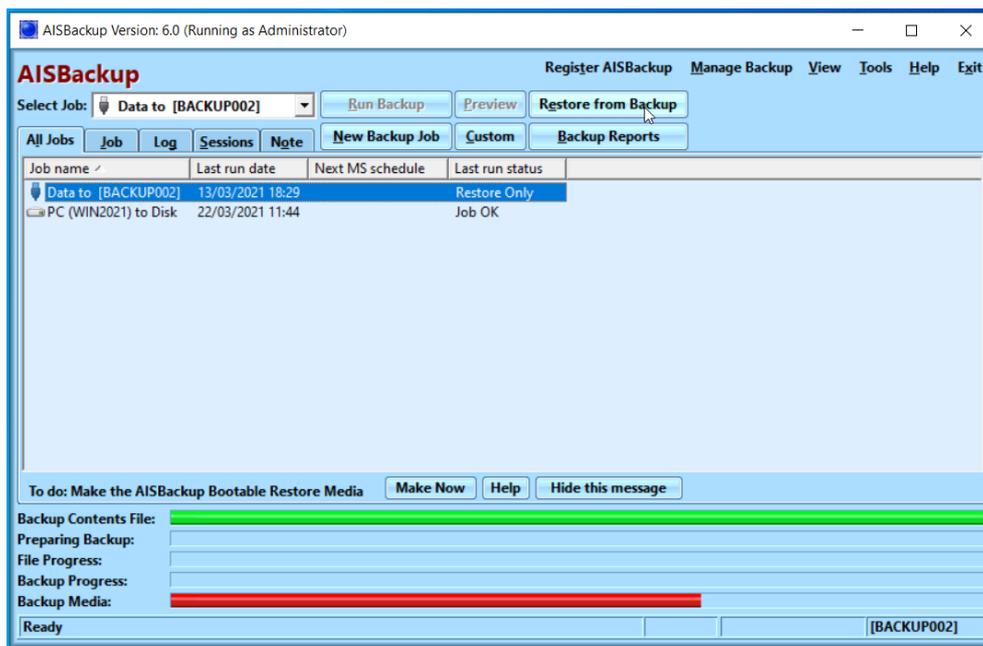
The backup was made on another PC, so click **Yes** to the Restore only question. Selecting **This backup is from a different PC** will cause some of the default restore options to be more appropriate for restoring data files. For example pictures, from a backup made on a different PC. These include:

- The options to remove files and folders that were not in the backup session are not pre-selected.
- The default action for duplicate files is set to **Do not replace duplicates**.
- The option for restoring the NTFS security settings is not selected.
- Hidden, System and Registry files are hidden from the select files for restore form.

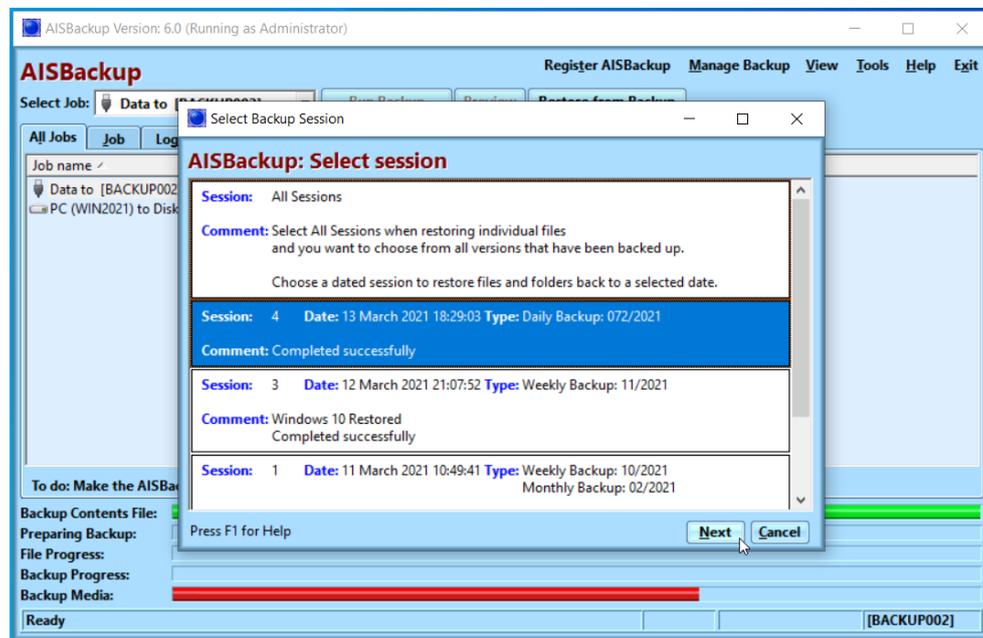


Acknowledge by clicking **OK**.

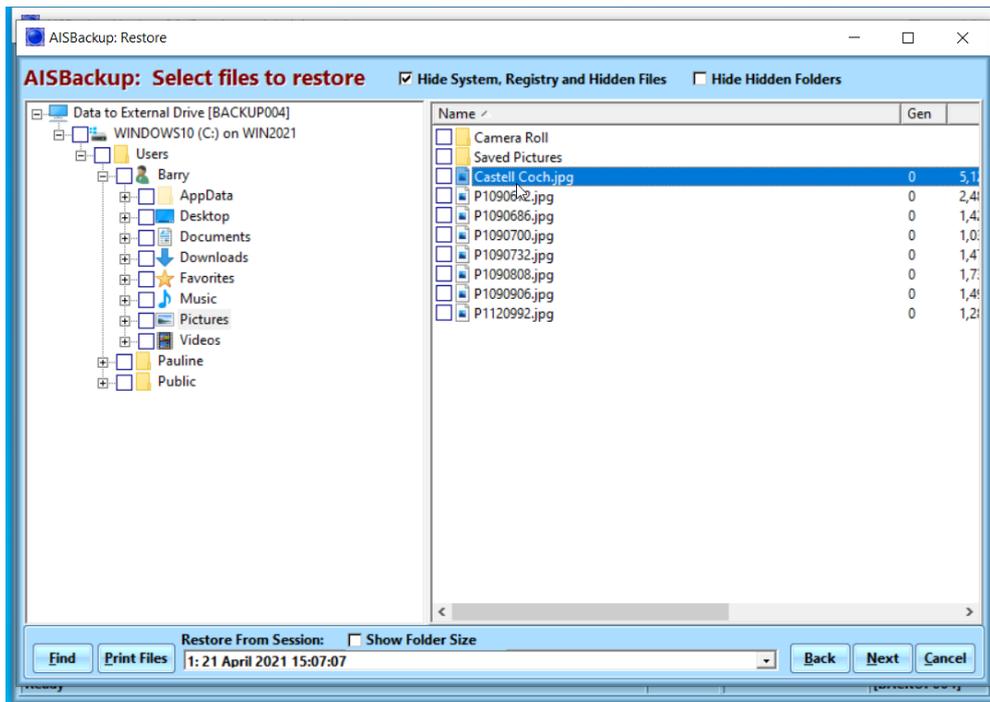
Restoring from the Backup.



Click on the backup job that was just installed then click **Restore from Backup**. If requested enter the password then click **OK**.

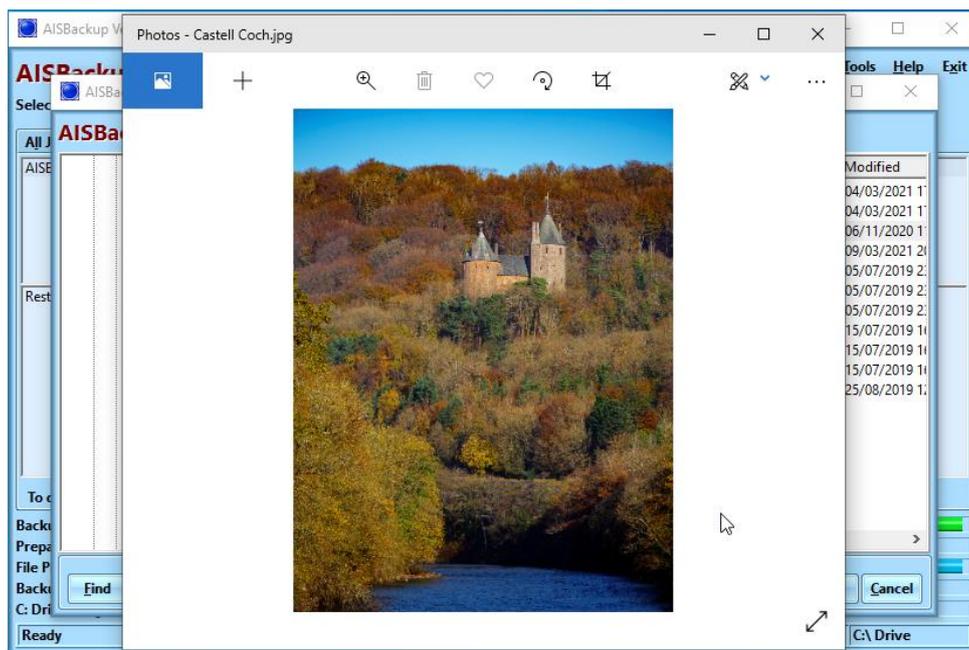


Choose a dated backup session then click **Next**.



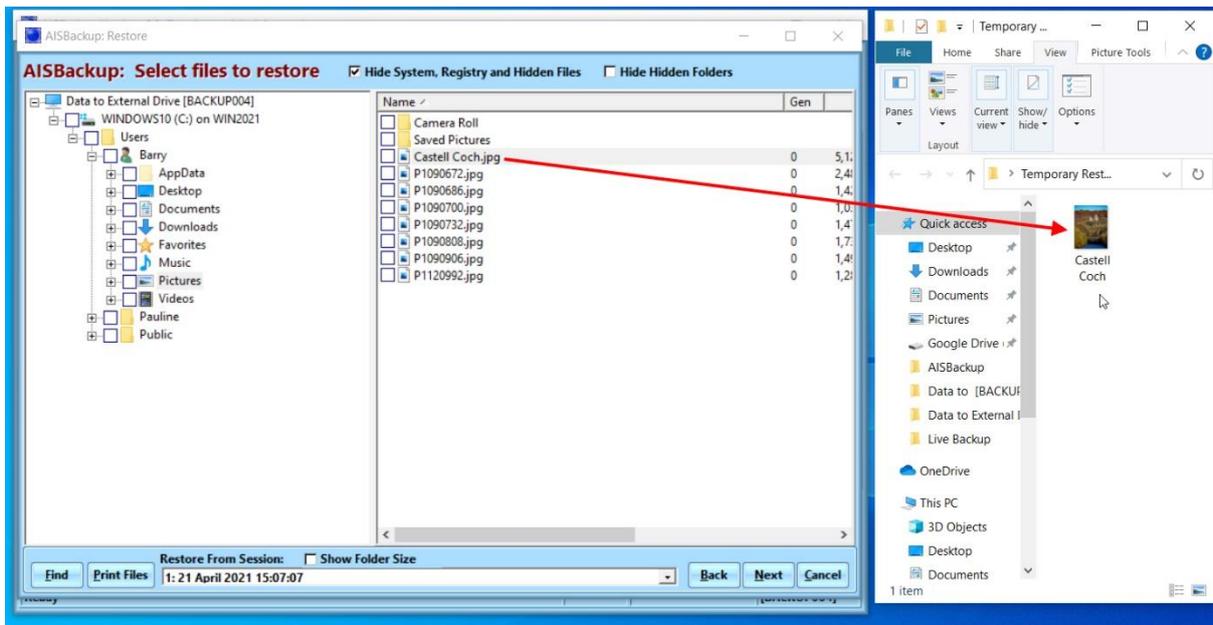
In this example the file *Castell Coch* is opened directly from the backup by simply double clicking it.

Notice that **Hide System, Registry and Hidden Files** has been pre-selected when the **This backup is from a different PC** was selected when reinstating the backup job. This will prevent Windows system files from being restored by accident. This option may be de-selected if you deliberately want to, for example, restore a hidden file.

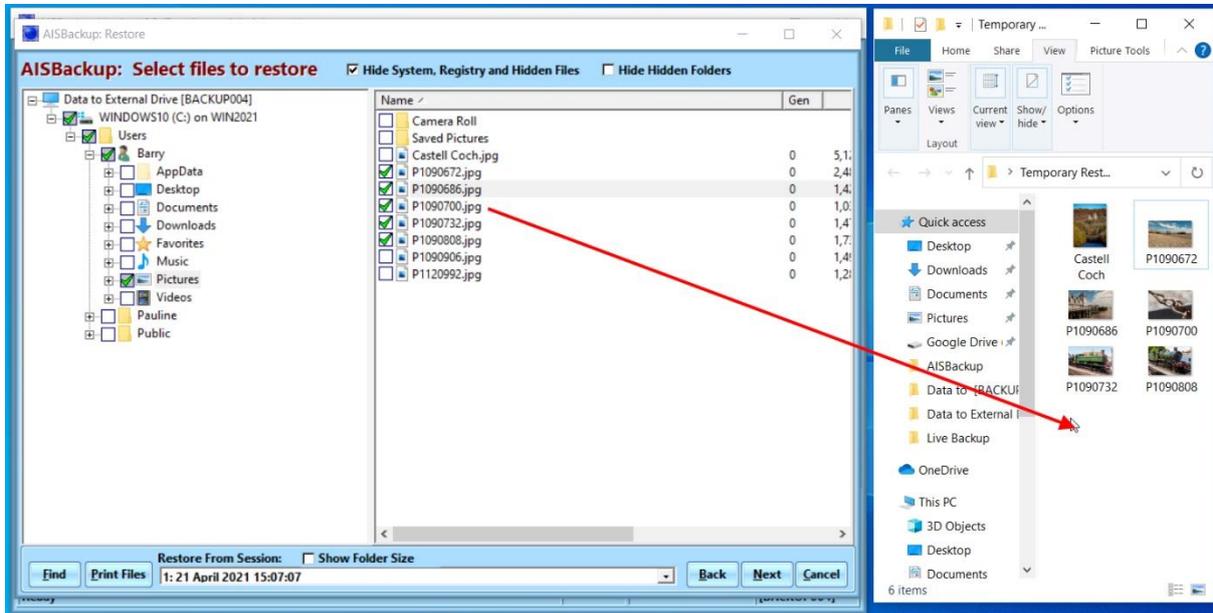


Result of double clicking a jpg image file.

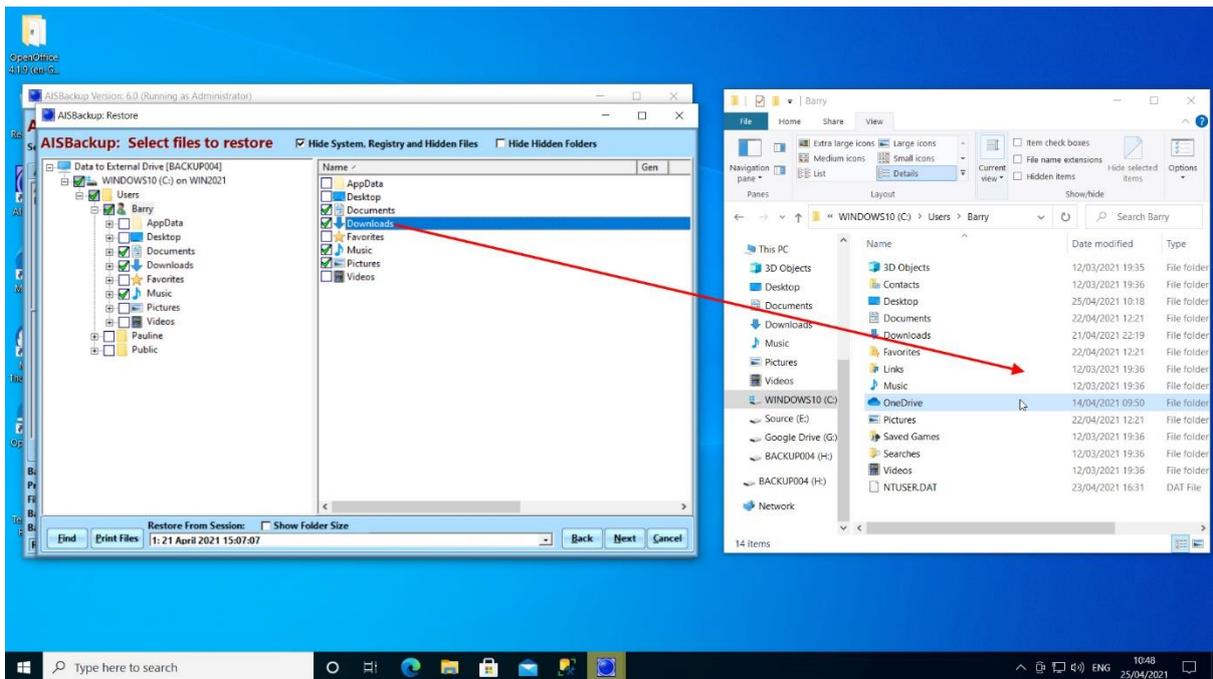
When a file is opened directly from the backup it is restored to a temporary folder. The contents of this folder are deleted when AISBackup closes. Rather than proceeding to restore the file you can usually use the 'Save As' functionality of the application that opened the file to save the file somewhere else on the PC.



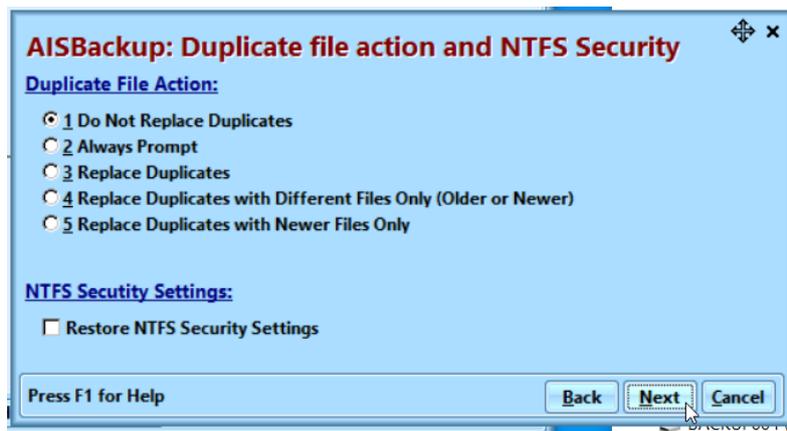
A file may be dragged and dropped into a folder or to the desktop, AISBackup must have access to the folder where the file is dropped, dropping a file to the root of the C drive, for example, produces an *Access Denied* error message.



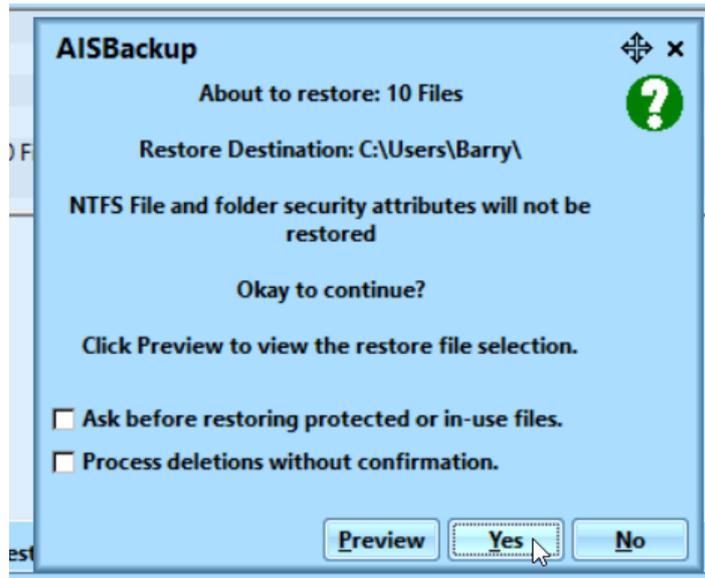
More than one file may be selected for the drag and drop operation.



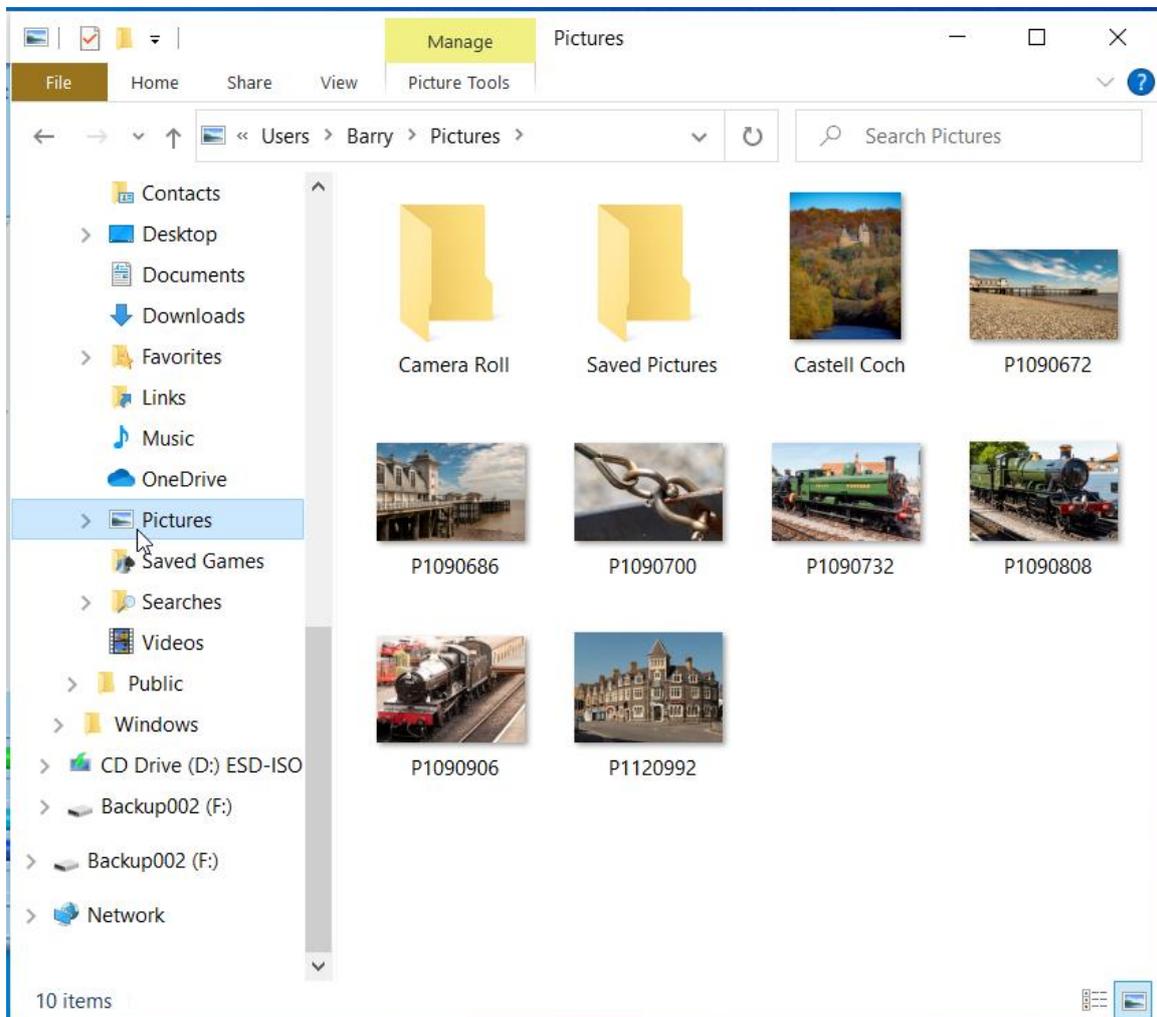
In this example the current folder containing the user account folders for 'Barry' has been opened in explorer (C:\users\barry) and the folders Documents, Downloads, Music and Pictures selected then dragged and dropped onto explorer.



This backup is from a different computer, so the duplicate file action has been set to **Do Not Replace Duplicates** and the security settings **Restore NTFS Security Settings** has not been selected, click **Next**. If the backup is from this computer you may restore the security settings. You can of course change the duplicate file action to something more suitable for your own requirements.



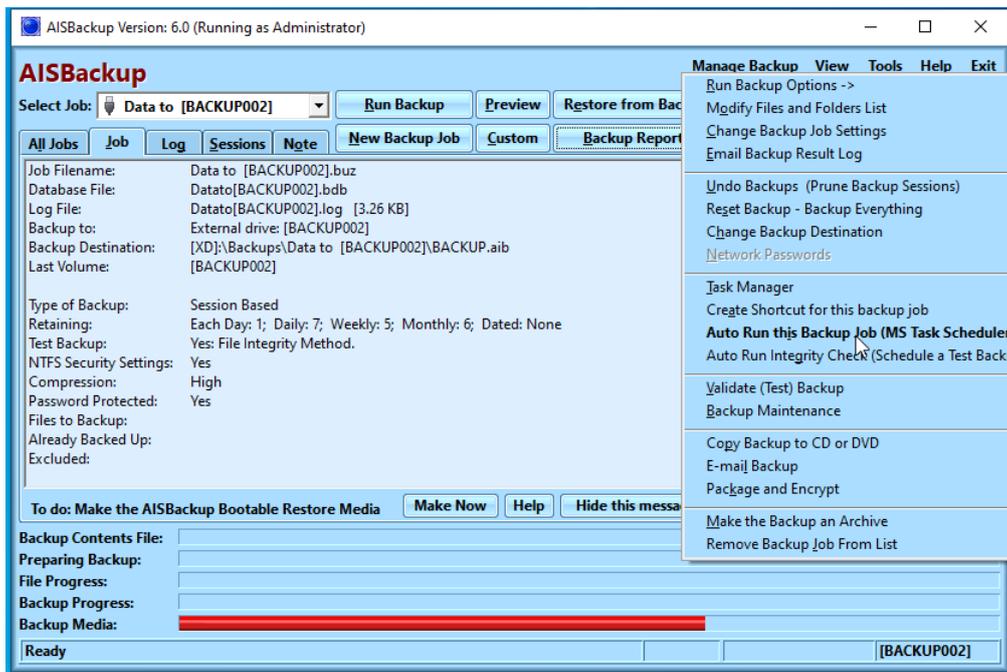
Confirm the restore by clicking **Yes**. You may view what is to be restored by clicking **Preview**.



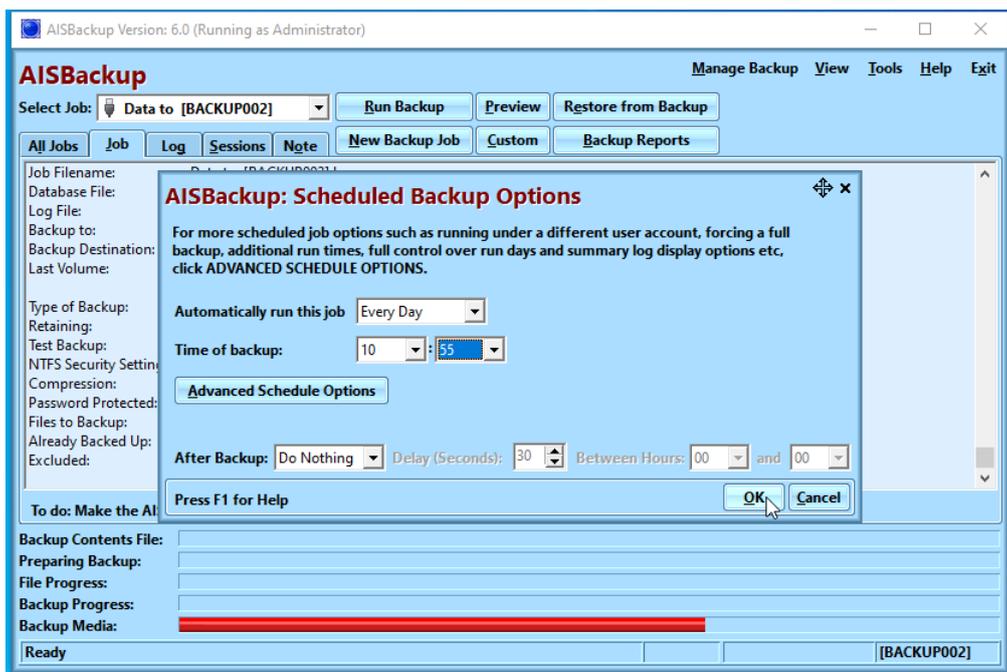
Here is the contents of the C:\Users\Barry\Pictures folder after the restore.

Scheduling a Backup

A backup job may be scheduled. The schedule is controlled by Microsoft Task Scheduler but may be set-up using AISBackup.



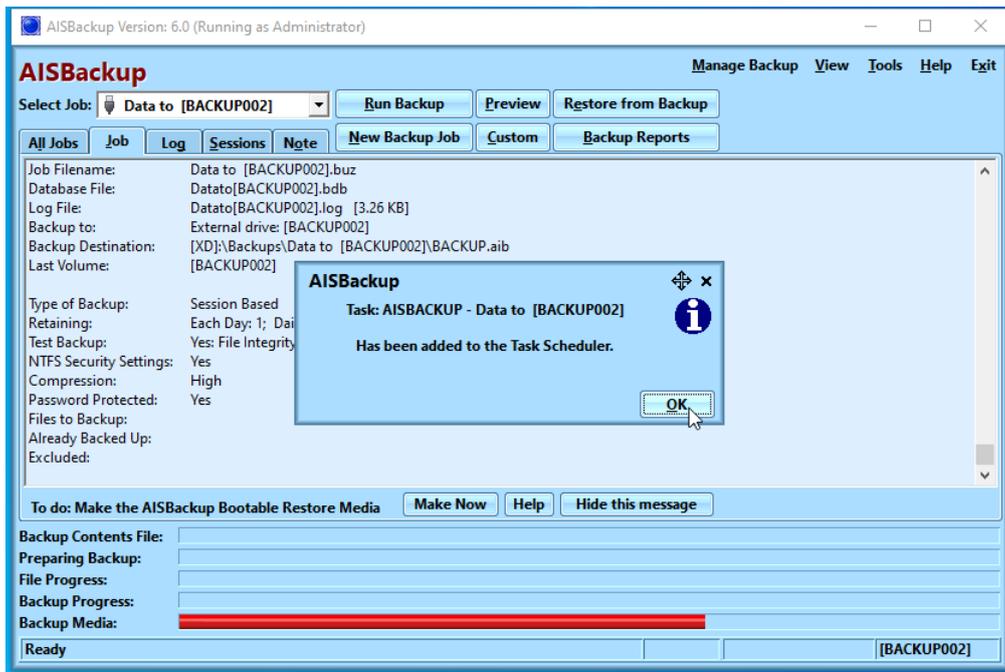
Choose the menu option **Manage Backup / Auto Run this Backup job (MS Task Scheduler)**.



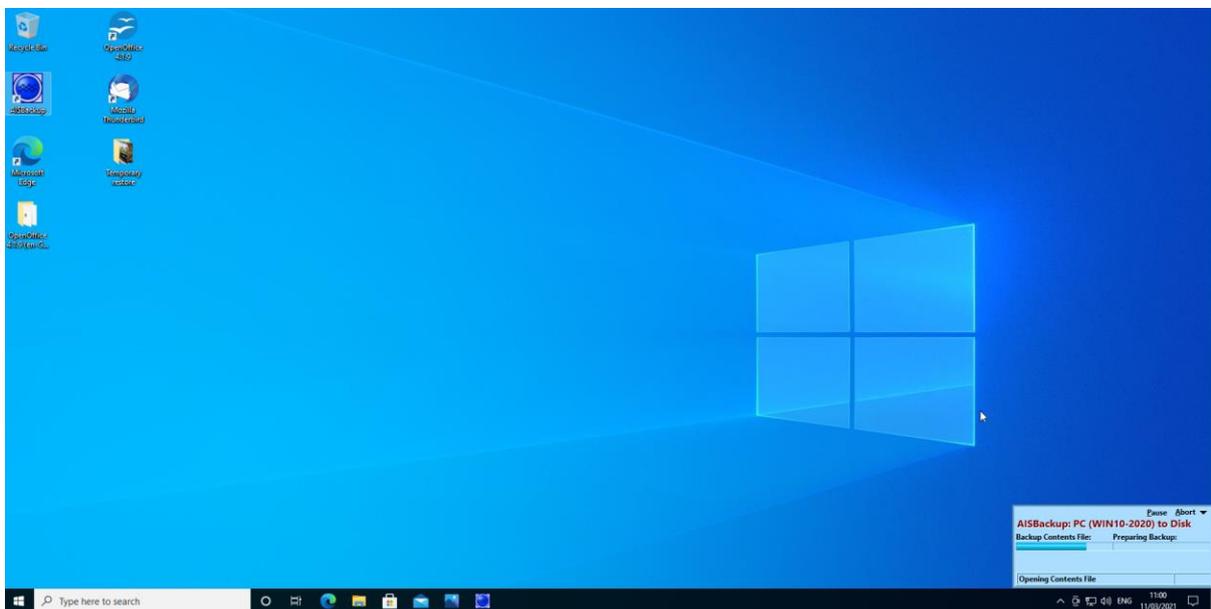
For most schedules where the PC is on and logged in at the chosen time select:

- The frequency with the **Automatically run this job** dropdown box.
- The **Time of backup** by selecting the hour and minutes.

If a scheduled backup starts whilst another backup is running AISBackup queues the scheduled backup job, or jobs and it will run after the current backup finishes.



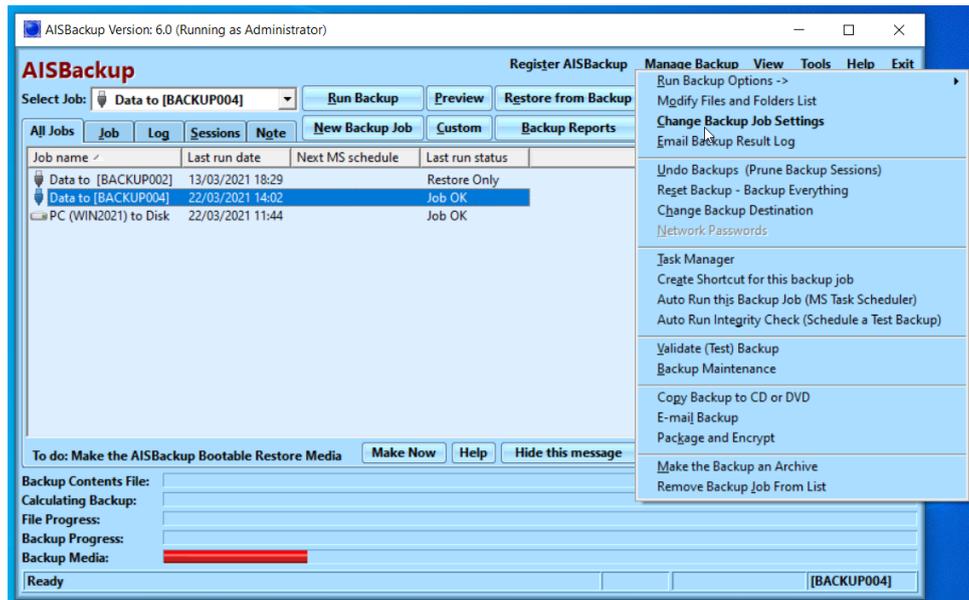
Click **OK** on the confirmation message.



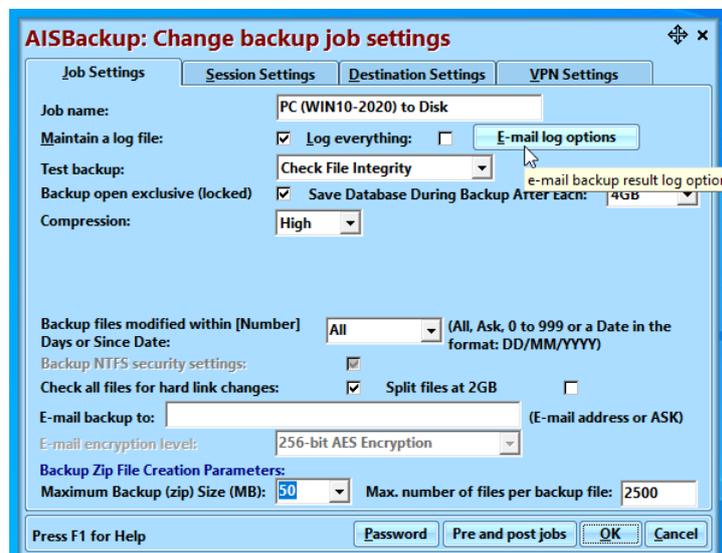
A scheduled AISBackup runs in a smaller window displayed on the bottom right of Windows.

Sending an E-mail Containing Backup Results

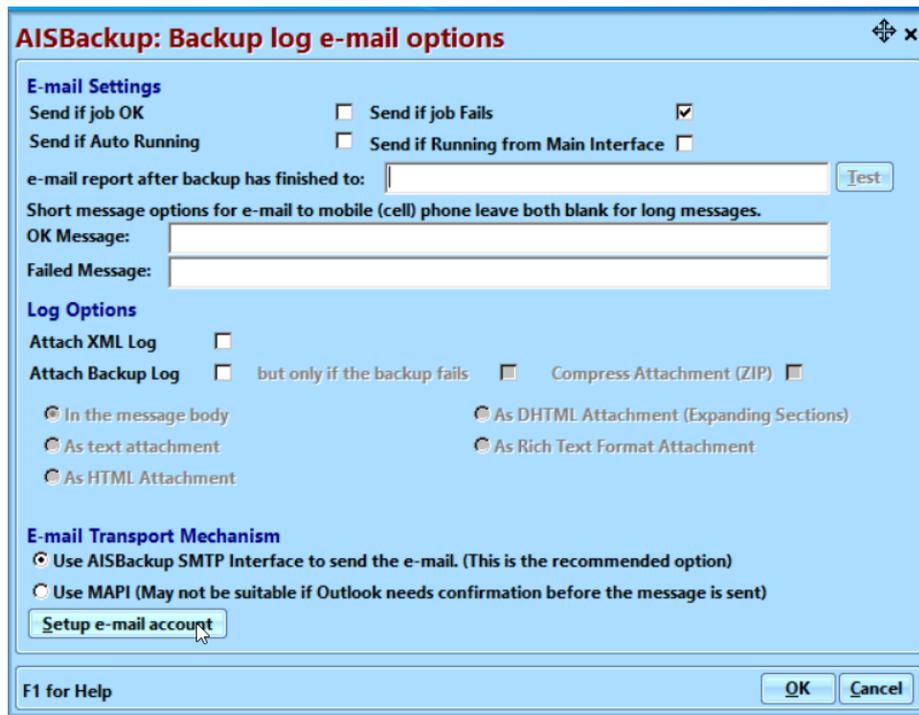
You may set-up an option for AISBackup to e-mail the results of a backup.



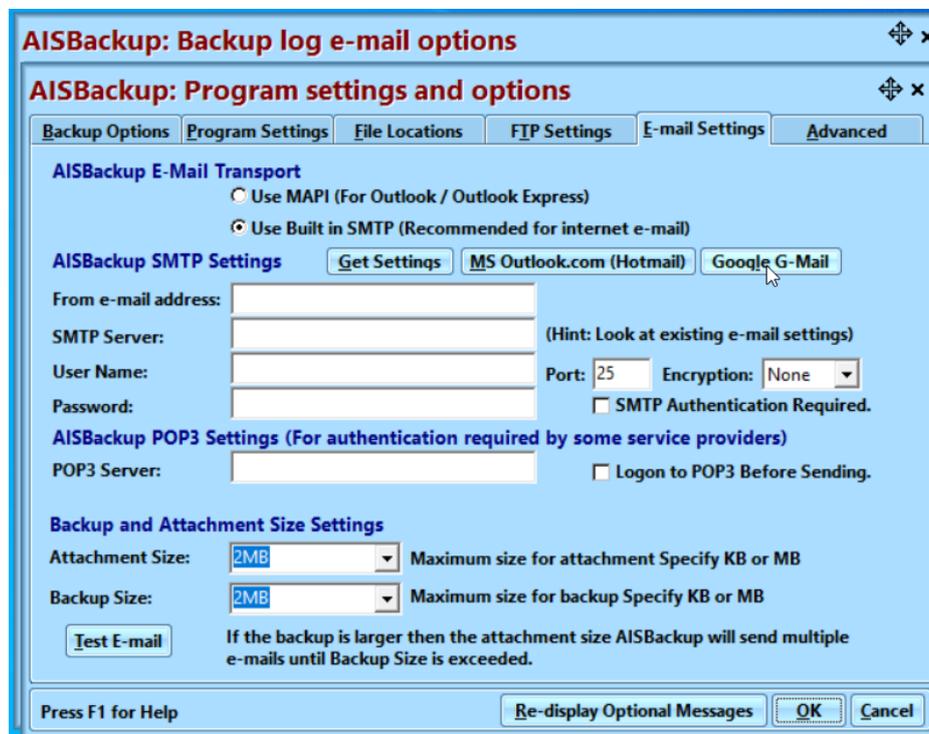
Select the menu options **Manage Backup / Change Backup Job Settings**



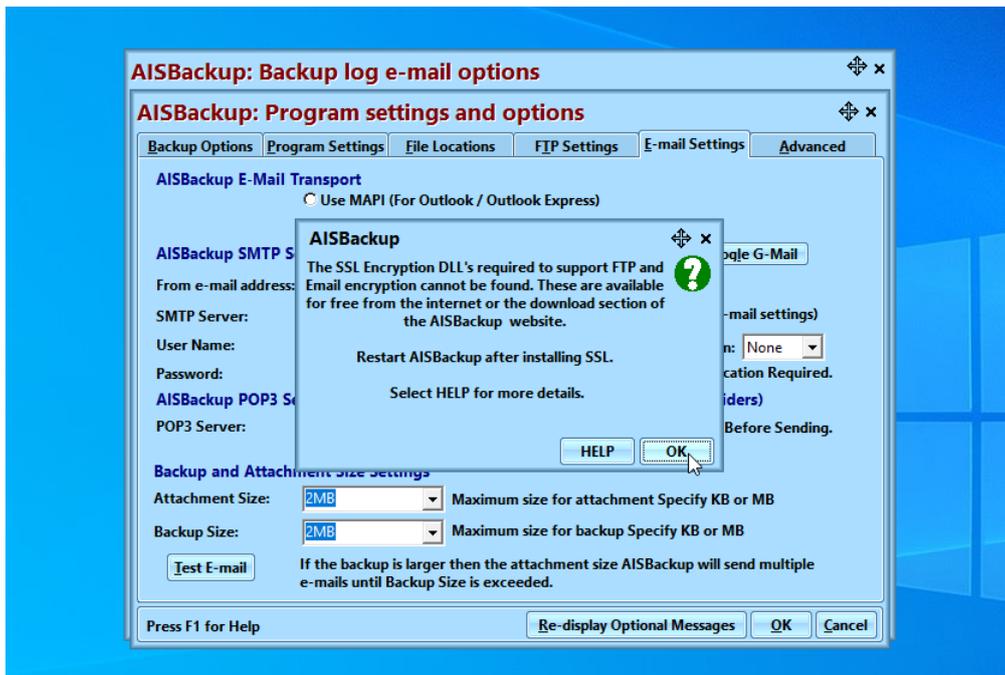
Click **E-mail log options**.



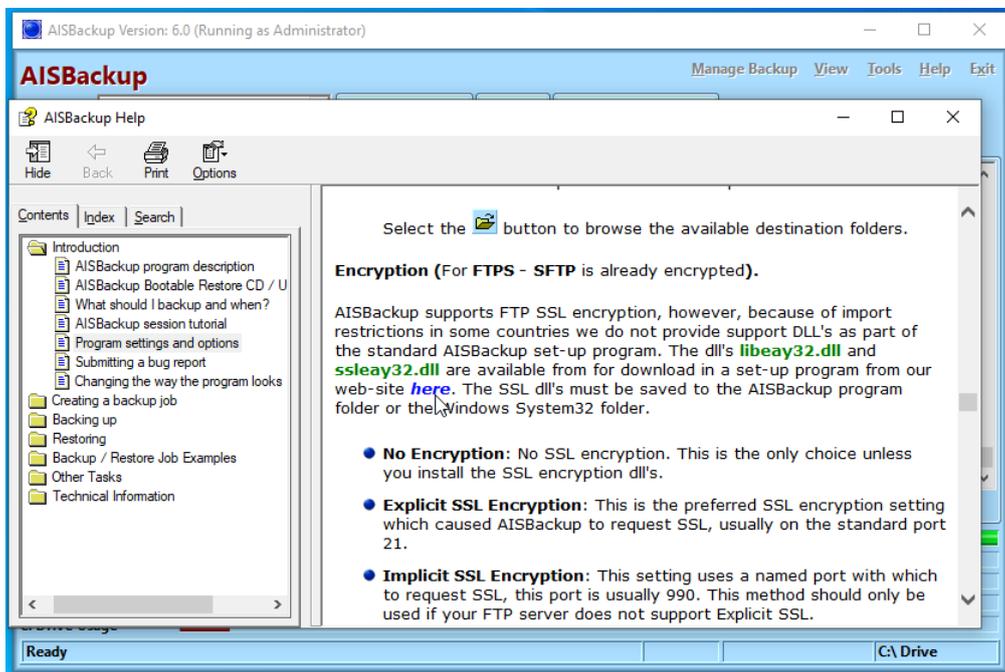
If this is the first time that you are using the e-mail option, click **Setup e-mail account**.



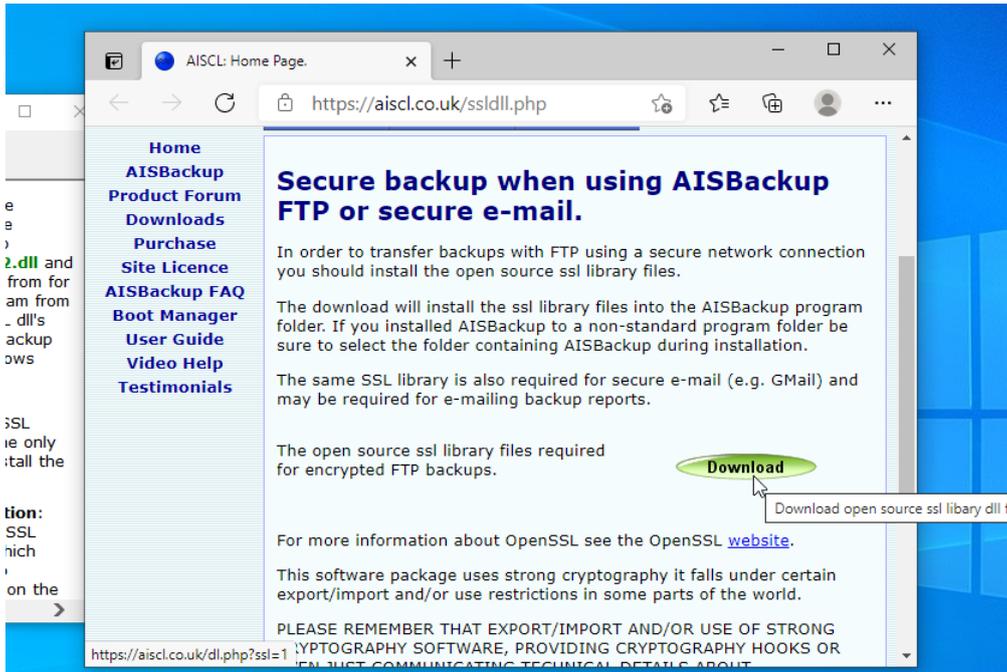
Enter the settings in the way you did for your current outgoing e-mail system. If you are using Outlook then you may choose an account by clicking **Get Settings**, AISBackup can start you off with **MS Outlook** and **Gmail** by clicking the appropriate button. Enter the e-mail user name and password then click **Test e-mail**.



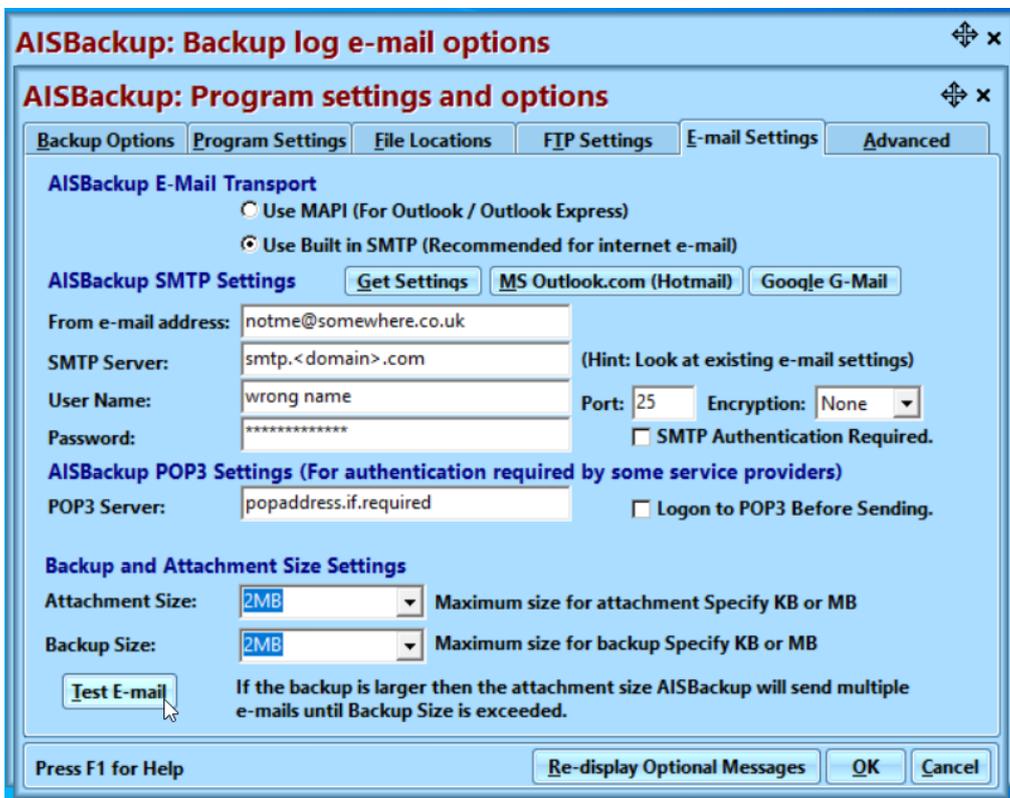
If the e-mail system you are using uses encryption, for example G-Mail, then you must download and install the encryption files from the AISBackup website.



The help text from AISBackup about secure e-mails and FTP. From here you can access the download page of the AISBackup website, by clicking [here](#) in the help file.

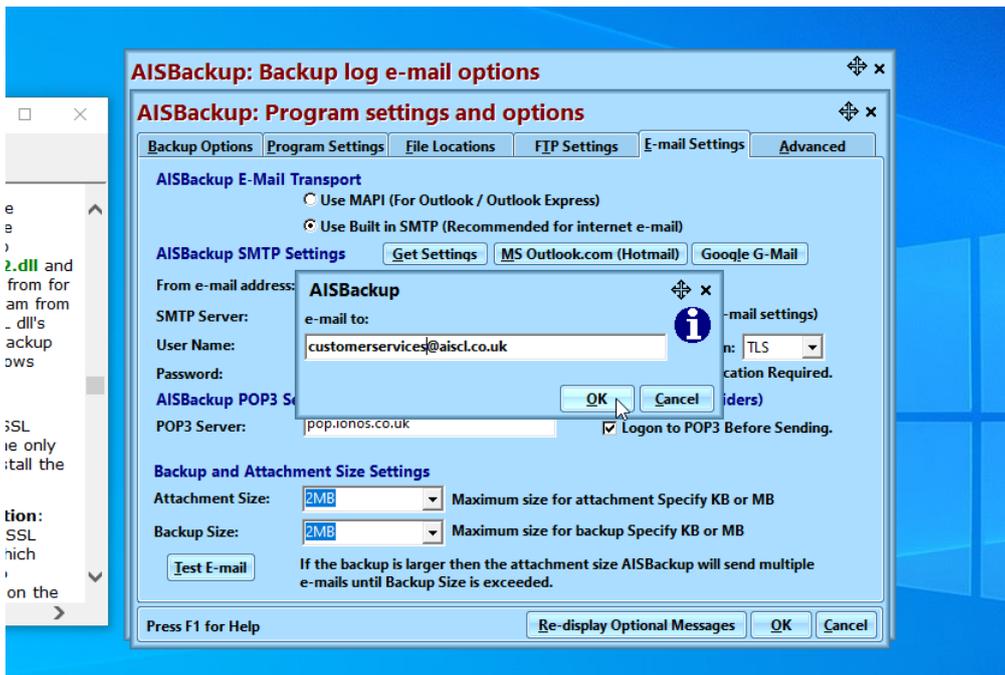


Download the files required for encryption and install them.

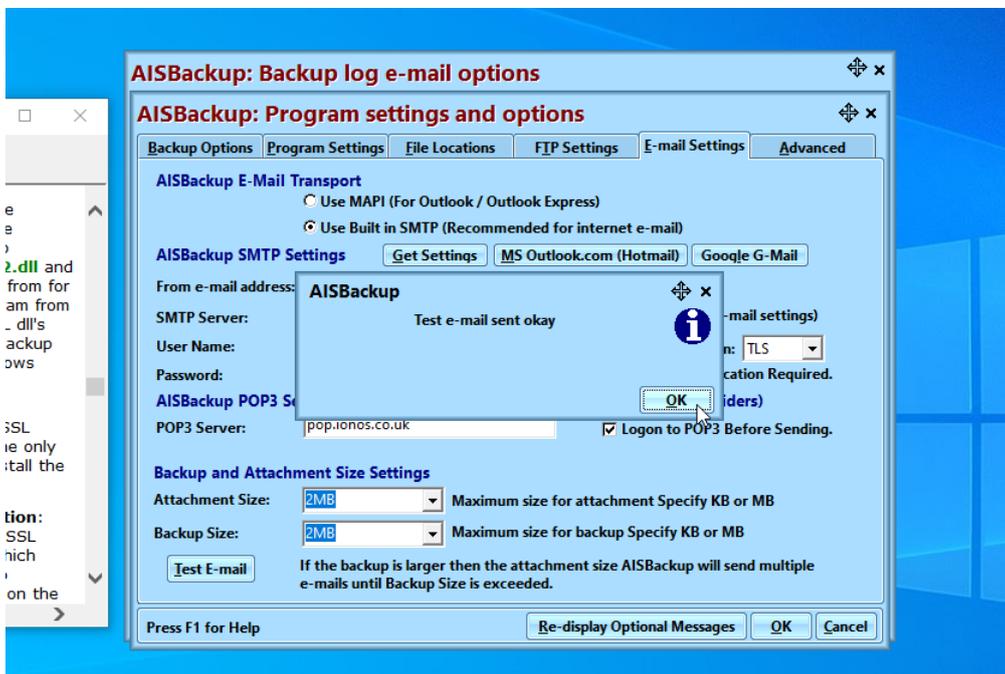


This is an example of the completed form, albeit using a fictitious information.

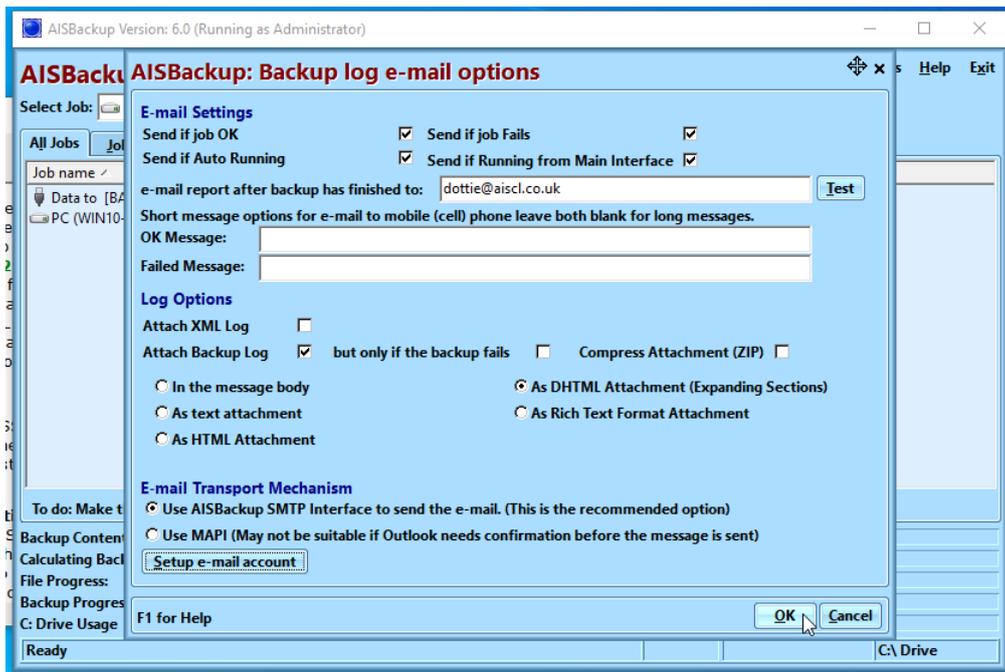
Click **Test E-mail**.



Enter the e-mail destination address for the test.



Once e-mail has been set-up correctly the sent okay message will display, click **OK**.



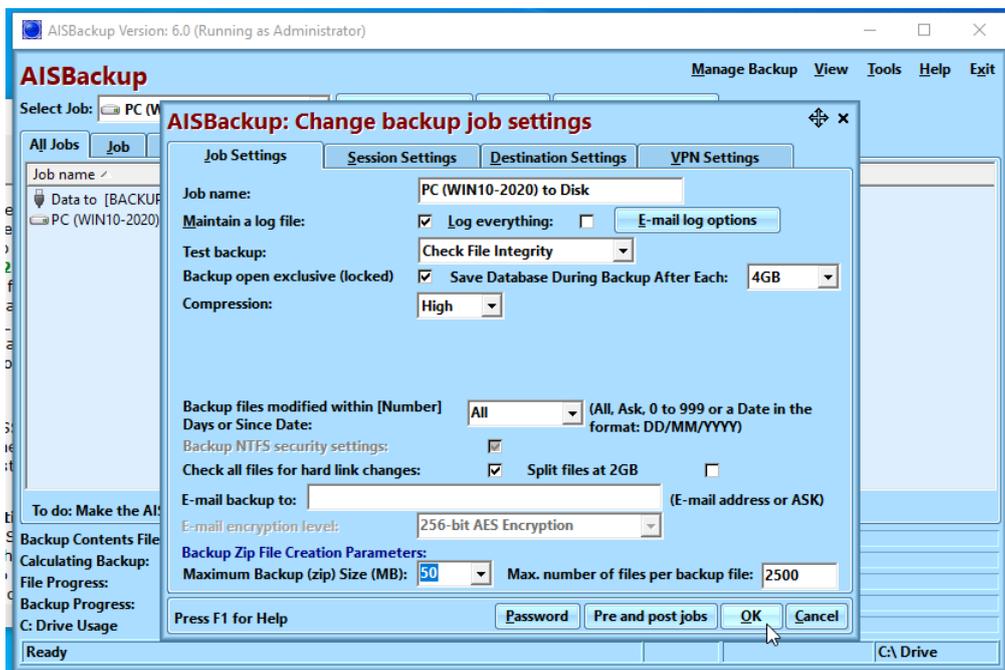
Now finish off the settings for the content of the e-mail.

Under E-mail Settings choose the options when the e-mail should be sent, for example you may only want to receive an e-mail if the backup fails when run via a schedule.

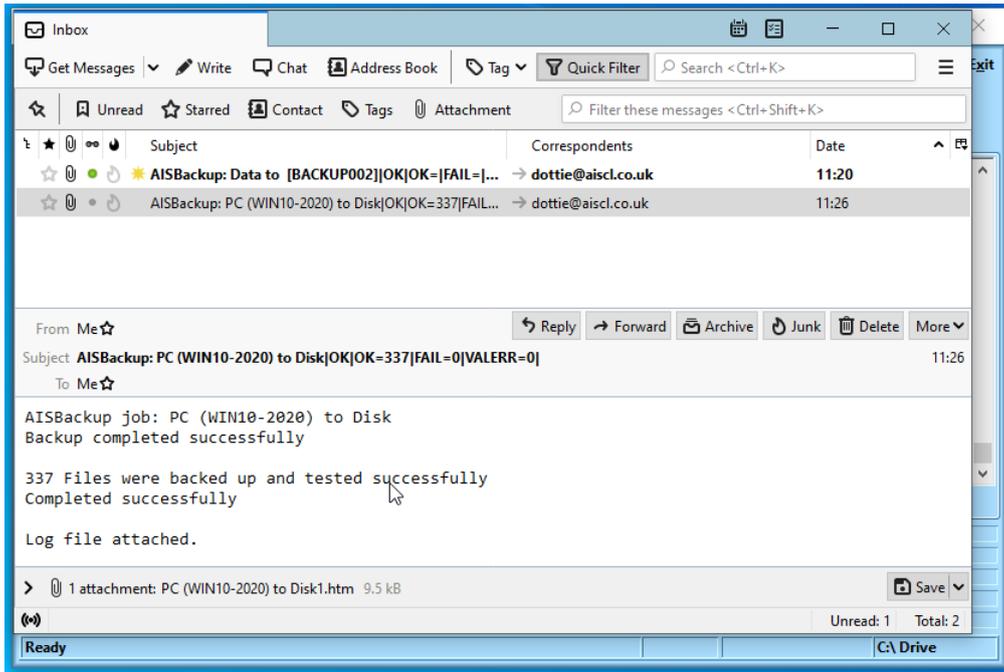
Enter the e-mail address of the recipient of the message.

You may enter your own message for when the backup works or fails.

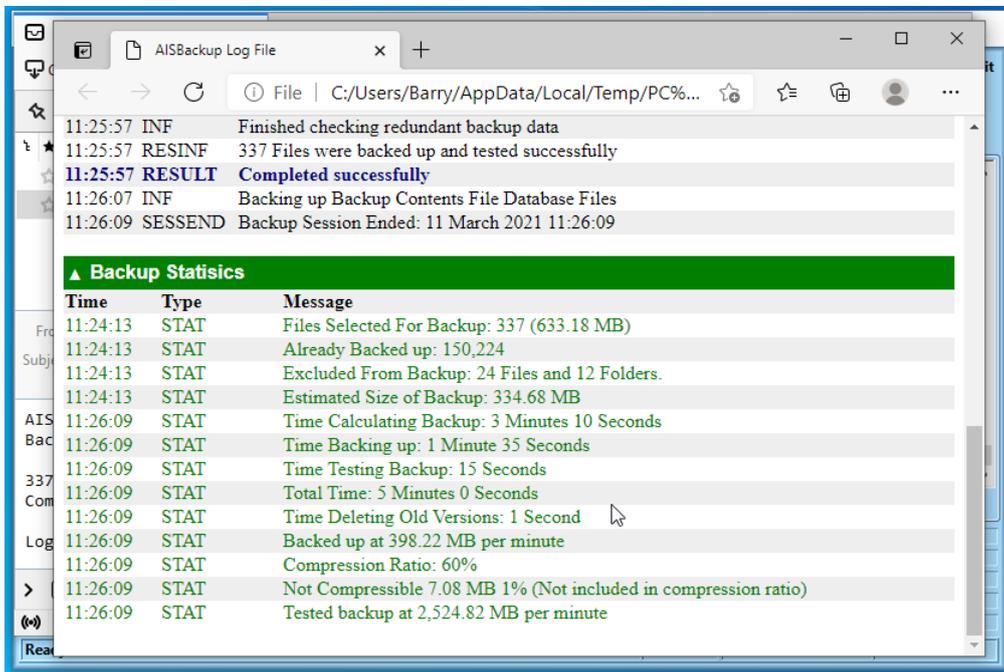
Optionally you may supply an attachment of various formats, and example of the DHTML format follows. Click **OK** when the set-up is complete.



Click **OK** to close the change settings form.



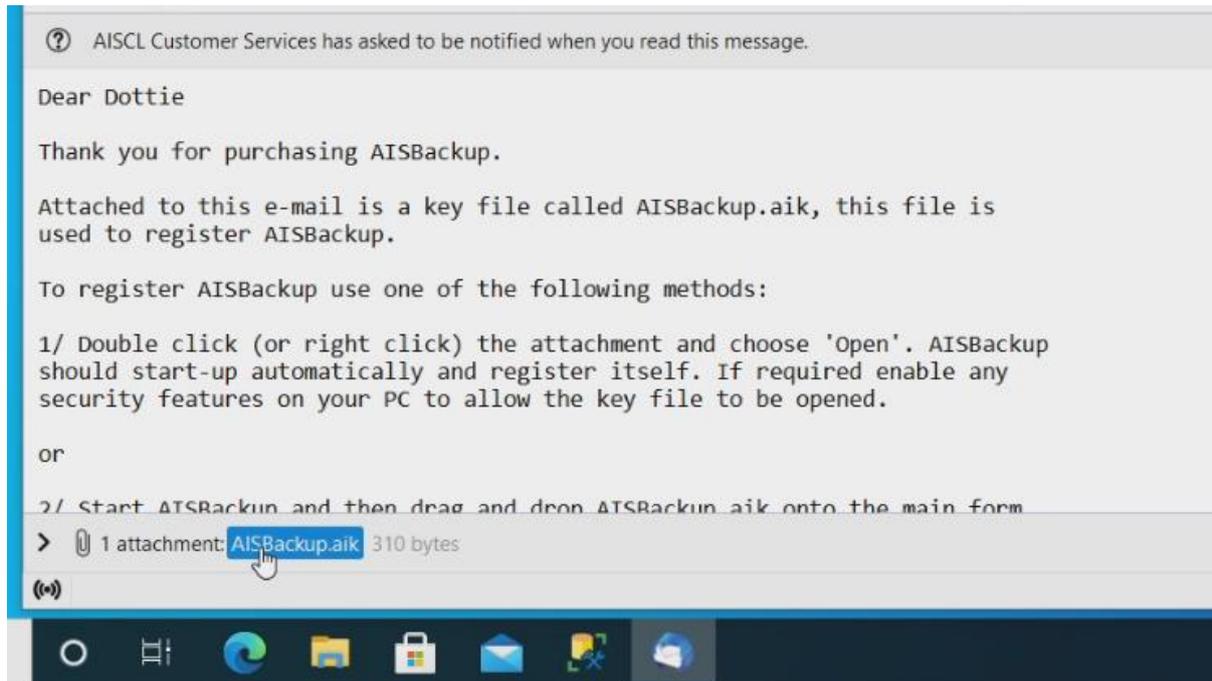
This is an example e-mail.



Here is an example of the DHTML attachment.

Registering the full version AISBackup

If you decide to purchase AISBackup an e-mail is sent to you containing a registration key file as an attachment.



AISBackup must be run at least once on the PC to register the file of type AIK with AISBackup.

AISBackup must not be running when you open the key file from the e-mail.

Double click the e-mail attachment to apply the key file. The method of opening attachments may differ according to the e-mail client you use.