AISBackup

Making a backup job and preparing for disaster recovery.

This documentation was made with AISBackup version 6.0 running on Windows 10 and is suitable for all versions of Desktop and Server Windows.

Table of Contents

Backup the PC to External Drive, DVD, Blu-ray, Network Drive, Local Drive or SFTP/FTP Server.

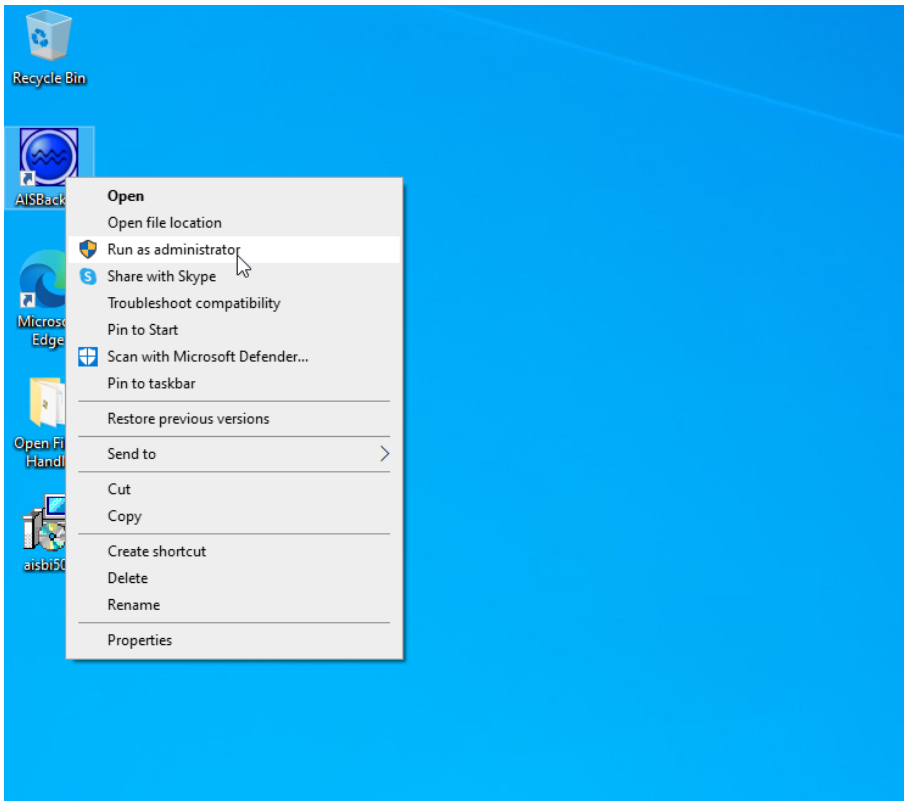
Introduction

These examples show how to backup a Windows 10 PC using AISBackup to one of the following media types:

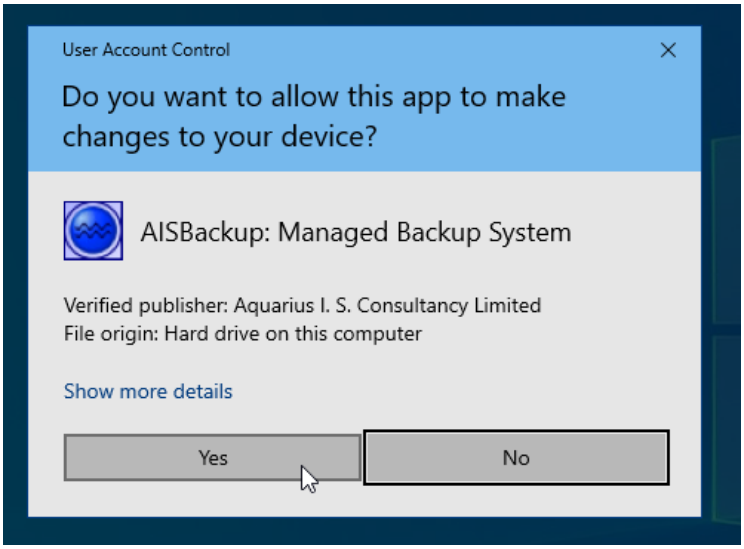
- An external disk drive (this option may also be used for a local internal disk drive).
- A Networked drive.
- A DVD, CD or Blu-ray disc.
- A Local disk drive.
- SFTP or FTP Server.

These backup instructions work for backing up all versions of Windows that AISBackup supports.

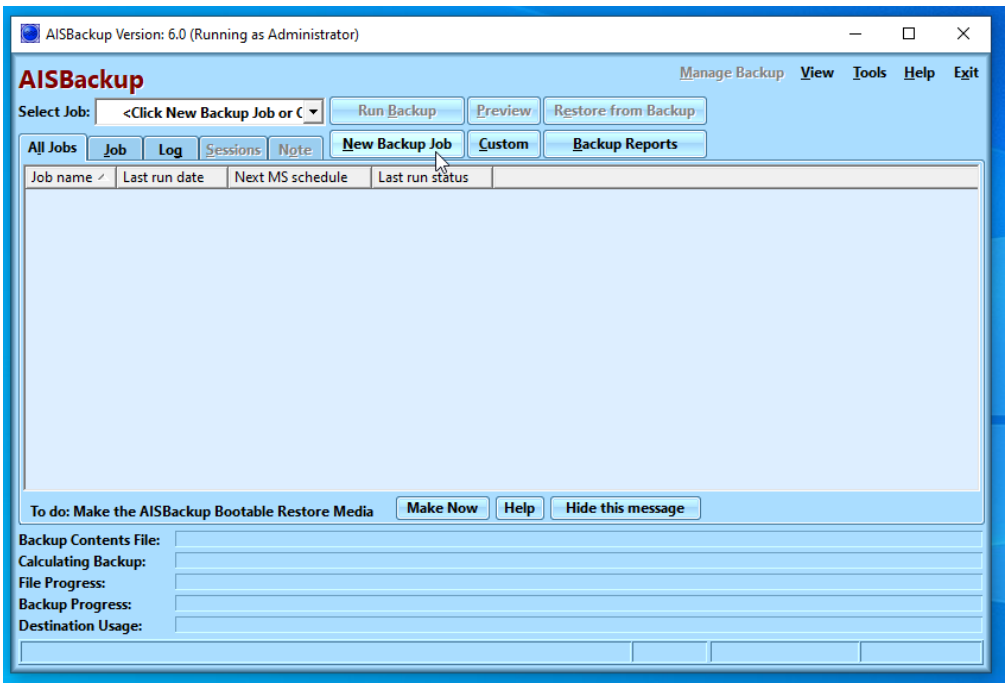
To make a backup suitable for disaster recovery AISBackup must have full unrestricted access to the files on the PC, in order to achieve this AISBackup must be run as an *administrator*. AISBackup will request that it be elevated to an administrator as soon as a request to make a backup job is made, however AISBackup may be started 'as an administrator' as described in the next paragraph.



To start AISBackup right click the AISBackup shortcut and choose **Run as administrator.**

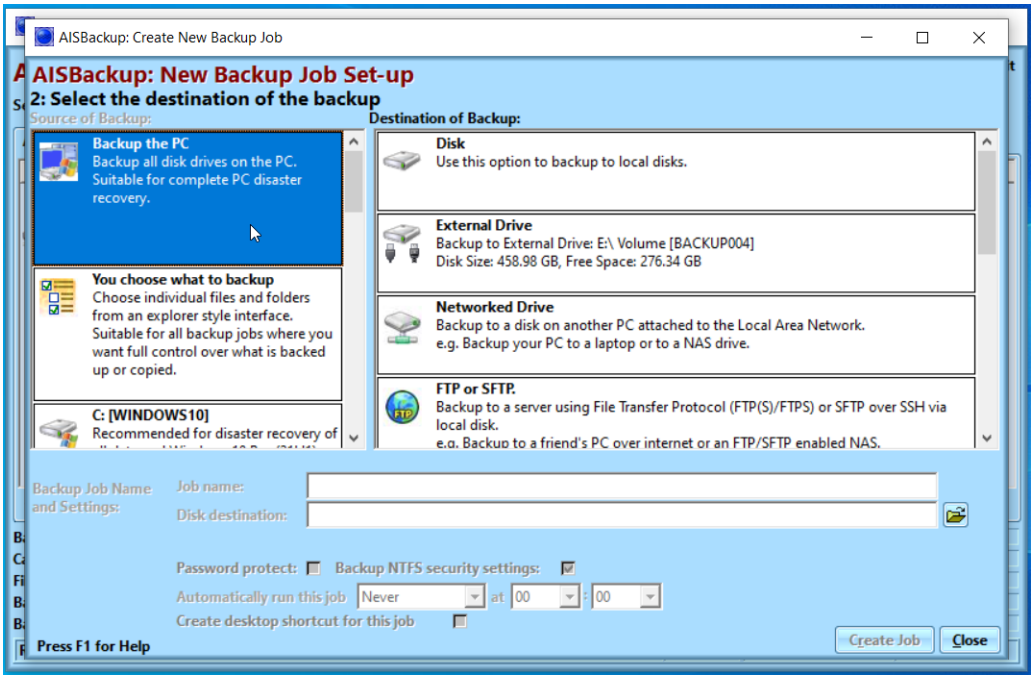


When a request is made to run AISBackup as an administrator is made the User Account Control (UAC) feature of Windows and will request permission to continue; ensure that the Verified publisher is **Aquarius I. S. Consultancy Limited** before continuing, anything else, e.g. *Publisher:* ***Unknown*** indicates that the AISBackup program is not genuine.



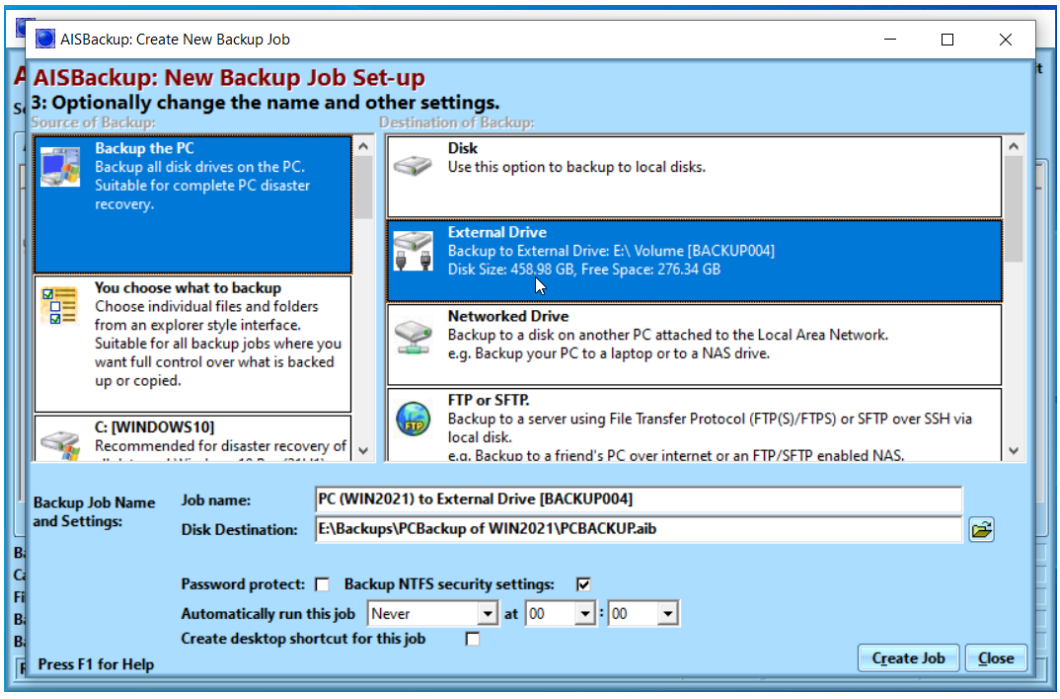
To make a backup job click **New Backup Job**.

AISBackup stores information about how to make the backup in backup jobs, to run the backup you select the backup job and then click **Run Backup**.



Choose the source of the backup: *Backup the PC*. The next choice depends on the chosen destination:

Backup to External disk drive.



For an external drive backup choose one of the connected *External Drives*, note that the external disk must be connected to the PC for it to appear in the list.

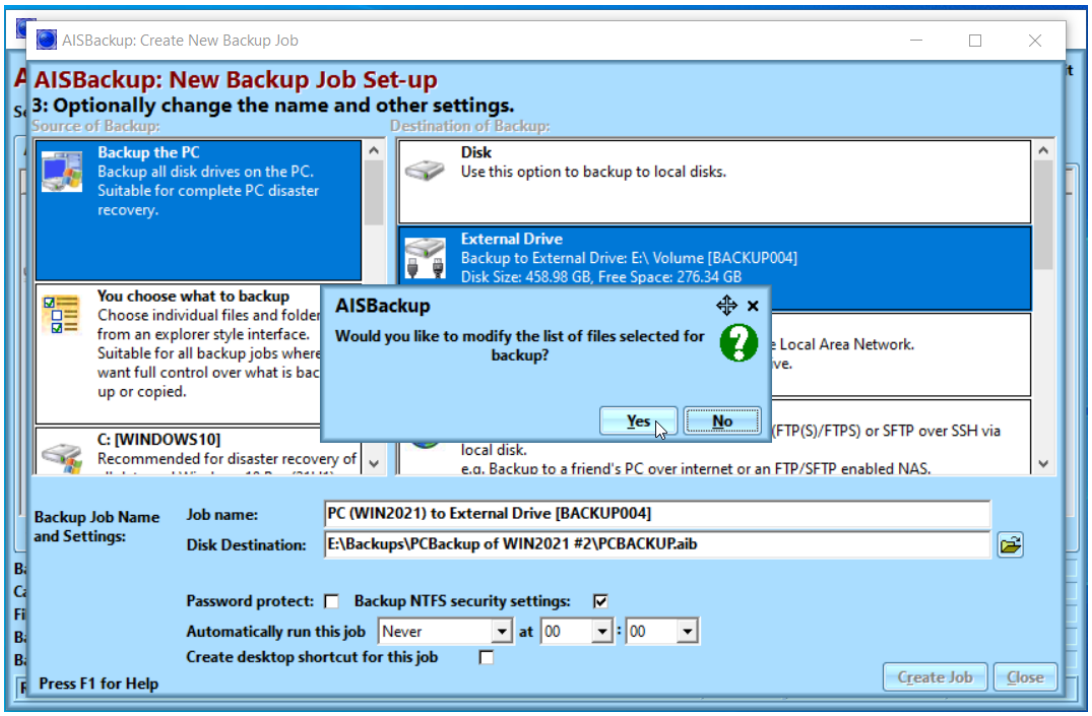
Optionally change the name of the backup using the **Job Name** field.

Optionally modify the destination of the backup by clicking the folder button to the right of **Disk Destination**.

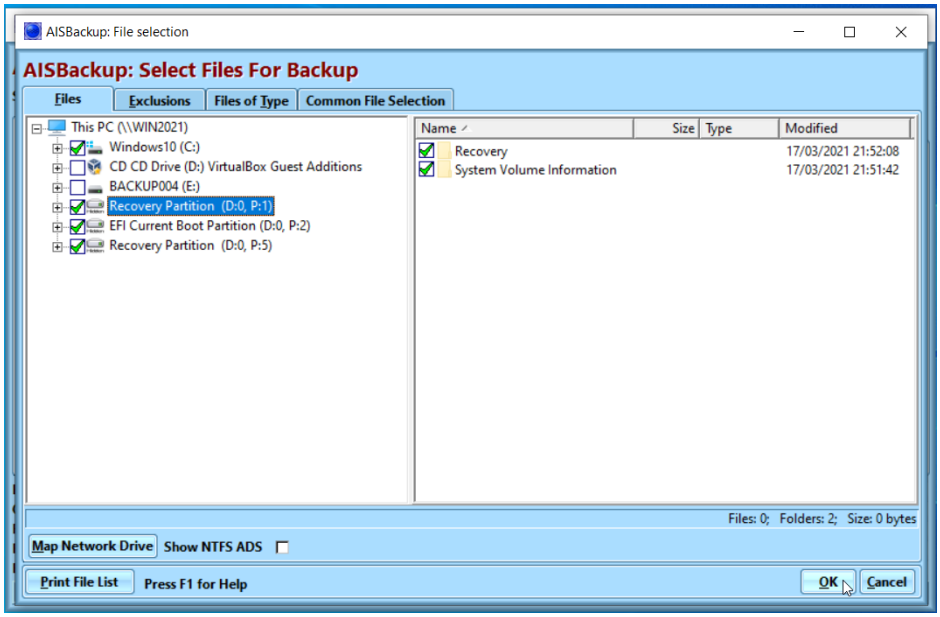
Optionally choose a schedule for the backup by selecting an option *'Automatically run this job'*, enter the desired time then click **Create Job**. For more options click F1 for help.

Backup to external drive is highly recommended as the backup may be stored away from the PC and it is really easy to facilitate onsite / offsite backups by selecting multiple destination drives.

Click **Create Job** to continue.



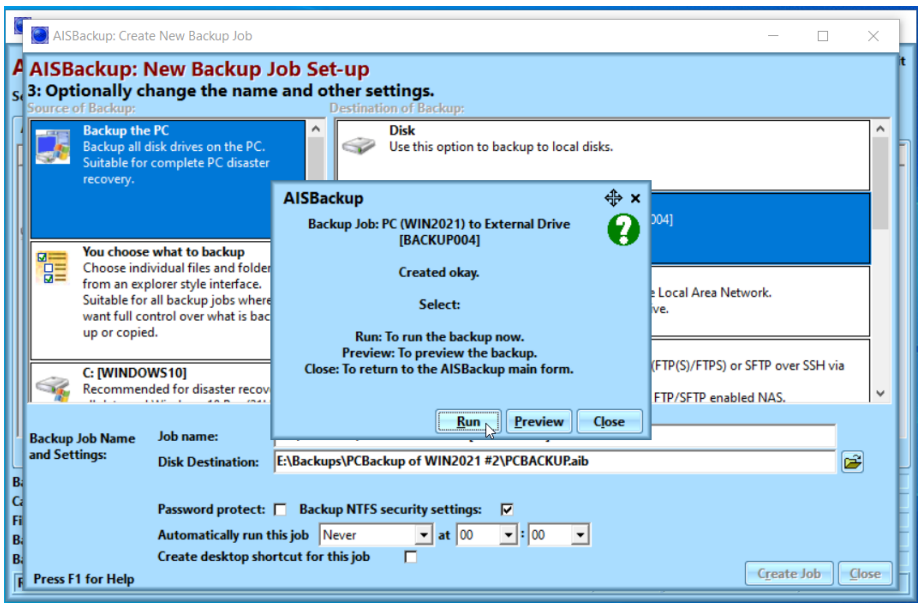
To see the files and folders that are selected when choosing the source *Backup the PC* click **Yes** to *'Would you like to modify the list of files selected for backup'*.



This is what has been selected for backup:

- The Windows drive C: partition, this contains the Windows operating system and your own documents, pictures and music etc.
- The EFI boot partition used on most current PCs.
- Two Windows recovery partitions.

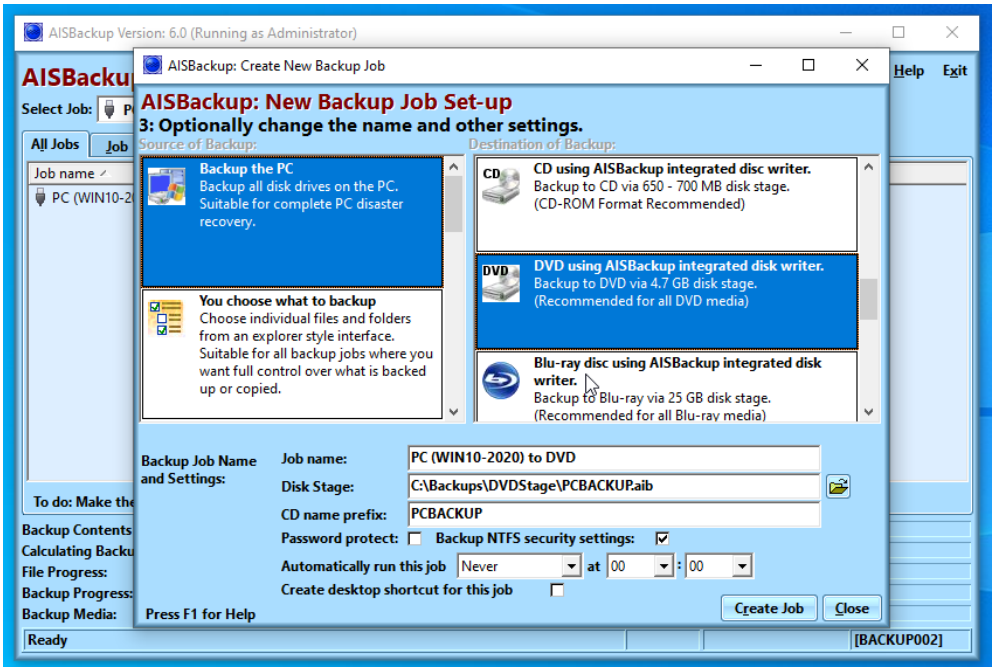
To proceed click **OK**, if you made changes to the file selection and then change your mind click **Cancel**.



To start the backup click **Run**.

To learn more about backup to external drives, for example adding more backup destinations, see page 23.

Backup to CD, DVD or Blu-ray.



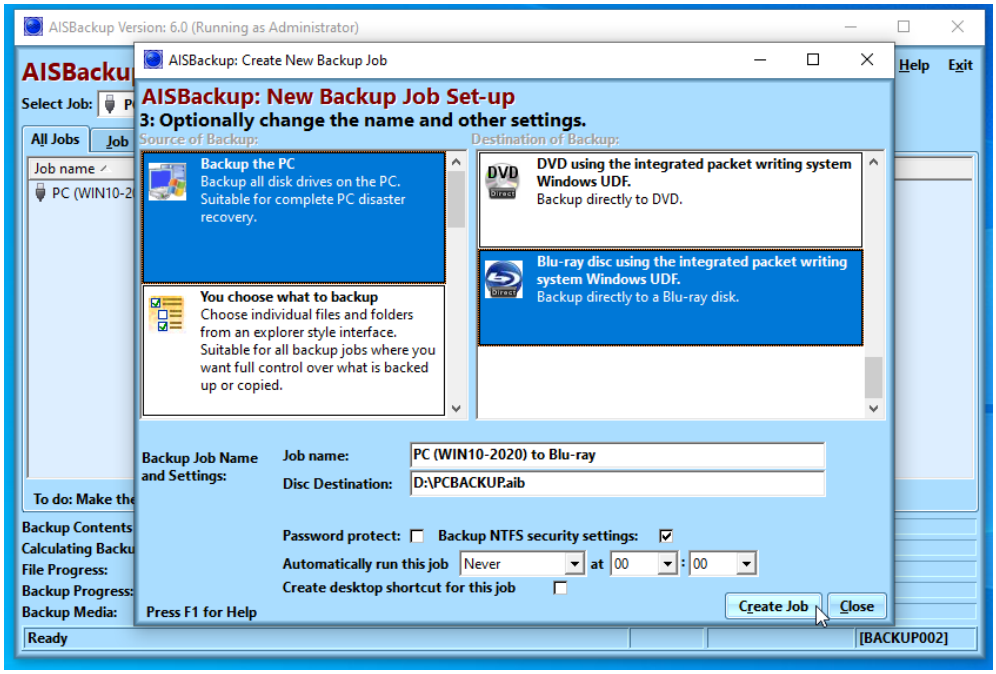
For a backup to DVD choose *DVD using AISBackup integrated disk*. When backing up using the integrated disc writer the backup data for each disc is written to local disk first. The size of the local disk stage area for backing up to CD, DVD. HDDVD and Blu-ray is:

- CD: 700MB
- DVD single layer: 4.5 GB
- DVD dual layer: 9GB
- HDDVD: 15GB
- Blu-ray single layer: 25GB
- Blu-ray dual layer: 50GB

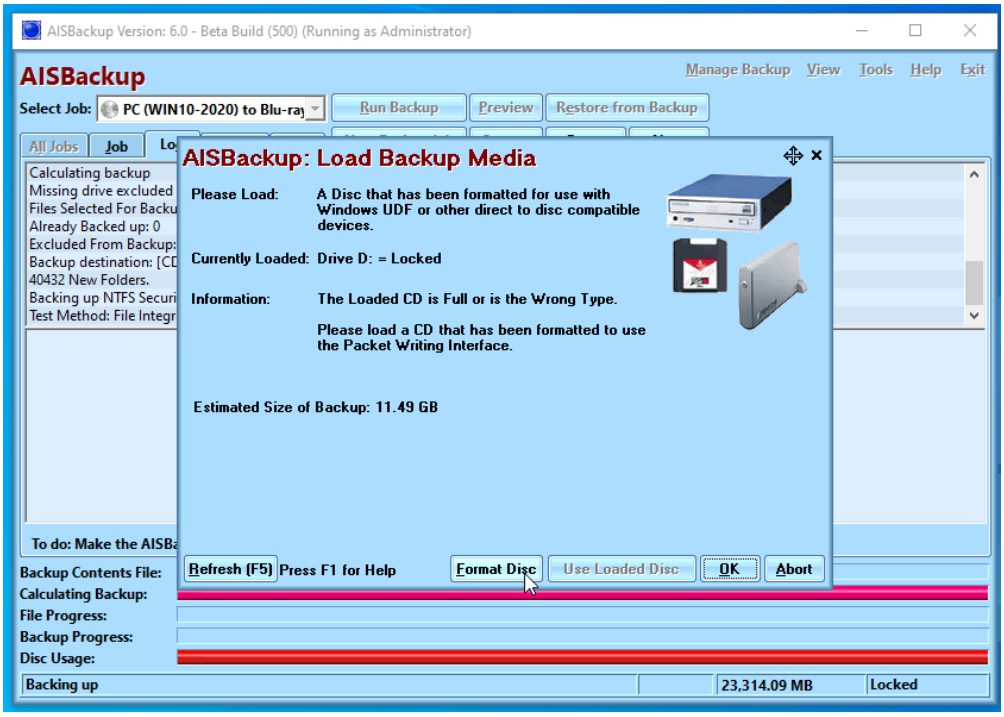
For the large capacity discs that require very a large local disk stage area you may want to consider backing up direct to the media instead, see *Backup direct to Blu-ray* in the next section.

Backup direct to CD, DVD or Blu-ray

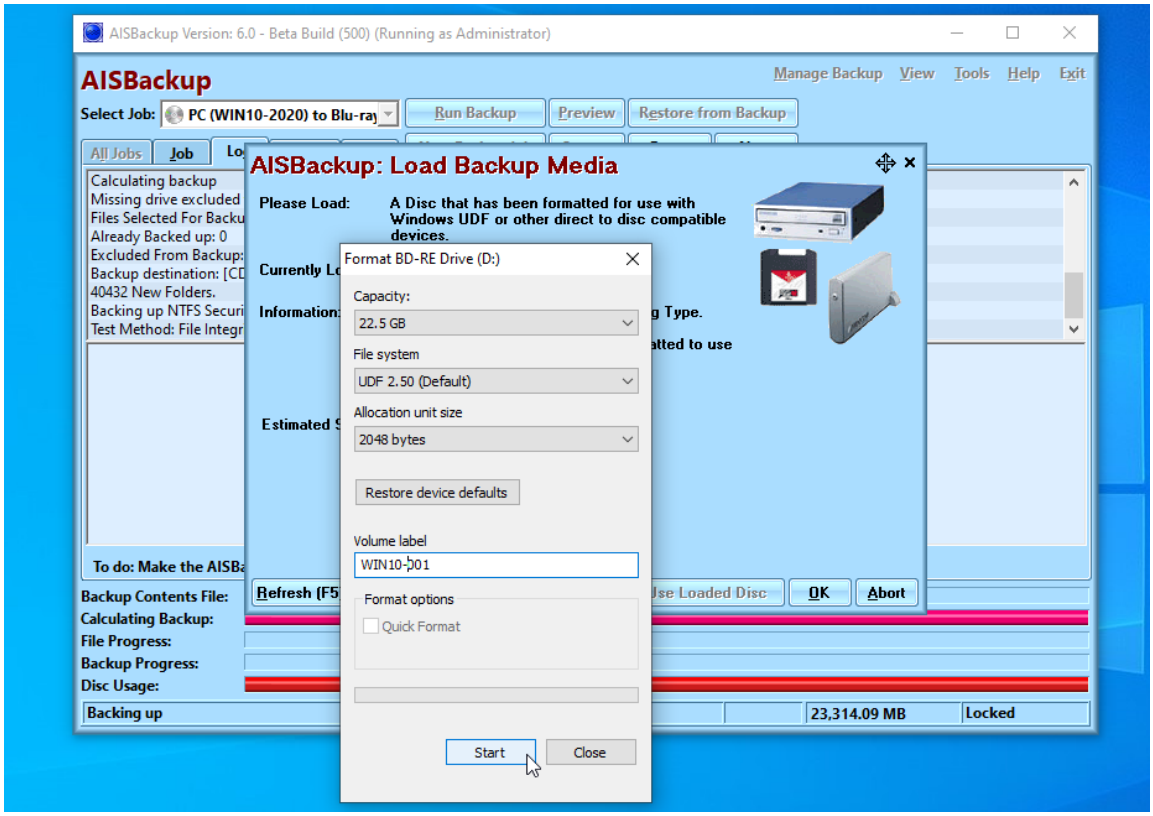
AISBackup may be used to backup directly to CD, DVD and Blu-ray under Windows since Windows Vista, AISBackup may also backup directly to disc from Windows 2000, XP, Server 2000, and Server 2003 provided that a packet writing system has been installed, for example, many older Dell PC's come with Drive Letter Access.



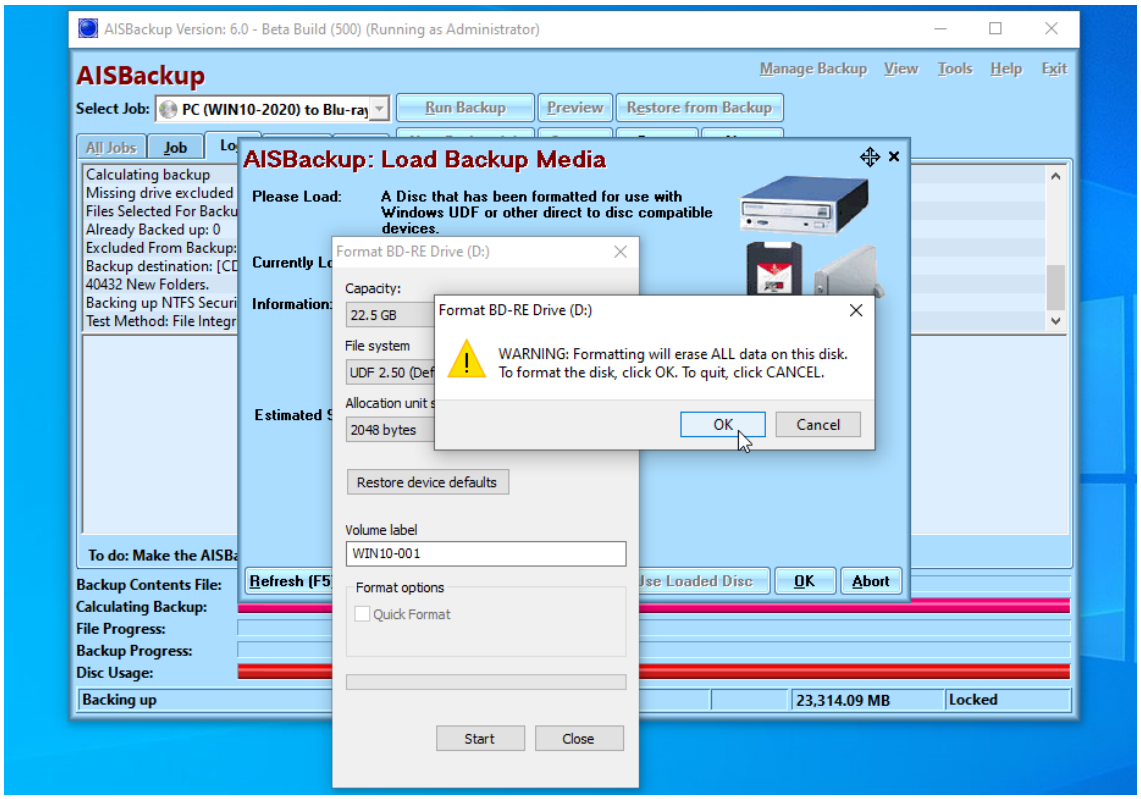
In this example we have chosen the destination Direct to Blu-ray.



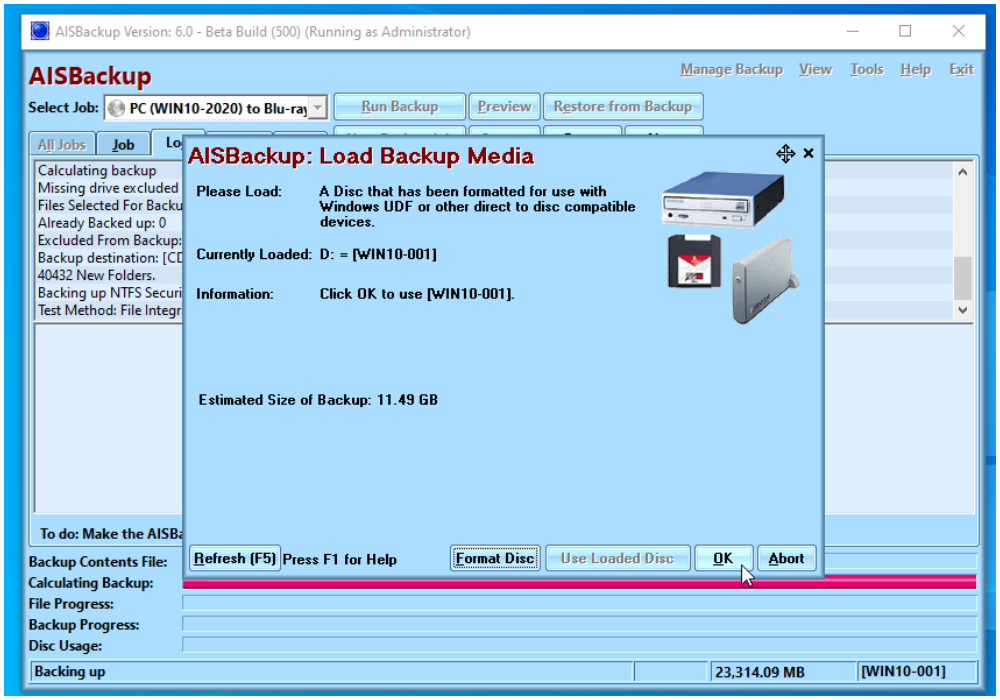
On running the backup AISBackup will ask for a disc to be loaded, note that CD, DVD, Blu-ray and indeed HDDVD may be mixed in the same backup job. If the disc is blank choose **Format**.



Enter a unique name for the disk and also provide a sequence number, e.g. *BACKUP01*, then click **Start**.

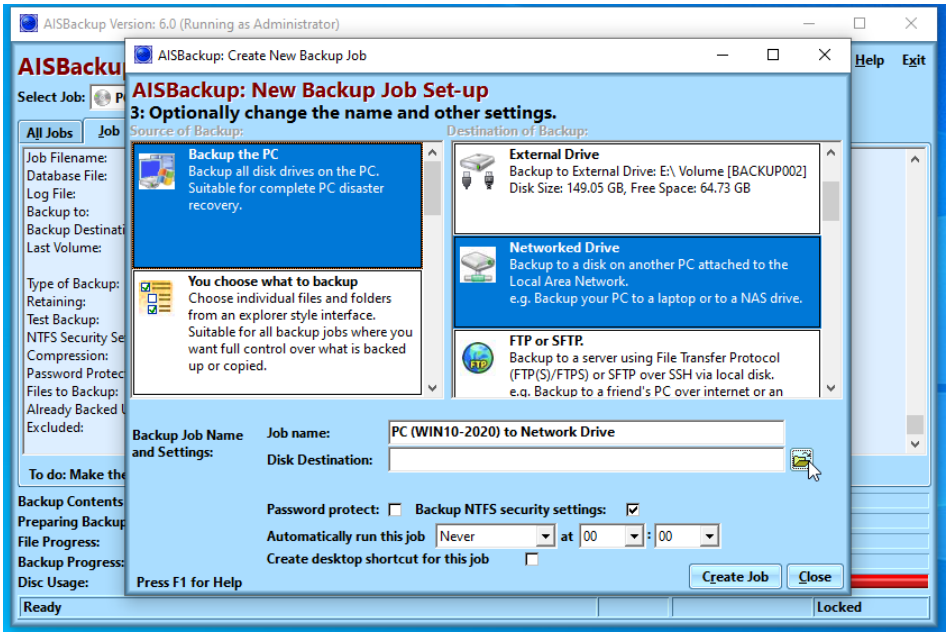


Acknowledge the format by clicking **OK.** After the format close the *Format* form.



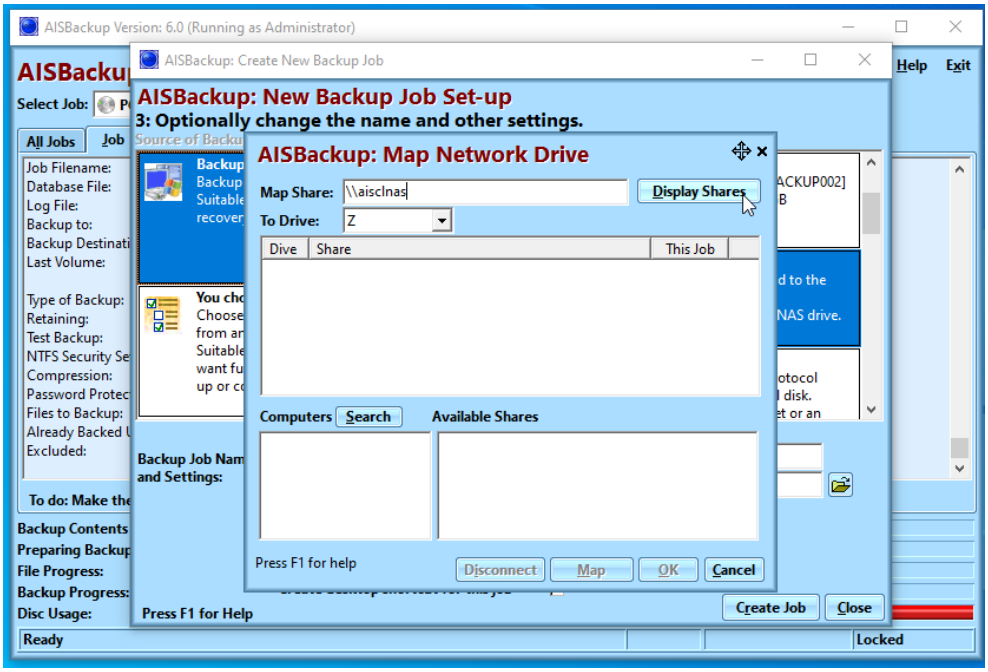
Once the disc has been formatted click **OK** to continue the backup.

Backup to a network share.

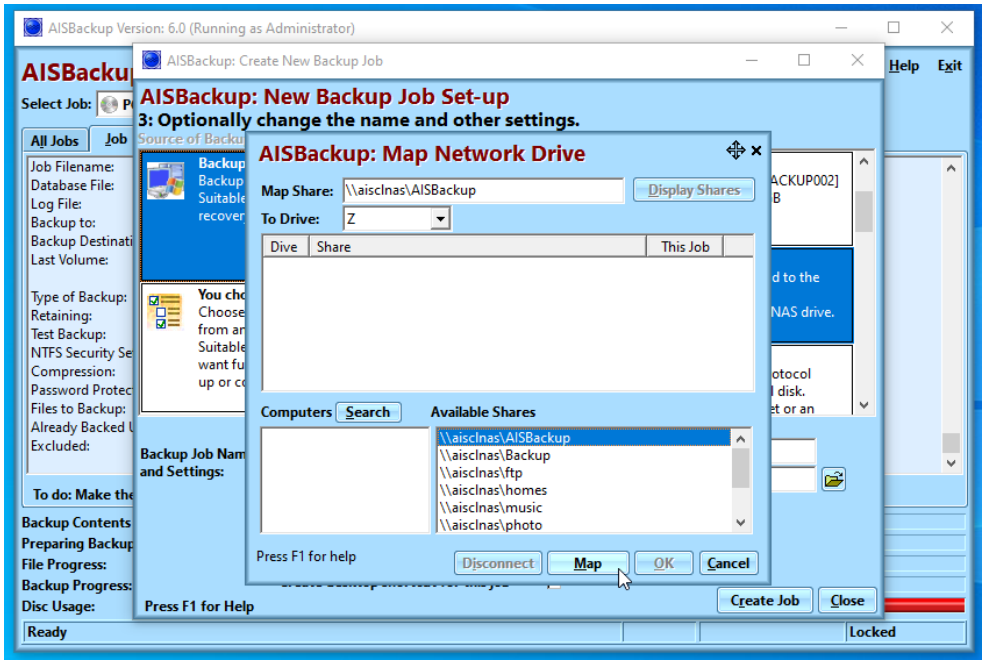


Choose the destination **Network Drive,** optionally change the name of the backup job and then click the disk destination folder button.

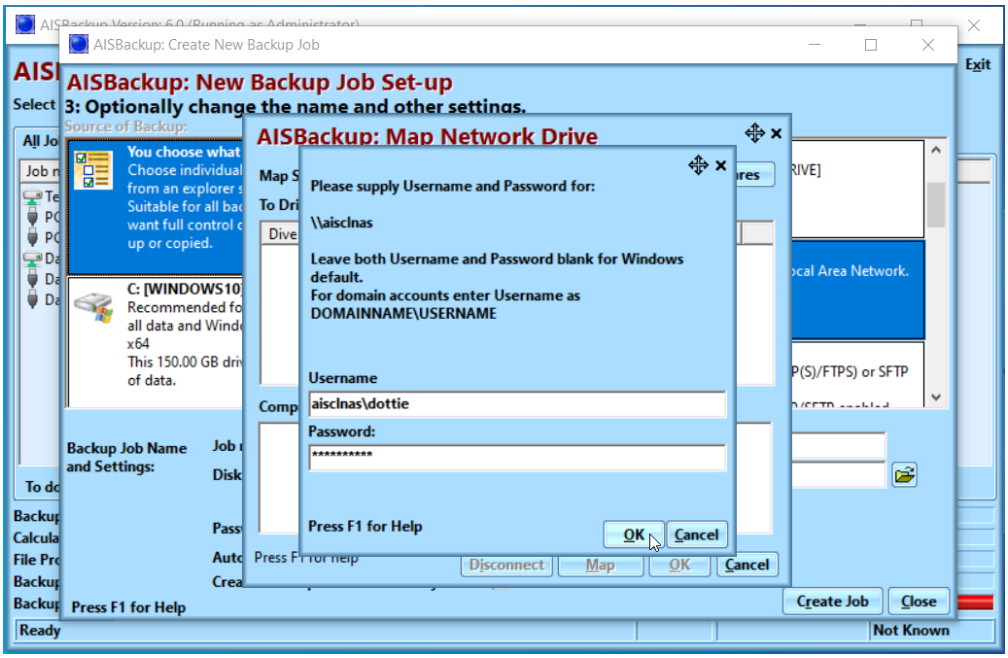
For network backup jobs either type the name of the share or use the **Search** button to select from a list of computers and shares. Note that the Windows *Network Discovery* option must be enabled to search for network drives. If required a password prompt will be displayed, see below.



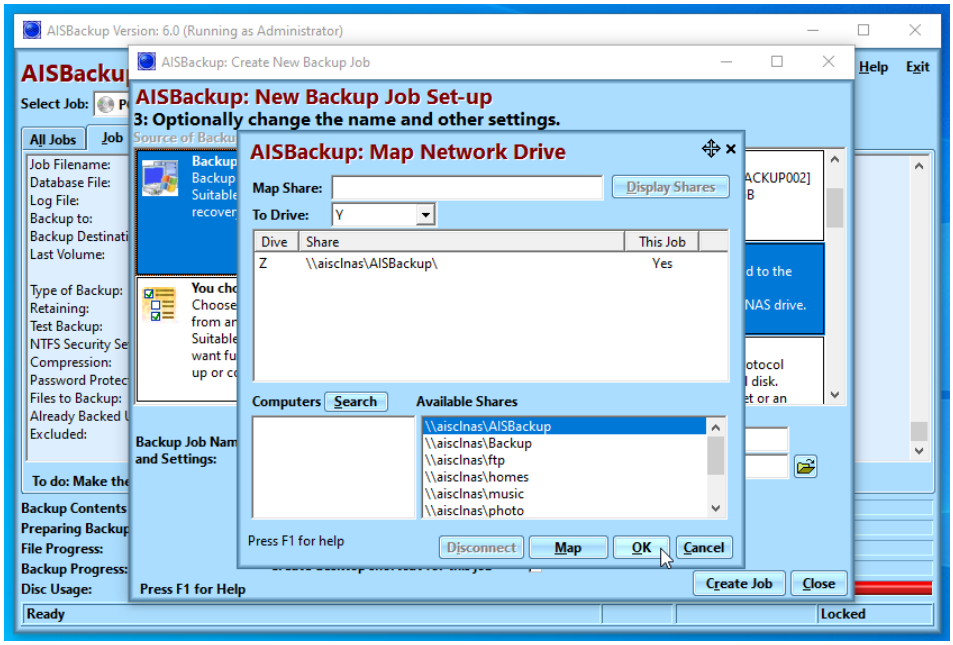
If you know the share name then you may type it into **Map Share** Alternatively type the computer name with preceding \\ and click **Display Shares**.



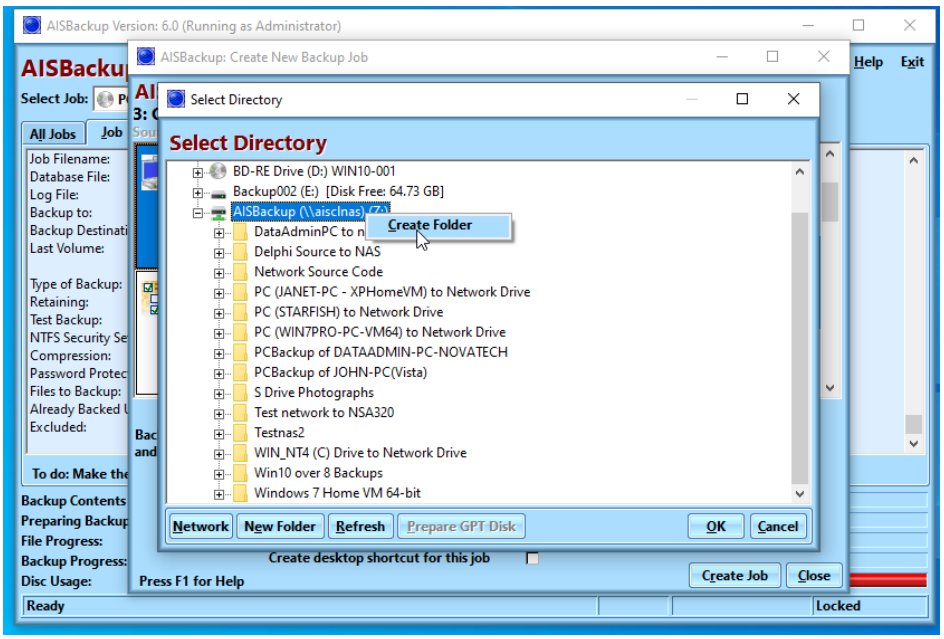
After typing the full share name or selecting the share name click **Map**, AISBackup will assign a spare drive letter to the share.



Enter the user account name and password for the chosen network destination if asked, in this example a *domain\username* was required.

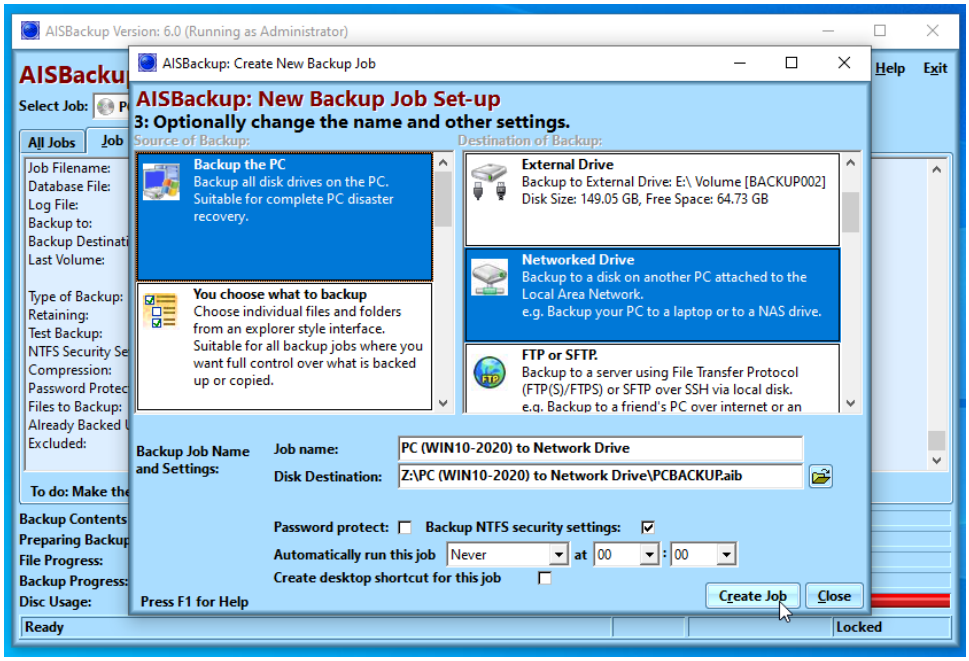


Click **OK** to continue.



The Select Directory dialogue will open at the root of the selected share, optionally create a folder for the backup, alternatively AISBackup will create a folder with the same name as the backup job.

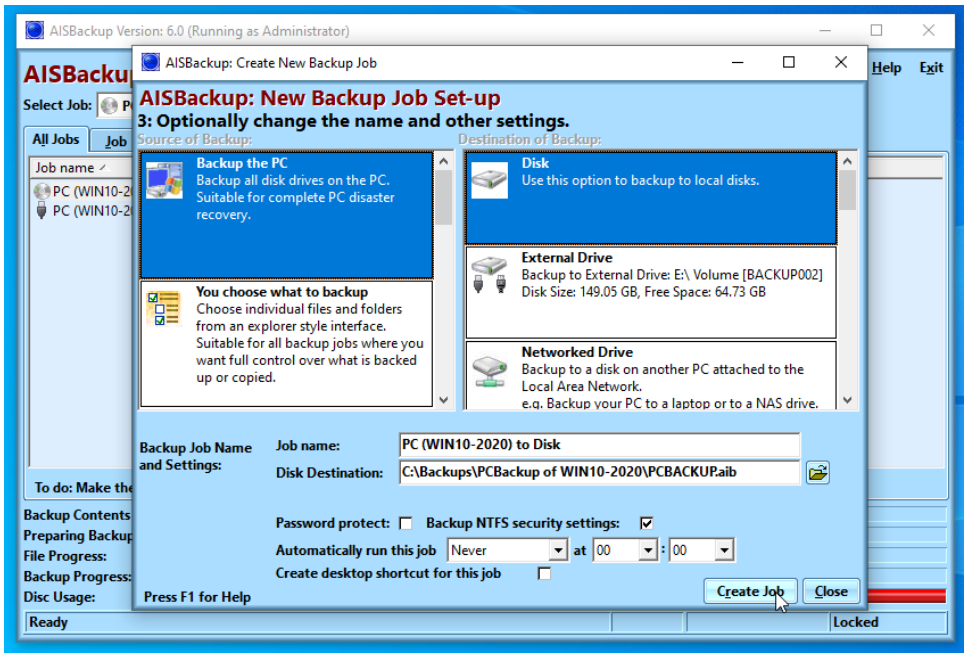
Click **OK** to continue.



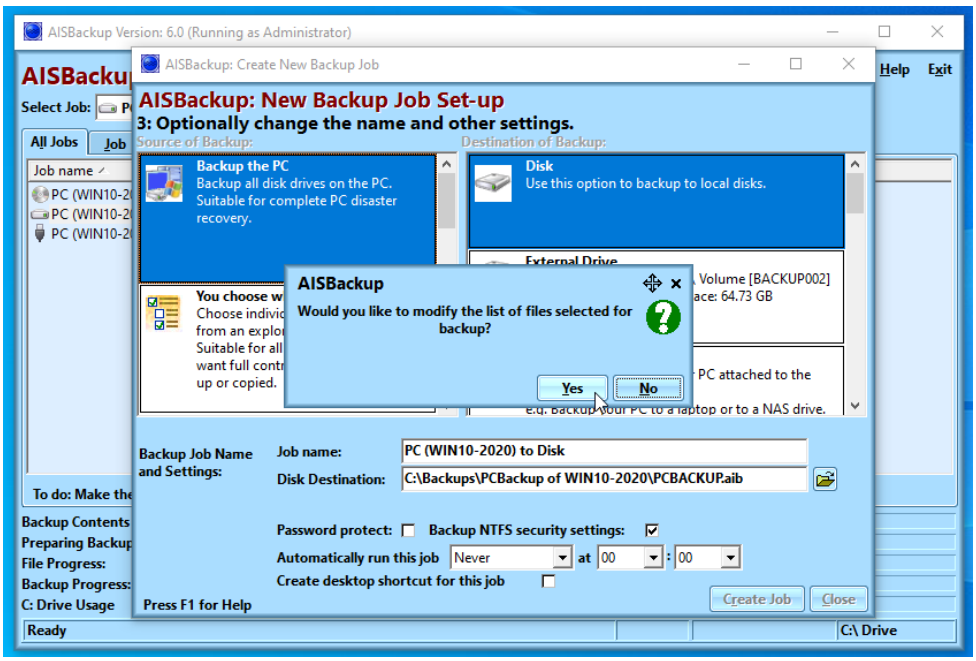
Click **Create Job** to continue.

Backup to an internal (local) PC disk drive.

Choose destination **Disk** for a local disk drive AISBackup uses the default destination for disk backup jobs, if the destination is not suitable or the destination is a network drive click the  button to open the Select *Backup Destination* dialogue.



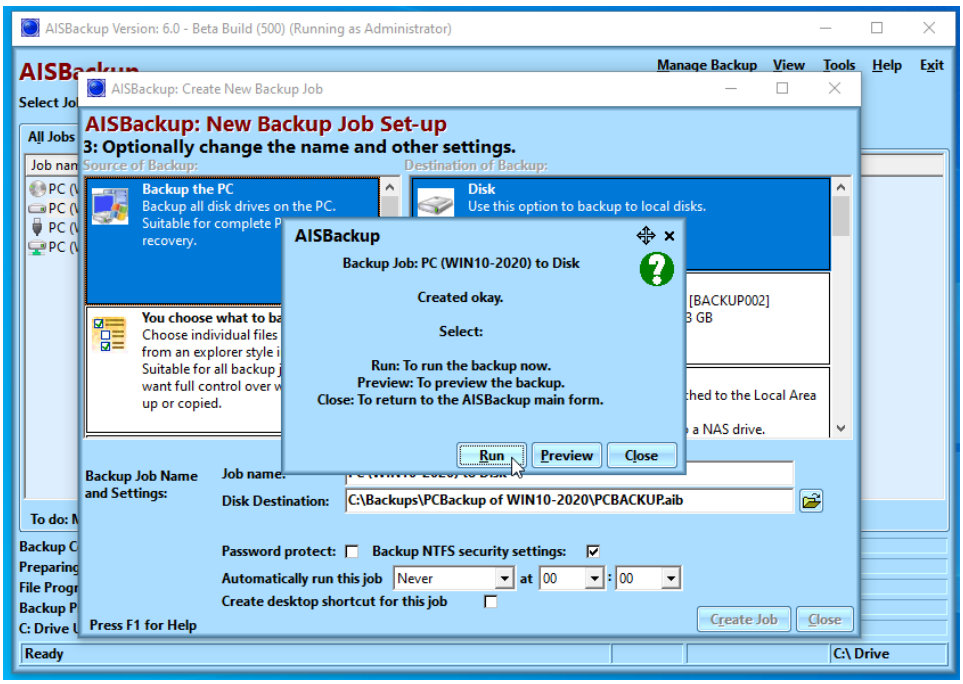
Click **Create Job** to create the backup job.



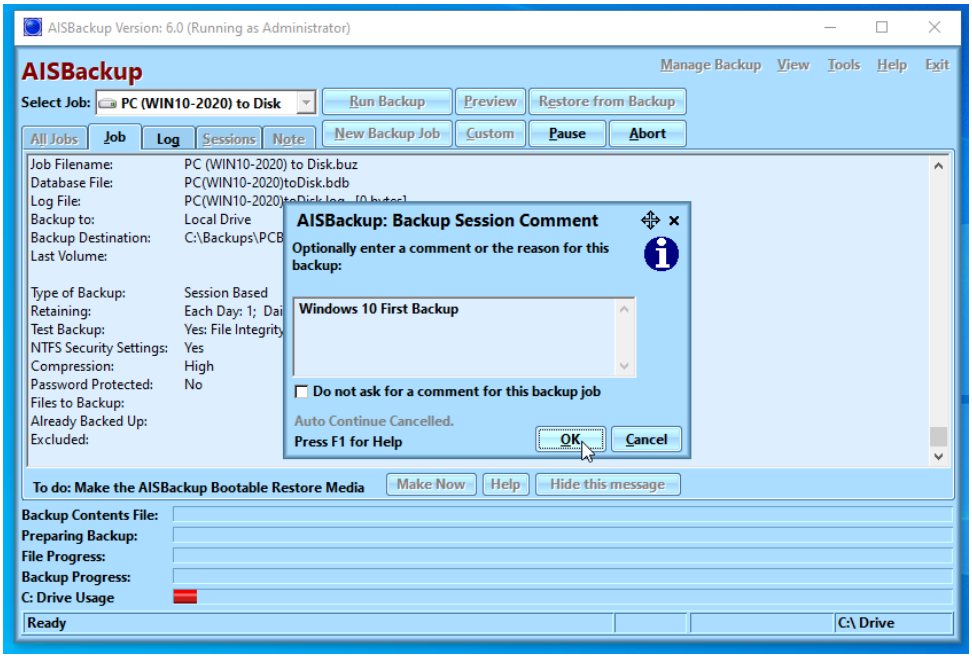
If you would like to modify or check the files selected for backup choose **Yes** on the '*Would you like to modify the list of files selected for backup*' dialogue.

This form shows that the C: drive has been selected; this is the disk that contains Windows and data on this PC. Some partitions were excluded as in The ‘External Drive’ example above.

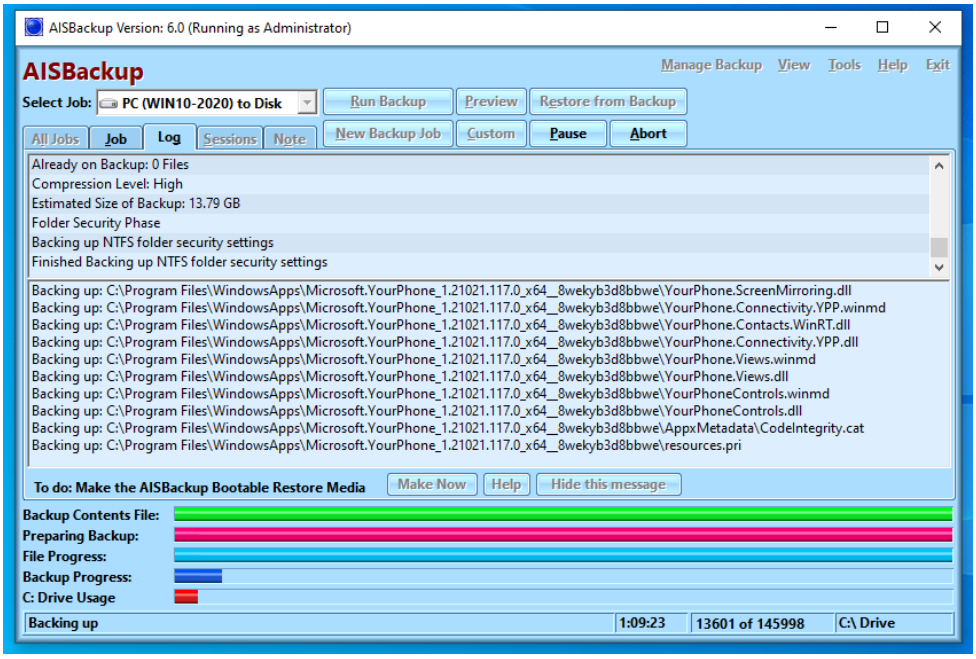
Click **OK** to continue.



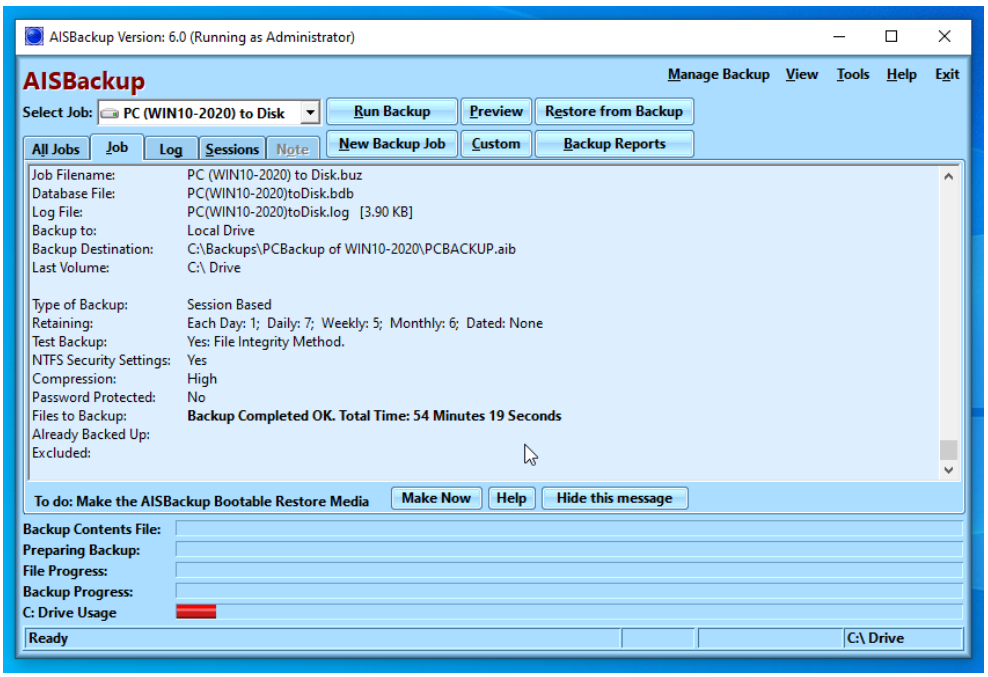
To run the backup job now click **Run**.



An optional comment may be made for each backup session; click **OK** to continue the backup. Click **Cancel** only if you want to cancel the backup.



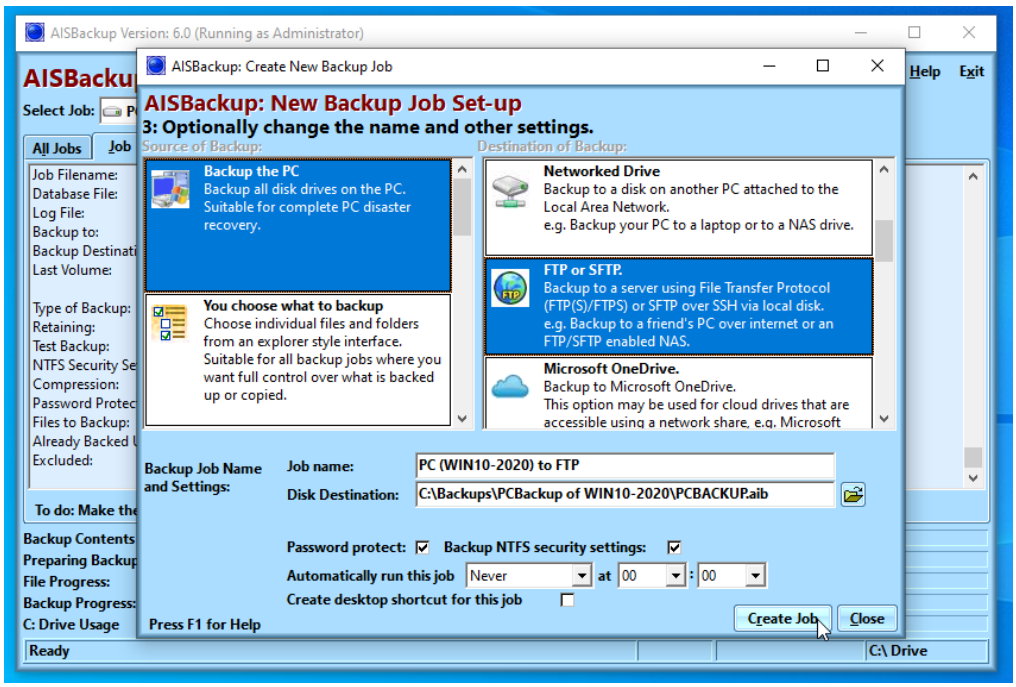
This screen shot shows the backup job making the backup. The backup may be paused at any time by clicking **Pause** or cancelled by clicking **Abort**.



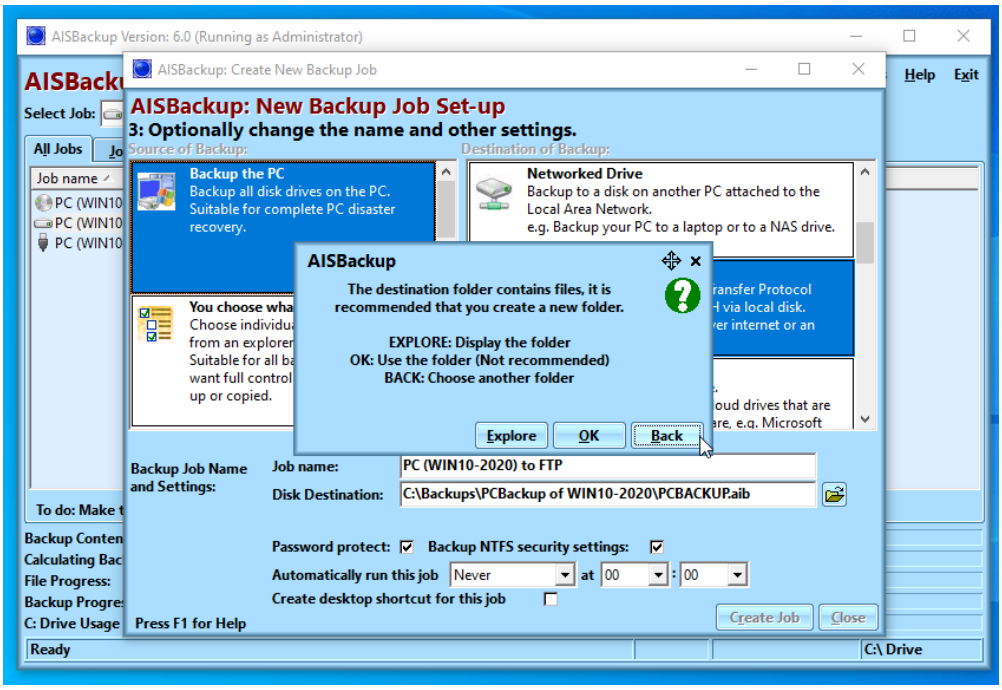
This screen shot shows the completed backup.

Backup to SFTP or FTP Server

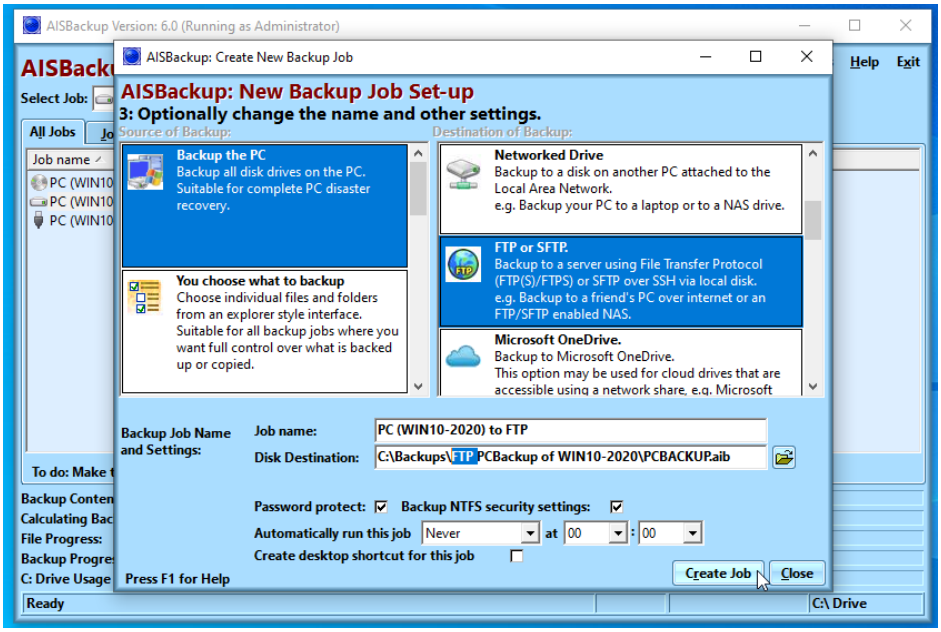
AISBackup may be used to make backups to FTP, FTPS and SFTP servers, either on local PC's, a local NAS drives and remote servers.



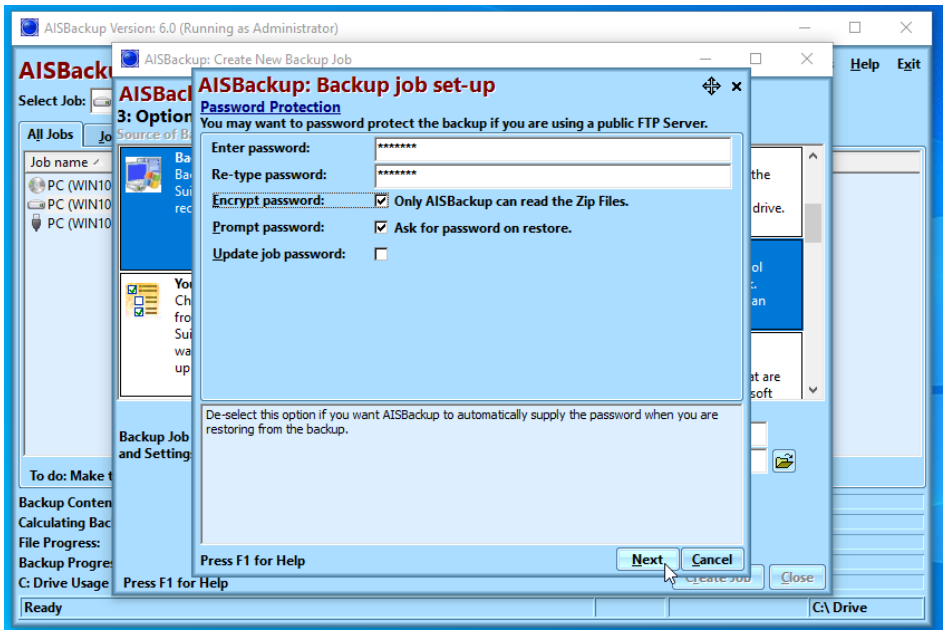
Choose the destination **FTP or SFTP**, then click **Create Job**.



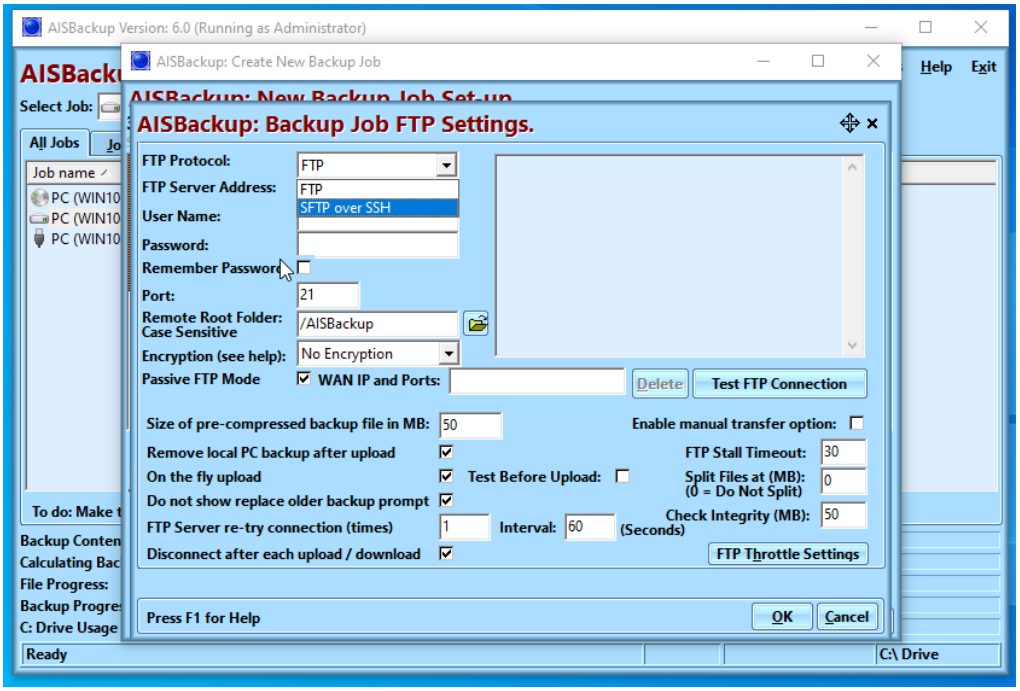
In this example the generated destination folder is already in use by another backup job; choose **Back**.



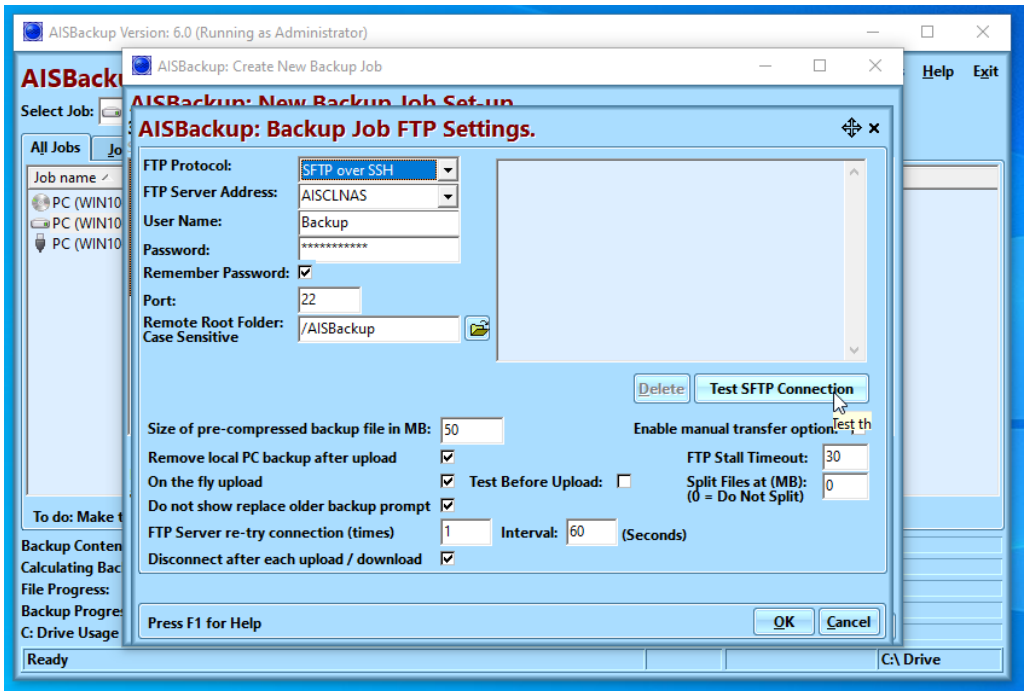
In this example the generated local destination folder was prefixed with **FTP**.



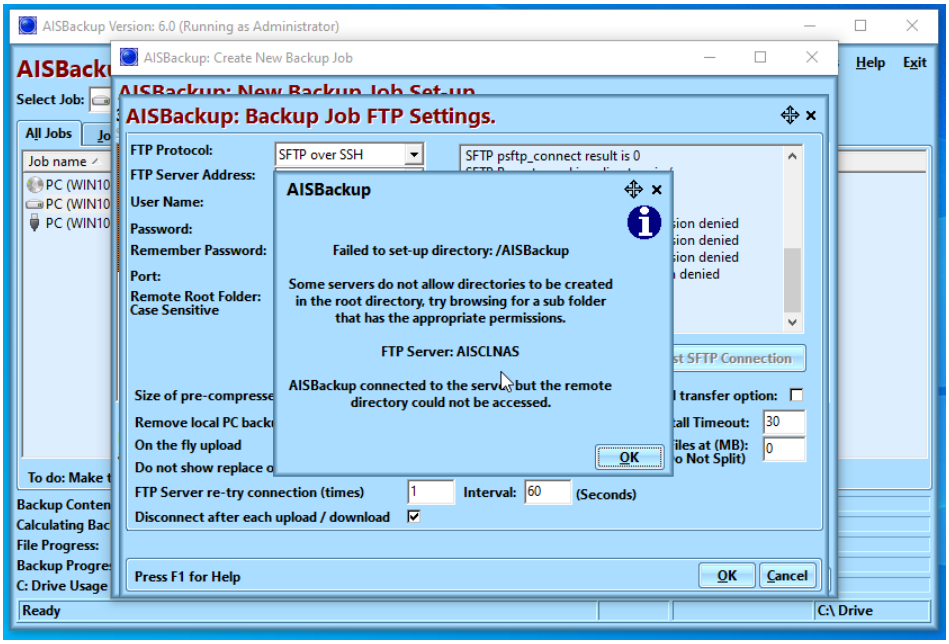
AISBackup suggests that you supply a password, this is highly recommended for off-site backups. The **Encrypt Password** option makes a much longer password from the password you enter to encrypt the backup (zip) files.



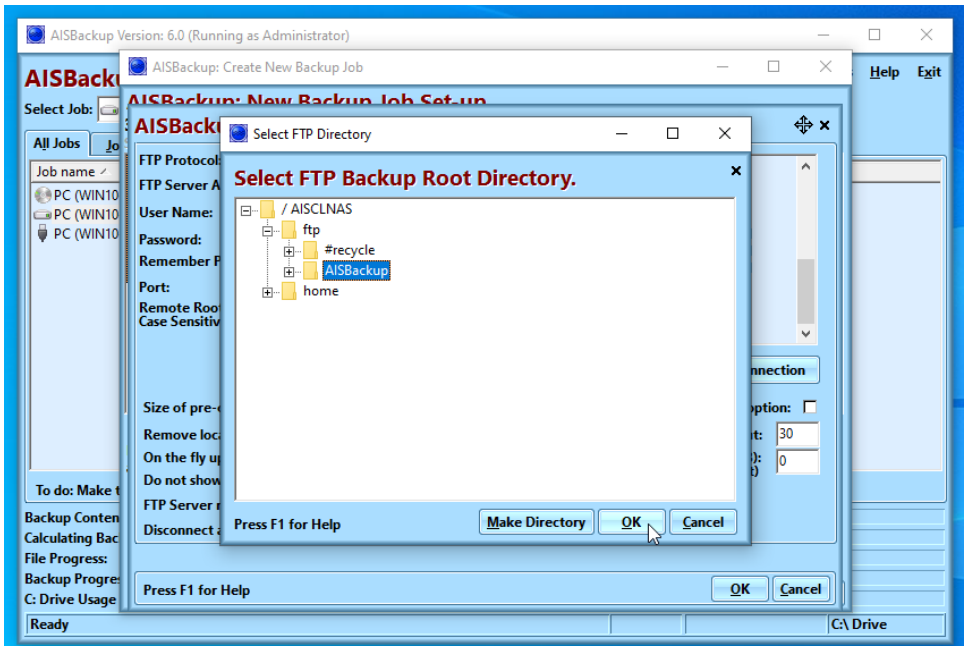
Choose the FTP protocol, either FTP for the legacy File Transfer Protocol or STFP over SSH to use the **Secure File Transfer Protocol**. In this example SFTP is used.



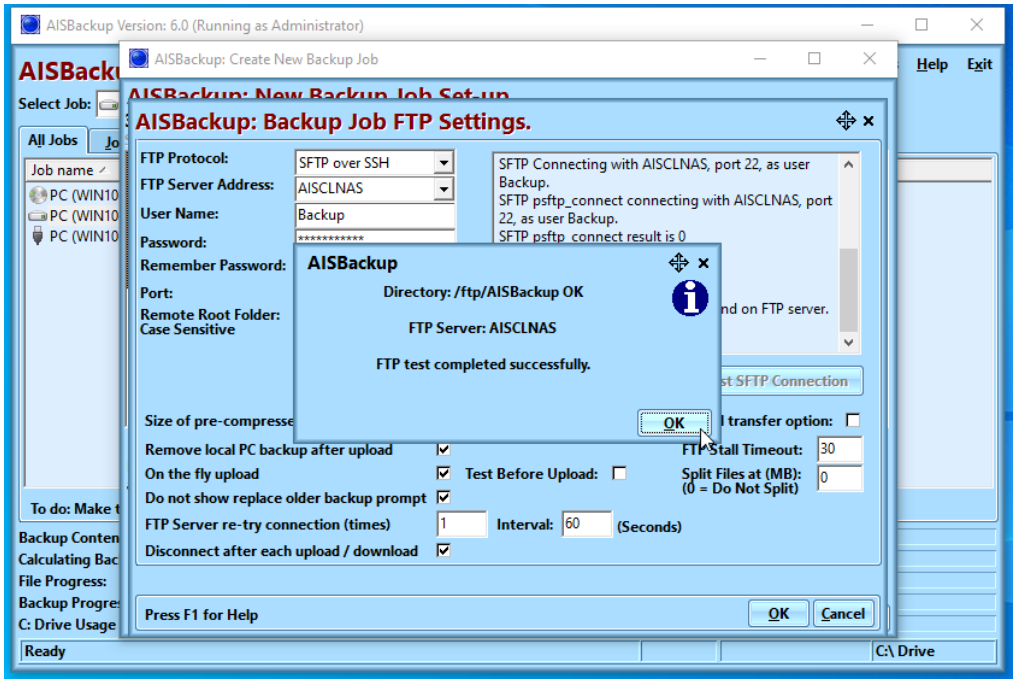
Enter the name of the server in **FTP Server Address**, and IP address may also be entered into this field, e.g. 192.168.1.25



Click **Test SFTP Connection**. If AISBackup cannot open the specified remote directory click **OK**, then click the folder icon next to **Remote Root Folder**.



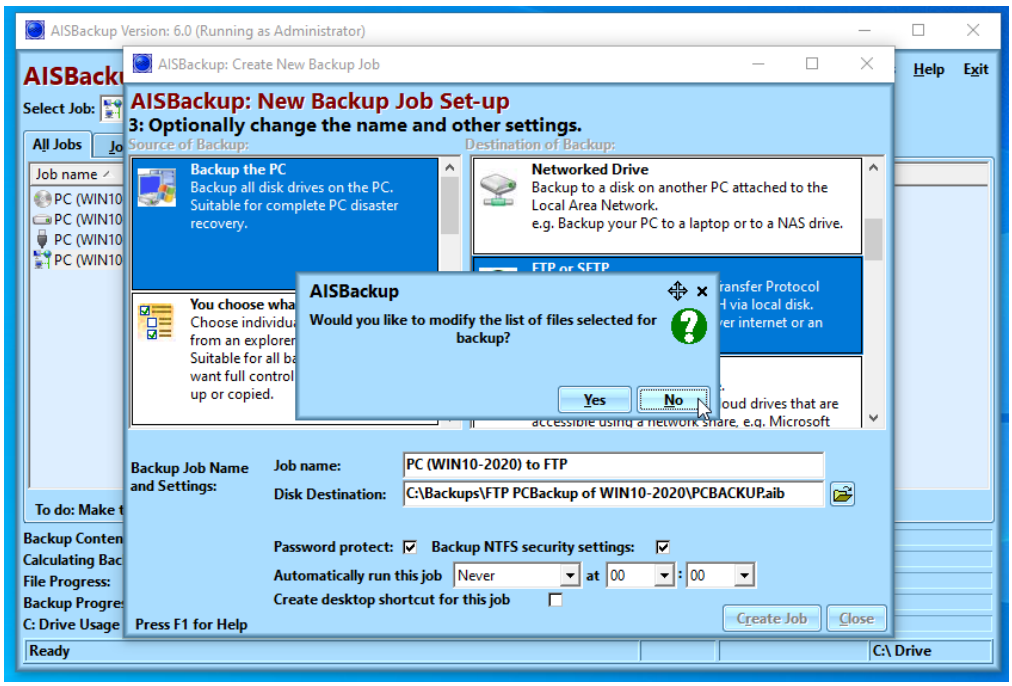
In this example the remote FTP folder for AISBackup is /ftp/AISBackup, click **OK**, and then click **Test SFTP Connection** again.



Click **OK**, and correct any other errors, for example incorrect password or user name.

Press help within AISBackup (press F1) for a description of the other parameters on this form.

Click **OK** to close the FTP / SFTP form.

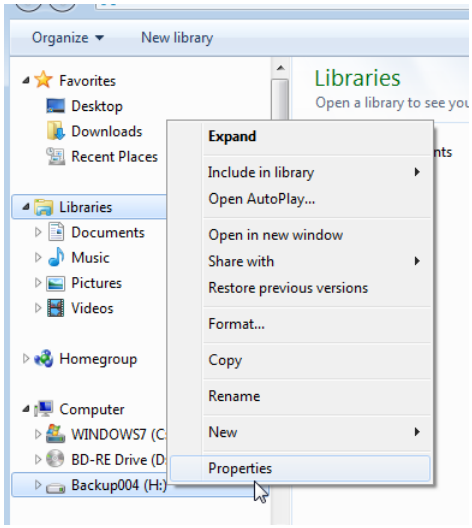


Additional information about external drive backup jobs.

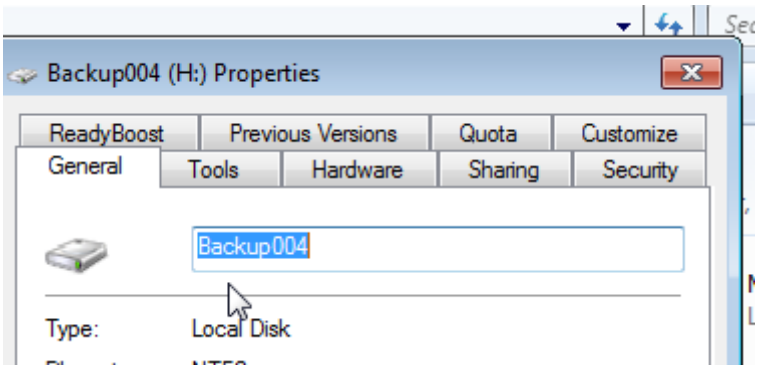
External drive backup jobs offer the following benefits:

- The backup can be stored separately from the PC e.g. in a fireproof safe or in another building.
- On most modern PC's the external drive can be made bootable to facilitate disaster recovery when the main computer does not start.
- AISBackup can maintain backups to more than one external drive to facilitate on site / off site backups; all you need to do is periodically swap the drives over.
- External hard disk drives are more robust than CD, DVD and Blu-ray.

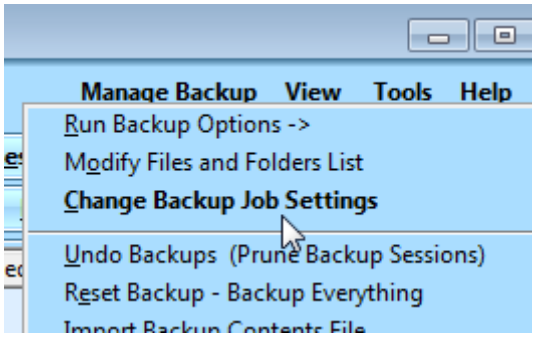
To set-up a multi volume backup destination optionally attach the additional external drives to the PC. Note that each external drive should be given a unique volume name. To change the name of the external drive right click the drive from Windows explorer and choose **Properties**.



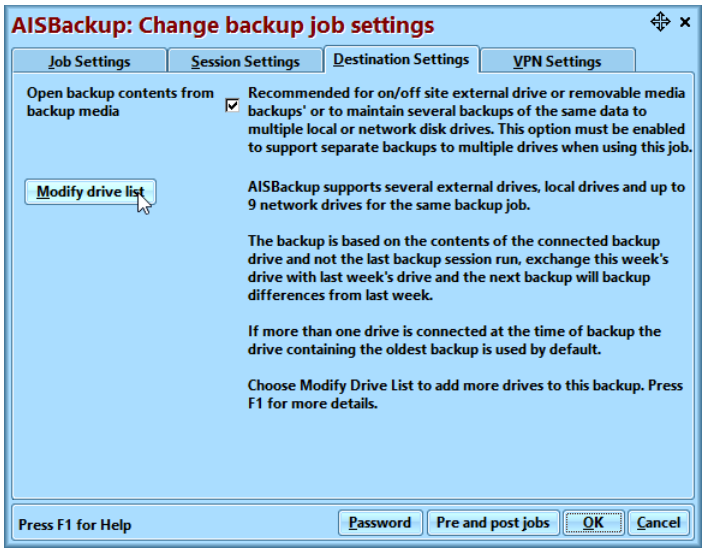
Change the name where indicated below then click **OK**.



In the external drive backup made on page 4 the backup drive chosen was named *Backup004*, in this example the backup should also be made to the disk named *ExternalWD2*. Once this additional disk has been added to the backup job the backup will automatically backup to whichever drive is connected. If both drives are connected the backup will automatically go to the external drive containing the oldest backup.



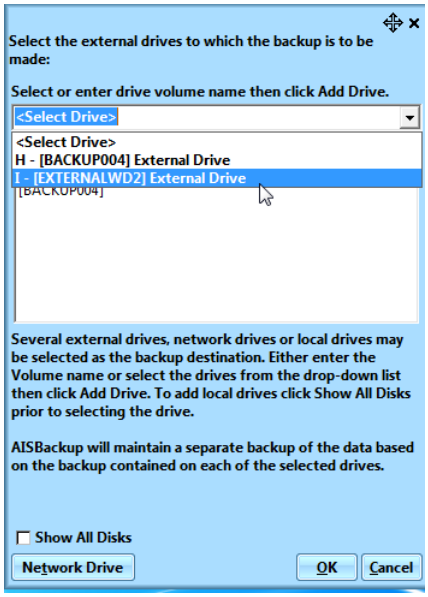
To set-up the additional drive choose the menu option **Manage Backup / Change backup job settings**.



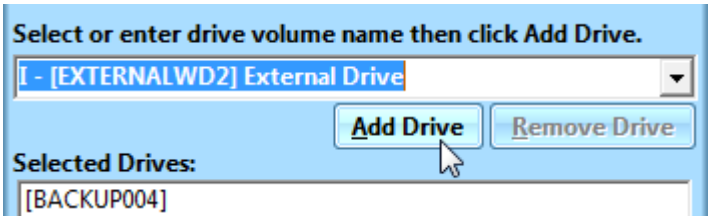
The option to backup to more than one drive requires that the existing contents of the backup is loaded from the backup media itself.

Click the **Destination settings tab** then select **Open backup contents from backup media** and then click **Modify drive list**.

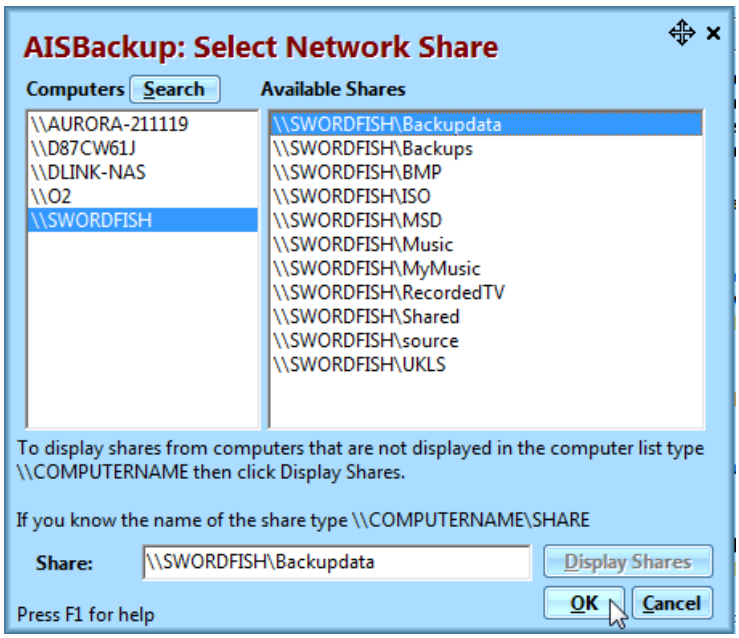
Network drives may also be added to the list of destination drives, in fact you may also specify local disk drives to the list.



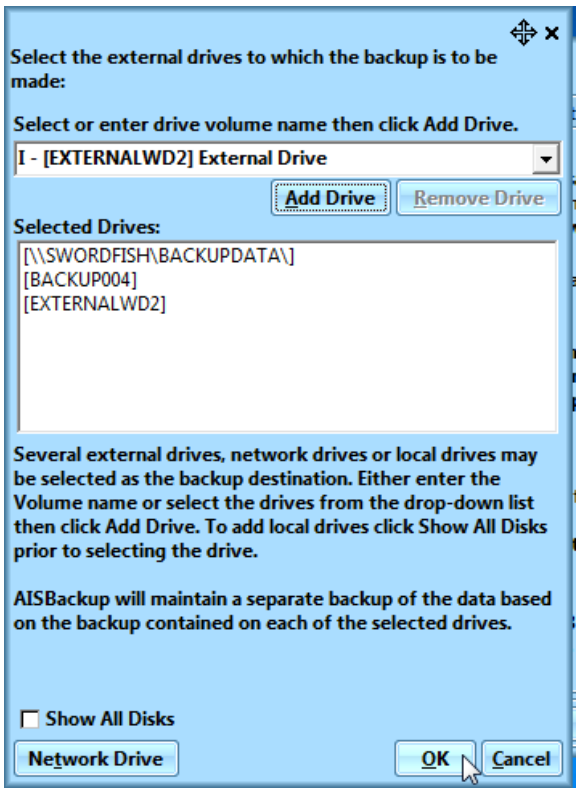
From the drop down list select the additional external drive. If the drive is not listed you may type in the volume name instead. To show the local disk drives select the option *Show All Disks* and then re-click the *Select drives* drop down list.



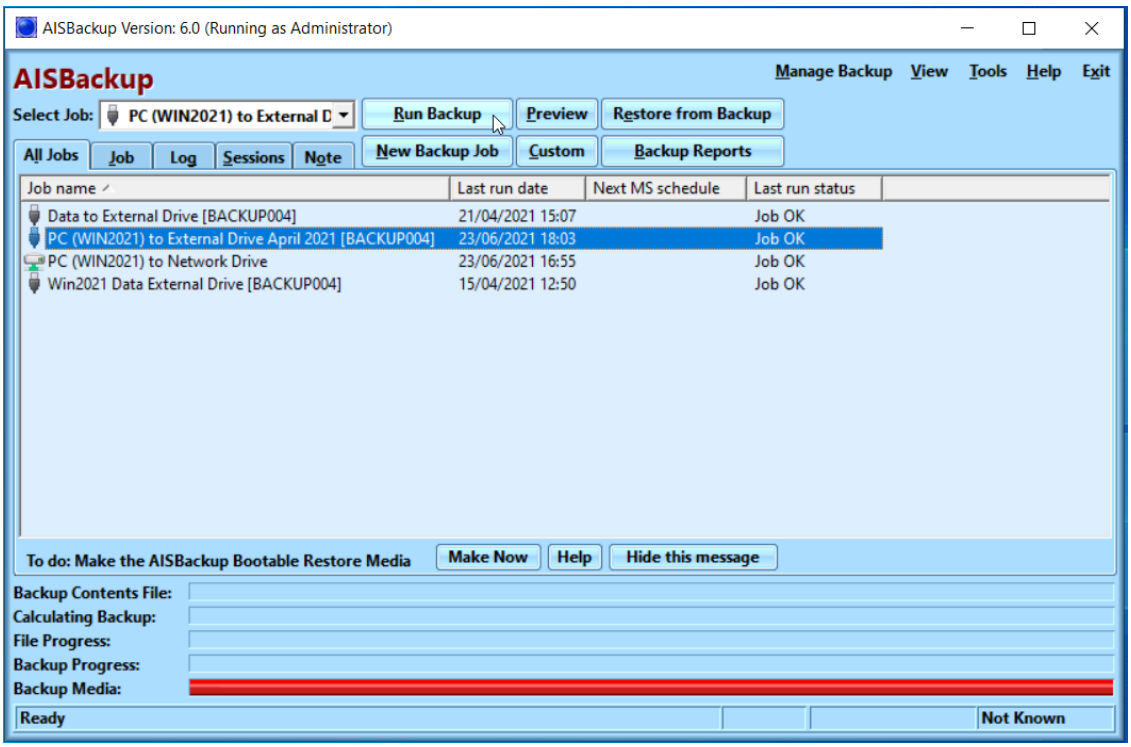
Once a drive has been selected click **Add Drive.**



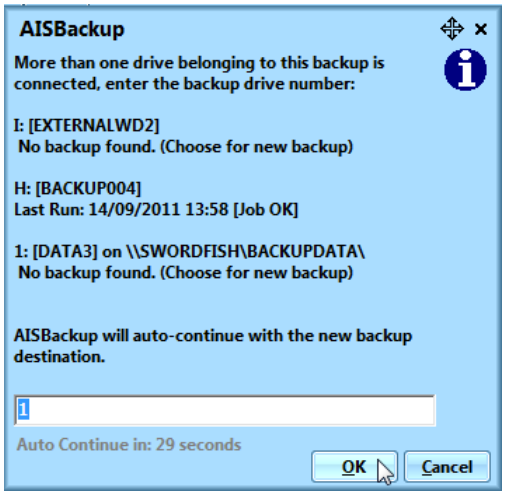
To add a network drive to the list click **Network Drive** then either type in the share name or use the search options to select the network share from a list. Click **OK** to continue, then click **Add Drive.**



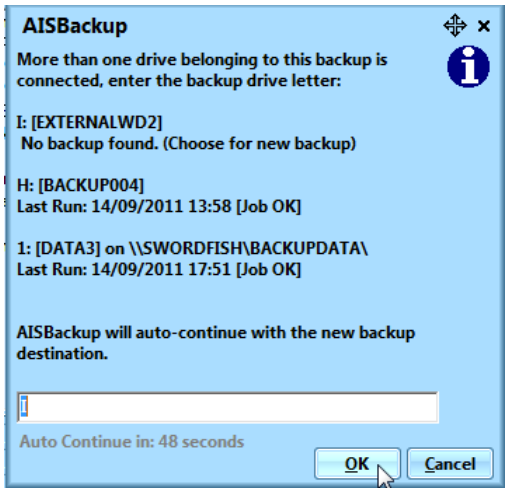
The above example shows that 2 external drives and one network drive has been added to this backup job. Click **OK,** then **OK** again to continue.



To run this backup job select the job then click **Run Backup**.



As you can see in the above example the backup has already been made to the external drive *H:[BACKUP004]* and one of the drives with the oldest backup (actually there cannot be a backup older than never backed up) automatically selected for backup this time. AISBackup will automatically backup to the selected drive after a minute unless you select another destination. Click **OK** to continue. If only one of the drives is connected the backup will automatically start with that drive, however in this example the network drive is always likely to be available.



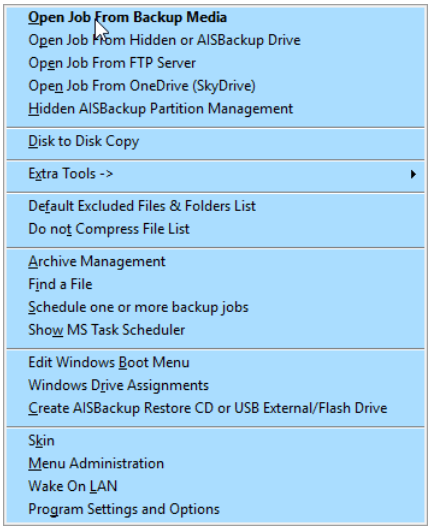
The next time AISBackup is run the drive *I:[EXTERNALWD2]* is selected as the backup destination.

The next time AISBackup is run the first used destination H:[BACKUP004] will be chosen as the backup destination where the backup is based on the contents of H:[BACKUP004] and the differences between that backup and the state of the computer now (new files, changed files and deleted files marked as deleted).

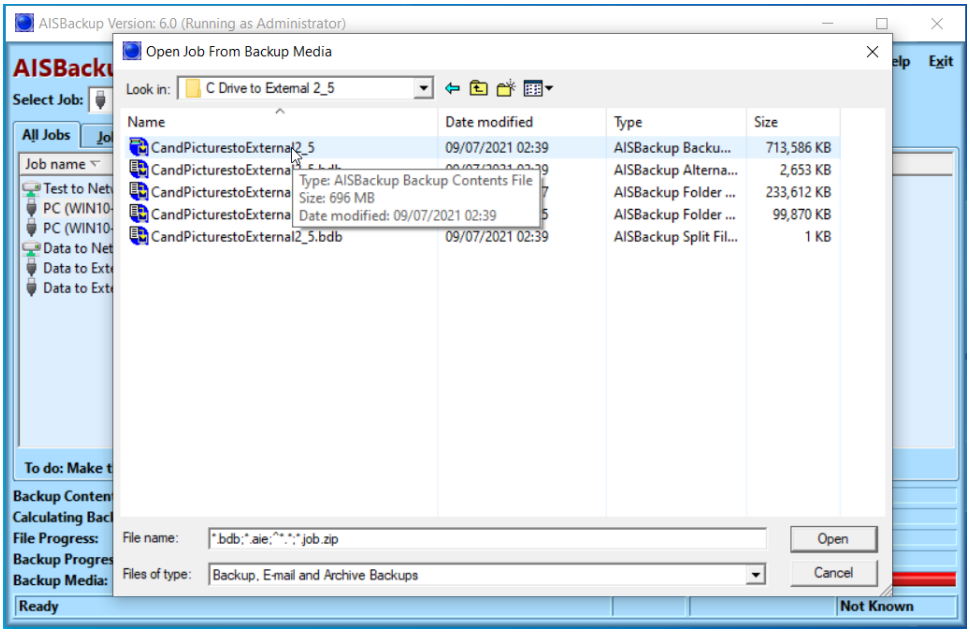
Opening a backup from a different computer

A backup may be opened that was made on a different computer, or a backup may be re-instated that has been removed from the list of backups where the backup was retained (by using the **Keep** option during the remove process **Manage Backup / Remove Backup Job from List**).

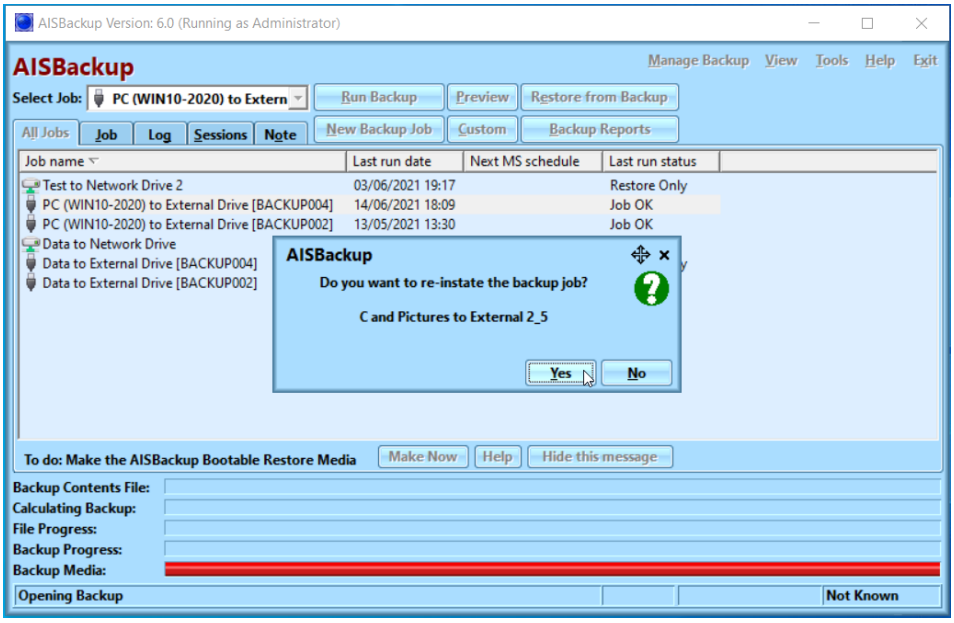
Occasionally, but rarely, a backup job may not behave as expected, this is sometimes rectified by removing the backup from the list of backups and then re-instating the backup using the **Tools / Open Job from Backup Media** option – this will recreate some of the settings for the backup job..



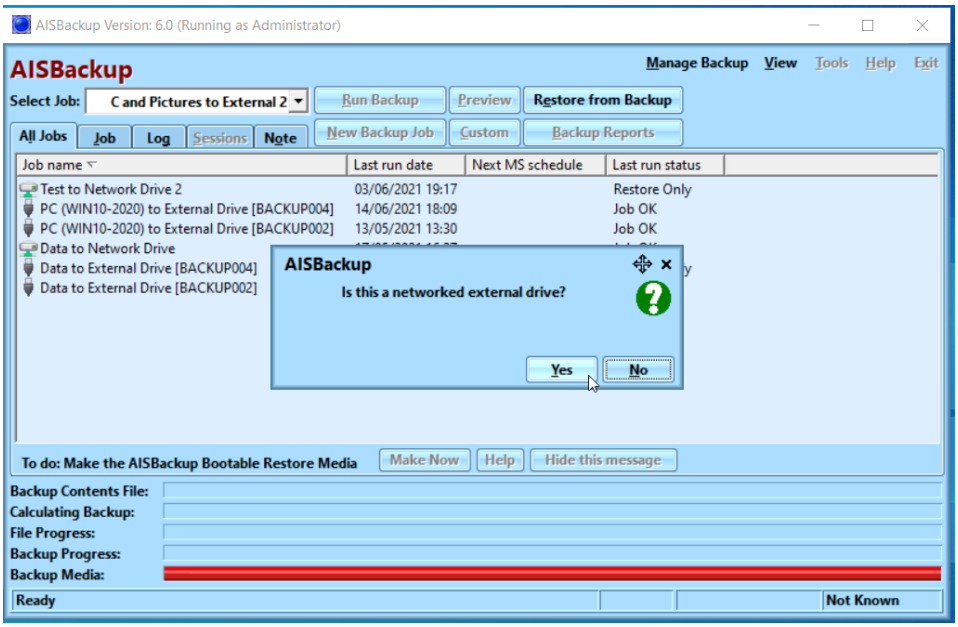
Use the **Tools / Open Job from Backup Media** option to open a backup from a CD, DVD, Blu-Ray, Disk or network drive. For FTP or backups to AISBackup '*Hidden*' drives choose the appropriate option. In the example below, the backup is being opened from a network drive.



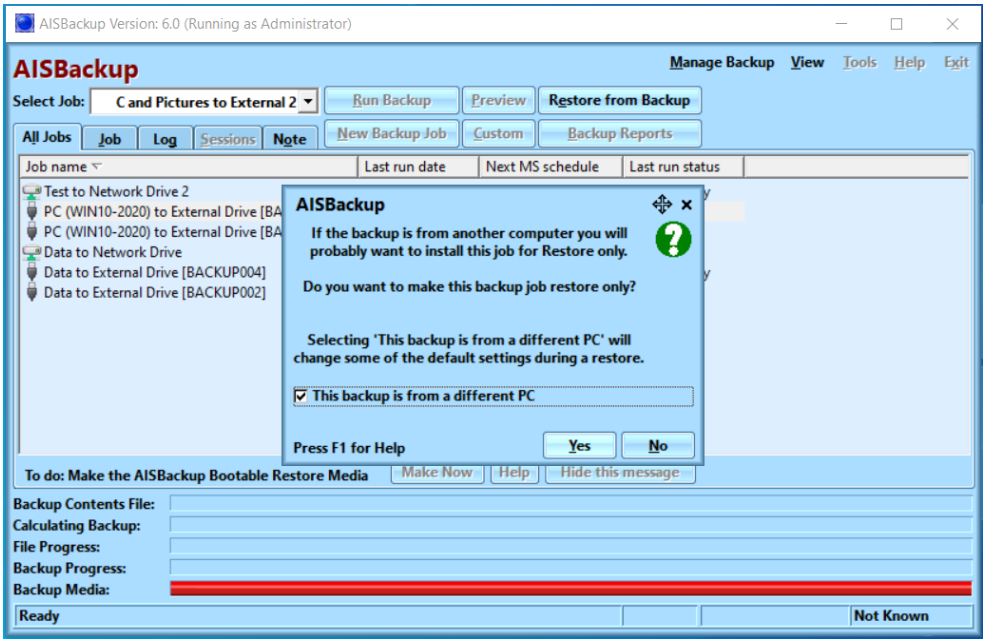
Choose how the backup should be opened on this PC.



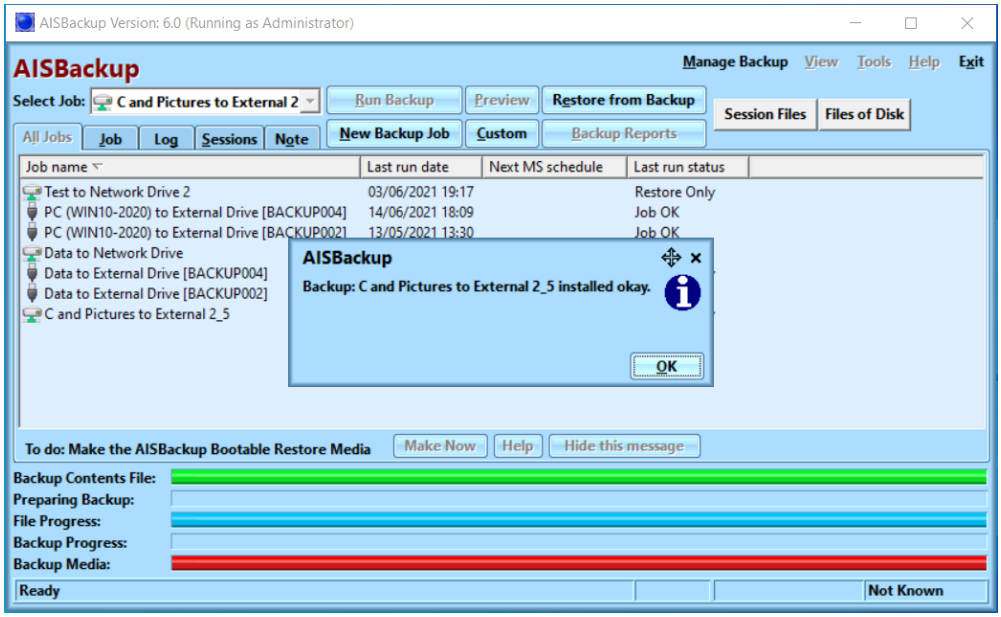
If the backup is to be always available on this PC choose **Yes** to re-instate, otherwise choose **No**.



If the backup is from a network share then regardless of whether the backup is on an external drive you may choose **Yes**.



If the backup is from the same computer that you are using and you wish to continue to backup using this backup job then choose **No** to '*Restore Only*'. If the backup is from a different computer choose **Yes** to '*Restore Only*'; you would use this option if the backup is from a different PC and you would like to restore some files. When installing a backup from another (different) PC you should also select **This backup is from a different PC**, selecting this option changes some of the default settings during the restore process to prevent system files from being restored that may corrupt the current PC's operating system.



Click **OK**

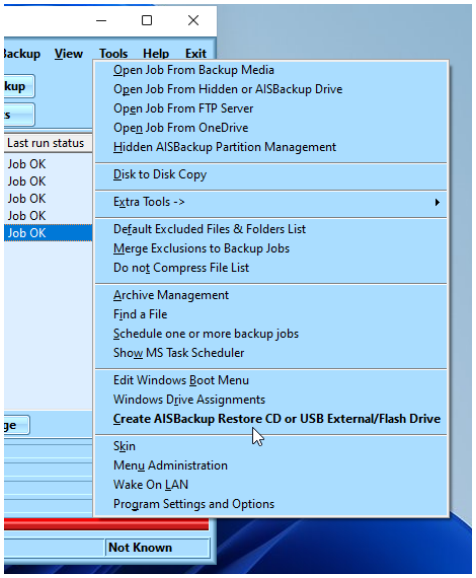
Prepare for disaster recovery: Make the Restore CD or USB Flash Drive

In the event that the PC no longer boots, the AISBackup restore CD or USB flash drive maybe used to start the PC so that you may restore using a backup that you have previously made.

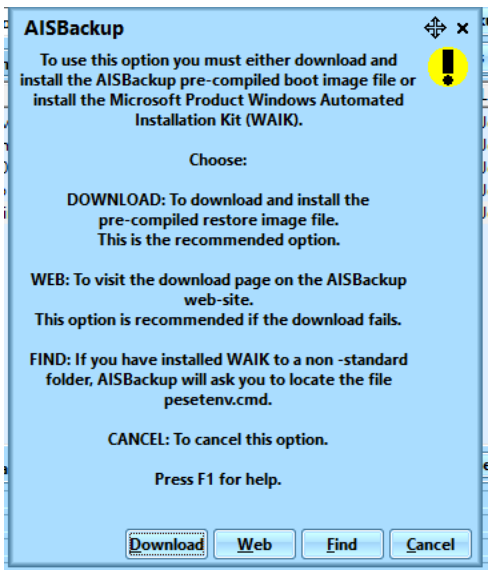
To make the Restore CD choose the menu option **Tools / Create AISBackup Restore CD or USB External/Flash Drive**.

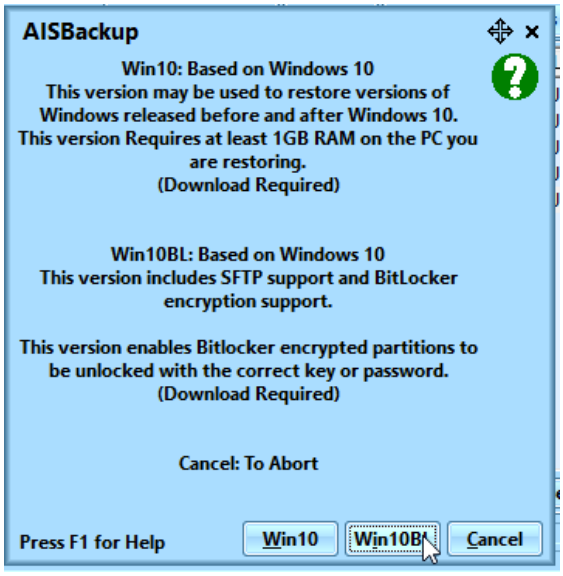
IMPORTANT: The PC must be set-up to boot in MBR mode when using the AISBackup retore media, so you may need to make a temporary change to the boot options in th CMOS settings of yout PC as most modern PC's use UEFI boot mode.

There are other options for a disaster recovery restore, for example download Windows installation media from the Microsoft website, install Windows and then restore using that version of Windows.

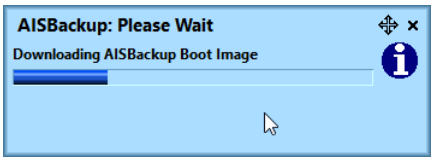


The first time this option is run AISBackup must download a pre-compiled restore CD image file from the AISBackup website. The latest version is Win10BL, this includes BitLocker and SFTP support.

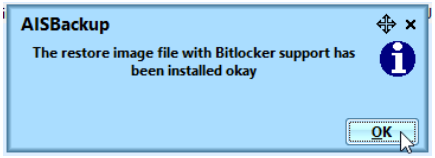




Click **Win10BL** to download the pre-compile boot image file.

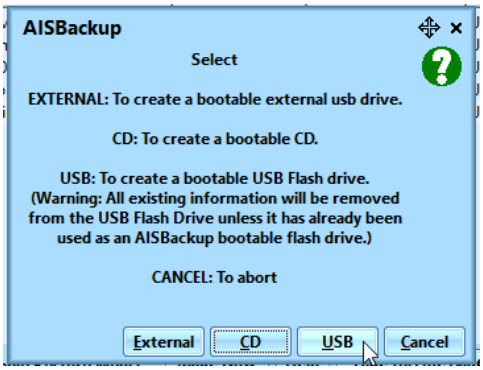


The download may take several minutes, however this file will not be updated even though new versions of AISBackup are likely to be made available over time.

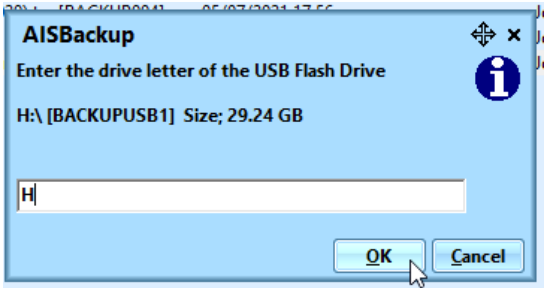


Click **OK** to continue.

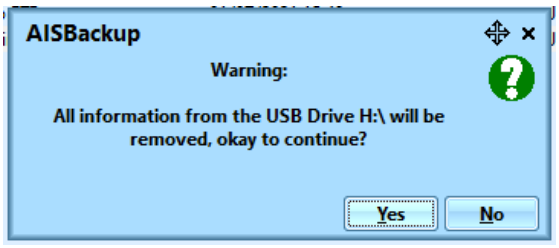
AISBackup offers a choice of making a restore CD or restore USB external drive or USB flash drive. Please note that a USB flash drive is formatted and all information lost the first time it is used as an AISBackup restore drive. If the boot image is copied to an existing AISBackup USB flash drive the existing information is preserved. If an external drive is chosen the destination must be a primary NTFS partition. USB flash drives are only supported on Windows Vista and above, however External drives are supported on Windows XP and above, including Windows Server 2003.



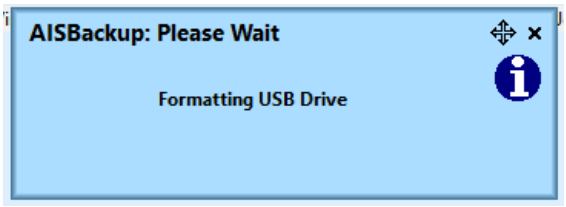
In the first example select **USB**.



Enter the drive letter of the USB drive.

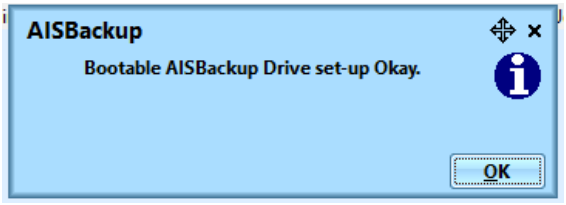


If shown, acknowledge the warning that all existing data will be removed from the USB flash drive.

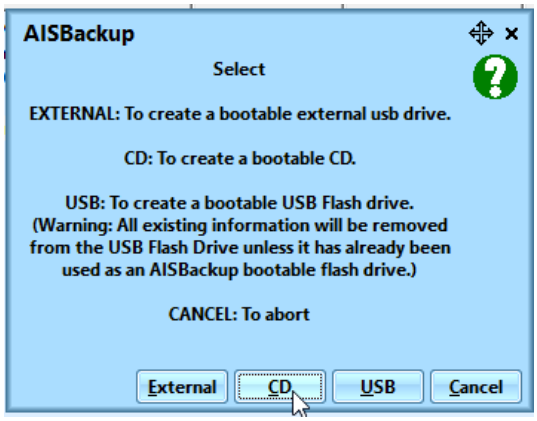


Wait for the drive to be formatted.

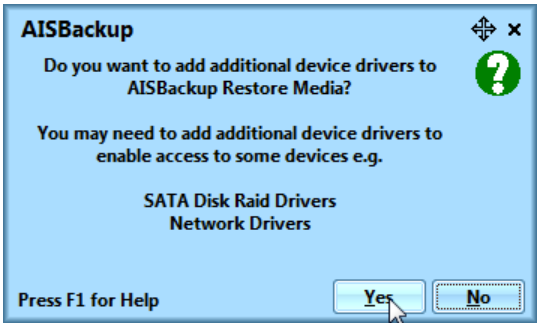
In this example we chose **No** to add *additional device drivers*.



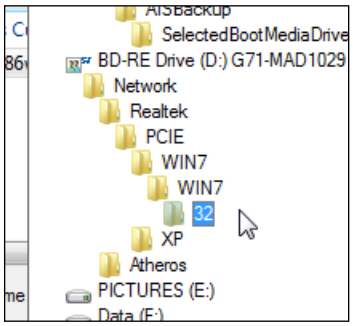
Click **OK** to continue.

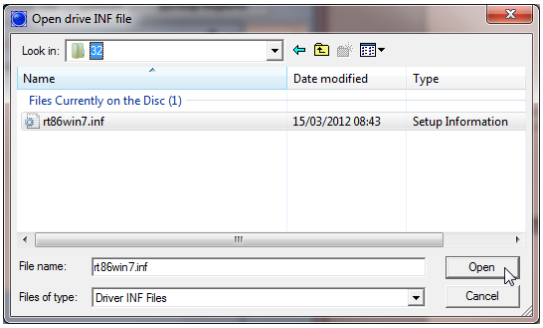


In the second example **CD** is selected.



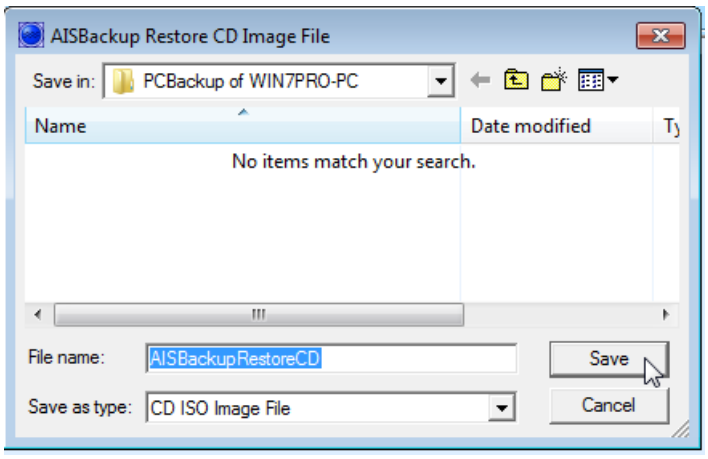
There is an option to add additional device drivers to the AISBackup restore media, in this example we will add Ethernet drivers from the PC Motherboard drivers CD. Please note that on OEM PC's you may have to download the device drives from the PC manufacturer's web-site. Click **Add**.



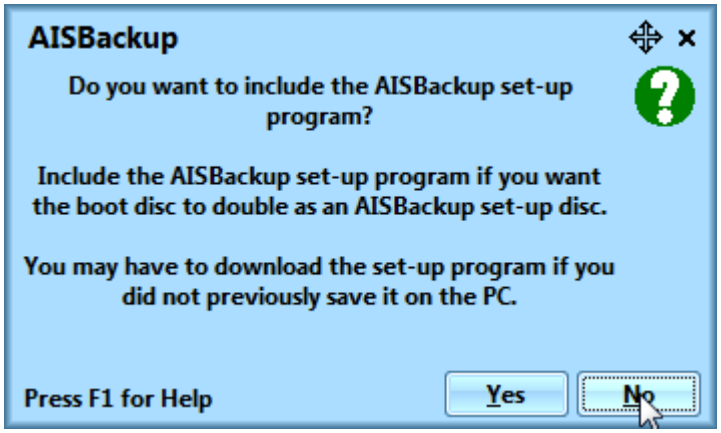


Navigate to the 32-bit drivers for Windows. Please ensure that 32-bit drivers are always selected as the Restore CD is based on 32-bit Windows. You can of course use the CD / USB drive to restore 64-bit Windows. The left hand image, above, shows the folders which contain the rt86win7.inf 32-bit Ethernet drivers.

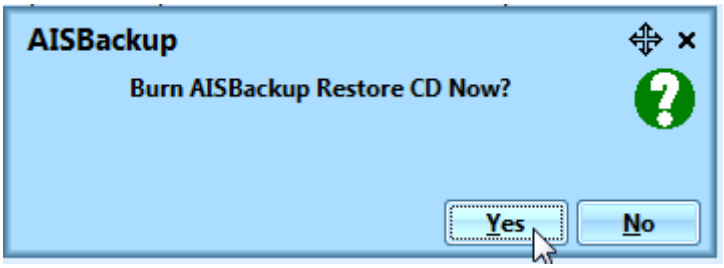
Click **Next** once all the driver files have been selected.



Choose the destination of the boot image (iso) file; this is this image file that is copied to CD in the next phase. Note that the boot image may be used directly with Microsoft and Oracle Virtual PCs.

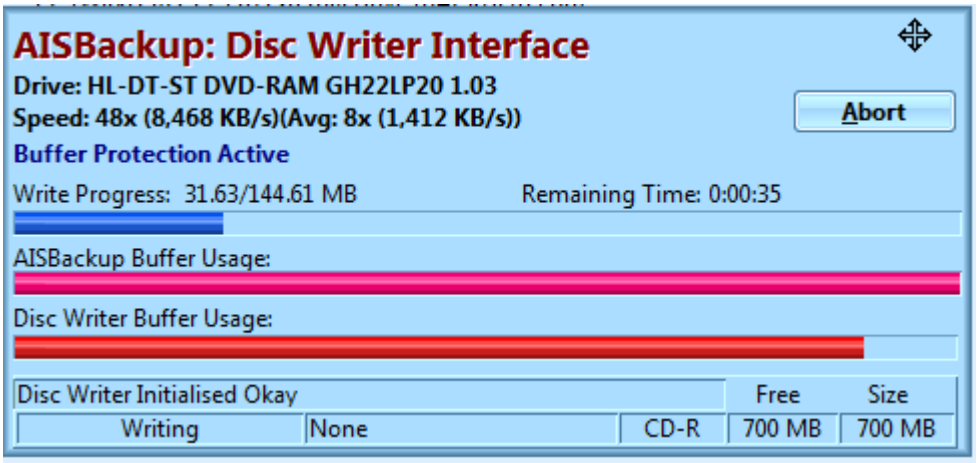


If you would like to make the restore CD double as an AISBackup set-up CD click **Yes** to the *Do you want to include the AISBackup set-up program.* If **Yes** is selected you are asked to open the AISBackup set-up program.



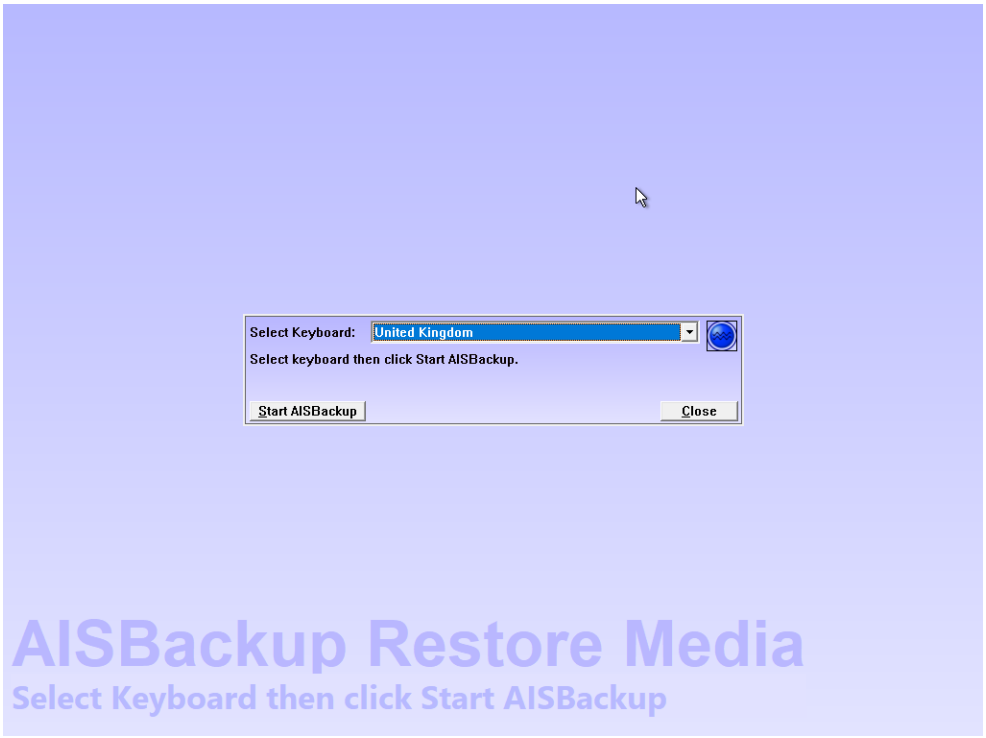
Choose **Yes** to make the CD now.

Load a blank CD and choose **OK** to continue.

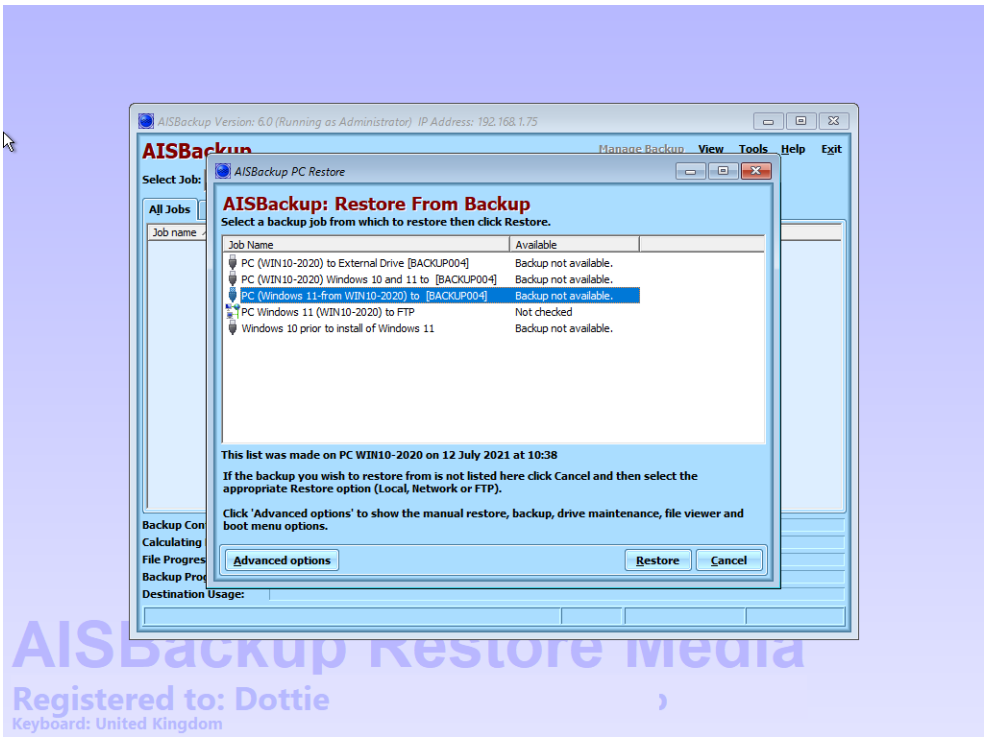


Wait for the CD to burn option to complete.

To test the CD or USB flash drive refer to your PC's instructions for choosing alternative boot devices and choose CD or USB as appropriate.



From the AISBackup Restore Disc start screen choose the keyboard then click **Start AISBackup**.



See the document *AISBackup: Disaster Recovery* to see how to use the AISBackup restore media.