AISBackup

Backup 64-bit Windows 8.1 from a MBR disk and restore to a GPT, EFI boot enabled disk.

This procedure documents backing up Windows 8.1, making the AISBackup bootable restore CD and restoring Windows 8.1 to a 4TB EFI boot enabled GPT disk.

This procedure will also work with 64-bit versions of Windows Vista, Server 2008 (including R2), Windows 7, Windows Server 2012 (including R2) and Windows 8.

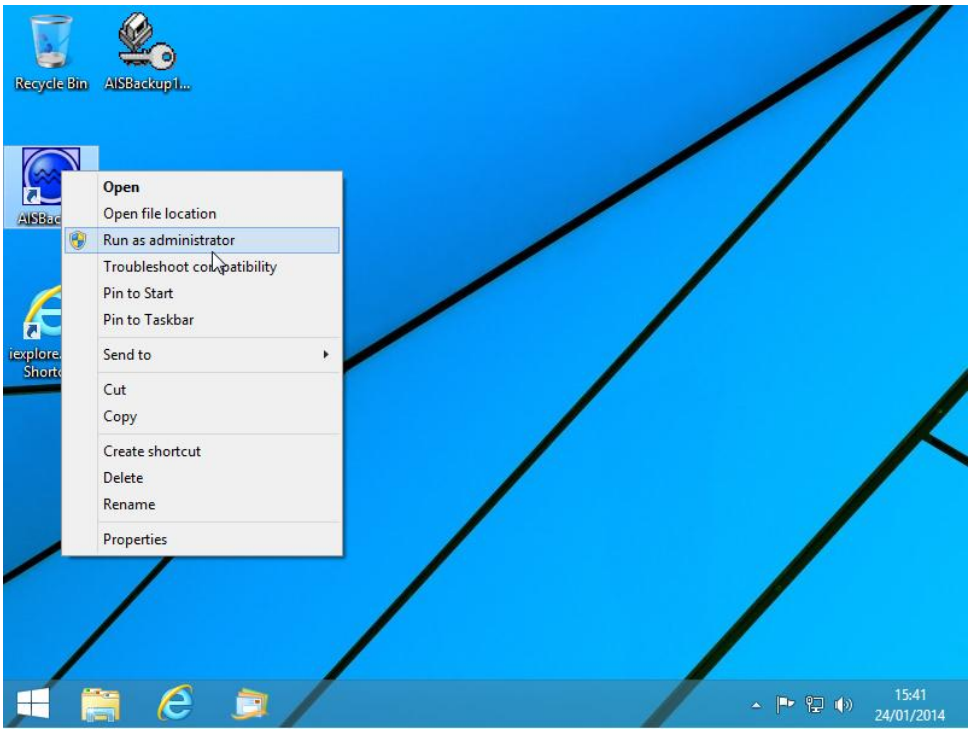
It is not possible to boot 32-bit versions of Windows using EFI.

You are responsible for determining if your PC supports EFI booting and setting up the motherboard CMOS settings to enable booting from an EFI boot partition. Your PC manufacturer or using Google should help.

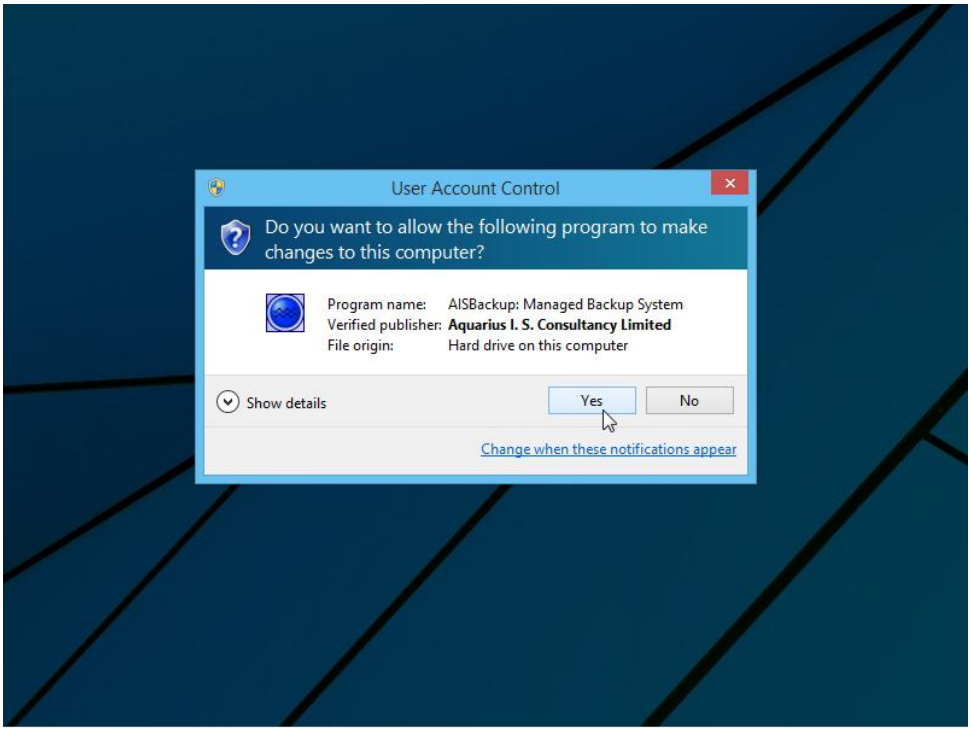
Please note that AISBackup restore media does not support USB 3 connections, please use USB 2 instead if booting from a flash drive (if used instead of CD) and restoring from an external drive.

Contents

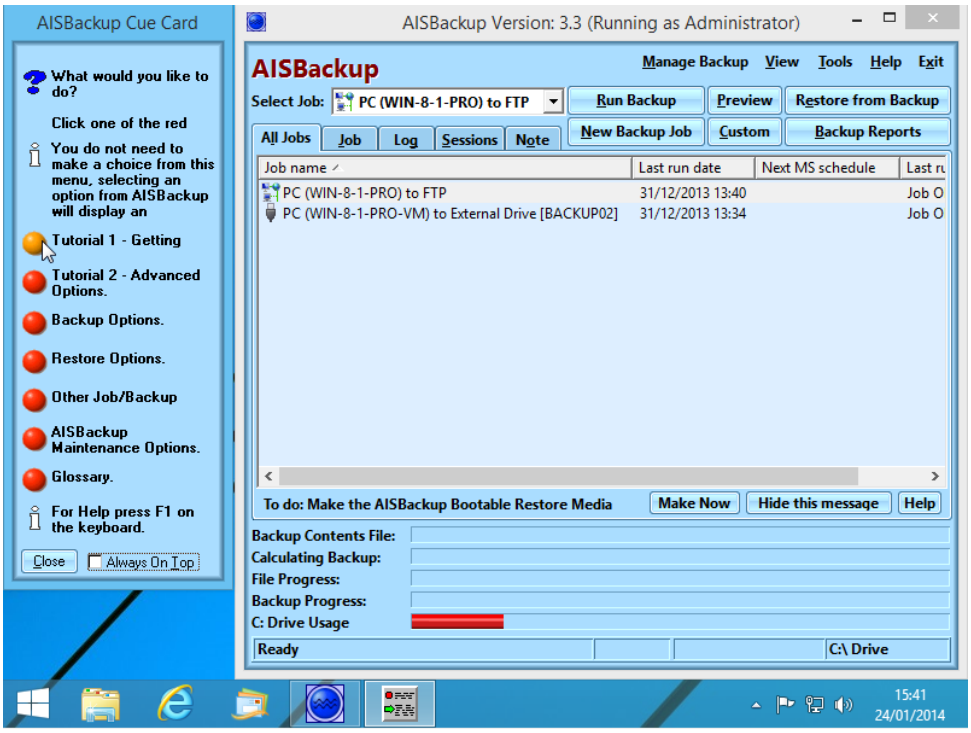
Phase 1: The Backup.



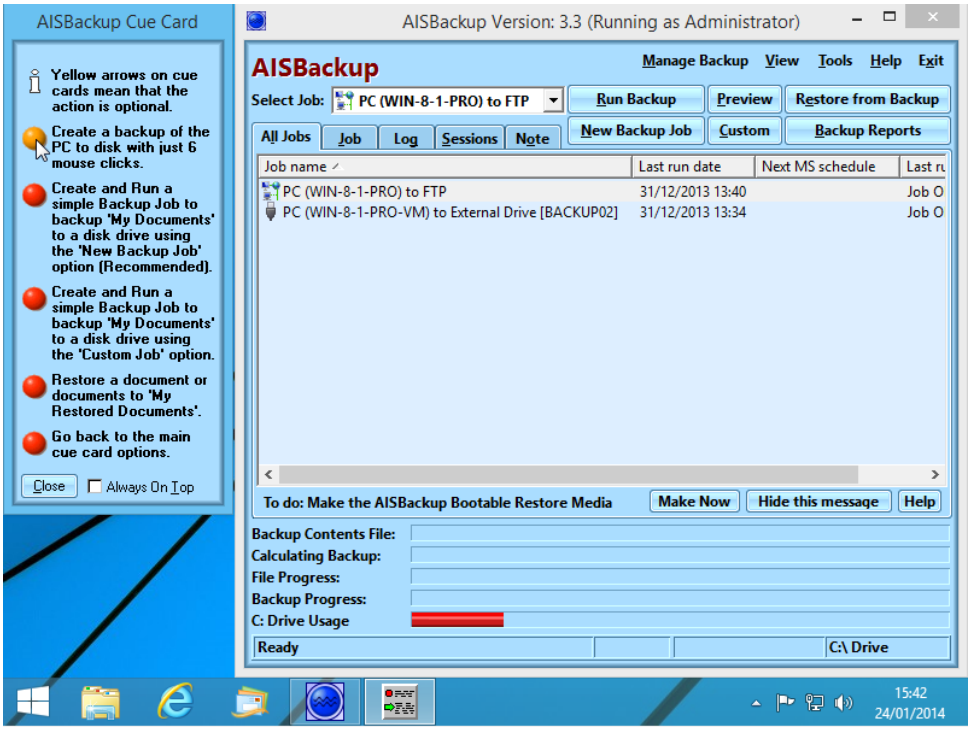
Right click AISBackup and choose **Run as administrator**.



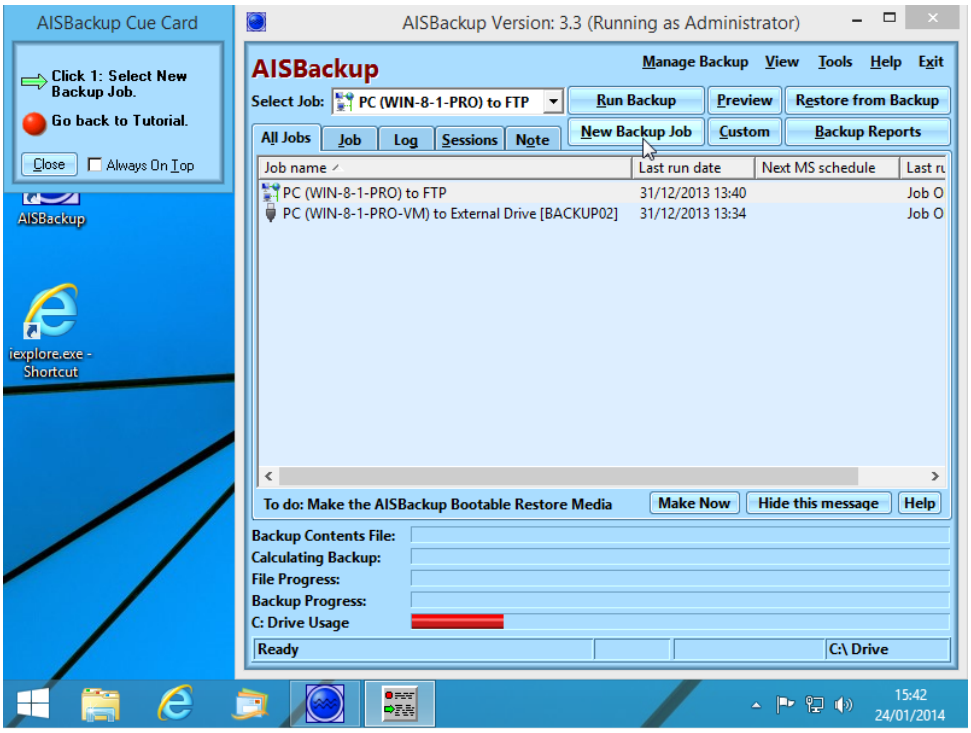
Acknowledge UAC by clicking **Yes**.



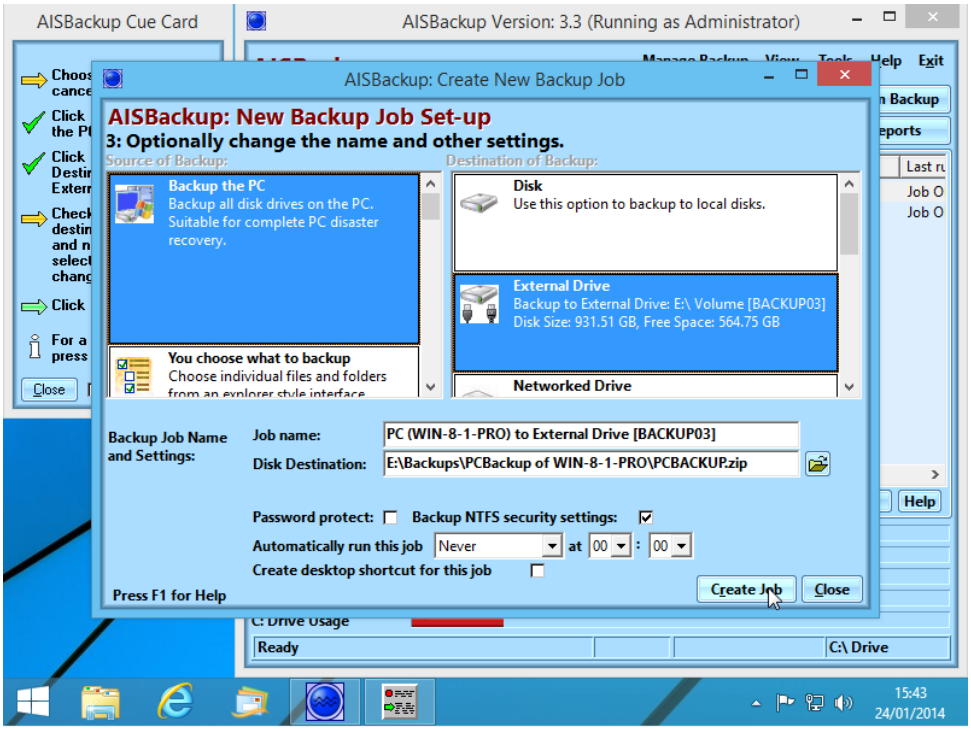
On the Cue Card click **Tutorial 1 – Getting Started**.



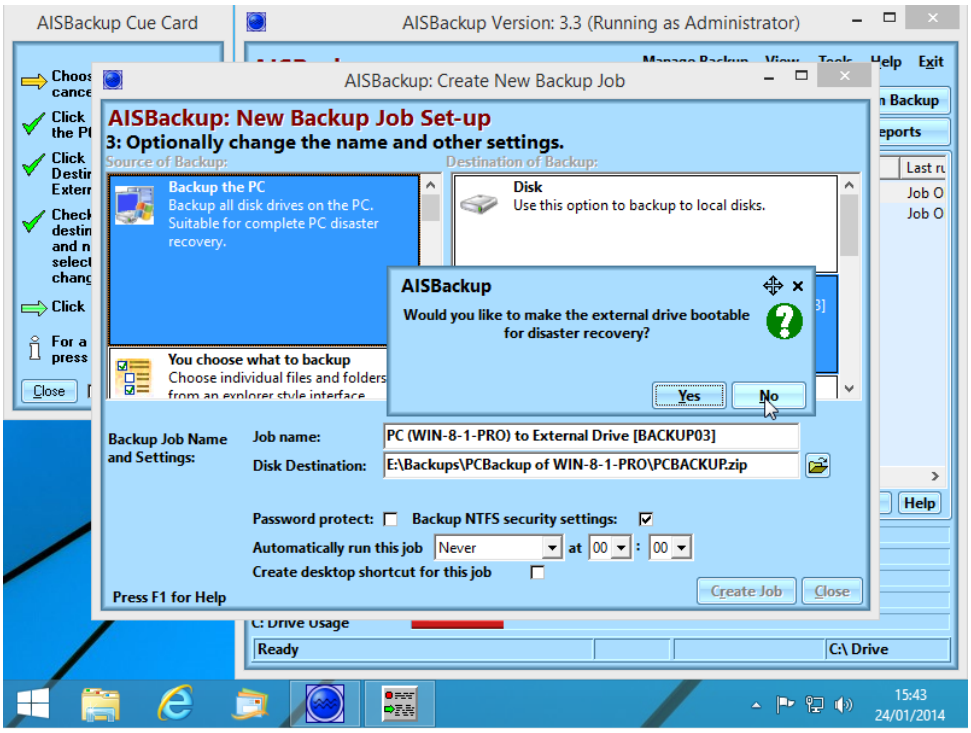
Then click **Create a backup of the PC…..**



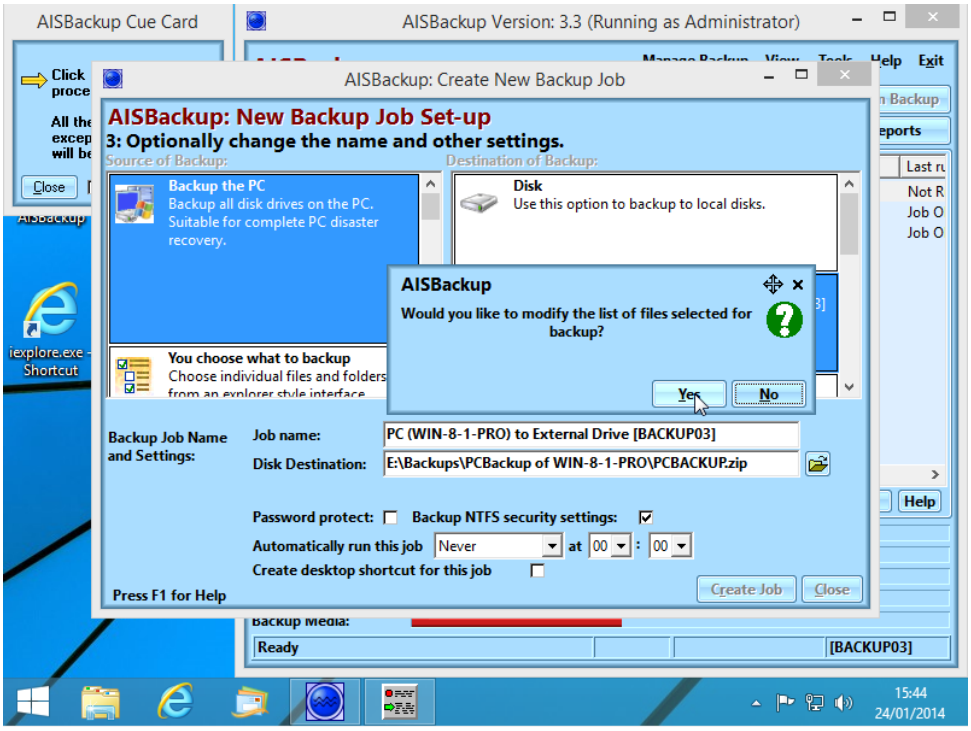
Following the cue card instructions click **New Backup Job**.



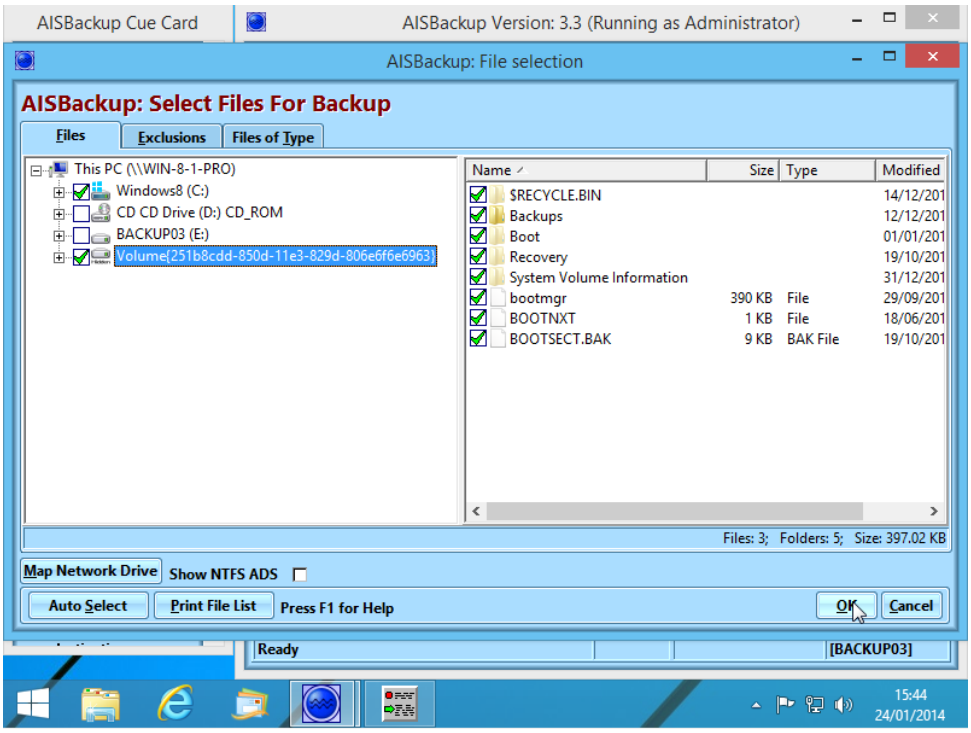
Click **Backup the PC** followed by **External Drive** (or your preferred backup destination).



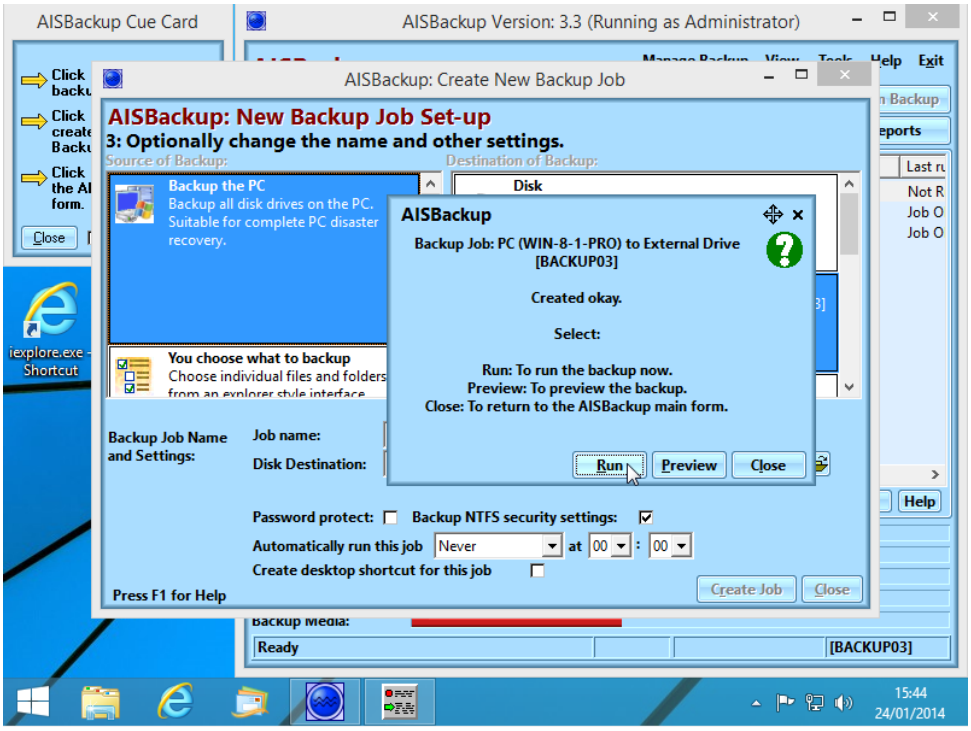
On *Would you like to make the external drive bootable….* Click **No**.



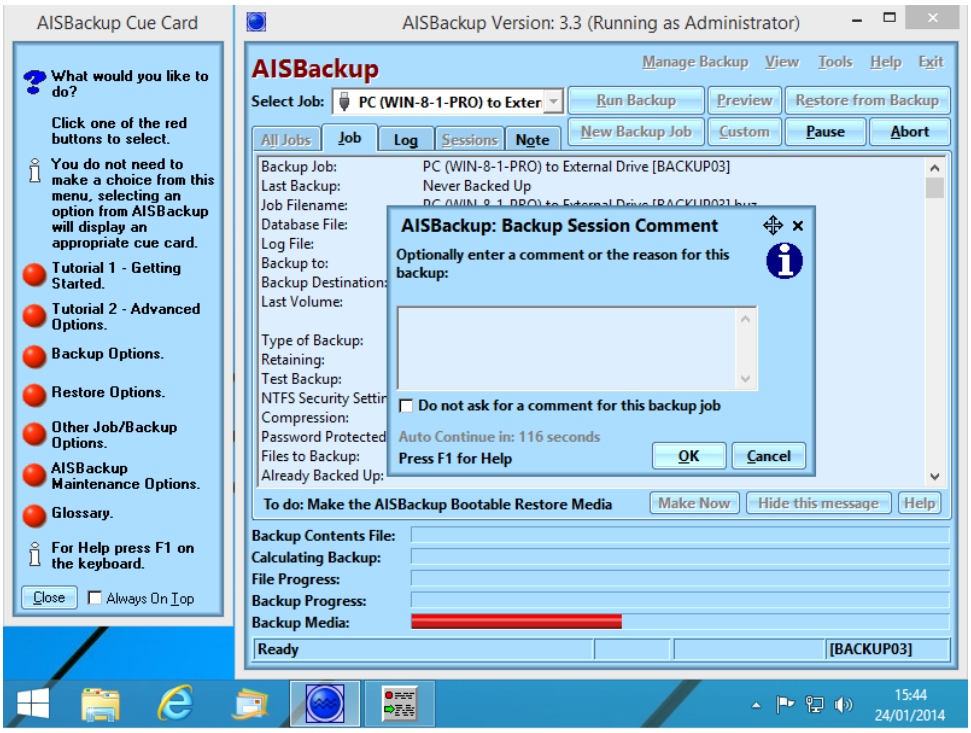
To see what you are backing up click **Yes** on the *Would you like to modify* question.



All local PC disk drives have been selected. Click **OK** on the file selection form.

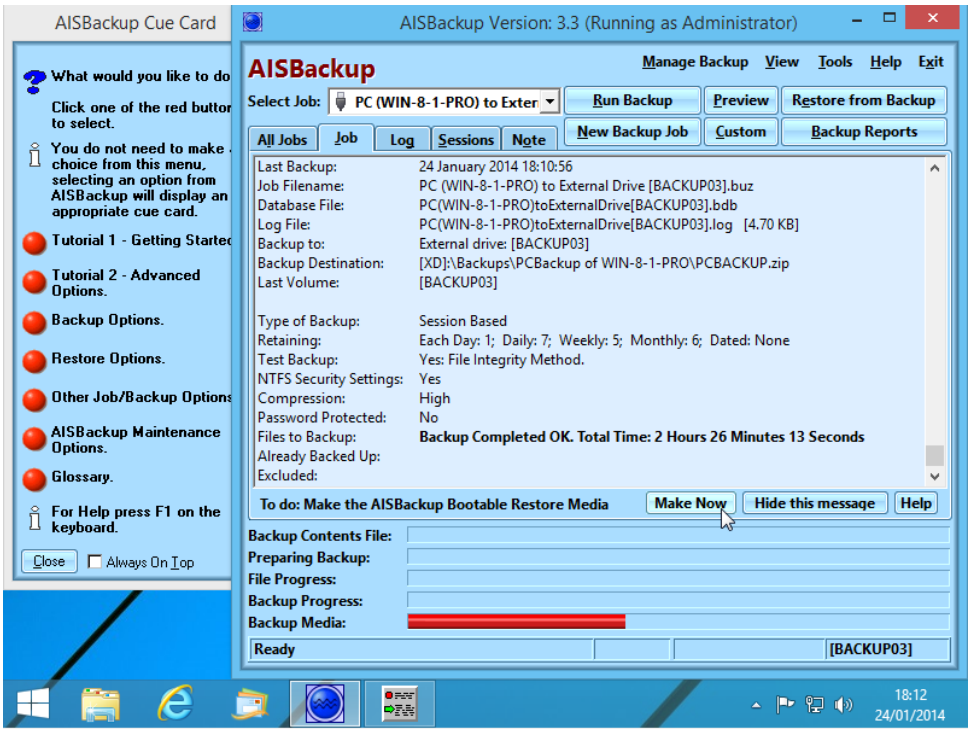


Click **Run** to run the backup now.

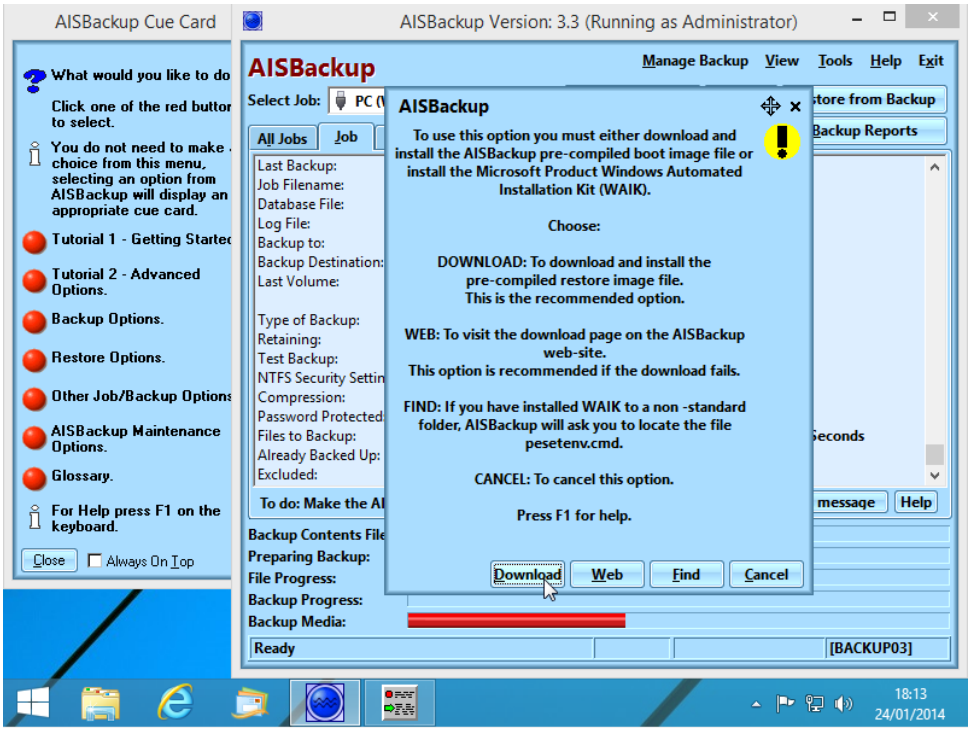


Optionally enter a comment then click **OK**.

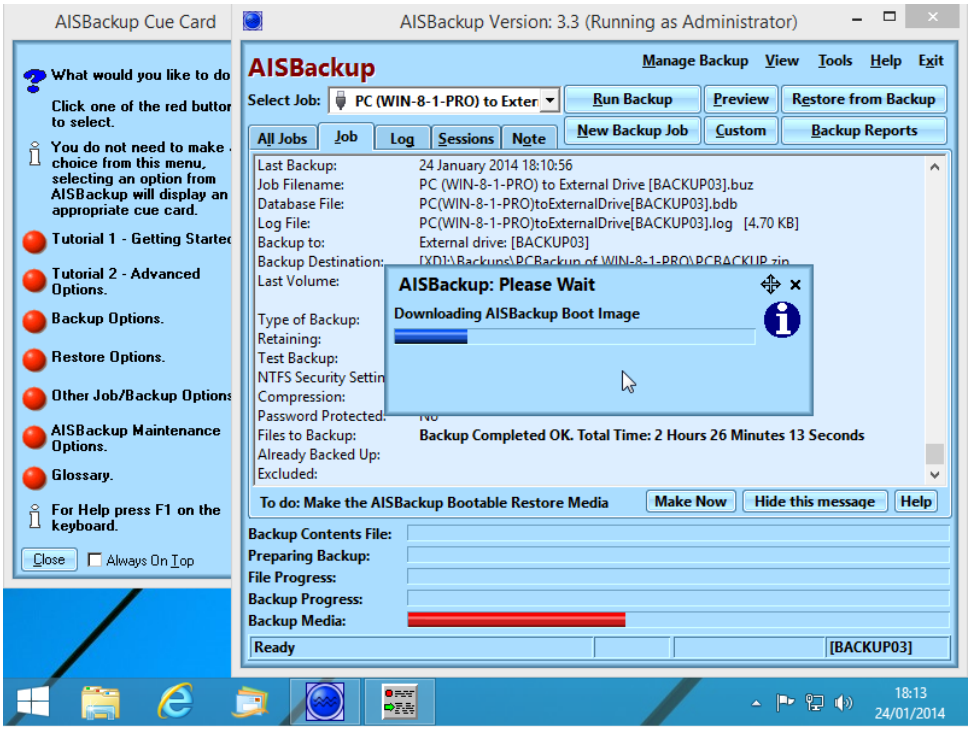
Phase 2: Making the AISBackup boot media.



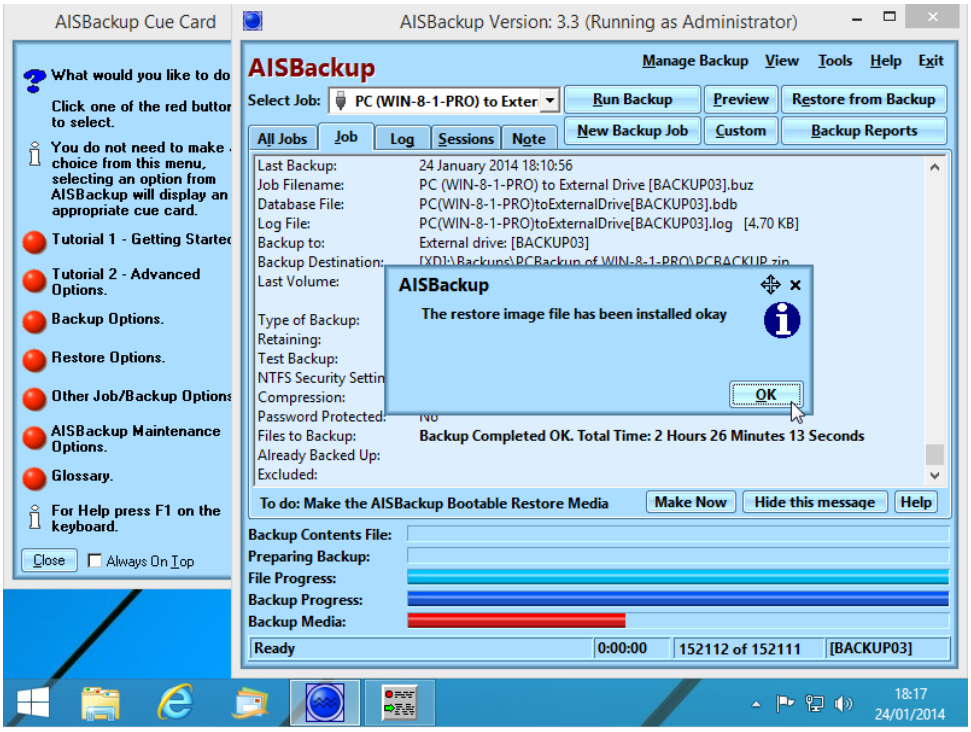
The backup has completed, the next phase is to make the bootable AISBackup restore media. If you have not already made the boot CD / USB then click the **Make Now** button. If you have already made the bootable AISBackup media and would like to make another then choose the menu options **Tools / Create AISBackup Restore CD or USB External/Flash Drive**.



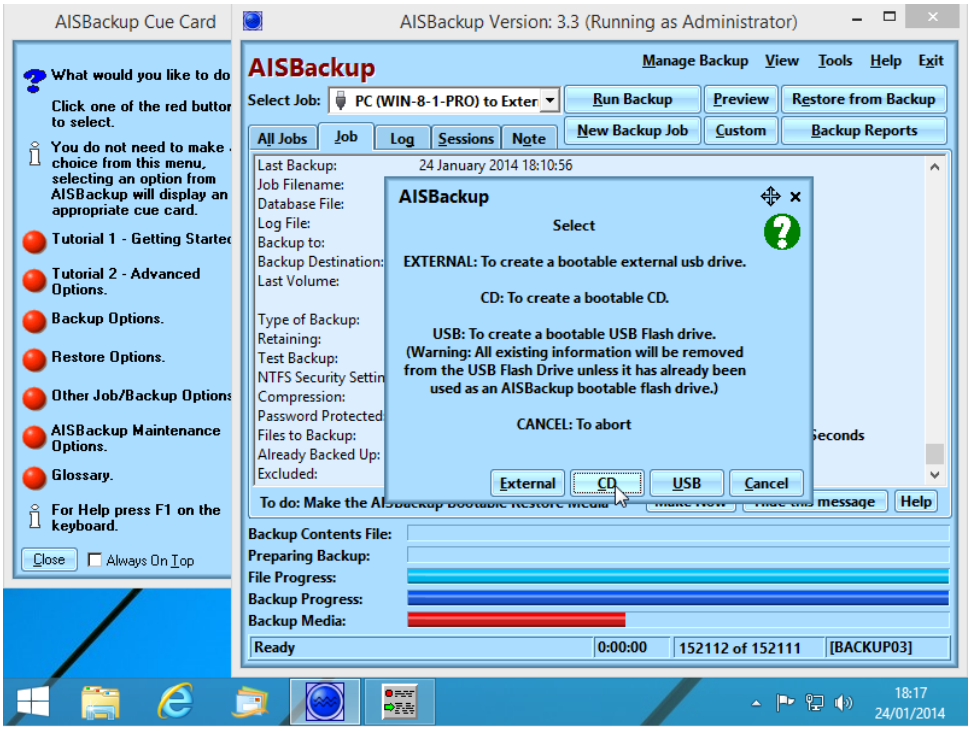
If you have not done so already download the AISBackup boot image file.



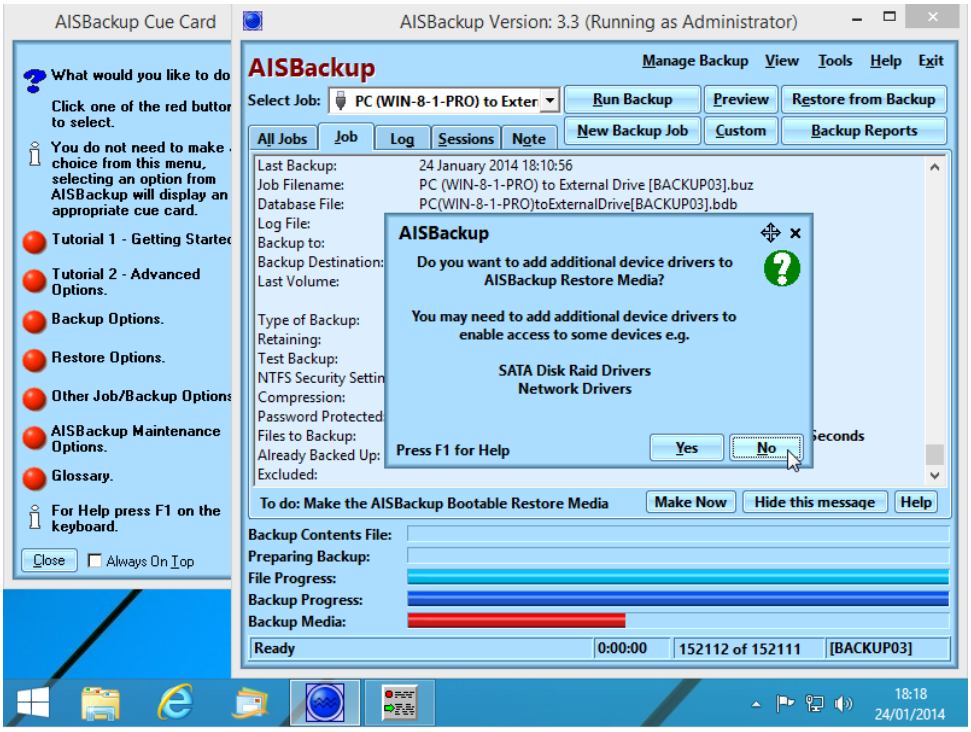
And wait a while.



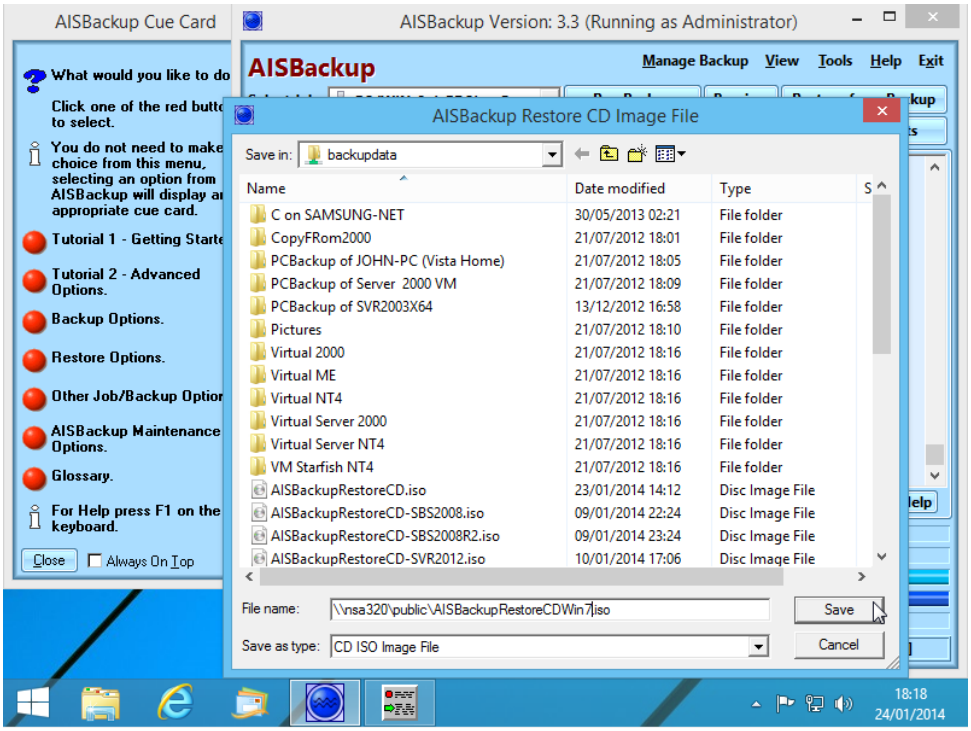
Acknowledge the *installed okay* message.



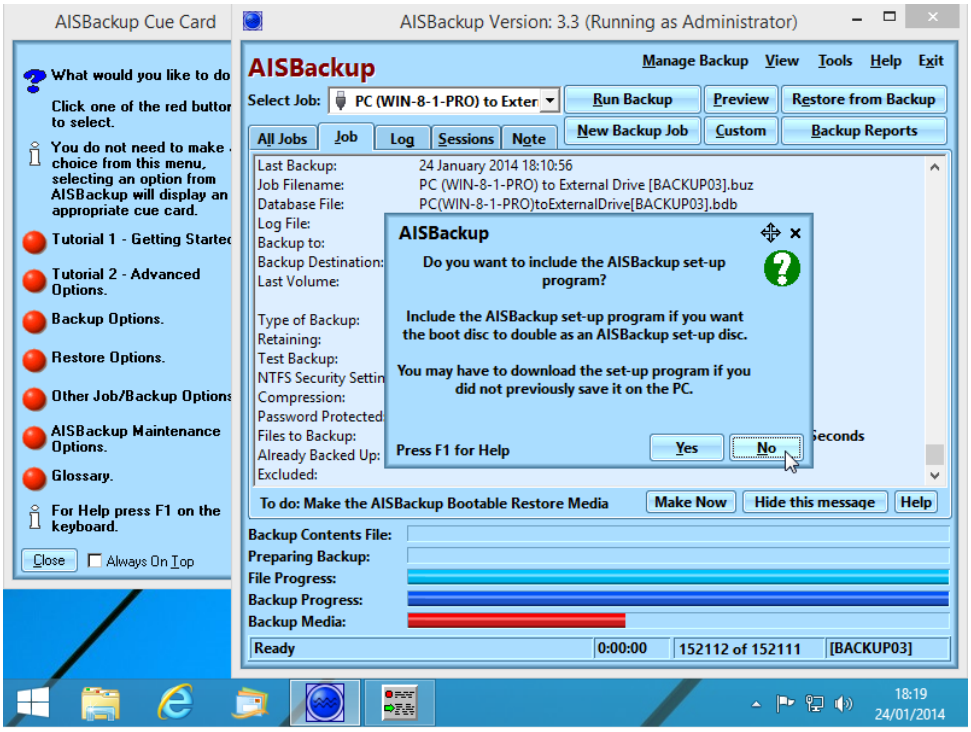
In this example choose **CD** to make a bootable CD.



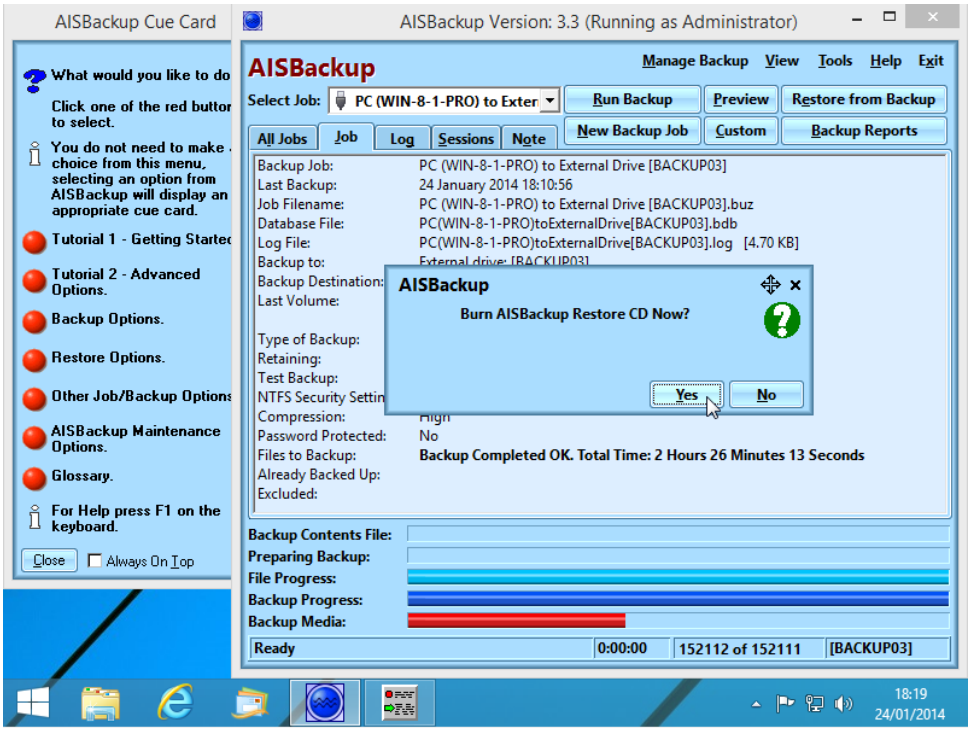
As we are restoring from an external drive using a USB 2 port we do not need to add additional drivers.



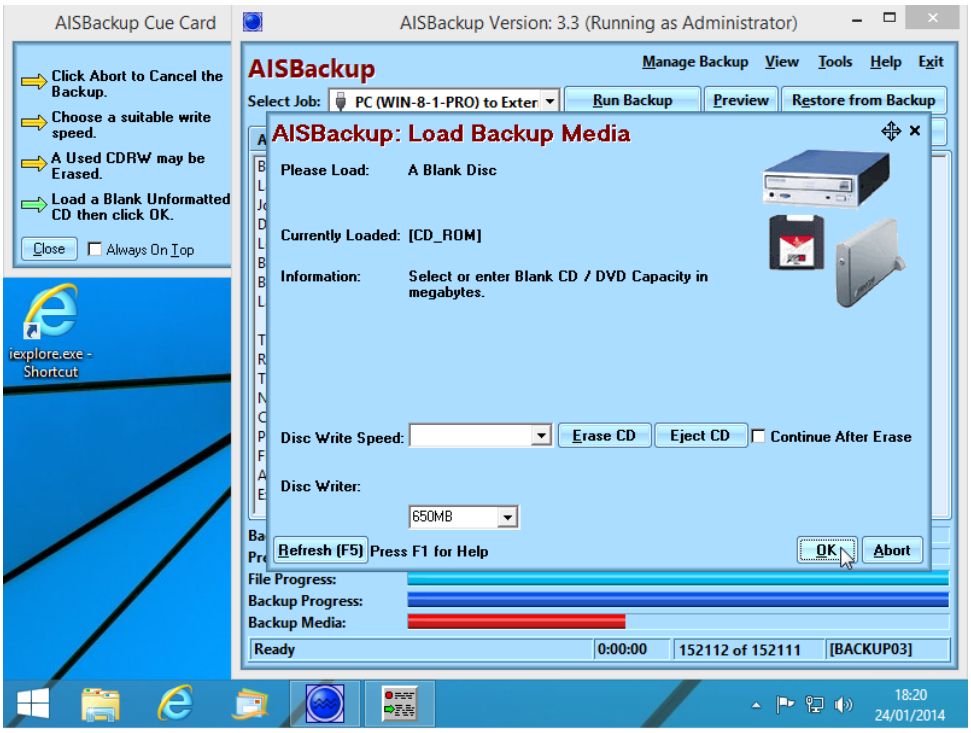
Choose a location for the restore CD image file, the desktop should be fine as you may delete the file once the CD has been made and tested.



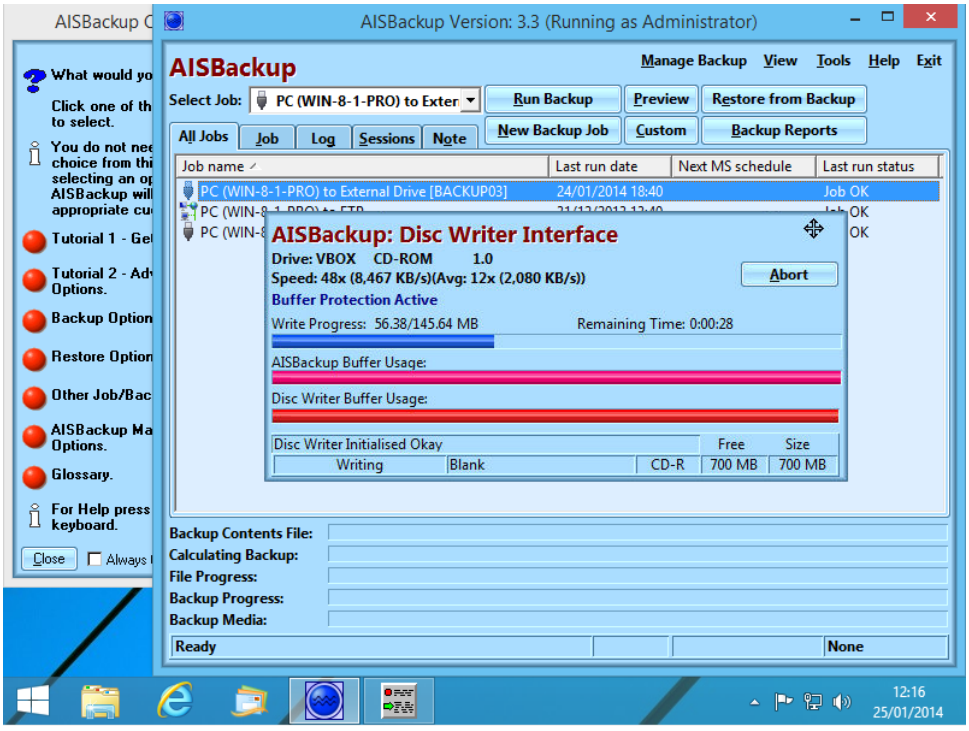
Click **No** to the *Add AISBackup set-up program* option. This option would enable the AISBackup restore CD to double as an AISBackup set-up CD.



Click **Yes** to the *Burn AISBackup CD Now* question.



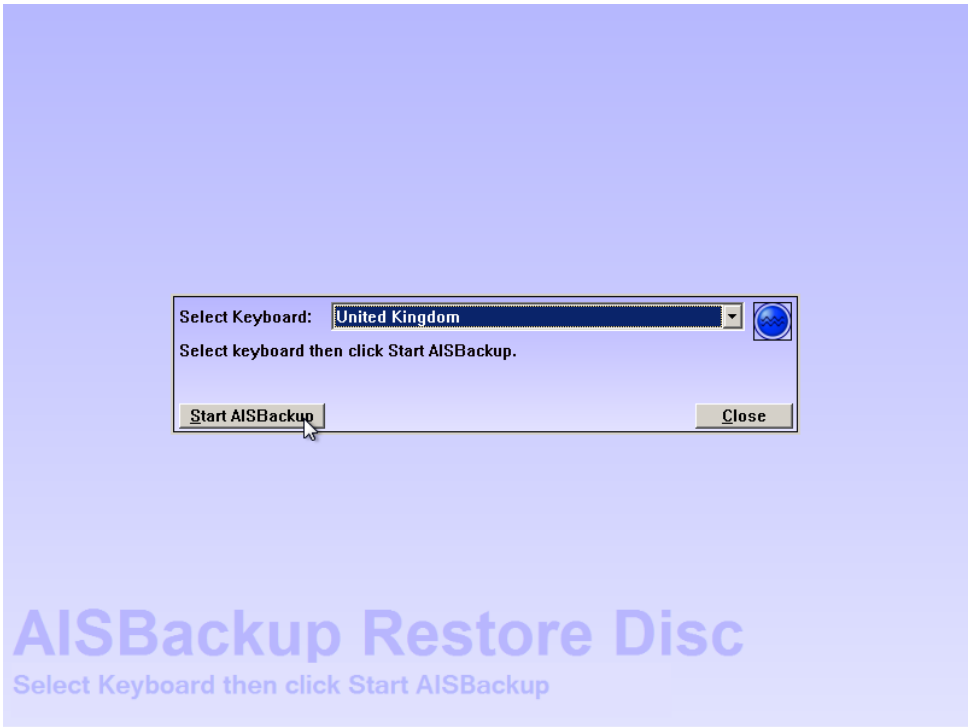
Load a blank CD into the CD drive, then click **OK**.



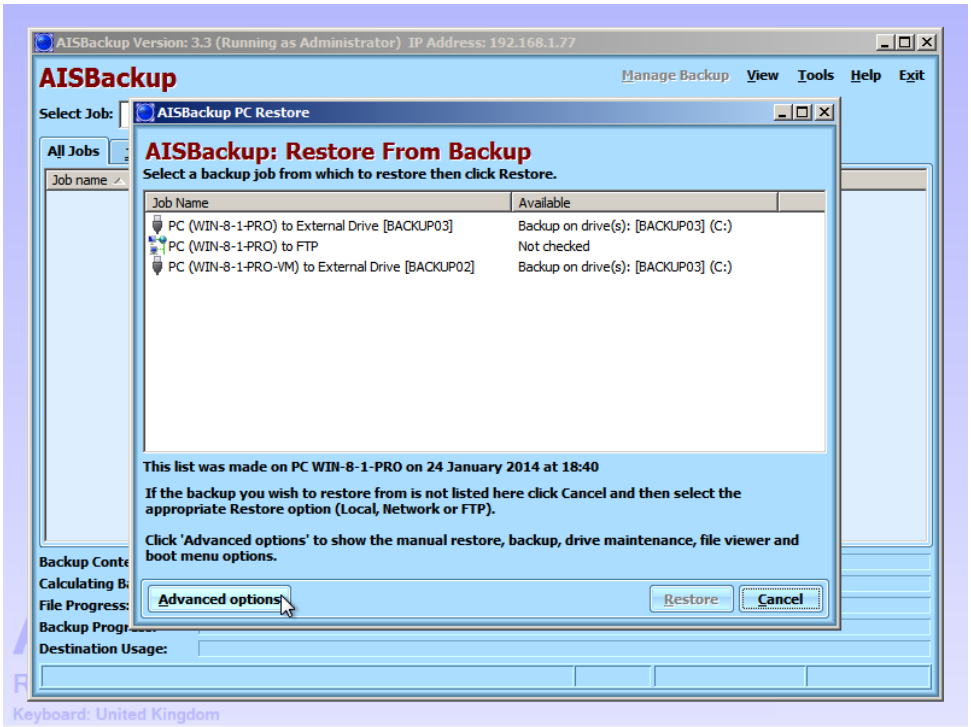
Wait for the CD to burn.

Phase 3: Restore the backup.

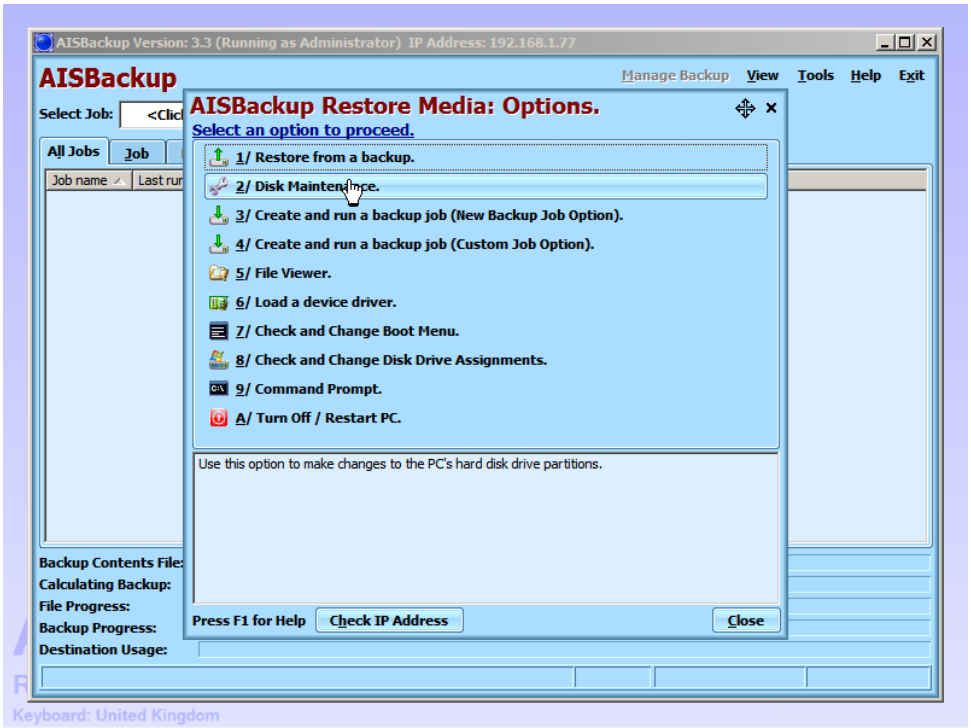
On the test PC that we are making these instructions the disk has been swapped with a pre-used 4 terabyte disk.



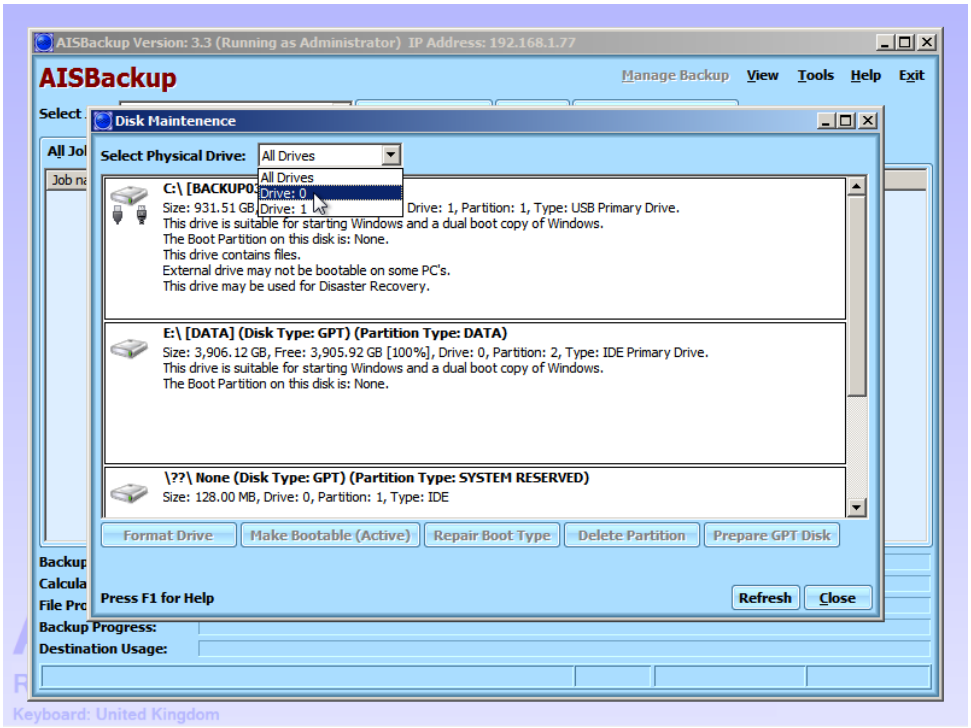
Start the PC using the AISBackup boot CD or bootable USB flash drive.



Click **Advanced options**.

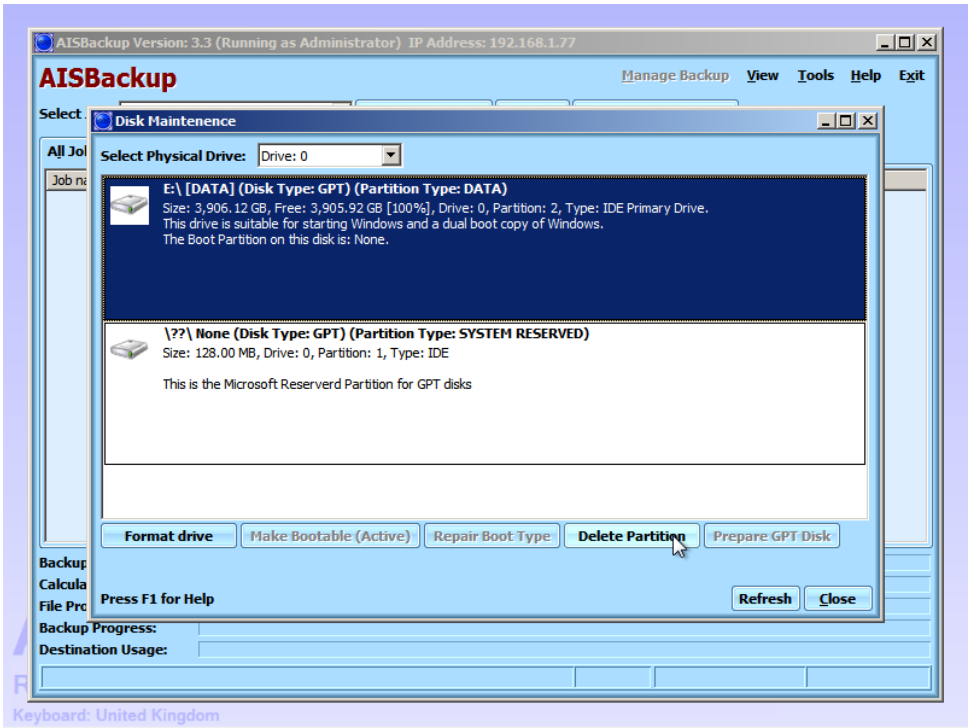


Select the option **Disk Maintenance**.

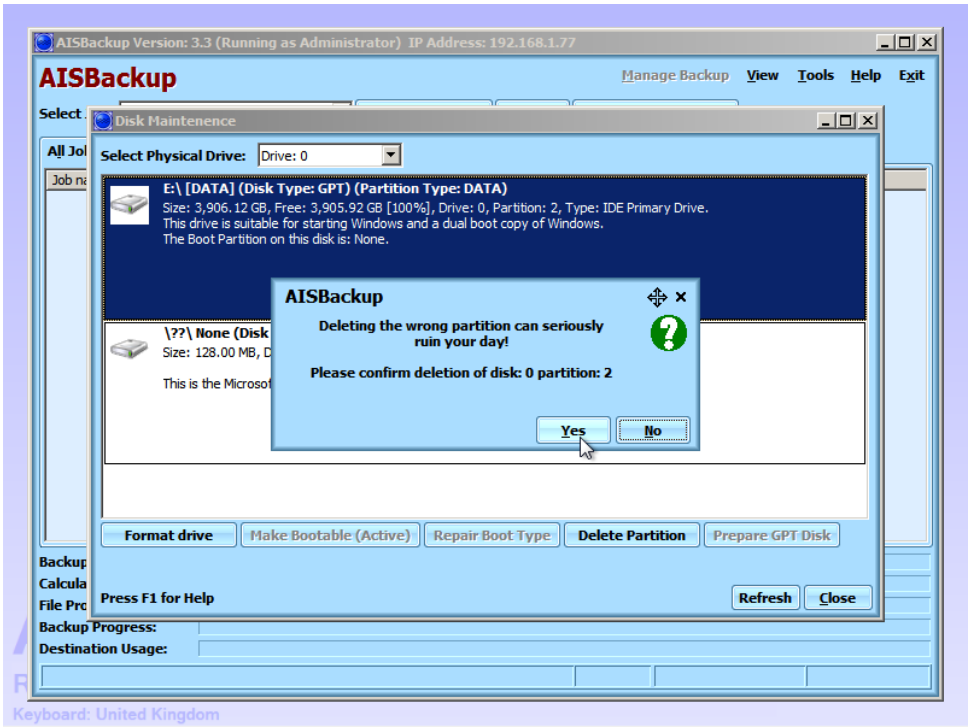


To be sure that we do not accidentally remove disk partitions from the wrong disk drive select the GPT disk from the drop-down **Select Physical Drive** list.

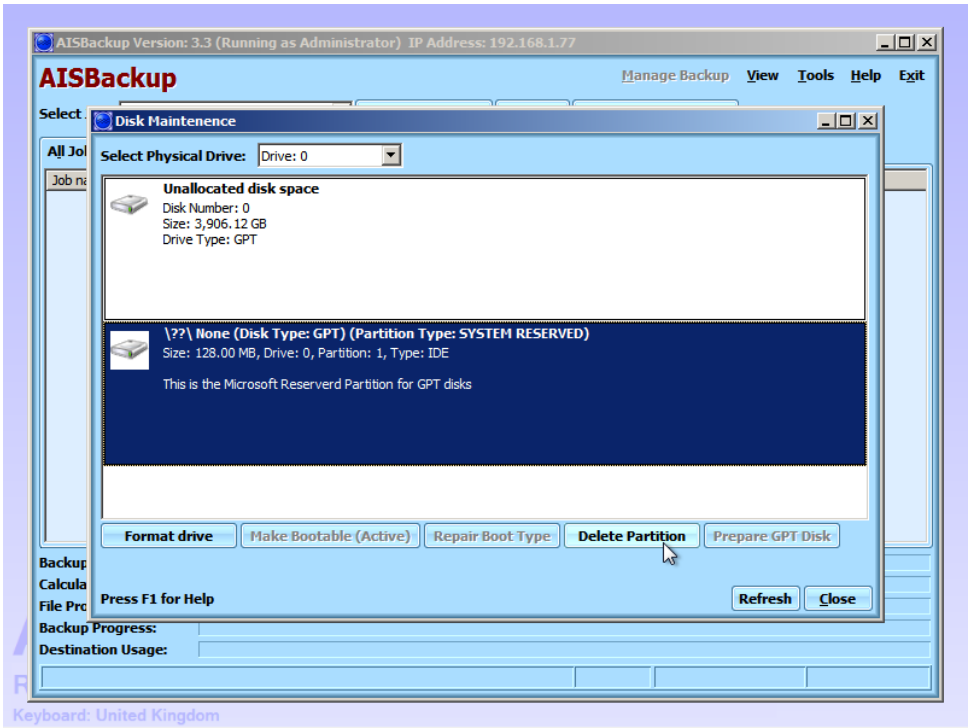
The GPT disk that the restore is to be made to should not contain any pre-existing partitions if it is going to be made EFI bootable, unless of course it is already formatted as an EFI boot volume.



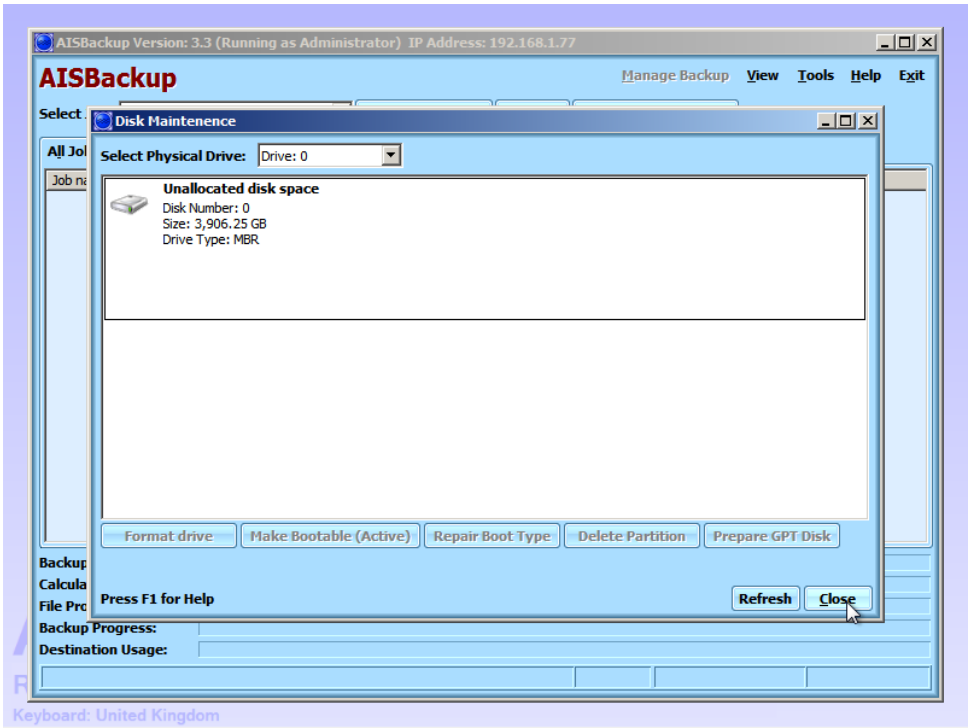
Select the first partition and click **Delete Partition**.



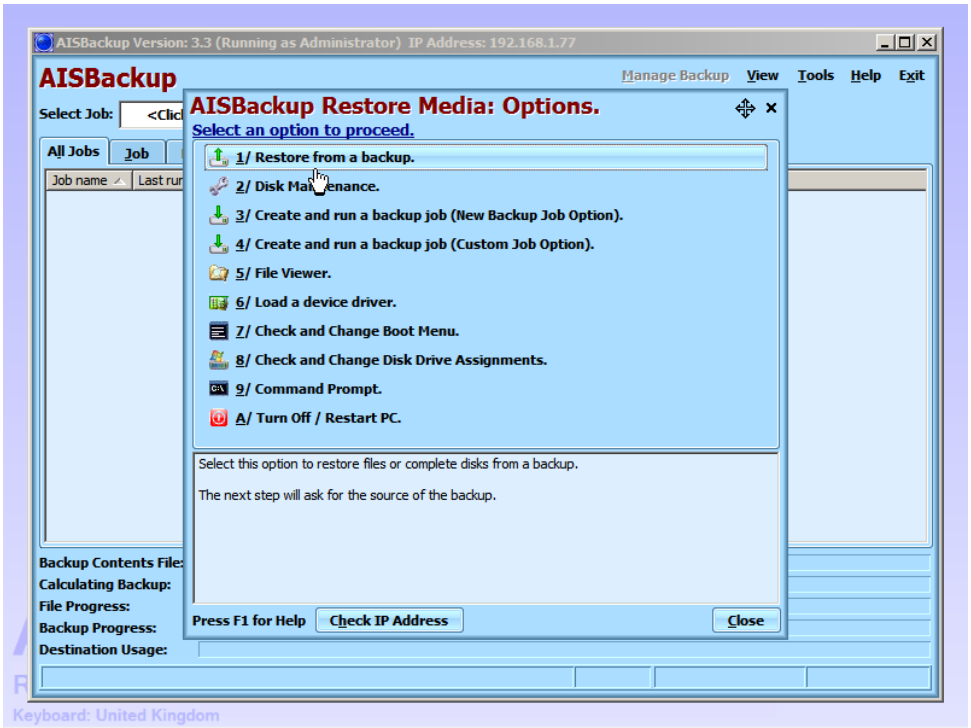
Confirm by clicking **Yes**.



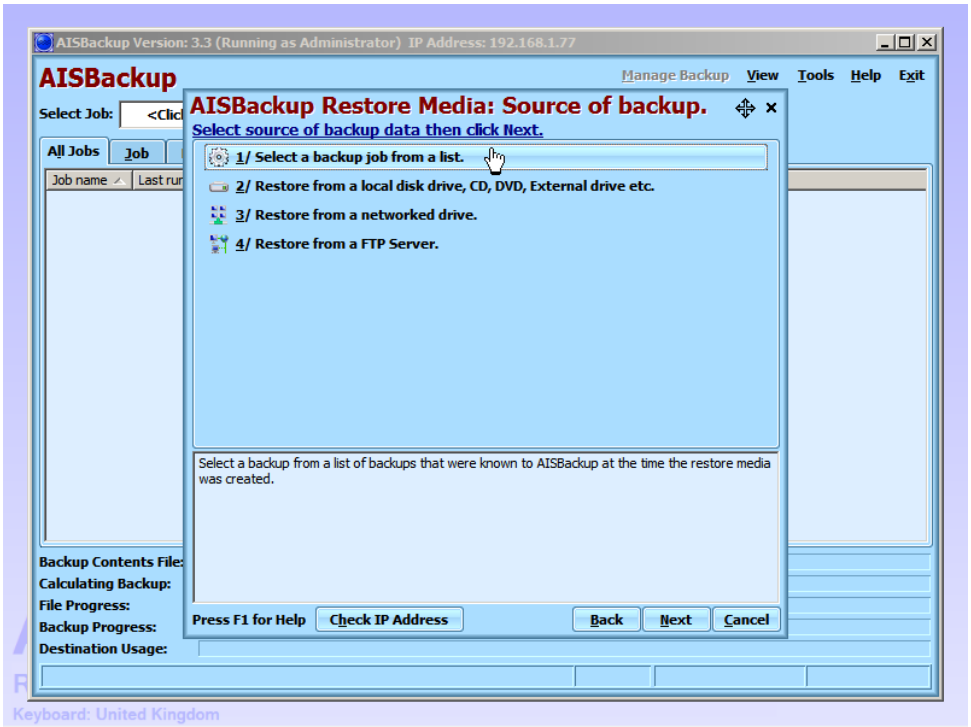
Select the normally hidden *System Reserved* partition and click **Delete Partition,** then confirm the delete by clicking **Yes**.



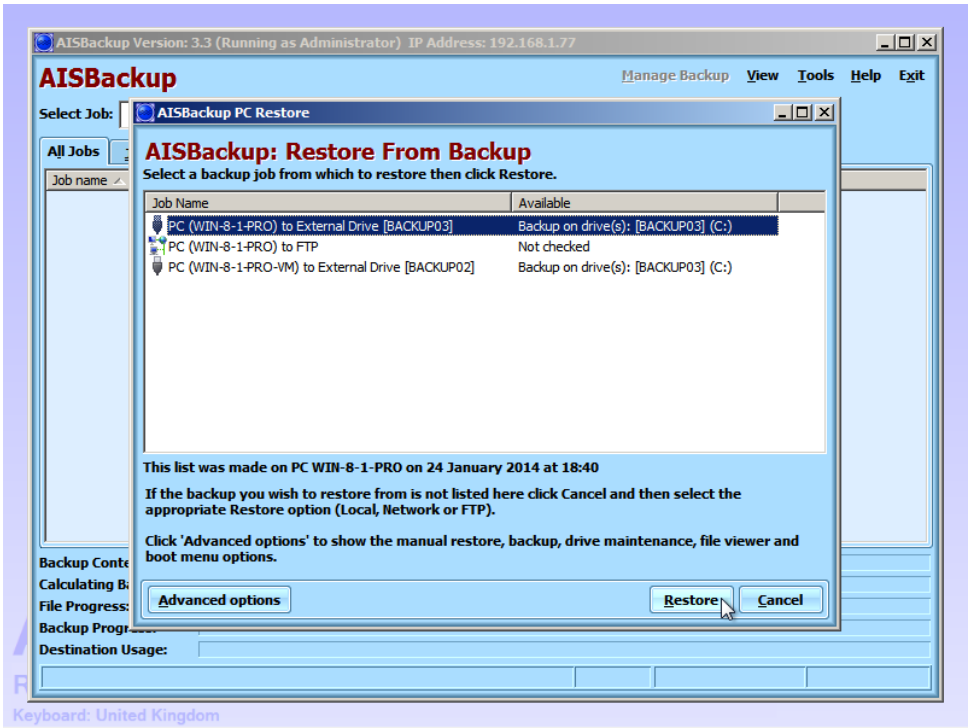
The disk is now *clean*.



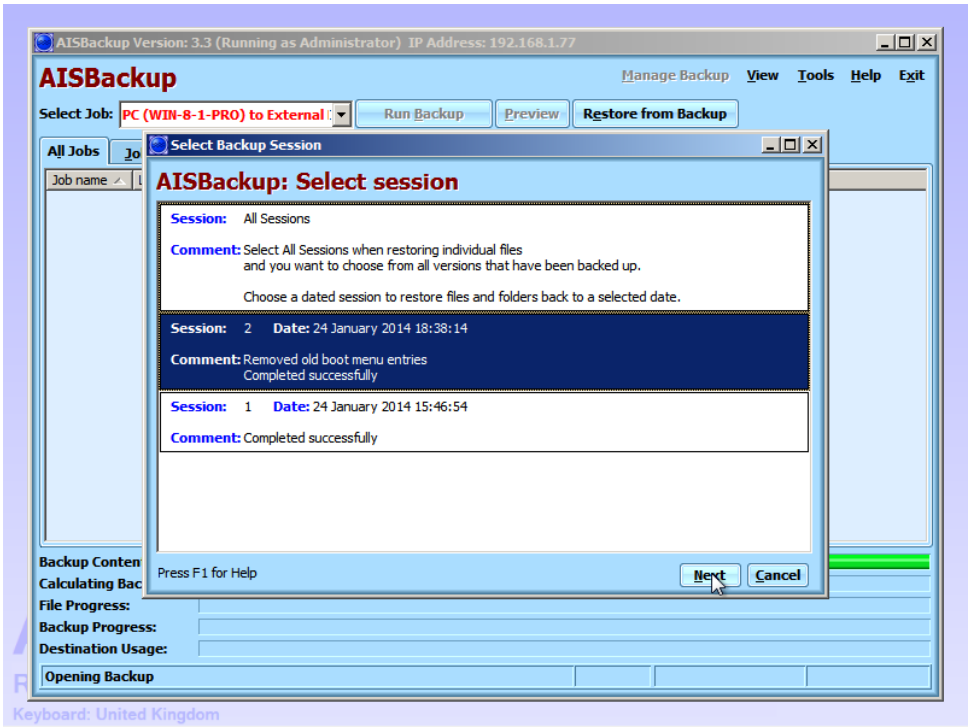
Select **Restore from a backup**.



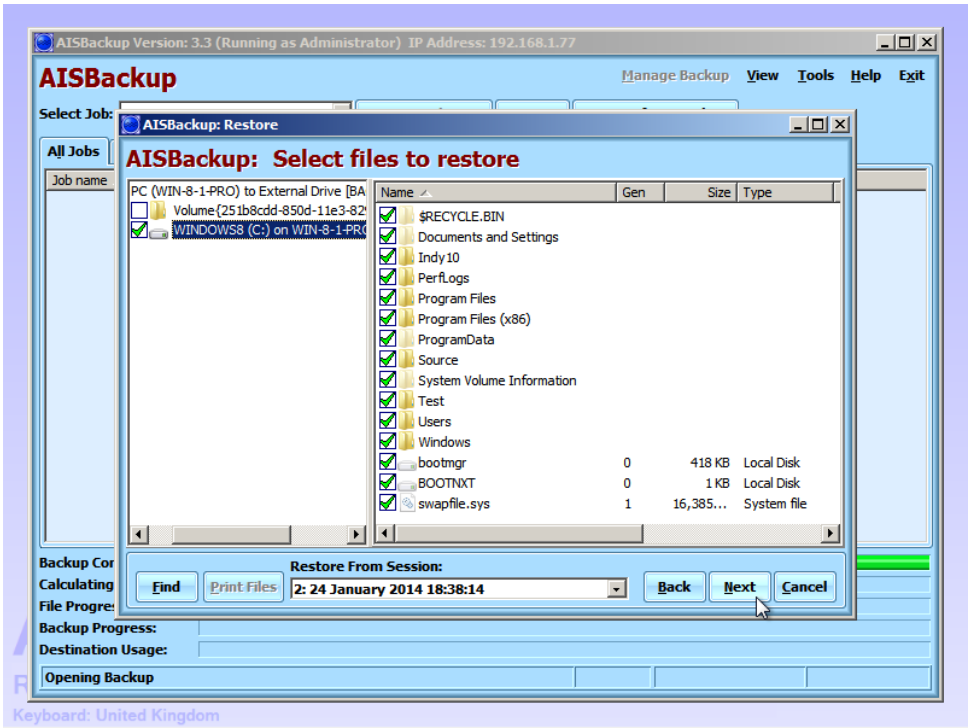
Choose **Select a backup job from a list**.



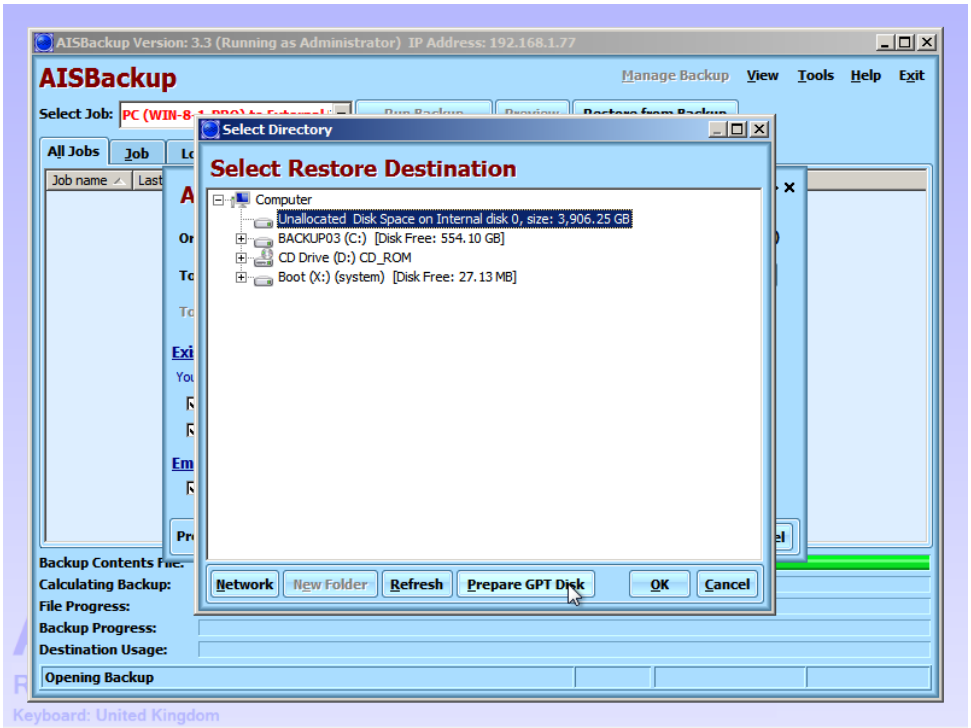
Select the back job made in phase 1, then click **Restore**.



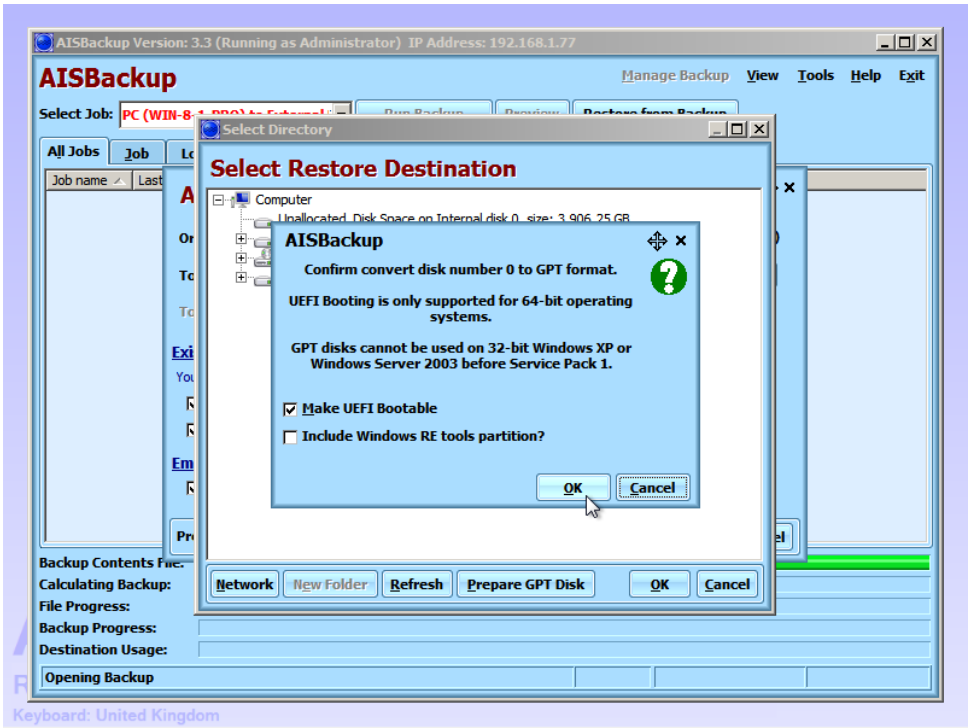
Select the dated backup session then click **Next**. Do not select *All Sessions* when restoring the Windows operating system.



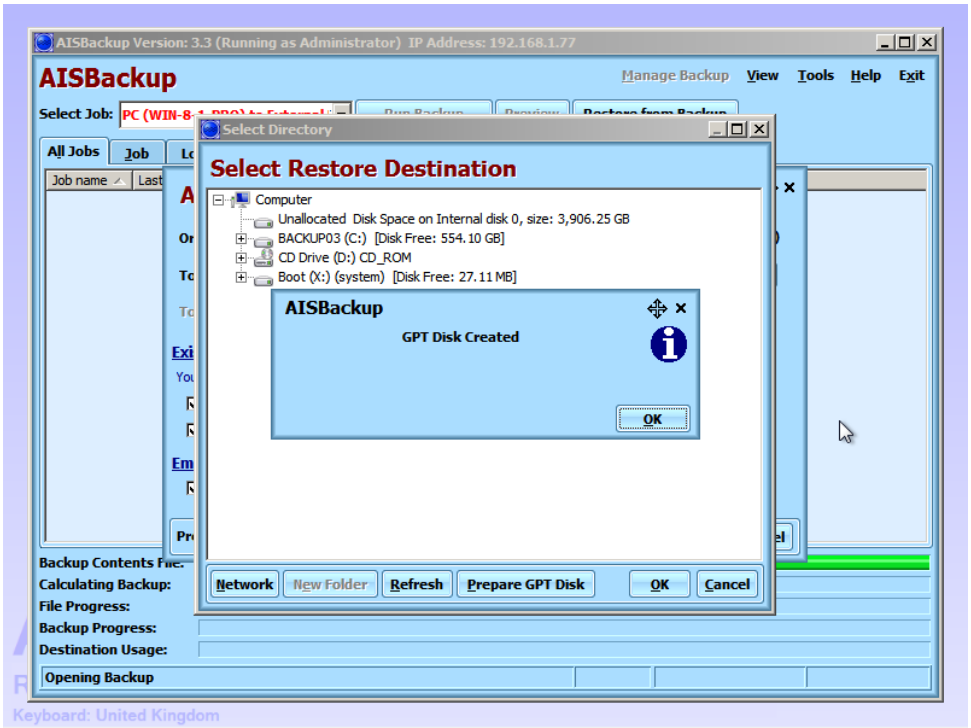
Select the Windows partition (C:) drive, do not select the MBR boot partition as a new EFI compatible boot partition will be created automatically.



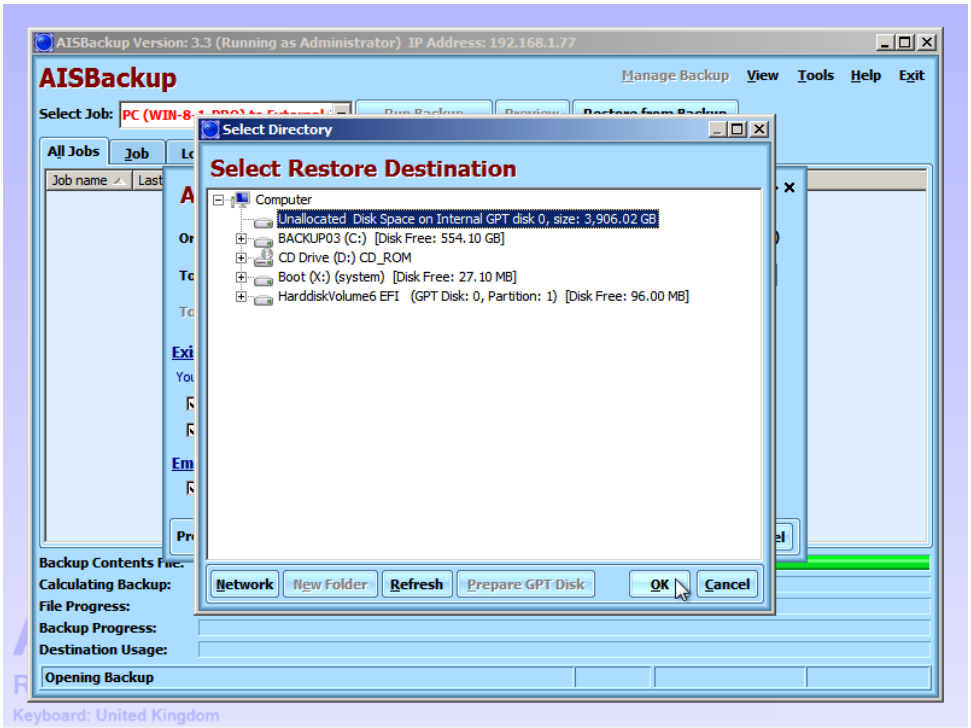
Choose *Unallocated Disk Space on Internal disk* then click **Prepare GPT Disk**.



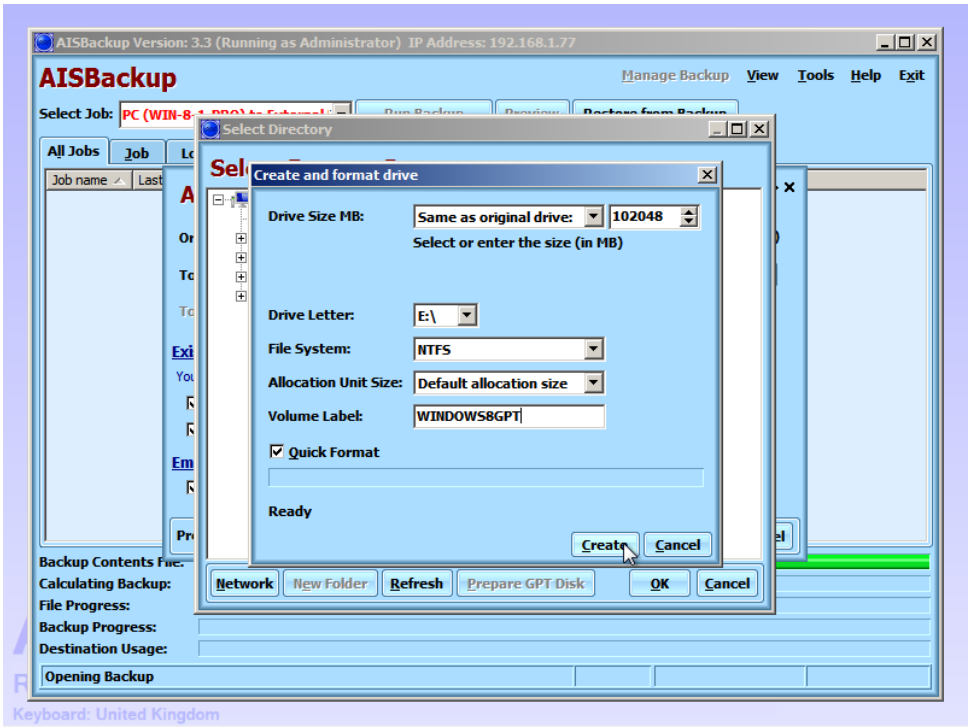
On the Windows 8.1 backed up in phase 1 there was no Windows RE tools partition so leave the **Make UEFI Bootable** checked and **Include Windows RE tools partition** un-checked**.** Click **OK**.



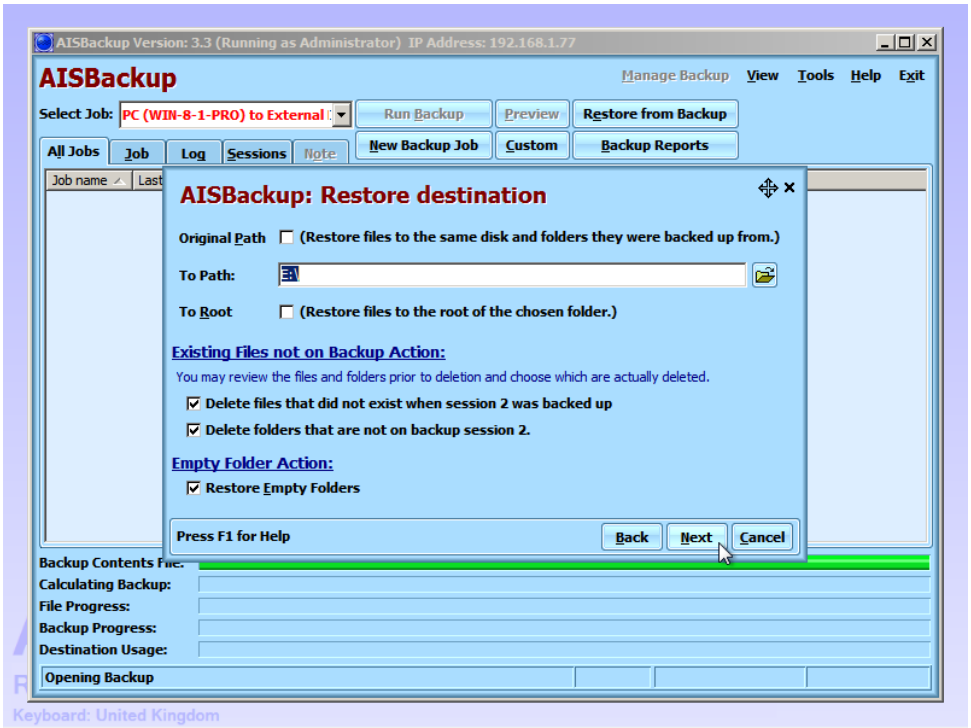
Acknowledge the **GPT Disk Created** message.



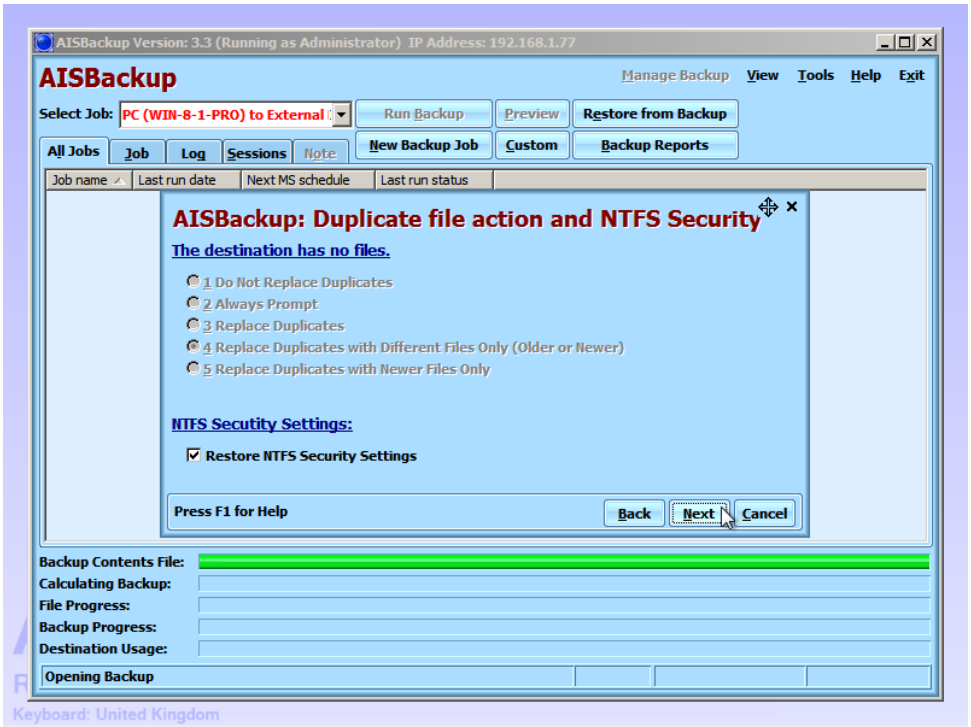
Select *Unallocated Disk Space on Internal GPT disk* then click **OK**.



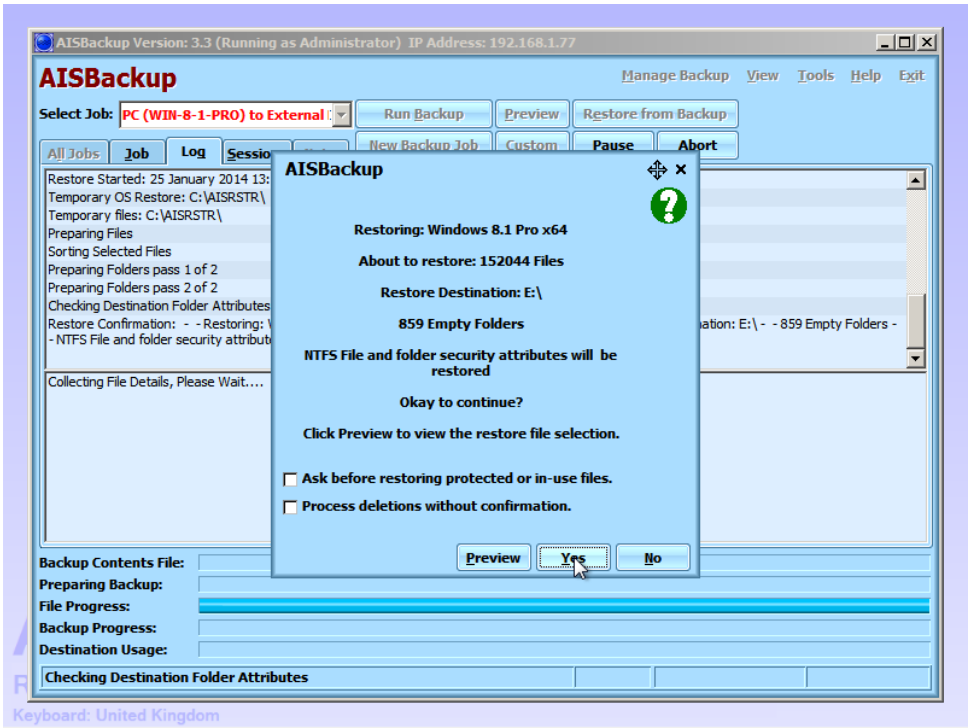
Optionally change the size of the partition you are restoring to, for example you may want to use the full capacity of the disk drive instead of *Same as original drive*. Leave the drive letter on whatever AISBackup chose (It is not necessary, and likely not possible, for the restore drive letter to be the same as what was backed up). Optionally change the name of the disk partition in the Volume Label option, then click **Create**.



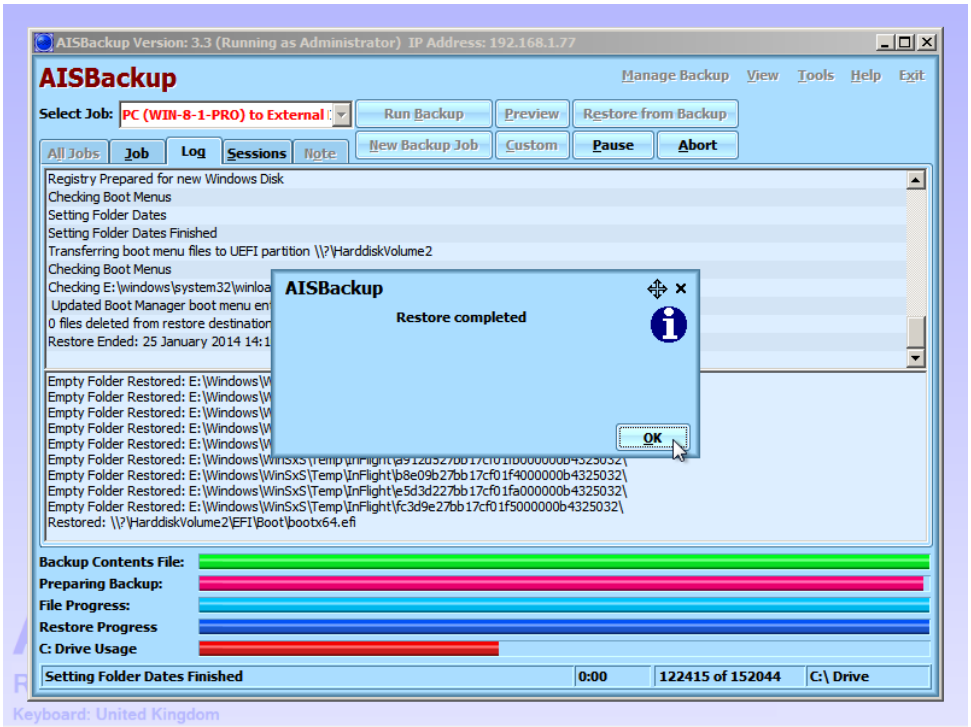
Notice that the C: drive is being restored to the E: drive, this is okay as once the restore is complete Windows will boot as the C: drive (or whatever the drive letter was at the time of the backup). Click **Next**.



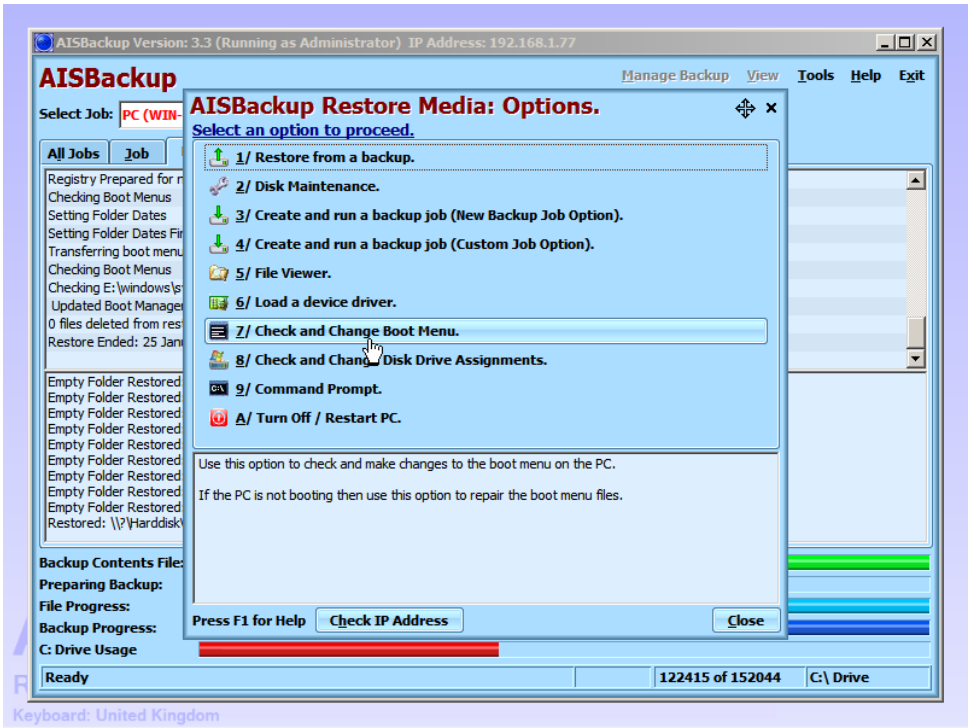
Leave *Restore NTFS Security Settings* checked (otherwise Windows 8 will not work properly), then click **Next**.



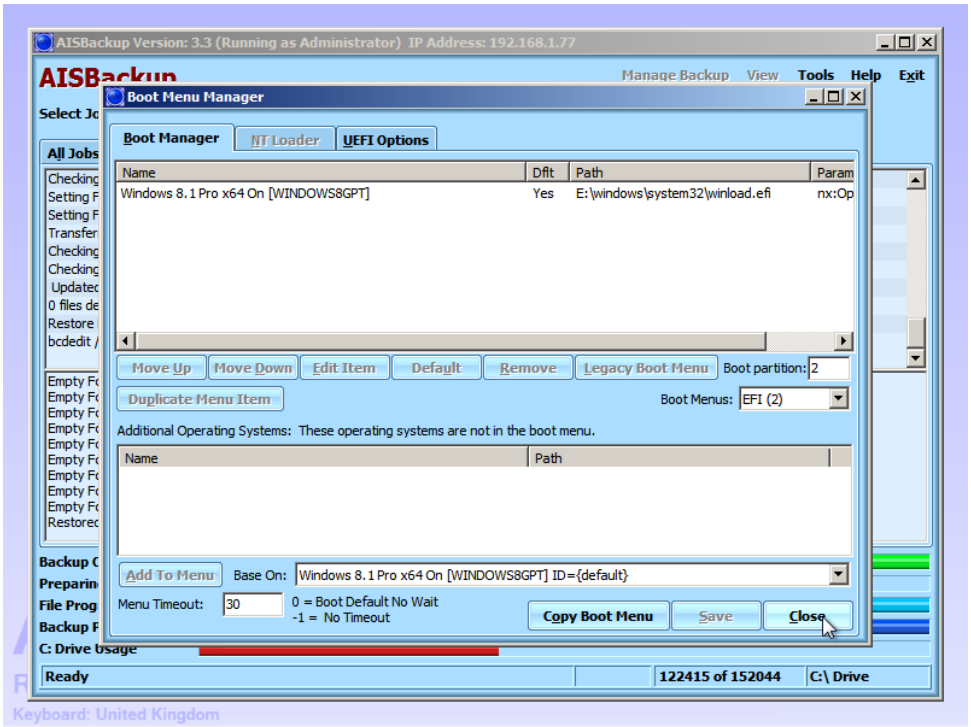
Confirm the restore by clicking **Yes**.



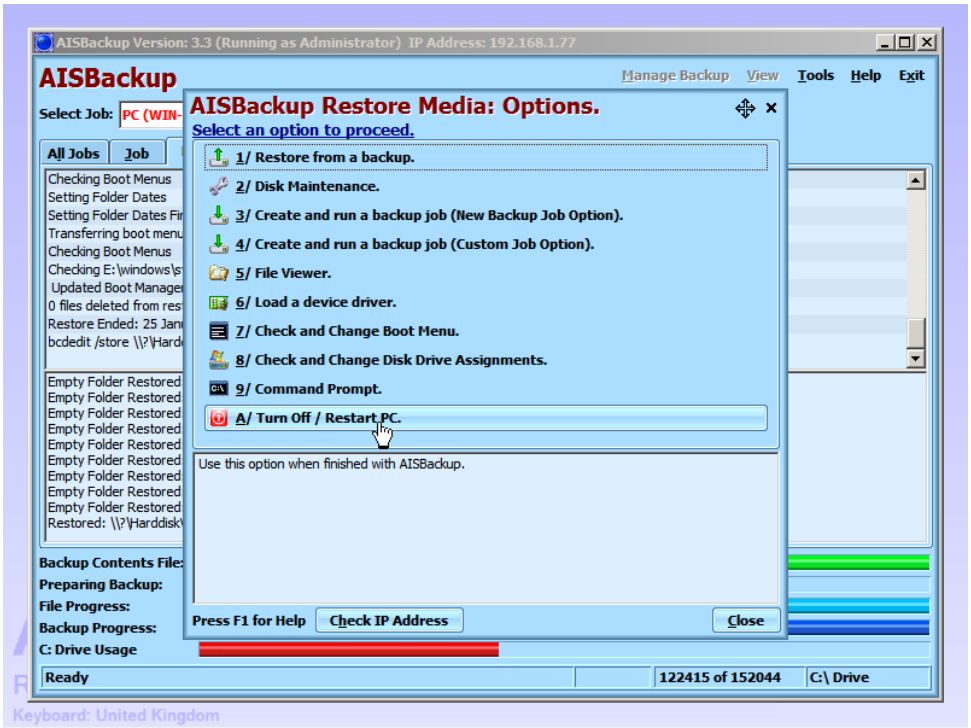
Acknowledge the Restore completed message.



Check that the boot menu has been set-up correctly by choosing **Check and Change Boot Menu**.



All looks okay so choose **Close**.

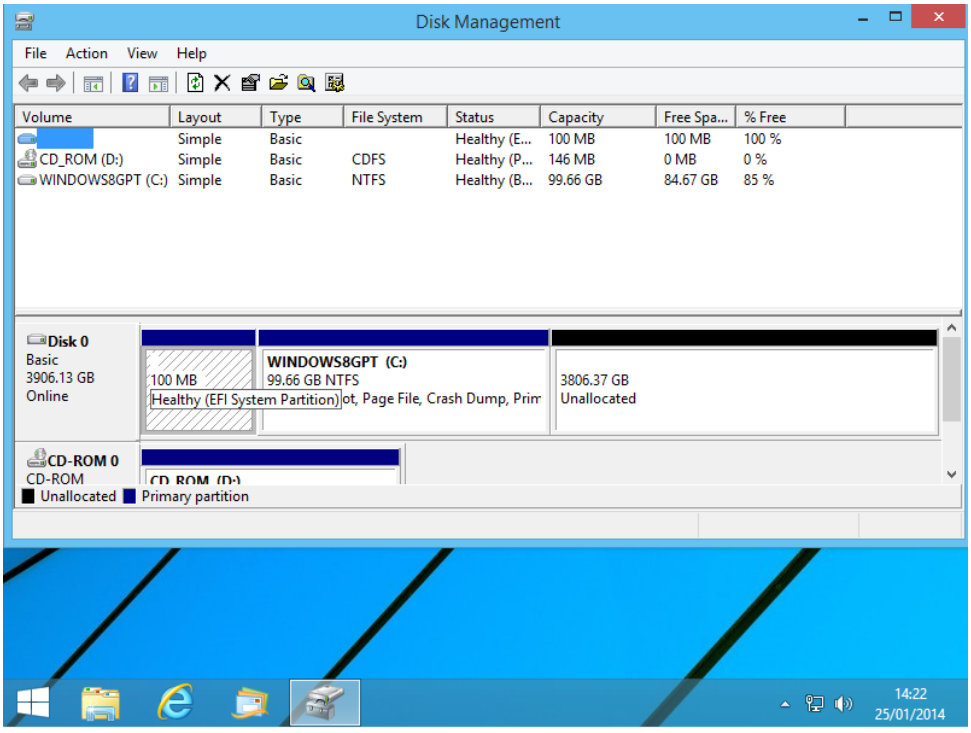


Turn off the PC and change the CMOS settings to boot using the (U)EFI boot option.

Example UEFI CMOS boot setting.

Change the first boot device to the (U)EFI boot option.

Configure the (U)EFI Drive BBS Priorities to the Windows Boot Manager (or equivalent on your PC). Then re-boot the PC.



Here is a screen shot of the Windows 8 Disk Management option after re-boot. Wow, look at all that unallocated free space.