

## Managing disk compression

With Microsoft Plus!, you can fine-tune your disk compression for maximum speed, disk space, or a balance between the two by specifying the [compression methods](#).

With DriveSpace 3, you can use [HiPack](#) or [standard](#) compression when you save files, or you can leave them uncompressed.

Microsoft Plus! also includes Compression Agent, which recompresses files on a compressed [DriveSpace 3](#) drive. Compression Agent supports an additional compression method, [UltraPack](#), for achieving maximum disk space.

When you upgrade your drives to DriveSpace 3 format, or when you compress a drive for the first time by using DriveSpace 3, System Agent automatically schedules Compression Agent to run at regular intervals. In System Agent, you can change the schedule for Compression Agent or the compression settings it uses.

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{button ,AL("a\_comp\_finetune")} [Related Topics](#)

### **Advantages to upgrading a compressed drive**

Upgrading a compressed drive to DriveSpace 3 increases the total capacity of your drive, providing you with more free disk space. In addition, you can use the full range of Microsoft Plus! enhanced compression features to manage disk compression. For example, you can:

- Use Compression Agent to recompress a drive while you are not using your computer.
- Use UltraPack to achieve maximum compression on files that you don't use often.
- Create compressed drives that are larger than 512 MB. DriveSpace 3 compressed drives can be as large as two gigabytes (2 GB).
- Use all the free space on your drive, even if it is fragmented.

### **To upgrade a compressed hard drive to DriveSpace 3**

- 1 Click the compressed hard drive you want to upgrade.
- 2 On the Drive menu, click Upgrade.
- 3 Click Start.
- 4 Windows may prompt you to update your startup disk. To update your start up disk, click Yes, insert your startup disk in floppy drive A, and then click Create Disk.
- 5 To back up your files before upgrading the drive, click Back Up Files, and then follow the instructions on your screen.
- 6 Click Upgrade Now.
- 7 If Windows prompts you to restart your computer, click Yes.

#### **Notes**

- You can only upgrade hard disks that have been compressed using DoubleSpace or DriveSpace for MS-DOS or DriveSpace for Windows 95. If your drive is not yet compressed, you can create a [DriveSpace 3](#) compressed drive.
- You cannot use the Upgrade command to upgrade a floppy disk. For information about upgrading a compressed floppy disk, see Related Topics below.

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{button ,AL("a\_upgrade\_advantages;a\_upgrade\_floppy;a\_compress\_drive")} [Related Topics](#)

### **To upgrade a compressed floppy disk**

- 1 Create a new folder on your hard disk, and then copy the contents of the floppy disk to it.
- 2 Click the letter of the floppy disk drive.
- 3 On the Advanced menu, click Delete to delete the compressed data on the floppy disk.
- 4 On the Drive menu, click Compress to compress the floppy disk by using [DriveSpace 3](#) compression.
- 5 Copy the contents from the new folder on your hard disk to the newly compressed floppy disk.
- 6 Delete the new folder from your hard disk.

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{button ,AL("a\_fcab\_create\_folder;a\_copy\_files")} [Related Topics](#)

### **To change the compression method**

- 1 On the Advanced menu, click Settings.
- 2 Click the method you want.

#### **Tips**

- Try using the option, No Compression, Unless Drive Is At Least 90% Full, and then change the percentage of full disk space as needed. To maintain performance, Windows will save your files uncompressed if you have plenty of disk space. But if your used disk space reaches the percentage you specify, Windows saves your files using standard compression.
- If you use a No Compression option, the free space on your drive will drop significantly. To regain the extra free space, schedule Compression Agent so that it compresses your files on a regular basis. Run System Agent to schedule Compression Agent.

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{button ,AL("A\_ONOFFLINECOMP\_OVERVIEW;a\_sched\_program")} [Related Topics](#)

### **To uncompress a floppy disk manually**

- 1 Create a new folder on your hard disk, and then copy the contents of the floppy disk to it.
- 2 Click the letter for the drive you inserted your floppy disk into.
- 3 On the Advanced menu, click Delete to delete the compressed data on the floppy disk.
- 4 On the Drive menu, click Uncompress to uncompress the disk.
- 5 Copy the contents from the new folder on your hard disk to the uncompressed disk.
- 6 Delete the new folder from your hard disk.

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{button ,AL("a\_fcab\_create\_folder;a\_copy\_files")} [Related Topics](#)

If you do not defragment your drive regularly, free space may become scattered across your disk. When working with compressed drives in Windows 95, it is possible to run out of space if your drive does not have enough contiguous free space to save a compressed file. When you upgrade to DriveSpace 3, all free space can be used to save a compressed file, even if the free space is noncontiguous.

## **Understanding disk compression**

A compressed drive is not a real disk drive, although it appears like one. The contents of a compressed drive are stored in a single file, called a compressed volume file (CVF), which is located on an uncompressed drive, called a host drive.

For example, when you compress your hard disk (drive C), DriveSpace 3 assigns a different drive letter to it, such as H. Drive H will be the host for drive C. DriveSpace 3 then compresses your hard disk into a compressed volume file stored on drive H. The compressed volume file on drive H appears as your original drive C, but drive C will have more free space than before.

When you view the contents of your computer by using My Computer or Windows Explorer, the host drive is hidden unless it has more than 2 MB of free space. In this case, it is visible, and you can work with it as you would with any other drive.

DriveSpace 3 can also use the free space on an uncompressed drive to create a new, empty compressed drive. For example, instead of compressing drive C, you could use 10 MB of free space to create a new drive, drive G. Drive G will contain approximately 25 MB of free space.

### **Tip**

- You can configure DriveSpace 3 so that it takes up less memory. This is useful if you want to run other programs, such as some MS-DOS-based games, that require more memory. For information on how to do this, see the Readme file.



### **DoubleSpace and DriveSpace compatibility**

DriveSpace 3 supports drives that were compressed using DoubleSpace (which was included in MS-DOS versions 6.0 and 6.2) as well as DriveSpace for MS-DOS version 6.22 and DriveSpace for Windows. If you have drives that were compressed using either DoubleSpace or DriveSpace, you can configure their compression by using DriveSpace 3.

Because DriveSpace 3 takes advantage of improved compression, you should upgrade your DoubleSpace and DriveSpace drives to DriveSpace 3 format to fully use the compression features in Microsoft Plus!

#### **Note**

- To use a compressed DriveSpace 3 drive on another computer, Microsoft Plus! must be installed on it.

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{button ,AL("a\_upgrade\_advantages")} Related Topics

**To compress a drive**

- 1 Click the drive you want to compress.
- 2 On the Drive menu, click Compress, and then click Start.
- 3 Windows may prompt you to update your startup disk. To update your startup disk, click Yes, insert your startup disk in floppy drive A, and then click Create Disk.
- 4 If you have not backed up your files, click Back Up Files, and then follow the instructions on your screen.
- 5 Click Compress Now.
- 6 If Windows prompts you to restart your computer, click Yes.

**Tip**

- If you want to use a compressed floppy disk or other removable disk on computers that use earlier versions of DriveSpace or DoubleSpace, in the Options dialog box, make sure the option Use DoubleSpace Compatible Format is checked when compressing the disk.

**To uncompress a drive**

- 1 Click the drive you want to uncompress.
- 2 On the Drive menu, click Uncompress, and then click Start.
- 3 If you have not backed up your files, click Back Up Files, and then follow the instructions on your screen.
- 4 Click Uncompress Now.
- 5 If Windows prompts you to restart your computer, click Yes.

**Tip**

- There may not be enough free space on a floppy disk to uncompress it by using the Uncompress command. For more information on how to uncompress a floppy disk, click [Related Topics](#).

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{button ,AL("a\_uncomp\_floppy")} [Related Topics](#)

**To reallocate free space on a compressed or host drive**

- 1 Click the compressed drive or host drive whose free space you want to reallocate.
- 2 On the Drive menu, click Adjust Free Space.
- 3 Drag the slider, and then click OK.
- 4 If Windows prompts you to restart your computer, click Yes.

**To mount a compressed volume file**

- 1 Click the drive that contains the compressed volume file (CVF) you want to mount.
- 2 On the Advanced menu, click Mount.
- 3 Click the compressed volume file that you want to mount, and then click OK.
- 4 If Windows prompts you to restart your computer, click Yes.

**Tip**

- Windows can mount a compressed volume file for you automatically. For more information, click [Related Topics](#).

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{button ,AL("A\_COMPRESS\_CHANGE\_OPTIONS")} [Related Topics](#)

**To unmount a compressed volume file**

- 1 Click the compressed drive you want to unmount.
- 2 On the Advanced menu, click Unmount.


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{button ,AL("A\_COMPRESS\_MOUNT\_COMP\_DRV")} [Related Topics](#)

**To create a new compressed drive**

- 1 Click a drive with enough free space to create a new compressed drive.
- 2 On the Advanced menu, click Create Empty.
- 3 Change any settings as needed, and then click Start.
- 4 If Windows prompts you to restart your computer, click Yes.

**Tip**

- For Help on an item, click  at the top of the dialog box, and then click the item.

**To delete a compressed drive**

- 1 Click the compressed drive you want to delete.
- 2 On the Advanced menu, click Delete.

**Tip**

- Deleting a compressed drive unmounts the drive and deletes the compressed volume file from the host drive. This provides a quick and easy way to delete all information on a compressed drive.



**To change the estimated compression ratio**

- 1 Click the compressed drive whose ratio you want to change.
- 2 On the Advanced menu, click Change Ratio.
- 3 Drag the slider, and then click OK.
- 4 If Windows prompts you to restart your computer, click Yes.

**Note**

- Windows uses the estimated compression ratio to report how much free space is available on the selected drive. Generally, this value should match the actual compression ratio.

### **To use compressed floppy disks or other removable media**

- 1 On the Advanced menu, click Settings.
- 2 Make sure the box Automatically Mount New Compressed Drives is checked.
- 3 Click OK, and then quit DriveSpace.

DriveSpace will now automatically mount compressed disks that you insert in a drive.


#### **Notes**

- Disks compressed in DriveSpace 3 format are not supported by earlier versions of DriveSpace (such as DriveSpace for Windows or MS-DOS) or MS-DOS DoubleSpace.
- DriveSpace 3 does not automatically mount removable media while it is running. For information about mounting media, click Related Topics below.

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{button ,AL("A\_COMPRESS\_MOUNT\_COMP\_DRV")} [Related Topics](#)

**To check a drive if DriveSpace detects a disk error**

- 1 Click here  to start ScanDisk.
- 2 In the list, click the drive you were working with in DriveSpace.
- 3 Make sure the Automatically Fix Errors box is not checked.
- 4 Make sure Thorough is selected, and then click Options.
- 5 Make sure System And Data Areas is selected and that the two boxes in this dialog box are not checked. Then, click OK.
- 6 Click Advanced, and then make sure the Invalid Filenames and Check Host Drive First boxes are checked. Then, click OK.
- 7 Click Start.

A compressed volume file stores the contents of a compressed drive. Compressed volume files are hidden and have names such as Drvspace.000.

Host drives are uncompressed drives that contain compressed volume files. They also typically contain some free space and system files that cannot be compressed.

Mounting a drive establishes a connection between a compressed volume file (CVF) and a drive letter, so you can use the files the CVF contains.

The actual compression ratio is the compression ratio that DriveSpace is currently achieving. For example, if the compression ratio is 3.0 to 1, DriveSpace is compressing files to one-third their original size.

## Removing the DriveSpace compression driver

DriveSpace is ready to uncompress or delete the last mounted compressed drive on your computer. If you have no other unmounted compressed drives and do not intend to use compressed removable media, you can probably remove the DriveSpace compression driver. For more information, click a button below.

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If you are sure you won't need DriveSpace to provide access to compressed drives in the future, click Yes. Choosing Yes removes DriveSpace from memory.

If you want DriveSpace to remain in memory to provide access to unmounted compressed drives and compressed removable media, click No. This option uses some additional memory.

If you remove the DriveSpace compression driver, and then discover that you need it to use unmounted compressed drives or compressed removable media, carry out the following procedure.

- 1 Start DriveSpace.
- 2 On the Advanced menu, click Settings.
- 3 Make sure Automatically Mount New Compressed Drives is checked.

**Tip**

- To print this topic, use your right mouse button to click it, and then click Print Topic.

It's easier to remove the compression driver now, and then reenale it later if you need to.

Click [Help Topics](#) to return to the list of topics.

Lists the drives on your computer that DriveSpace 3 supports. To work with a compressed drive, click it, and then use the commands on the Drive or Advanced menu. To view the properties of a drive, double-click it.

Shows how much space on this disk is currently free and how much is currently being used. This disk's free space and capacity will increase after you compress it.

Shows approximately how much free and used space will be on the drive after the drive is compressed.

Begins the compression process. After you click Start, you will have an opportunity to back up your files.



Click this to change settings for the compressed drive's host drive. A host drive is an uncompressed drive on which a compressed drive (which is actually a large hidden file) is stored.

If this box is checked, Windows automatically mounts compressed removable media, such as floppy disks, when they are inserted in a drive. If this box is not checked, you must use the Mount command on the Advanced menu each time you insert compressed removable media in a drive.

Shows which version of the compression driver Windows is currently using. This driver enables you to use your compressed drives.

Shows which drive letter DriveSpace will use as the host drive for the drive you are compressing. If you plan to use this drive letter for another purpose, such as mapping to a network drive, click a different drive letter.

Shows how much uncompressed free space will be set aside on the host drive. To change this amount, select it, and then type a new amount.

If this box is checked, this drive will not appear in My Computer, Windows Explorer, and the Open and Save As dialog boxes.

Starts compressing this drive.

Starts uncompressing this drive.



Starts a backup program, which you can use to back up the files on this drive.

Shows how much free and used space is currently on the selected compressed drive and its host drive.

Shows how much free and used space will be on the host drive after the compressed drive is uncompressed.

Starts uncompressing the selected drive. After you click Start, you will have an opportunity to back up your files.

Shows which drive letter DriveSpace will use for the new compressed drive. If you plan to use this drive letter for another purpose, such as mapping to a network drive, click a different drive letter.

Shows how much space DriveSpace will use to create the new drive. To change the size of the new drive, select it, and then type a new size.

Shows the uncompressed drive whose free space will be used to create the new compressed drive.

Shows approximately how much free space the new compressed drive will contain.



Shows how much space will remain on the uncompressed drive whose free space is being used to create the new compressed drive.

Starts creating a new compressed drive.

Shows how much free and used space is on the compressed drive. If you need more free space on the compressed drive, you can reduce the size of the host drive by dragging the slider.

Shows how much free and used space is currently available on the host drive. If you need more free space on the host drive, you can reduce the size of the compressed drive by dragging the slider.

Shifts free space between the compressed drive and its host drive. There may be a red area on the left or right side of the slider bar. If you move the slider into the red area, DriveSpace will defragment the drive.

Shows the volume files on the selected drive that you can mount. Volume files contain compressed drives.

Lists drive letters that you can assign to the host drive for the selected volume file. If you plan to use the selected drive letter for another purpose, such as mapping to a network drive, select a different drive letter.

Shows the compression ratio that DriveSpace is actually achieving. For example, if the actual compression ratio is 3.0 to 1, DriveSpace is compressing files to one-third their original size.



Displays the compression ratio used to estimate how much free space is available on this drive. Changing the estimated compression ratio does not affect the degree of file compression. It affects only the accuracy with which Windows reports free disk space.

Generally, this value should be approximately the same as the value for the actual compression ratio. However, for accurate disk space reporting, you may want to decrease this value if you will be copying files that cannot be compressed as much (such as .zip files) to the drive, or increase this value if you will be copying files that can be compressed more (such as .bmp files).

Lists other drive letters that you can use if you do not want to use the letter that DriveSpace assigned. For example, you might want to use the drive letter for mapping to a network drive.

Changes the estimated compression ratio.

Displays the name of the selected disk.

Describes what type of disk is selected.

Shows how much space on the selected disk is used and how much is free.


Displays the total capacity of the selected disk.

Shows how much space on the selected disk is used (in blue) and how much is free (in pink).



Displays the compression ratio used to estimate how much free space is available on this drive.

Closes this dialog box and returns to the main DriveSpace screen.

Help is available for each item in this group. Click  at the top of the dialog box, and then click the specific item you want information about.

Shows how much space on this drive is currently free and how much is being used. This drive's free space and capacity will increase after you upgrade it.

Shows approximately how much free and used space will be on the drive after it is upgraded.

Shows how much free space is currently available on the host drive and whether or not it is hidden.

When DriveSpace 3 upgrades a compressed drive, it may take some of the space on the host drive and add it to the space on the compressed drive, increasing the drive's capacity and free space. However, this is not the case when upgrading a compressed drive that was originally created by using the Create Empty command in Windows 95 DriveSpace.

Shows approximately how much free space will be available on the host drive after the compressed drive is upgraded, and whether or not the host drive will be hidden.

Begins the upgrade process. After you click Start, you have an opportunity to back up your files.



Click this to change settings for the compressed drive's host drive.

Indicates the progress DriveSpace is making.

Shows how much uncompressed free space will be set aside on the host drive. To change this amount, select it, and then type a new amount.

If this box is checked, the host drive will not appear in areas such as My Computer, Windows Explorer, and the Open and Save As dialog boxes.

Creates a compressed disk that is compatible with the compression formats in Windows 95 and MS-DOS 6.0 or 6.2. If you will use this disk on a system that is running either Windows 95 or MS-DOS 6.0 or 6.2, make sure this option is checked.

[Click this to start upgrading the drive.](#)

Click this to start a backup program to back up the files on this drive.

Shows how the compression method you select affects disk space and performance. The less compression you use, the less time it will take to read and write files on a compressed drive.



Uses HiPack compression to save files to a compressed drive. This method maintains the most disk space, but writing files to a compressed drive may be slower. If your mouse or keyboard seem slow to respond, or if performance drops significantly, try using the Standard or No Compression option instead.

**Note** HiPack compression only applies to saving files to a DriveSpace 3 compressed drive. If you are using a compressed drive that was created using MS-DOS or Windows 95 DriveSpace or MS-DOS DoubleSpace, and you have not yet upgraded the drive, your files will be saved using standard compression, even if you select this option.

Uses standard compression to save files to a compressed drive. This setting provides good compression without sacrificing performance when writing and reading files to and from a compressed drive.

Uses standard compression to save files to a compressed drive only if the drive is as full as you specify. If the drive is not that full, then files are saved uncompressed.

This setting is useful for maintaining performance when you have ample disk space and for conserving space when the free space on a compressed drive is low.

Leaves files uncompressed when you save them to a compressed drive. This provides the best performance when writing and reading files to and from a compressed drive.

Specifies a percentage of disk space. If the amount of used disk space reaches this percentage, then DriveSpace 3 uses standard compression to save files.

