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The xcopy command is a <u>Command Prompt command</u> used to copy one or more files or folders from one location to another location.

With its many options and ability to copy entire directories, it's similar to, but much more powerful than, the <u>copy command</u>. The robocopy command is also similar but has even more options.

Xcopy Command Availability

This command is available from within the <u>Command Prompt</u> in all Windows operating systems including Windows 11. You can also access the command in MS-DOS as a <u>DOS command</u>.

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Xcopy Command Syntax

Use the following <u>syntax</u> for the xcopy command:

xcopy source [destination] [/a] [/b] [/c] [/d [:date]] [/e] [/f] [/g] [/h] [/i] [/j] [/k] [/l] [/m] [/n] [/o] [/p] [/q] [/r] [/s] [/t] [/u] [/v] [/w] [/x] [/y] [/z] [/exclude:file1[+file2][+file3]...] [/?]

The availability of certain xcopy command switches and other command syntax may differ from operating system to operating system. Learn <u>how to read command syntax</u> if you're not sure how to read the syntax above or in the table below.

Xcopy Command Options		
Item	Description	
source	This defines the files or top level folder that you want to copy from. The <i>source</i> is the only required parameter. Use quotes around <i>source</i> if it contains spaces.	
destination	This option specifies the location where the <i>source</i> files or folders should be copied to. If no <i>destination</i> is listed, the files or folders will be copied to the same folder you run the xcopy command from. Use quotes around <i>destination</i> if it contains spaces.	
/a	Using this option will only copy <u>archive files</u> found in <i>source</i> . You can not use /a and /m together.	
/b	Use this option to copy the symbolic link itself instead of the link target. This option was first available in Windows Vista.	
/c	This option forces xcopy to continue even if it encounters an error.	
/ d [:date]	Use the command with /d option and a specific date, in MM-DD-YYYY format, to copy files changed on or after that date. You can also use this option without specifying a specific date to copy only those files in	

Xcopy Command Options	
	source that are newer than the same files that already exist in destination. This is helpful when using xcopy to perform regular file backups.
/e	When used alone or with /s, this option is the same as /s but will also create empty folders in <i>destination</i> that were also empty in <i>source</i> . The /e option can also be used together with the /t option to include empty directories and subdirectories found in <i>source</i> in the directory structure created in <i>destination</i> .
/f	This option will display the full path and file name of both the <i>source</i> and <i>destination</i> files being copied.
/g	Using xcopy with this option allows you to copy encrypted files in <i>source</i> to a <i>destination</i> that does not support encryption. This option will not work when copying files from an EFS encrypted drive to a non-EFS encrypted drive.
/h	The command doesn't copy <u>hidden files</u> or <u>system files</u> by default but will when using this option.
/ i	Use the /i option to force xcopy to assume that <i>destination</i> is a directory. If you don't use this option, and you're copying from <i>source</i> that is a directory or group of files and copying to <i>destination</i> that doesn't exist, the xcopy command will prompt you enter whether <i>destination</i> is a file or directory.
/ j	This option copies files without buffering, a feature useful for very big files. This option was first available in Windows 7.
/k	Use this option when copying <u>read-only files</u> to retain that <u>file attribute</u> in <i>destination</i> .
/1	Use this option to show a list of the files and folders to be copied but no copying is actually done. The /l option is useful if you're building a complicated command with several options and you'd like to see how it would function hypothetically.
/m	This option is identical to the /a option but xcopy will turn off the archive attribute after copying the file. You can not use /m and /a together.
/n	This option creates files and folders in <i>destination</i> using short file names. This option is only useful when you're using the command to copy files to a <i>destination</i> that exists on an drive formatted to an older <u>file system</u> like <u>FAT</u> that does not support long file names.
/o	Retains ownership and Access Control List (ACL) information in the files written in <i>destination</i> .
/ p	When using this option, you'll be prompted before the creation of each file in <i>destination</i> .
/q	A kind of opposite of the /f option, the /q switch will put xcopy into "quiet" mode, skipping the on-screen display of each file being copied.

Xcopy Command Options		
/ r	Use this option to overwrite read-only files in <i>destination</i> . If you don't use this option when you want to overwrite a read-only file in <i>destination</i> , you'll be prompted with an "Access denied" message and the command will stop running.	
/s	Use this option to copy directories, subdirectories, and the files contained within them, in addition to the files in the <u>root</u> of <i>source</i> . Empty folders will not be recreated.	
/t	This option forces the xcopy command to create a directory structure in <i>destination</i> but not to copy any of the files. In other words, the folders and subfolders found in <i>source</i> will be created but there we be no files. Empty folders will not be created.	
/u	This option will only copy files in <i>source</i> that are already in <i>destination</i> .	
/v	This option verifies each file as it's written, based on its size, to make sure they're identical. Verification was built in to the command beginning in Windows XP, so this option does nothing in later versions of Windows and is only included for compatibility with older MS-DOS files.	
/w	Use the $/\mathbf{w}$ option to present a "Press any key when ready to being copying file(s)" message. The command will begin copying files as instructed after you confirm with a key press. This option is not the same as the $/\mathbf{p}$ option which asks for verification before $each$ file copy.	
/x	This option copies file audit settings and System Access Control List (SACL) information. You imply $/\mathbf{o}$ when you use the $/\mathbf{x}$ option.	
/y	Use this option to stop the command from prompting you about overwriting files from <i>source</i> that already exist in <i>destination</i> .	
/-y	Use this option to force the command to prompt you about overwriting files. This might seem like a strange option to exist since this is the default behavior of xcopy but the /y option may be preset in the COPYCMD environment variable on some computers, making this option necessary.	
/z	This option allows the xcopy command to safely stop copying files when a network connection is lost and then resume copying from where it left off once the connection is reestablished. This option also shows the percentage copied for each file during the copy process.	
/exclude:file1[+file2] [+file3]	This option allows you to specify one or more <i>file</i> names containing a list of search strings you want the command to use to determine files and/or folders to skip when copying.	
/?	Use the <u>help switch</u> with xcopy to show detailed help about the command. Executing xcopy /? is the same as using the <u>help command</u> to execute help xcopy .	

The xcopy command will add the archive attribute to files in *destination* no matter if the attribute was on or off on the file in *source*.

Xcopy Command Examples

Following are several examples of how to use this command:

Copy Files to a New Folder

```
xcopy C:\Files E:\Files /i
```

In the above example, the files contained in the *source* directory of $C:\$ are copied to *destination*, a new directory [/i] on the E drive called Files.

No subdirectories, nor any files contained within them, will be copied because the /s option was not used.

Xcopy Backup Script

```
xcopy "C:\Important Files" D:\Backup /c /d /e /h /i /k /q /r /s /x /y
```

In this example, xcopy is designed to function as a backup solution. Try this if you'd like to use xcopy instead of a <u>backup software program</u> to back up your files. Put the command as shown above in a script and schedule it to run nightly.

As shown above, the command is used to copy all the files and folders [/s] newer than those already copied [/d], including empty folders [/e] and hidden files [/h], from *source* of $C: \mbox{Important Files}$ to the *destination* of $D: \mbox{Backup}$, which is a directory [/i]. We have some read-only files we want to keep updated in *destination* [/r] and we want to keep that attribute after being copied [/k]. We also want to make sure we maintain any ownership and audit settings in the files we're copying [/x]. Finally, since we're running xcopy in a script, we don't need to see any information about the files as they're copied [/q], We don't want to be prompted to overwrite each one [/y], nor do we want the command to stop if it runs into an error [/c].

Copy Files and Folders Over the Network

```
xcopy C:\Videos "\\SERVER\Media Backup" /f /j /s /w /z
```

Here, the command is used to copy all the files, subfolders, and files contained in the subfolders [/s] from *source* of *C:\Videos* to the destination folder *Media Backup* located on a computer on the network by the name of *SERVER*. We're copying some really large video files, so buffering should be disabled to improve the copy process [/j], and since we're copying over the network, we want to be able to resume copying if we lose the network connection [/z]. Being paranoid, we want to be

prompted to start the process before it actually does anything [/w], and we also want to see every detail about what files are being copied as they're being copied [/f].

Duplicate Folder Structure

xcopy C:\Client032 C:\Client033 /t /e

In this final example, we have a *source* full of well-organized files and folders in *C:\Cliento32* for a client. We've already created an empty *destination* folder, *Cliento33*, for a new client but we don't want any files copied—just the empty folder structure [/t] so that we're organized and prepared. We have some empty folders in *C:\Cliento32* that might apply to the new client, so we want to make sure those are copied as well [/e].

Xcopy & Xcopy32

In Windows 98 and Windows 95, two versions of the xcopy command were available: xcopy and xcopy32. However, the latter command was never intended to be run directly.

When you execute xcopy in Windows 95 or 98, either the original 16-bit version is automatically executed (when in MS-DOS mode) or the newer 32-bit version is automatically executed (when in Windows).

To be clear, no matter what version of Windows or MS-DOS you have, always run the xcopy command, not xcopy32, even if it's available. When you execute xcopy, you're always running the most appropriate version of the command.

Xcopy Related Commands

The xcopy command is similar in many ways to the copy command but with significantly more options, like the ability to copy folders, copy every file in subdirectories, and exclude files.

This command is also very much like the robocopy command except that robocopy has more flexibility than even xcopy.

The <u>dir command</u> is often used with xcopy to check which folders and files are in a directory before completing the command.

FAQ

What is the difference between the copy and xcopy commands?

While the copy command can also be used to move files, xcopy supports additional switches that allow you to do things like move entire directory trees and remove read-only attributes from protected files. When you provide the path of a folder, xcopy copies the folder itself along with its contents

(rather than just the files).

What is the difference between xcopy and robocopy?

Robocopy supports different switches for copying files across a <u>network</u>. While you can technically do that with xcopy, robocopy is typically faster, and it will automatically retry if a copy attempt fails.

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