

HP LeftHand SAN Solutions

Support Document

Service Notes

How to – Use Robocopy For Windows File Transfers



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How To - Use Robocopy for Windows File Transfers

Overview

Robocopy, or "Robust File Copy", is a command-line folder replication tool. It was available as part of the Windows Resource Kit, and introduced as a standard feature of Windows Vista.

Download from:

**[http://www.microsoft.com/downloads
details.aspx?familyid=9d467a69-57ff-4ae7-96ee-b18c4790cffd&display
ang=en](http://www.microsoft.com/downloads/details.aspx?familyid=9d467a69-57ff-4ae7-96ee-b18c4790cffd&displaylang=en)**

Common Uses

One example is if a customer has made changes to a mounted remote snapshot. If they delete that snapshot, or if that snapshot is deleted due to the scheduled snapshot retention policy, the changes made to that snapshot will be lost. To save that info you would use Robocopy to move the data from the snapshot back to the main volume.

Another example would be if a file system was corrupt and you needed to get as much info off to a new mounted drive. You could use Robocopy to copy off that info via Windows and then delete the original information from that volume or mounted drive.

Finally, if you have mis-configured a volume, you can Robocopy the data to local disk, delete and recreate the volume with proper configuration, then Robocopy the data back to the volume.

Procedure

Run Robocopy from a cmd window. An example would be:
cmd>**Robocopy /e /xo /copyall E:\test G:\test_New**

The above command explained:

/e <copies subdirectories, even empty ones (like XCOPY)>

/xo <eXclude Older files (Please note that the Robocopy GUI (3.1.1) does not seem to use this

switch correctly, meaning it still copies older files over newer ones.)>

/copyall <makes sure NTFS security information is copied>

E:\test <Source file>

G:\test_New <Destination file>

Also note these commands are NOT case sensitive.

Additional options:

/MIR activates mirror mode, deleting any files in the destination that aren't present in the source **/Z** copy files in restartable mode. "Restartable" means Robocopy should write a recovery record inside an incomplete file so if the operation is interrupted or aborted, a future run of Robocopy can resume copying where the previous one left off, instead of starting over at the beginning.

This is useful for reliably copying large files or many files over an unreliable network such as a VPN or the Internet. An incomplete file has the same file size as the complete file, and is noted with a date stamp in the file system being within 24 hours of 1/1/1980 00:00.

/COPYALL makes sure NTFS security information is copied

/B opens files in backup mode. Backup mode allows files to be opened without security restrictions, but requires additional rights on both the source and destination systems.

/ZB use restartable mode; if access denied, use Backup mode.

Specialized options:

/S copies subdirectories unless they're empty (like XCOPY)

/E copies subdirectories, even empty ones (like XCOPY)

/MOV moves the files, removing them from the source folder. **/MOVE** removes the source folder as well if empty.

/MON:n This will monitor and trigger a copy after n changes (and MOT minutes)

/MOT:n This will set the minimum monitor interval (n minutes) before another copy is triggered.

/XF filespec - excludes files indicated by filespec. Wildcards are accepted.

Example: **/XF *.bak** will skip copying any file with an extension of .bak

/XD dirspect - excludes directories indicated by dirspect by name/path.

Wildcards work (i.e. **/XD BKUP*** skips copying all directories whose name starts with "BKUP", regardless of where in the source tree they are found)

/XC - eXclude Changed files
/XN - eXclude Newer files
/XO - eXclude Older files (Please note that the Robocopy GUI (3.1.1) does not seem to use this switch correctly, meaning it still copies older files over newer ones.)
/XX - eXclude eXtra files and directories
/XL - eXclude Lonely files and directories
/IS - Include Same files
/IT - Include Tweaked files
/XJ - exclude junctions. When copying user accounts to another place in Windows Vista, it's important to exclude junctions. There is a junction in '`\Users\...\AppData\Local`' named 'Application Data' which points to its parent folder, creating a loop which will break Robocopy.
/R:n tells Robocopy to retry 'n' times before giving up in the event of error (default is 1 million).
/IPG:n tells Robocopy to pause 'n' milliseconds between packets for network transfers. Useful to preserve bandwidth on slow lines.
/L pretends to do the copy without actually doing it, which is useful for testing a command line without being committed to the results.
/W:n Wait time between retries (default is 30 seconds).

Logging Options:

/NFL - No File List - don't log file names.
/NDL - No Directory List - don't log directory names.
/NS - No Size - don't log file sizes.
/NC - No Class - don't log file classes.
/X - report all eXtra files, not just those selected.
/V - produce Verbose output, showing skipped files.
/TS - include source file Time Stamps in the output.
/FP - include Full Pathname of files in the output.
/NP - No Progress - don't display % copied.
/ETA - show Estimated Time of Arrival of copied files.
/LOG:file.txt - Replace file.txt with the status of the run.
/LOG+:file.txt - Append the status of the run to file.txt.
/TEE - output to console window, as well as the log file.
/NJH - No Job Header.
/NJS - No Job Summary.

More information is available at: <http://en.wikipedia.org/wiki/Robocopy>