

COPY+ V4.0

for SEG-D and SEG-Y files

This version 4.0 of COPY+ is designed with a new graphic interface and is user-friendly to use. It is available in Windows or Linux version. It allows you copy or convert SEG-D and SEG-Y files, selected on a local or network disk, to all magnetic tapes used in the Geophysics world. You can also transfer all tape formats to hard disk and to tapes. Its assets with regard to the existing software are its simplicity, its conviviality and its higher speed of transfer.

Changes introduced in revision 4.0:

1. Ftp connection for disk to tape(s) process, for Windows edition.
2. Copy disk to disk
3. Up to five processes per type of copy
4. Select up to three target folders for copy tape to disk
5. New feature "Advanced logs level", logs with more details (Control headers, Channel sets, Traces length)
6. Error messages with more information, command in progress, sense bytes and description
7. New Graphic User Interface
8. Change settings easily for each process
9. New viewers for file headers and file/traces headers list
10. RHEL and CentOS version 8 and Windows 11 compatible
11. SEG-D Rev 3.0 compatible

Copy disk files to tape(s)

Files selection:

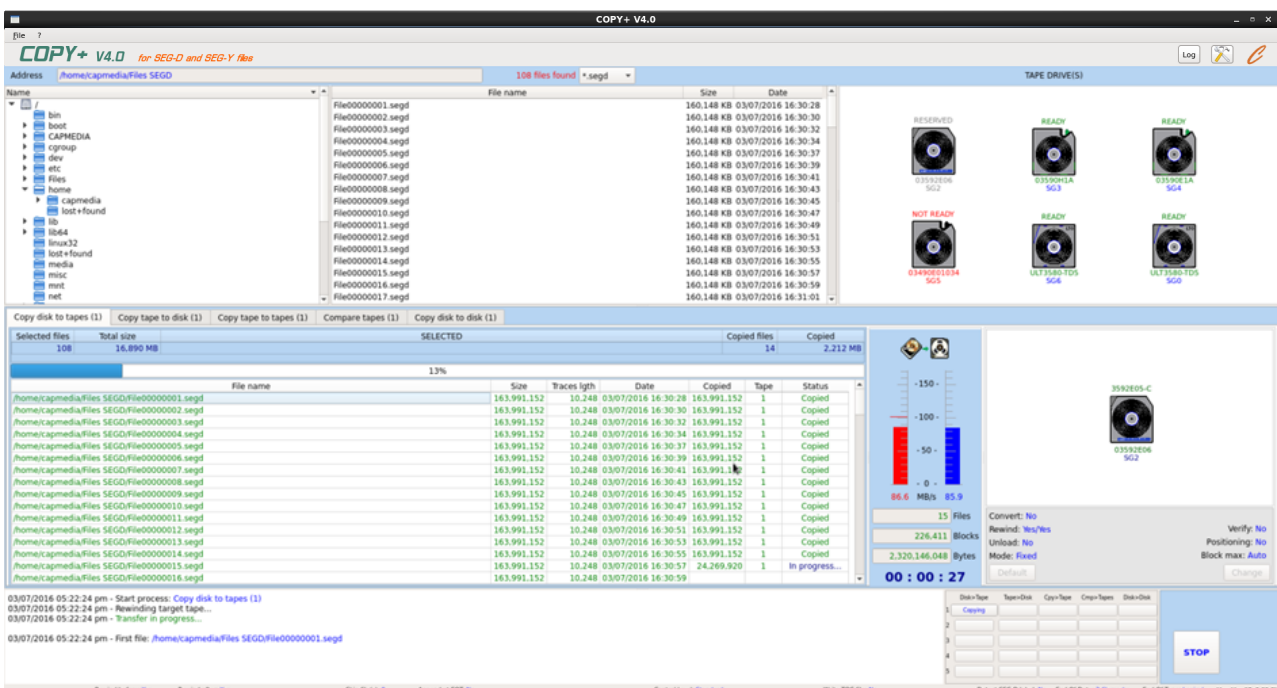
- Select files or folder with subfolder(s) by double click or drag and drop
- Files can be moved, sorted or suppressed in list of selected files

Tapes selection:

- Double click or drag and drop tape icon to select it
- Select the tape density by right click on its icon

Features:

- Converting SEG-D 8058 file to SEG-Y file
- Writing up to 2 tapes simultaneously
- Handling multivolume tapes (automatic with stacker)
- Block length up to 4 MB*
- Verifying copy by reading disk files and tape files and comparing block length and data.
- Change settings easily
- Up to 5 processes simultaneously



Copy tape files to disk

Tape selection:

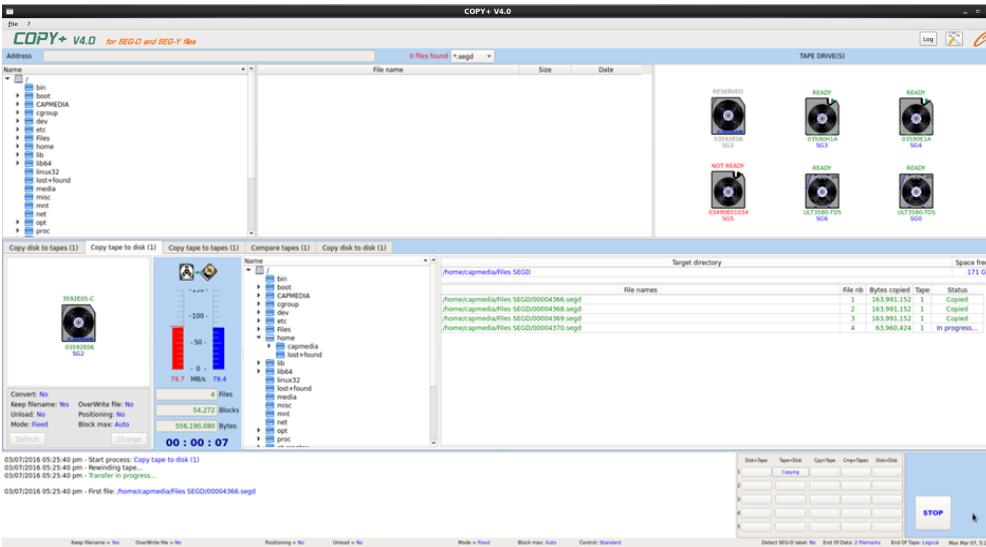
- Double click or drag and drop tape to select it

Target directory selection:

- Select target directory in tree list box
- Create or rename folders
- Select up to 3 ranges of files in 3 target directories

Features:

- Converting SEG-D 8058 file to SEG-Y file
- Handling multivolume tapes
- Block length up to 1 MB*
- Positioning tape before transfer
- Change settings easily
- Up to 5 processes simultaneously



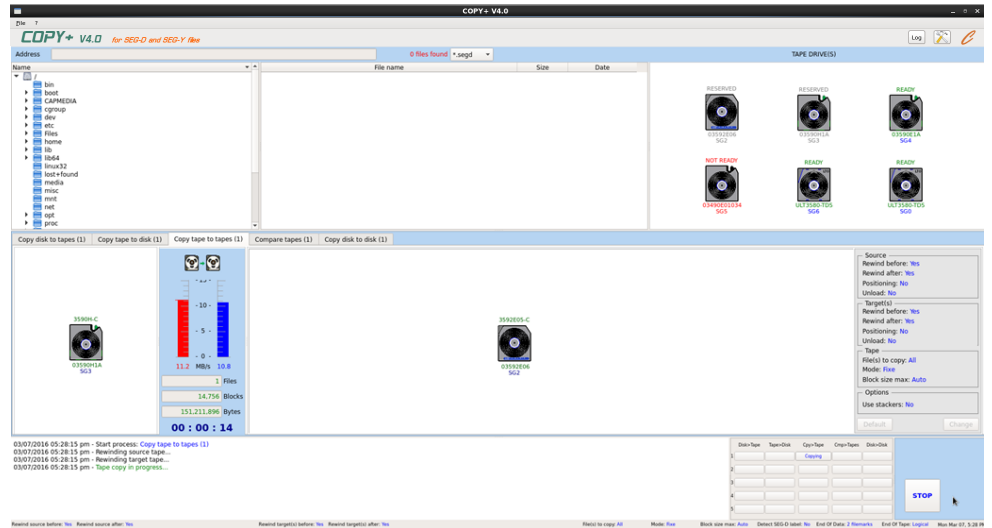
Copy tape to tape(s)

Tapes selection:

- Double click or drag and drop tape to select it

Features:

- Handling multi-copy with input and output stackers
- Handling multivolume input tapes (automatic with input stacker)
- Block length up to 4 MB*
- Positioning tapes before transfer
- Change settings easily
- Writing up to 4 tapes simultaneously
- Direct copy from input tape to output tapes (no writing to disk)
- Up to 5 processes simultaneously



Copy disk files to disk

Files selection:

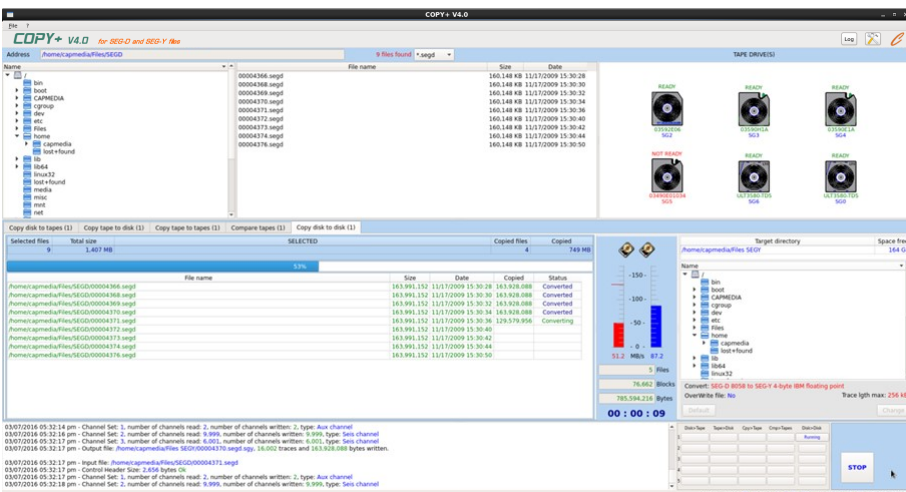
- Double click or drag and drop tape to select it

Target directory selection:

- Select target directory in tree list box
- Create or rename folders

Features:

- Converting SEG-D 8058 file to SEG-Y file
- Change settings easily
- Up to 5 processes simultaneously



File properties

File headers detail:

With a right click, access to detail of all headers of the file

The screenshot shows the 'File properties' dialog for the file `/home/capmedia/Files/Rev2.1/tape10/00000314.segd`. It displays 21 headers. The table below summarizes the data shown in the dialog.

GHB #1	GHB #2	GHB #3	Scan Type Header	Scan Type Header	Scan Type Header	Scan Type Header	Scan Type Header	Scan Type Header	Scan Type Header	Scan Type Header
Bytes No.	Description		Hex	Fmt	Value	Notes				
1 - 2	File Number		0314	bcd	0314	Set to FFFF if file number > 9999, Extended file number is use...				
3 - 4	Format Code		8058	bcd	8058	SEGD Format (8015, 8036, 8038, 8048, 8058, 8080)				
5 - 10	General Constant		00	bcd	0	1 = CM408, 2 = SEAL, 3 = 408XL				
11	Last two digits of Year		07	bcd	07	0 - 99				
12H	Number of Additional Blocks in General Header		2	bcd	2					
12L - 13	Julian Day, 3 digits		164	bcd	164	1 - 366				
14	Hour of Day		11	bcd	11	0 - 23				
15	Minute of Hour		17	bcd	17	0 - 59				
16	Second of Minute		10	bcd	10	0 - 59				
17	Manufacturer's Code		13	bcd	13	Sercel				
18 - 19	Manufacturer's Serial Number		0000	bcd	0					
20 - 22	Bytes per scan		000000		000000	000000 = non blocked record, 100000 = blocked record				
23	Base Scan Interval		20	bcd	20	4 = 0.25ms, 8 = 0.5ms, 10 = 1ms, 20 = 2ms, 40 = 4ms				
24H	Polarity		0	uint4	0	0x0 = Untested				
24L - 25	Reserved		000		0	Not used				
26H	Record Type		2	bcd	2	0x2 = Test Record				
26L - 27	Record Length		FFF		FFF	FFF = extended record length used				
28	Scan Types Per Record		01	bcd	01					
29	Number of Channel Sets Per Record		16	bcd	16					
30	Number of Sample Skew 32 bytes Extensions		00	bcd	00					
31	Extended Header Length		32	bcd	32					
32	External Header Block		32	bcd	32	32 for land operation, FF for marine operation				

Position : 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
 Value hex : 03 14 80 58 00 00 00 00 05 07 21 64 11 17 10 13 00 00 00 00 20 00 00 2F FF 01 16 00 32 32

File and traces headers list:

With a right click, access to list of all general headers, with description and value for each byte or group of bytes

The screenshot shows the 'File properties' dialog for the same file, displaying 10,002 traces. The 'Headers' tab is active, showing a list of headers and their corresponding byte values across 32 bytes.

Header names \ Bytes	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
General header #1	03	14	80	58	00	00	00	00	05	07	21	64	11	17	10	13	00	00	00	00	20	00	00	2F	FF	01	16	00	32	32			
General header #2	00	01	3A	00	00	00	00	00	00	02	00	00	00	0F	A0	00	02	00	00	00	00	00	00	00	00	00	00	00	00	00	00		
General header #3	00	01	3A	00	00	00	00	00	00	06	00	00	01	00	00	00	00	03	01	00	00	00	00	00	00	00	00	00	00	00	00		
Scan Type Header #1	01	01	00	00	00	00	00	00	00	02	90	03	02	00	03	70	00	00	00	00	00	00	00	00	00	00	00	00	00	07	01	00	01
Scan Type Header #2	01	02	00	00	00	00	00	00	00	99	99	10	03	02	00	03	70	00	00	00	00	00	00	00	00	00	00	00	00	07	01	00	01
Scan Type Header #3	01	03	00	00	00	00	00	00	00	00	01	10	03	02	00	03	70	00	00	00	00	00	00	00	00	00	00	00	07	01	00	01	
Scan Type Header #4	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
Scan Type Header #5	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
Scan Type Header #6	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
Scan Type Header #7	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
Scan Type Header #8	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
Scan Type Header #9	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
Scan Type Header #10	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	

Or access to all traces headers, with description and value for each byte or group of bytes

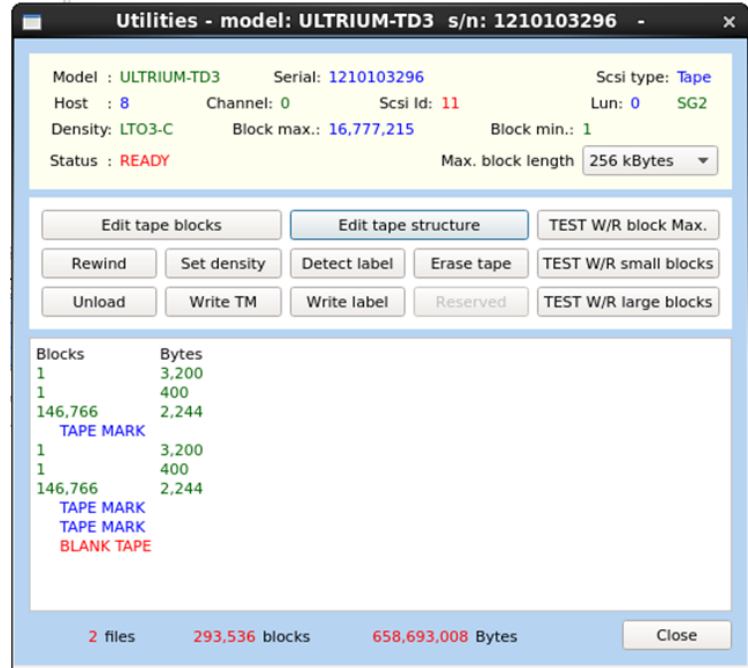
The screenshot shows the 'File properties' dialog for the same file, displaying 10,002 traces. The 'Traces' tab is active, showing a list of trace headers and their corresponding byte values across 32 bytes.

Header names \ Bytes	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Demultiplexed Trace Header	03	14	01	01	00	01	00	00	07	00	00	00	00	00	00	00	00	00	01	3A	00	00	00	00	00	00	00	00	00	00	00	00
Trace Header Extension Block # 1	00	00	00	00	00	01	01	00	07	D1	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
Trace Header Extension Block # 2	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
Trace Header Extension Block # 3	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
Trace Header Extension Block # 4	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
Trace Header Extension Block # 5	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
Trace Header Extension Block # 6	01	40	01	01	01	00	00	01	40	01	01	01	00	00	15	00	00	00	4F	80	00	00	00	00	00	00	00	00	00	00	00	00
Trace Header Extension Block # 7	30	00	00	01	02	00	00	00	00	00	00	00	00	00	09	01	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00

Utilities

Features:

- Information about tape drive
- Edit tape block (Hexa and ASCII/EBCDIC)
- Edit tape structure
- Rewind
- Unload
- Set density
- Write Tape Mark
- Detect SEGD label
- Write SEGD label
- Erase tape
- Tape tests



Approved tape drives

- 4MM** HP 35480A, C1533A, C1537A, C5683A, C7438A
- 8MM** EXABYTE 8505XLS, ELIANT, MAMMOTH EXB-8900, MAMMOTH 2
- DLT / SDLT** DLT2000, DLT4000, DLT7000, DLT8000, SDLT220, SDLT320, SDLT600
- 3490** STK 4890, FUJI 2483K, 2488, 2488E, OVERLAND T490E, L490E, PHILIPS TD3610, TD3620, TD3630, IBM 3490-E01, IBM 3490-E11, IBM 3490-F11
- 3590** FUJI M8100, IBM 3590-B1A, B11, E1A, E11, H1A, H11
- LTO** LTO1, LTO2, LTO3, LTO4, LTO5, LTO6, LTO7, LTO8, LTO9
IBM 3580-L11, H11, L23, H23, L33, H33, TS2230, TS2240, TS2340, TS2250, TS2350, TS2260, TS2360, TS2270, TS2370, TS2280, TS2290
- 3592** IBM 3592-J1A
IBM 3592-E05, TS1120
IBM 3592-E06, TS1130
IBM 3592-E07, TS1140
IBM 3592-E08, TS1150
IBM 3592-55F, TS1155
IBM 3592-60F, TS1160



Operating systems

- Windows** 7, 8.1, 10, 11 32/64 bit
Server 2008, 2012, 2016, 2019, 2022 64 bit
- Linux** CentOS or RHEL 6, 7, 8 32/64 bit

*depending tape drive, controller and OS, 512 KB max for Windows, 4096 KB max for Linux