

TapeCopy User's Guide

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TapeCopy for Windows

Introduction to TapeCopy

TapeCopy allows tapes written by VMS BACKUP to be read directly on a Windows computer and allows the files in the BACKUP savesets to be copied and converted for use on Windows,

TapeCopy works with all tapes written by VMS BACKUP and supports tapes written with any block size including 64K bytes. Savesets which span multiple tapes are supported.

TapeCopy also provides for the backup savesets on a tape to be copied to a Windows disk for restoring of files at a later time without the need to reread the tape.

TapeCopy converts any VMS file for use on Windows. All RMS file organizations are supported including sequential, relative, and indexed.

TapeCopy provides a Graphical User Interface, like an explorer, which provides visibility to the tape and saveset contents.



Tape drives supported

TapeCopy will work with any tape drive that Windows sees. It has been tested extensively on the following tape drives:

- 4 mm
- 8 mm
- DLT
- IBM 3490



TapeCopy License

TapeCopy requires a license to run. The initial temporary license installed with a download is good for 30 days. The Welcome dialog that is displayed when this programs first runs tells you when the license will expire.

In order to obtain a permanent license, you will need provide Compact Data Works with your system ID. This is obtained by selecting License File from the Help menu. A small dialog will appear giving the system ID information.



Reading Tapes

Selecting a tape drive

You need to select a tape drive before you can do anything. Upon starting TapeCopy, a dialog is presented with a list of available tape drives. Select the one you want to use.

You may, of course, change this at any time by selecting the  icon.



Scanning for savesets

This action reads the entire tape looking for saveset headings only. It skips tape marks and is very fast to process an entire tape. Each saveset encountered will be listed on the left side of the TapeCopy display. No directories or files are listed as they are skipped between tape marks.

You may then view the saveset summary by selecting a saveset and using either the View menu, a right click, or the  icon.



Listing a tape

This action will read an entire tape, multiple volumes if necessary, and list each saveset and its contents on the TapeCopy display. At the same time, it will also create a TapeList file for later use. This file may then be viewed at any time to see the contents of the tape. Individual files or directories may be restored using the TapeList file. Files may also be restored as soon as the tape is listed.

To restore files immediately, select the files to be restored and then use the Restore Menu or select the  icon

To restore files at a later time from a TapeList file use the Restore menu or select the  icon.



Copying savesets

This action will copy all the savesets found on the tape to disk. These can then be used for restoring files. This is the fastest way to restore files at a later time because no tape is required. The disk address of each file is stored in the SaveSet file making restoring a file very fast. All of the file data is copied. The files created are called SaveSet files to differentiate them from VMS

BACKUP savesets. They contain all the same data but in a slightly different format, i.e., they could not be copied to VMS and read with BACKUP.

To see the contents of SaveSet file, use the Restore menu or the  icon. You may then select files or directories to restore and use the  icon.



Nonrecoverable Errors

Some tape errors are detected by the Windows drivers and TapeCopy cannot recover from them. TapeCopy will advance the tape to the next tape mark and attempt to continue at this point if there is another saveset on the tape. Otherwise the current action will be terminated. These include the following:

Error Code 23 - CRC error

Error Code 1117 - device I/O error



TapeCopy Display

TapeCopy display

The TapeCopy display is an explorer type display with the savesets and directories listed on the left side (tree view) of the display. The right side (file view) of the display lists the files contained in the directory selected on the left side. To view a different directory simply click on it.

Files are selected to be restored from this display.



Status bar

The status bar at the bottom of the screen is used to display current tape status, ie, rewinding tape, scanning saveset etc. While files are being restored, the name of each file is displayed.



? Help

This icon can be used to view a short description of any other icon on the display. Simply click on it and drop it on another icon.



Viewing Tape Details

View saveset summary

To view the saveset summary, select a saveset in the display tree and use the View menu, a right click, or the  icon.. A summary dialog will be presented. The contents are what VMS BACKUP would display if you were to list the tape on a VMS system.



View file properties

To view the file details of a given file, select a file in the file display and use the View menu, a right click, or the  icon.. A dialog will be presented. The contents are similar to what would be displayed on a VMS system using a DIRECTORY/FULL command



Current tape position

The current tape position may be displayed using the  icon.. The current tape device is displayed as well as the current volume number, saveset number on that volume and block number within the current saveset.



Restoring Files

Restore an entire tape

To restore an entire tape, simply insert the tape in the drive and use the Action menu or the  icon. You will be presented with a dialog requesting the starting destination directory. The contents of the tape will be restored there. Directory structure is preserved. Multiple version numbers are not restored; only the highest version of a file is restored.

System files are not restored. These include files from SYS\$SYSTEM, SYS\$MANAGER, VMS\$COMMON for example.

To restore lower version numbers or any system file you will need to restore using a TapeList  or a SaveSet  file and select the particular file that you want restored.

Restore using a TapeList file

To restore using a TapeList file, first open the TapeList using the  icon. Select the files or directories that you want to restore. Then use the  icon. If the tape to be used is not in the drive, you will need to insert it. If the files to be restored reside on a tape that is not the first tape of a set, you will be prompted which tape to insert. A dialog will be presented requesting the destination directory.

As the files are restored, the status bar will contain the name of the current file being restored.

If you are restoring a directory, the tree structure will be preserved. The file dates of each restored file are set to the dates of the files as they reside on the tape.

Restore using a SaveSet file

To restore using a SaveSet file, first open the SaveSet using the  icon. Select the files or directories that you want to restore. Then use the  icon. You do not need a tape when restoring from a SaveSet file. A dialog will be presented requesting the destination directory.

As the files are restored, the status bar will contain the name of the current file being restored.

If you are restoring a directory, the tree structure will be preserved. The file dates of each restored file are set to the dates of the files as they reside on the tape.

Restoring files

To restore a file, simply select it (highlight it) and then click the  icon. You may select many files. A dialog will be presented which allows you to choose the destination folder. As files are restored, the name of each restored file will be displayed on the Status Bar.



Restoring a directory

To restore a directory, simply select it (highlight it) on the left side (tree) of the display and then click the  icon. A dialog will be presented which allows you to choose the destination folder. If the directory selected contains other directories, they will also be restored. The tree structure will be preserved.

As files are restored, the name of each restored file will be displayed on the Status Bar.



Controlling TapeCopy

Loading a tape

There is no direct action for loading a tape. Simply insert the tape into the drive and select one of the read actions (list tape, copy savesets, or restore tape). TapeCopy will then take care of loading the tape.

Rewinding a tape

To rewind the current tape, select the  icon or use the Action menu, The status bar will display "Rewinding tape".

Ejecting a tape

To eject the current tape, select the  icon or use the Action menu, The status bar will display "Tape is ejected" after the tape is rewound and ejected.

Stopping an operation

To stop any given operation, select Stop from the Action menu or use the  icon.. This will abort any read or restore operation. This is very handy if you accidentally start the wrong action or realize the tape you are reading is not the one you want.

You cannot, however, stop certain tape actions such as rewind or eject. There may also be times when it appears that you cannot stop a read operation. This can happen if the driver software is having trouble reading a particular block on the tape. Usually the operation recovers. If there is an unrecoverable error, this will be displayed.

The status bar will display "Aborting operation".

VMS File types supported

VMS File Types

VMS supports 3 different file organizations and many record types within each organization. TapeCopy can convert all of these file types to Windows format.

File organization	VMS record type	TapeCopy conversion
Sequential Files		✓
	Variable length records	✓
	Fixed length records	✓
	Stream	✓
	Stream-CR	✓
	Stream-LF	✓
	FTN	✓
	VFC	✓
Relative Files		✓
	Variable length records	✓
	Fixed length records	✓
Indexed files		✓
	Variable length records	✓
	Fixed length records	✓
	Compressed Keys	✓
	Compressed Index	✓
	Compressed Data	✓



VMS version numbers

BACKUP tapes are likely to contain many versions of any given file. If you are restoring an entire tape, TapeCopy will only restore the highest version of any file. If you wish to restore a lower version, you will need to restore from a SaveSet  or restore from a TapeList . Even then, if you select many versions of a file, TapeCopy will still only restore the highest version selected.



