



Tape/Copy

Product Update Bulletin

Release 2.7.4



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1

Updates and New Features

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Introduction

The following updates have been made to the Tape/Copy product for the Release 2.7.4.

Installation and Software Support Updates

- 1 Added support for the following tape management systems:
 - CONTROL-T/R7.0
 - RMM/Z1.13
- 2 Added support for the following tape media types:
 - StorageTek T10000C (5TB Native capacity)
 - StorageTek T10000CS (1TB Native Capacity)
 - IBM TS1140 / 3592-E07 (up to 4TB native capacity)
- 3 Added support for the following tape library interfaces:
 - IBM-LCS/Z1.13
- 4 Added support for the following Proprietary data types:
 - RSD's EOS (Enterprise Output Solution) product tapes allow the tapes to be migrated to tape media with a capacity greater than or equal to the source media.
 - Generic EDM tapes allow the tapes that are EDM-managed (but not one of the specifically supported proprietary types) to be processed. This support only allows for the data to be migrated to new media, it does not supply any support for updating the product that created the tapes with the newly created volser.

Tape/Copy Erase End of Tape

A new function, Erase End of Tape, has been introduced in Tape/Copy R2.7.4. This batch job takes one or more simple control statements, which identify a volser that may be the only volume of a volset or a volser that is part of a multi-volume volset, and mount the last volume of the volset and position it after the double tape marks on the volume, and erase the volume from that point until the end of tape is encountered.

Tape/Copy Copy-Unknown Feature

In normal processing, Tape/Copy copies all the datasets known to the tape management system that are on the volumes selected to be copied. In some cases, however, there may be valid datasets on a volume beyond the last one known by the tape management system, and therefore known by TapeCopy. Typically, this would only occur when tapes have been identified to the TMS as **EDM Managed** because the TMS will only track the first file on an EDM managed tape. It is also possible that the data in the TMS is incomplete due to operational issues such as when the tape information was added manually to the TMS, or when it was re-added after a premature scratch.

To allow Tape/Copy to process files on the tape that are not recorded in the TMS, the function must be enabled either by parameter setting or by definition in the PROPRIET member of the parmlib. The user Parameter **BYPASS-END-OF-VOLSET-TEST** has a new parameter value in release 2.7.4, COPY-UNKNOWN, which informs TapeCopy to verify if there are “unknown” datasets past the last known dataset on the volume, and if so, to copy those too. In addition to the BYPASS-END-OF-VOLSET-TEST parameter, the user can indirectly tell TapeCopy to copy unknown datasets on a per dataset basis by having the Proprietary table identify a dataset as a proprietary type that is known to write multiple files to EDM managed tapes. Currently, the only proprietary type that is supported for that functionality in Tape Copy is **GENEDM**. GENEDM (Generic EDM) is also new to R2.7.4 and allows for the processing for EDM tapes that are not specifically supported via another proprietary type.

When TapeCopy is requested to use Copy Unknown processing, it checks the tape itself after copying the last known dataset to see if there are other datasets on the tape, and if so copies all of them, up until the point it finds two tapemarks, indicating the logical end of the tape. Datasets copied using Copy-Unknown processing mode are copied without opening or closing the input or output dataset, and as a consequence, no tape management system or zOS catalog entries are created for the output datasets that correspond to the “unknown” input datasets.

Miscellaneous Updates

- 1 Beginning in this release of VDR, it is possible to request that the CA-1 LIB and LIBR vault data be included in the VLTPNS dataset when any of the VAULT PATTERN CONVERTER jobs in the Tape/Copy JCLLIB library are run. The default for including the LIB and LIBR vault data is NO. To include the LIB and LIBR data, add the following statement after the //SYSIN DD * statement in the DCVPCCA1 jcl member in the Tape/Copy JCLLIB library:

```
LIST-LIB-AND-LIBR-VAULTS
```

The above parameter value can start in any column of the SYSIN record, however it must end before column 72.

- 2 The report sysout redirection function was updated to permit concurrent access to sysout datasets directed to identically named GDG datasets.
- 3 The VDR RECYCLE ISPF function had some minor changes to help you navigate the ISPF panels used by the function.
- 4 Beginning in this release, the VDR Business Continuance Utility (BCU) function has been enhanced to include the ability to reattempt failed Update New Original volume, dataset, file sequence number requests as well as failed Expire Old Original volume, dataset, and file sequence number request. This ability is controlled by the addition of two new Usersets/Pgmsets parameters:

- UPDATE-NEWORIG-FORCE
- EXPIRE-OLDORIG-FORCE

By specifying a value of YES for either or both of the above parameters will enable the retry of failed updates for the BCU update process.

For more information, see the *VDR Guide and TapeCopy Parameters Reference Guide*.

- 5 Beginning with this release of the Tape/Copy and VDR products, the ability to bypass propagating the SMS Management Class value from the input dataset to the output dataset during updates of the customers Tape Management Catalog has been added. This new functionality is controlled by a new parameter **BYPASS-TMS-MGMTCLAS-UPDATE-FROM-INPUT**. This parameter is documented in the product's Parameter Reference Guide.
- 6 The Conflict Avoidance feature, which processes SMF records in an attempt to discover possible dataset conflicts and prevents conflicting datasets from being stacked on the same output volume, has been enhanced to allow INCL/EXCL processing to reduce the number of SMF records processed.
- 7 A new parameter was added to control whether Tape Copy and Tape Analyze/Compare run with or without Full ERP (Error Recovery Procedure) support when reading the input tape. This option was added to get around an issue with IBM tape ERP (since fixed, with APARs back to zOS 1.10), which caused up to 500% performance degradation when processing certain RECFM=U datasets.
EXCP-USE-FULL-ERP: YES/NO

The default of YES informs Tape Copy and Tape Analyze/Compare to run with Full ERP support on. This will provide the highest amount of recovery from I/O errors and certain special conditions. It should always be set to YES if on a zOS with the IBM ERP performance fix. For more information, see the *TapeCopy Parameters Reference Guide*.
- 8 The Tape Copy Conflict Avoidance feature, which creates a Conflict database to help avoid stacking datasets that "conflict" with each other from being stacked on the same tape during a TapeCopy conversion job, now allows SMF record filtering, using include/exclude filtering. Filtering can be done on dataset name, volser, jobname or creating program name, using the TapeCopy parmlib members: INCLDSN, EXCLDSN, INCLVOLS, EXCLVOLS, INCLCRJB, EXCLCRJB, INCLCRPG, EXCLCRPG, or DD overrides to point to other members. Filtering out unneeded SMF records speeds up both the Conflict database update process and Candidate Selection when it is using conflict avoidance, while also reducing the size of the Conflict database.
- 9 VDR Copy Recovery jobs now support the **restart** processing, allowing a VDR Copy Recovery job that was stopped either by an abend or a **HALT** command to resume with the last file that was not processed successfully instead of restarting with the first file in the control cards. This uses the same Restart facility that was introduced in R2.7.3 for jobs that create stacked tapes. No action is required to enable this feature, unless it has been disabled via the user parameter (see RESTART-MANAGEMENT-DATASET-PREFIX parameter setting).
- 10 Added support for the OTMSGID facility, which allows the user to override the condition code that is set when a WTO is issued as well as the routing and descriptor codes for the WTO messages. See the OTMSGID member of parmlib.
- 11 The contents and structure of the Stacking Groups Control Dataset have been changed from the previous releases of Tape/Copy. During the first execution of any Tape/Copy program which uses the Stacking Groups functionality, the contents of the Stacking Groups Control Dataset will be reformatted as required. An informational message will be issued when this occurs.

- 12 The ability to use a pre-existing Calculated Expiration Date file has been added to Tape/Copy. For more information, see Special Considerations in the *TapeCopy User Manual*.
- 13 The way Tape/Copy identifies full AUDITLOG generations has changed. In this release, Tape/Copy allocates a new AUDITLOG generation when the current generation becomes full (Sx37 abend encountered). Expect to see IEC030I messages in Tape/Copy JESMSG LG file; however, Tape/Copy will continue despite the file full condition. Any new audit data will be written to a new AUDITLOG generation.
- 14 A new parameter has been added to limit AUDITLOG's track allocation to a maximum size. For details, see documentation on the AUDIT-LOG-FILE-TRACK-ALLOCATION-LIMIT. You can use this parameter to prevent AUDITLOG from growing beyond a desired limit despite space consolidation by DFDSS or FDR.
- 15 A new parameter has been added to define a lifetime for a given AUDITLOG generation. For details, see AUDIT-LOG-FILE-NEW-GENERATION. This parameter can trigger a new AUDITLOG generation based on a specified number of days; or Tape/Copy can allocate new AUDITLOG generations on the first of a month, or after a certain day of the week. This parameter is superseded by file full conditions (Sx37) and AUDIT-LOG-FILE-TRACK-ALLOCATION-LIMIT.
- 16 This release provides new control over Tape/Copy's work file allocations, giving you the ability to change default space allocation values for various datasets. This feature was developed with two of Tape/Copy's datasets in mind: AUDITLOG and TMCDUMP. Space overrides are specified in a new member in the parameter library named DSNALLOC. For more information, refer to the documentation for DSNALLOC in *Tape/Copy User Guide*.
- 17 This release of Tape/Copy provides improved table handling for very large INCLUDE and EXCLUDE tables in PARMLIB: INCLDSN, EXCLDSN, INCLVOLS, EXCLVOLS, INCLCRJB, EXCLCRJB, INCLCRPG, EXCLCRPG, or DD overrides to point to other members.
- 18 Effective in this release, Tape/Copy will no longer automatically create the Dual/Copy Inventory Flat file. For customers who wish to create this file a new parameter is available: CREATE-DC-INVENTORY-FLATFILE. This parameter's value may be specified as YES or NO, with NO being the default value. To have this file created as the default, add the CREATE-DC-INVENTORY-FLATFILE parameter to the USERSETS parameter library member with a value of YES.
- 19 Changes to RMM MANAGEMENTVALUE parameters:

The default of MOVE-EXPIRE-MANAGEMENTVALUE was changed from 'ASIS' to 'TCEXPURE'. 'ASIS' is not an acceptable value for VDR processing and it is not recommended for Tape/Copy MOVE processing (e.g. when performing a data migration).

Parameter validation for MOVE-EXPIRE-MANAGEMENTVALUE does not allow 'ASIS' if PERFORM-DUALCOPY-PROCESSING is set to a value other than 'NO'.

Parameter validation for PERMANENT-MANAGEMENTVALUE does not allow 'NONE' if PERFORM-DUALCOPY-PROCESSING is set to a value other than 'NO'.

- 20** The IDCAMS, IEBGENER, SORT, and DFDSS/COPYDUMP data conversion engines have been discontinued in this release. Because this would leave the Internal EXCP engine as the only general data conversion engine, the STANDARD-DATA-CONVERSION-ENGINE parameter has also been removed. Contact OpenTech Systems Technical Support if you were using any of these and need assistance converting your parmlib settings to use the Internal EXCP engine.
- 21** Added an enhancement in the OAM update program. The OAM update program can now run in simulation mode, allowing DB2 updates to run in non-commit mode while OAM is active. This will allow you to get timings or discover any Storage Group errors before running the process while OAM is down. Storage Group errors will be skipped and OAM updates will continue to process.

The OAM update control cards are now placed in one dataset versus one for each conversion job.

2

Upgrading Tape/Copy

TOPICS COVERED IN THIS CHAPTER

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Introduction



Note Click on your current Tape/Copy release below for the instructions on upgrading to Tape/Copy Release 2.7.4.

If you are not sure what release of Tape/Copy you are currently using, you can find this information on any of Tape/Copy's report headings.

- Tape/Copy Release 2.7.3
- Tape/Copy Release 2.7.1 or Previous Release



Warning Technical Support recommends backing up your current Tape/Copy libraries before performing an upgrade.

Tape/Copy Release 2.7.3

Use the checklist below for quick reference when upgrading from Tape/Copy release 2.7.3 to 2.7.4 using a CD or emailed product installation file. This checklist is only a guide; individual customer requirements and customization may be necessary.

Done	Task
<input type="checkbox"/>	Save XMIT file to a directory on your PC.
<input type="checkbox"/>	<p>Upload the XMIT file from your PC to your mainframe as a binary file (i.e. with no ASCII and CRLF translation) using INDSFILE, FTP or your terminal emulator's file transfer option. Name the new mainframe file @DSPREFIX.TAPECOPY.XMITFILE (where @DSPREFIX is your chosen high-level qualifier for Tape/Copy software files). The TAPECOPY.XMITFILE requires approximately 85 TRKS of DASD space. If pre-allocating the mainframe target file, the DCB attributes must be:</p> <pre>DCB= (LRECL=80 , BLKSIZE=3120 , RECFM=FB , DSORG=PS)</pre>
<input type="checkbox"/>	<p>Enter the TSO RECEIVE command and restore parameters to create the Tape/Copy R2.7.4 INSTALL library:</p> <pre>TSO RECEIVE INDA ('@DSPREFIX.TAPECOPY.XMITFILE')</pre> <p>After the command is issued, you will receive the following prompt:</p> <pre>INMR906A Enter restore parameters or 'DELETE' or 'END' +</pre> <p>Enter the following reply:</p> <pre>DSN ('@DSPREFIX.TAPECOPY.INSTALL') VOL (vvvvvvv)</pre>
<input type="checkbox"/>	<p>Edit the UPFRM27X JCL in the Tape/Copy R2.7.4 INSTALL library. This job consists of three steps:</p> <ul style="list-style-type: none"> • IEFBR14 - Deletes the existing Tape/Copy LOADLIB. Specify your Tape/Copy R2.7.3 LOADLIB name in the OLDLOAD DD. • IKJEFT01 - RECEIVES the libraries from the INSTALL library. These are the files that will be used to upgrade your current Tape/Copy R2.7.3 libraries. The job will overlay your SKELS, MSGS, PANELS, and LOADLIB libraries (which generally are not customized by the user). The @DSPREFIX of the datasets in this step should be changed to match the naming standard of your Tape/Copy libraries. • IEBCOPY - Copies updated members from the libraries RECEIVED by the IKJEFT01 step. This step upgrades the existing JCLLIB, REXX, and PARMLIB libraries by adding newly available members and/or overlaying members that have changed since the last release. Update the dataset names in the JCLLOUT, REXXOUT and PARMOUT DD statements to the names of your current Tape/Copy JCLLIB, REXX, and PARMLIB libraries. <p>Submit the UPFRM27X job to upgrade the existing Tape/Copy product libraries to the R2.7.4 level</p>

Done Task

Because it is necessary for some users to modify the PROPRIET member to correctly identify proprietary data formats at their site, the PROPRIET member is not replaced when upgrading to R2.7.4. For your reference, a copy of the full PROPRIET member default statements shipped with Tape/Copy R2.7.4 are listed below. Compare this with your existing PROPRIET member to determine if any changes should be made.

* FILE		CREATING	CREATING	BLOCK	REC				
* TYPE	DSN	JOBNAME	PGMNAME	LRECL	SIZE	FM	CTLGD	PROCESS	
\$AVERS	/	/	\$AVR/	/	/	/	N	N	
ABARS	*.D.C!!V!!!!	/	ARCWCTL	/	/	/	Y	Y	
ABARS	*.O.C!!V!!!!	/	ARCWCTL	/	/	/	Y	Y	
ABARS	*.I.C!!V!!!!	/	ARCWCTL	/	/	/	Y	Y	
ABARS	*.C.C!!V!!!!	/	ARCWCTL	/	/	/	Y	Y	
ABARS	*.D.C!!V!!!!	/	ARCWCTL	/	/	/	N	N	
ABARS	*.O.C!!V!!!!	/	ARCWCTL	/	/	/	N	N	
ABARS	*.I.C!!V!!!!	/	ARCWCTL	/	/	/	N	N	
ABARS	*.C.C!!V!!!!	/	ARCWCTL	/	/	/	N	N	
ADSM	ADSM/	/	/	/	/	/	/	N	
CA-DISK	/	/	ADSMI002	/	/	/	/	Y	
CA-DISK	DMS./	/	/	/	/	/	/	Y	
CONTROL-D	*CNTLD/	/	/	/	/	/	/	N	
CONTROL-D	/	/	CNTLD/	/	/	/	/	N	
CONTROL-D	/	CNTLD/	/	/	/	/	/	N	
DB2	*DB2/	/	/	/	/	/	N	N	
DFSMSHSM	*.HMIGTAPE.DATASET	/	ARCCTL	/	/	/	/	Y	
DFSMSHSM	*.HMIGTAPE.DATASET	/	ARCWCTL	/	/	/	/	Y	
DFSMSHSM	*.BACKTAPE.DATASET	/	ARCCTL	/	/	/	/	Y	
DFSMSHSM	/	/	ARCCTL	/	/	/	/	N	
EOS	/	/	AREPUT00	/	/	/	Y	Y	
EOS	/	/	AREPUT00	/	/	/	N	N	
FDRABR	*.V?????.A!!!!!!?	/	FDR/	/	/	/	/	Y	
FDRABR	*.V?????.B!!!!!!?	/	FDR/	/	/	/	/	Y	
GEN-EDM	GENEDM.DSN/	/	/	/	/	/	/	N	
IMS	*IMS/	/	/	/	/	/	N	N	
INFOPAC	VIEW.DIRECT.MODEL./	/	/	/	/	/	N	N	
MQARCLOG	*.A!!!!!!	/	CSQYASCP	/	/	/	N	N	
MQARCLOG	*.B!!!!!!	/	CSQYASCP	/	/	/	N	N	
OAM	OAM.PRIMARY.DATA/	/	CBROAM	/	/	/	/	Y	
OAM	OAM.BACKUP.DATA/	/	CBROAM	/	/	/	/	Y	
OAM	OAM.BACKUP2.DATA/	/	CBROAM	/	/	/	/	Y	
SAR	*.SARTAPE./	/	/	/	/	/	/	Y	
SAR	*.SARDPLX./	/	/	/	/	/	/	Y	
SAR	/	/	SAR/	/	/	/	/	Y	
TRMS	/	/	TRMUTIL	/	/	/	/	N	
TAPECOPY	/	/	/	0	0	U	/	Y	
TAPECOPY	/	/	/	0	0	UA	/	Y	
TAPECOPY	/	/	/	/	/	VBS	/	Y	
TAPECOPY	/	/	/	/	/	U	/	Y	

To preserve the user's customization, the USERSETS member of the Tape/Copy PARMLIB is not overlaid by the UPFRM27X job. Review the parameters listed in the USERSETS member of your Tape/Copy PARMLIB to check for any parameters that have been renamed or that are now obsolete (see the "Miscellaneous Updates" section of [Chapter 1](#) for a list of renamed and obsolete parameters).

Done	Task
<input type="checkbox"/>	<p>If the Tape/Copy LOADLIB was allocated to a different DASD volser than previously used, it will need to be APF authorized again. This APF authorization may be temporarily set using the MVS SETPROG system command from a system console. The format of the SETPROG command is:</p> <pre>SETPROG APF,ADD,DSNAME=@DSPREFIX.TAPECOPY.LOADLIB, VOL=vvvvvv</pre> <p>Warning: The effect of the SETPROG command is only temporary. The authorization will be lost the next time the system is IPL'd. Obtain permanent authorization for the Tape/Copy LOADLIB as soon as possible.</p>
<input type="checkbox"/>	<p>Apply available Tape/Copy R2.7.4 maintenance zaps (if any are available) from the OpenTech Systems Support website: http://www.opentechsystems.com/support.php.</p> <p>Note: After the installation is complete, the XMIT file can be deleted from your system.</p>

Tape/Copy Release 2.7.1 or Previous Release

Because of the extent of the updates and changes implemented in Tape/Copy since R2.7.1, there is no JCL or upgrade methods available to upgrade Release 2.7.1 or earlier releases to the current Tape/Copy release.

Technical Support recommends that you request a copy of all Product Update Bulletins between the release that you are now using, and the current release that you want to install. Those documents will inform you of all the new updates and features. Feel free to contact Technical Support if you have questions on any of the changes or enhancements.

After you are familiar with product updates, please follow the instructions in the Tape/Copy R2.7.4 Installation Guide to complete a new installation to new libraries and re-customize the product.



Warning Do not copy the contents of your old Tape/Copy PARMLIB into the new PARMLIB, as the format and contents of some of the members may have changed. It's best to complete a "fresh" installation using your existing Tape/Copy configuration as a guide.
