

INNOVATION

February 2014 • Volume 9.0

FOCUS ON:

FATS/FATAR/FATSCOPY
New Features, User Testimonials
Question & Answers, Audit Reports
and FATSCOPY Resources

FATS/FATAR, FATSCOPY Version 4.9L28 Now Available!

Enhancements in this new release include:

- IMAGE copy for TLMS is now supported. In version 4.9.27, IMAGE copy for RMM and CA 1 was added. IMAGE copy allows you to make an exact block-for-block copy of the data from the input volume to the output volume, including copying the VOLSER from the input to the output. For data files that have their VOLSER locations recorded in an external data base (such as CA Views and OAM backup tape files), IMAGE allows you to migrate these files to a new tape device without incurring the significant processing overhead of updating the external data base.
- FATSCOPY can now write audit records to a system logger log stream. This allows jobs that are running at the same time to write to a single audit data set, instead of each job writing to a separate sequential data set. This simplifies managing your audit data and generating reports to satisfy auditing requirements. The FATAUDIT utility can produce audit reports from either sequential data sets or from a log stream, and write out data from the logger to a sequential data set for long-term storage.
- FDREPORT, a companion product from INNOVATION, is now available for a 90-day period at no charge to FATSCOPY customers. FDREPORT is a tool that can be used to analyze the tapes in your RMM or CA 1 tape environment to see what resources are in use; determine what types of data sets you have; filter results by creation date, expiration date, and other criteria; and help plan an effective migration strategy.

FATAR USER EXPERIENCES

FATAR continues to benefit customers who find that their physical tape or VTS/DLM data has been corrupted and want to recover as much of the remaining data as possible.

Many data centers are moving away from using real (cartridge) tapes and have migrated to virtual tape systems. While FATAR has traditionally been used for analyzing and correcting errors found on real tapes, FATAR has been used recently to successfully recover data in virtual tape environments.

In November 2013, a customer was receiving ABENDS when using the IBM Sub-Capacity Reporting Tool (SCRT) with one of their SMF log files.

Using FATAR, the customer could see that the SCRT (Sub-Capacity Reporting Tool) abend was caused by an improper spanned logical record, where a record that should have spanned from one block to another was missing one segment of the record. A second FATAR job was used to drop the single record that had incomplete segments. After the file was copied, the SCRT was able to read the file.

Thanks for all the help! It was very important to have a full month's worth of SMF data available to feed into the IBM Sub-Capacity Reporting Tool. Without that data, we could have ended up paying Thousands of dollars more for November's 2013 IBM software monthly maintenance charges. I submitted the SCRT report tonight and the report shows "% Data Collected for z/OS 100%" instead of "% Data Collected for z/OS 88%". Anything under 95% is unacceptable.

– A Large University in the MIDWEST

In December 2013, a company found that several of their encrypted 9840D tapes had been improperly re-used, resulting in some of the files on those tapes being overwritten. Using FATAR, the customer was able to identify which files remained on the tape (beyond the overwriting files and the EOD mark), and to copy those files to new tapes. Since FATAR was able to read the user labels (containing the encryption information) from the input tape and copy them to the output tape, the customer was able to successfully read the recovered data sets.

– A Large U.S. Telecommunications Company

FATAR Q & A

Many clients are moving to VTS and they are asking the following:

Q A year ago, we migrated to a virtual tape system (VTS). Can you explain the benefits or needs for FATS or FATAR with a VTS?

A FATAR functions on a Virtual Tape System:

1. Investigating a volume, to discover its label type, file count, DCB characteristics, etc., and providing a compact summary of the characteristics of all files on the volume.
2. Examining the data on a volume.
3. Verifying that certain data fields contain valid data.
4. Creating a backup copy of any volume (or multi-volume set of tapes), even if multiple files exist on the volume. FATAR can be used to make a backup physical copy of a virtual tape volume.
5. Verifying that a data set is properly formatted (every block is checked against its DCB info).
6. Correcting invalid data by creating a copy of the input volume(s) with the bad data corrected or dropped.
7. Creating a copy of a volume that was not properly closed (such as during a system failure).
8. Replacing volumes with small block sizes with copies using a larger block size (reducing elapsed and CPU times of applications that read that data).
9. Making an “image copy” (an exact bit-for-bit copy) of a tape volume.
10. Detecting and correcting invalid variable spanned records. An example of this procedure can be found on the Innovation FTP site, <http://www.fdr.com/ftp/ftp.cfm>, in the file /Public/Download/FATS_FATAR_V49/ FATAR example - correct invalid variable spanned records.pdf



USER EXPERIENCES: See the two recent user experiences described on page 1 on how FATAR users see the benefits of using FATAR for modifying corrupted tape files.

FATSCOPY RESOURCES

Download the FATSCOPY User Manual:

http://www.fdr.com/Manuals_CurrentVersion/FATS_FATAR_FATSCOPY_V49L28_December_5_2013.pdf

How to build a FATSCOPY JCL view the link below:

http://www.fdr.com/Manuals_CurrentVersion/FATSCOPY_How-To-Guide_V49L28_December_5_2013.pdf

Watch the FATSCOPY Product Demo:

<http://www.fdr.com/portfolio/products/demo.cfm>

Download the FATSCOPY Quick Start guide:

http://www.fdr.com/Manuals_CurrentVersion/FATSCOPY_Quick_Start_Guide_V49L28_December_5_2013.pdf

View the FATSCOPY Concepts & Facilities Guide:

<http://www.fdr.com/concepts/FATSCOPYCFG/index.html>

The jobstreams and output for examples shown in this newsletter are available from the Innovation FTP site.

- Go to: www.fdr.com
- Click on “FTP login” and Enter your access code (if you don’t have one, you can request one on this webpage).
- Click on the “Download” directory, then “Tech_Support_Samples/FATSCOPY_Examples/Feb2014”.
- For FDREPORT examples go to “Tech_Support_Samples/FDREPORT_FATSCOPY_Examples”.

FATSCOPY

AUDIT

Q I am setting up a complex migration project. How can I keep a record of which data sets and volumes have been copied without having to save and sort through hundreds of job logs?

A FATSCOPY can write records to an audit data set which contains information on the data sets copied (the input and output volumes, expiration dates, etc.) by that job. A second copy job can append to that audit data set, and then a third, and so forth. You can run the FATAUDIT utility at any time which reads the audit data set and formats out a report displaying the files copied and summary information for all of the jobs which were recorded in that audit data set.

Here's an example of a job which writes to a new audit data set:

FTP member: Copy_With_New_Audit.txt

```
//JOB LIB      DD  DSN=FATCOPY.LIBRARY,DISP=SHR
//AUDIT1      EXEC PGM=FATSCOPY,REGION=0M
...
//AUDIT       DD  DSN=JAT.FATSCOPY.AUDITDSN,UNIT=SYSALLDA,
//            DISP=(NEW,CATLG),SPACE=(TRK,(5,5))
//TAPEOUT     DD  DSN=DUMMY,DISP=(NEW,KEEP),UNIT=VTAPE
//SYSIN       DD  *
COPY
  SELECT ALLDSN,VOL=A00001
  SELECT ALLDSN,VOL=B34220
/*
```

A second job which appends to that audit data set would change the AUDIT DD to:

```
//AUDIT       DD  DSN=JAT.FATSCOPY.AUDITDSN,DISP=MOD
```

but otherwise looks the same as the first job, with new SELECT statements.

Here is a FATAUDIT job which reads the audit data set to produce a printable report:

FTP member: Write_Audit_Report.txt

```
//AUDIT2      EXEC PGM=FATAUDIT,REGION=0M
//SYSABEND    DD  SYSOUT=*
//AUDITRPT    DD  SYSOUT=*
//AUDIT       DD  DSN=JAT.FATSCOPY.AUDITDSN,DISP=SHR
/*
```

FATSCOPY AUDIT

Here is a sample of a portion of an Audit Report produced by FATAUDIT:

FATAUDIT DETAIL REPORT														
JOBNAME=JATPAN		STEPNAME=FATSCOPY		RUN DATE= 2013303		RUN TIME= 145653		CPUID=CPUC						
INPUT INFORMATION							OUTPUT INFORMATION							
DATA SET NAME	VOLSER	FSEQ	VSQ	M/V	EXPDATE	CAT	SCRDATE	VOLSER	FSEQ	VSQ	EXPDATE	CAT	TMS RC	REAS
NEW NAME	BLOCKS		BYTES		BLOCKS		BYTES							
JAT.EE.FATS.FILE1	CCR009	1	1	NO	2019001	YES	E10037	1	1	2013304	NO	YES	0000	
JAT.EE.FATS.FILE2	CCR009	2	1	NO	2019002	YES	E10037	2	1	2013304	NO	YES	0000	
		2		0		2		2		0				
...														
FATAUDIT SUMMARY REPORT														
TOTAL INPUT VOLUMES	-	25												
TOTAL OUTPUT VOLUMES	-	25												
TOTAL BYTES READ	-	9550256056												
TOTAL BYTES WRITTEN	-	9550256056												
TOTAL BLOCKS READ	-	1463991												
TOTAL BLOCKS WRITTEN	-	1463991												
TOTAL FILES COPIED	-	486												
TOTAL FAILED COPIES	-	0												
TOTAL JOBS EXECUTED	-	46												

Q OK, but I want to run two (or more) FATSCOPY jobs at a time. Can I write to the same audit data set with copy jobs that are running concurrently?

A You can't use the same sequential audit data set for two jobs which run at the same time. There are two options you can use: use separate audit data sets and merge them into one Audit Report, or use a System Logger log stream to write audit records to a single log stream.

- One "set" of copy jobs can use an audit data set MY.AUDIT.DATASET1 and a second "set" can use MY.AUDIT.DATASET2. When you want to produce an Audit Report, the FATAUDIT utility can use both audit data sets as input and produce a single Audit Report.

Here's how you use 2 audit data sets to produce 1 report:

FTP member: [Audit_Report_Using_Two_Audit_Datasets.txt](#)

```
//AUDIT      EXEC  PGM=FATAUDIT,REGION=0M
//AUDITRPT   DD    SYSOUT=*
//AUDIT      DD    DSN=MY.AUDIT.DATASET1,DISP=SHR
//           DD    DSN=MY.AUDIT.DATASET2,DISP=SHR
/*
```

- Instead of writing audit records to a sequential data set, FATSCOPY can write audit records to a system logger log stream. The z/OS system logger is a component of z/OS that must be activated and configured. If you have configured a log stream to receive FATSCOPY audit records, then your copy jobs will look like:

FTP member: [Copy_Using_System_Logger.txt](#)

```
//JOB LIB    DD    DSN=FATCOPY.LIBRARY,DISP=SHR
//AUDIT1     EXEC  PGM=FATSCOPY,REGION=0M
...
//TAPEOUT    DD    DSN=DUMMY,DISP=(NEW,KEEP),UNIT=VTAPE
//SYSIN      DD    *
COPY  AUDITLOG=MY.FATSCOPY.LOGSTRM
SELECT ALLDSN,VOL=A00001
SELECT ALLDSN,VOL=B34220
...
```

and audit records are written to the log stream. Concurrent jobs can write to the same log stream. The FATAUDIT utility can read audit records from the log stream and produce Audit Reports.

FDREPORT BASIC REPORTS

FDREPORT is a planning tool which can be used with RMM or CA 1 to query the tape management database using a broad range of powerful selection parameters.

FDREPORT is available to FATSCOPY customers at no charge for 90 days.

FDREPORT generates reports on the tape environment that you can use to determine which volumes you need to copy.

Sample FDREPORT volume usage reports FOR RMM AND CA1

RMM REPORT - LIST OF VOLUMES & DATA SETS NOT EXPIRED IN VOLSER ORDER

VOLSER	DATA SET NAME	EXPDAT	EXDAY	%FU	APPROXSIZE	FILE SIZE	PHYSICALSIZ
200154	A03.A04345.RSDGR07.C109244.T023014.E2014338	2014.345	374	3	12619.874M	12619.612M	643825.664K
200159	A03.A04345.RSDBK07.C109244.T023015.E2014338	2014.345	374	3	12619.874M	12619.612M	13631.488K
200161	ANIC01.SMF.ESA.JAN12	2014.062	91	7	23410.199M	23409.459M	5249.171M

RMM REPORT - VOLUMES NOT IN SCRATCH STATUS:

VOLSER	VOLSTAT	CRDATE	EXPDAT	RTDATE	RETENTVALU	DSCOUNT	PREVOL	NXTVOL	OWNER
FAT49P	MASTER	2008.088	1999.365	2008.093		1			SS001
FDR54P	MASTER	2008.088	1999.365			0			SS001
I00000	MASTER	2003.297	2012.358	2014.022		29	I03745	I00094	SS040

FOR CA1 - LIST OF VOLUMES & DATA SETS NOT EXPIRED & NOT EDM, IN VOLSER ORDER

VOLSER	VOLSTAT	NDSNB	%FU	CRDATE	CRDAY	EXPDAT	EXDAY	CA-1	DENSITY
800034		1	0	2013.119	205	2014.119	160	3590	CART TAPE
800041		0	7	2010.341	1079	1999.000	65535	3590	CART TAPE
800044		0	1	2012.286	404	2016.102	873	3590	CART TAPE

Sample FDREPORT Summary Reports

```
FDR400 FDRABR REPORT STANDARD SUMMARIES - FDREPORT VER 5.4/80 - INNOVATION DATA PR..
RMM REPORT - TOTAL VOLUMES NOT IN SCRATCH STATUS:
FINAL TOTALS --
TVVOLSER-----200287 TOTAL VOLUMES NOT IN SCRATCH STATUS
```

```
FDR400 FDRABR REPORT STANDARD SUMMARIES - FDREPORT VER 5.4/80 - INNOVATION DATA PR..
RMM REPORT - TOTAL VOLUMES IN SCRATCH STATUS:
FINAL TOTALS --
TVVOLSER-----61411 TOTAL VOLUMES IN SCRATCH STATUS
```

```
FDR400 FDRABR REPORT STANDARD SUMMARIES - FDREPORT VER 5.4/80 - INNOVATION DATA PR..
RMM REPORT - APPROX SIZE OF ALL EXPIRED DATA SETS & (NOT SCRATCH)
FINAL TOTALS --
TDAPRSIZ---59.704T TDVOLSER-----138767
```

APPROX SIZE OF ALL EXPIRED DATA SETS & (NOT SCRATCH) Total Terabytes

```
FDR400 FDRABR REPORT STANDARD SUMMARIES - FDREPORT VER 5.4/80 - INNOVATION DATA PR..
RMM REPORT - APPROX SIZE OF ALL DATA SETS NOT EXPIRED & (NOT SCRATCH)
FINAL TOTALS --
TDAPRSIZ---102.286T TDVOLSER-----61569
```

APPROX SIZE OF ALL DATA SETS NOT EXPIRED & (NOT SCRATCH) Total Terabytes

FDREPORT BASIC REPORTS

Here we show a simple FDREPORT example of GROUPING on the VOLUME STATUS (MASTER,SCRATCH,...) Grouping can be used with many other fields such as expiration date, creating program/job, last reference date, and more. With groupings you can get a good overview in (sub)totals per grouping (MASTER/SCRATCH) and the final totals.

LIST ALL TAPES GROUPED PER VOLUME STATUS SCRATCH - EXTRACT FILE 2013.329

VOLSER	VOLSTAT	EXPDAT	LRDATE	LOCATION
100029	SCRATCH		2009.190	AWAATL1
100060	SCRATCH		2011.274	AWAATL1
104610	SCRATCH			AWAATL1
SUBTOTAL -- TVSTATUS--SCRATCH				
TVVOLSER-----94				

LIST ALL TAPES GROUPED PER VOLUME STATUS MASTER - EXTRACT FILE 2013.329

VOLSER	VOLSTAT	EXPDAT	LRDATE	LOCATION
100048	MASTER	2010.062	2010.057	AWAATL1
100049	MASTER	2007.310	2013.239	AWAATL1
100050	MASTER	2009.295	2009.290	DISTANT
SUBTOTAL -- TVSTATUS--MASTER				
TVVOLSER-----4518				
FINAL TOTALS --				
TVVOLSER----- 4612 ← TOTAL FOR BOTH SCRATCH AND MASTER				

Tape Volume Usage Report

VOLUME USAGE REPORT - EXTRACT FILE 2013.326

VOLSER	VOLUSEBYTES	%FU
200002	21041.650M	29
200003	3694.789M	0
200004	21041.650M	29
200005	28800.102M	32
200007	3694.789M	0
200011	0.000M	7
200015	22052.438M	31
200017	20815.544M	7
200021	5612.859M	1
200022	46852.009M	26
200024	0.000M	3
200025	3694.789M	0
253782	7.082M	1
253783	0.029M	0
253784	210.022M	12
253785	197.869M	8
FINAL TOTALS --		
TVVOLSER-----	5203	TVUSEBYT-- 38548.046G ← TOTAL GIGABYTES

You should use this report to identify tapes that have a history of errors. You might want to process these tapes separately.

TAPES WITH PERMANENT ERRORS - EXTRACT FILE 2013.326

LUNI	VOLSER	LWRDAT	LRDATE	PERMRDERR	PERMWTErr
0801	201638	2006.251	2006.251	92	2
080E	200204	2010.253	2013.254	116	0
080F	201450	2010.252	2010.271	106	0
0810	202032	2010.212	2010.212	211	0
080F	202740	2011.358	2012.141	38	0

NOTE: For more information on how to use FDREPORT with FATSCOPY view: http://www.fdr.com/Using_FDREPORT_for_Tape_Migration_with_FATSCOPY.pdf
See page 2 on how to access these sample FDREPORT jobs.

FATSCOPY CHECKPOINT/RESTART

FATSCOPY Checkpoint/Restart examples:

Q I have long-running copy jobs that I sometimes have to interrupt at the end of my processing window. How can I make it easy to pick up where I left off?

A FATSCOPY's checkpoint/restart features allow you to stop a running job with an operator command (STOP or CANCEL) and save the status of the current job in a DSNTABLE data set. The DSNTABLE data set saves a list of the files which were selected for the copy job, and marks which of those files have been copied. A FATSCOPY RESTART job using that DSNTABLE data set loads the list of files, skips those which have already been copied, and copies the selected files starting with the first non-copied file.

Here's an example of a job which might select a large number of data sets:

FTP member: Large_Copy_Job.txt

```
//JOB1          EXEC PGM=FATSCOPY,REGION=0M
//STEPLIB       DD   DSN=FATSCOPY.LIBRARY,DISP=SHR
...
//DSNTABLE      DD   DSN=JAT.FATSCOPY.RESTART,UNIT=SYSALLDA,
//              SPACE=(TRK,(15,5),RLSE),DISP=(,CATLG)
//TAPEOUT        DD   DSN=DUMMY,UNIT=VTAPE,DISP=(,KEEP)
//SYSIN          DD   *
COPY MULTIFILE=YES
SELECT CATDSN=PROD.**
/*
```

The operator stops the job with a STOP command while the 259th selected file is being copied. FATSCOPY finishes copying the 259th file and then terminates, writing out the data set JAT.FATSCOPY.RESTART. The following job is used to continue copying starting with the 260th file:

FTP member: Restart_Job.txt

```
//JOB2          EXEC PGM=FATSCOPY,REGION=0M
//STEPLIB       DD   DSN=FATSCOPY.LIBRARY,DISP=SHR
...
//DSNTABLE      DD   DSN=JAT.FATSCOPY.RESTART,DISP=SHR
//TAPEOUT        DD   DSN=DUMMY,UNIT=VTAPE,DISP=(,KEEP)
//SYSIN          DD   *
COPY RESTART
/*
```


FATSCOPY Q & A

Q I want to combine as many files onto a single tape or set of tapes, but I want to do this in separate jobs run over the course of a week. How can I do this without having to manually keep track of where the output files have been written?

A You can use FATSCOPY's LASTAPE feature. When you use LASTAPE for the first time in a copy job, such as in this example:

FTP member: Copy_Using_LASTAPE.txt

```
//FATSCOPY EXEC PGM=FATSCOPY,REGION=0M
//STEPLIB DD DSN=FATSCOPY.LIBRARY,DISP=SHR
...
//TAPEOUT DD DSN=DUMMY,UNIT=VTAPE,LABEL=(,SL)
//SYSIN DD *
COPY EXPDTGROUP=999, LASTAPE=MY.LASTAPE.DATASET
SELECT ALLDSN,VOL=CCR009
SELECT ALLDSN,VOL=001122, NUMVOLS=10
...
/*
```

EXPDTGROUP=999 tells FATSCOPY to stack as many files onto as few tapes as possible. FATSCOPY catalogs a dummy file (with a name you choose as the LASTAPE= parameter) at the end of the last output tape in that copy job. The next time you run a copy job using the same LASTAPE file name, FATSCOPY determines that the LASTAPE file already exists, finds out which volume it is on, and continues to write files on that volume. At the end of the job, it recatalogs the dummy file at the (new) end of the output tape. You can repeat this to keep adding files to the volume you have been writing to.

Q I have ranges of input volsers I want to copy to a single high-capacity output tape. How can I do this?

A The FATSCOPY keywords NUMVOLS (to specify a range of consecutive volsers) and EXPDTGROUP=999 (to stack all data sets onto as few volumes as possible) make this easy to do:

FTP member: Stacking_Volume_Ranges.txt

```
//FATSETUP EXEC PGM=FATSCOPY,REGION=0M
//STEPLIB DD DSN=FATSCOPY.LIBRARY,DISP=SHR
...
//TAPEOUT DD DSN=DUMMY,UNIT=MYTAPE,DISP=(,KEEP)
//SYSIN DD *
COPY EXPDTGROUP=999
SELECT ALLDSN,VOL=003200, NUMVOLS=100
SELECT ALLDSN,VOL=003400, NUMVOLS=50
/*
```

This will select volser 003200 to 003299

This will select volser 003400 to 003449

FATSCOPY Q & A

Q I have a tape-backed TS7740 virtual tape device. I want to make backup copies of the logical volumes in the VTS while minimizing the number of physical tape mounts. What is the best way to do this with FATSCOPY?

A FATSCOPY has two keywords, PHYSVOL and ALLPHYS, which allow you to select and copy all of the logical volumes from a single physical volume in a single job. If you know the physical volser you want to copy from, use PHYSVOL. If you know the logical volser of one logical volume on the physical tape, use ALLPHYS. Here's an example for when you have a logical volser and you want to find and copy all the logical volumes on the same physical back-end tape:

FTP member: Copy_Using_IBM_PHYSVOL.txt

```
//STEP1      EXEC  PGM=FATSCOPY,REGION=0M
//STEPLIB    DD   DSN=FATSCOPY.LIBRARY,DISP=SHR
...
//TAPEOUT    DD   UNIT=OUTDEV,DSN=DUMMY,DISP=(,KEEP)
//MAPTAPE    DD   UNIT=(INPUTDEV,,DEFER),DISP=(,CATLG),
//            DSN=MY.MAPTAPE.FILE,LABEL=(,SL),
//            DCB=(RECFM=F,LRECL=80,BLKSIZE=80,TRTCH=NOCOMP)
//SYSIN      DD   *
COPY        VIRTTYPE=IBM
SELECT     ALLDSN,ALLPHYS=CCR012
/*
```

The MAPTAPE data set is used to communicate tape mapping information between the VTS and FATSCOPY. FATSCOPY will find out which physical volume that logical volume CCR012 is located on, and select and copy all the logical volumes on that physical volume.

NOTE: a similar function is available for Oracle StorageTek tape-backed virtual tape devices.

PRODUCT UPDATES

This table shows, for each current release of z/OS, the minimum levels of each Innovation product that should be installed. Use the table when upgrading your z/OS system, to verify that you have the correct Innovation software in use. If not, you should install the latest version. If you already are using the indicated minimum level, you may wish to install the latest version anyway in conjunction with the Operating System upgrade. If not, please review the Product Notes that follow the table on our website at www.fdr.com/osreq.cfm for ZAPs that may be required depending on the hardware and software in use at your installation.

MAINFRAME SERVER SUPPORT

zEC12 Mainframe Server Support requires no changes to the supported Innovation Products.

As of February 2014

PRODUCT	z/OS 1.10 -1.12 Minimum	z/OS 1.13 Minimum	z/OS 2.1 Minimum	Latest Version
FDR	V5.4/74	V5.4/74	V5.4/78	V5.4/80
COMPAKTOR	V5.4/74	V5.4/74	V5.4/78	V5.4/80
ABR	V5.4/74	V5.4/76	V5.4/78	V5.4/80
FDRCRYPT	V5.4/74	V5.4/74	V5.4/78	V5.4/80
FDREPORT	V5.4/74	V5.4/74	V5.4/78	V5.4/80
FDRVIEWS	V5.4/74	V5.4/74	V5.4/78	V5.4/80
FDRINSTANT	V5.4/74	V5.4/74	V5.4/78	V5.4/80
FDRDRP	V5.4/74	V5.4/74	V5.4/78	V5.4/80
FDRREORG	V5.4/74	V5.4/74	V5.4/78	V5.4/80
FDRPAS	V5.4/76	V5.4/76	V5.4/78	V5.4/80
FDRPASVM	V5.4/80	V5.4/80	V5.4/80	V5.4/80
FDRMOVE with FDRPAS	V5.4/76	V5.4/76	V5.4/78	V5.4/80
FDRERASE for z/OS	V5.4/70	V5.4/70	V5.4/70	V5.4/70
FDRSOS	V5.4/76	V5.4/76	V5.4/78	V5.4/80
FATS/FATAR/FATSCOPY	V4.9/20	V4.9/20	V4.9/25	V4.9/28
IAM	V8.1/18	V8.1/18	V9.0/04	V9.1/01
UPSTREAM CLIENT	V3.6.0	V3.6.0	V3.6.0	V3.7.28
UPSTREAM for System z	V3.6.0	V3.6.0	V3.6.0	V3.7.28
UPSTREAM z/OS UNIX	V3.5.0	V3.5.0	V3.6.0	V3.7.1
UPSTREAM Director	-	-	-	V4.2.01
UPSTREAM z/OS Storage	V3.6.0	V3.6.1	V3.7.0	V3.8.0
UPSTREAM Reservoir	-	-	-	V3.7.2e

For the most up-to-date information visit the website at: <http://www.fdr.com/osreq.cfm>

NOTE: While prior versions might still work, the versions listed are the minimum supported versions.

VISIT US AT:

SHARE Technology Exchange: March 10-12, 2014 Anaheim CA

EMC World 2014: May 5-8, 2014 Las Vegas, NV

SHARE Technology Exchange: August 4-6, 2014 Pittsburgh, PA

FDREPORT WITH FATSCOPY

FDREPORT: A Companion Tool Available with FATSCOPY

FDREPORT is a planning tool which can be used with RMM or CA 1 to query the tape management data base using a broad range of powerful selection parameters.

FDREPORT generates reports on the tape environment that you can use to determine which volumes you need to copy.

Sample selection criteria:

- Data sets expiring after a certain date
- Data sets created within a specified date range
- Data sets created by specified programs
- ...etc.

For an EMC DLM, FDREPORT can generate scratch volume reports that can be used as input to the DLM utility for scratching the backing disk space of logical tape volumes that are in scratch status.

FDREPORT is available to FATSCOPY customers at no charge for 90 days.

FDREPORT helps to properly plan a customer's migration.

FDREPORT can report on:

- How many tapes are
 - Active
 - In scratch status
 - Managed by an EDM
- % of space used on each tape
- Number of tapes and capacity expiring in nnn days

You can generate these reports from the customer's active RMM/CA 1 data base.

You can also create an extract file from the tape management data base, **allowing you to generate reports on your own system** instead of at the customer's site. This extract file is very helpful for those 3rd parties/VARs that are contracted to do a tape migration.

Sample FDREPORT Summary Reports

```
FDR400 FDRABR REPORT STANDARD SUMMARIES - FDREPORT VER 5.4/80 - INNOVATION DATA PR..
RMM REPORT - TOTAL VOLUMES NOT IN SCRATCH STATUS:
FINAL TOTALS --
TVVOLSER-----200287 ← TOTAL VOLUMES NOT IN SCRATCH STATUS
```

```
FDR400 FDRABR REPORT STANDARD SUMMARIES - FDREPORT VER 5.4/80 - INNOVATION DATA PR..
RMM REPORT - APPROX SIZE OF ALL DATA SETS NOT EXPIRED & (NOT SCRATCH)
FINAL TOTALS --
TDAPRSIZ---102.286T TVVOLSER-----61569 ← TOTAL VOLSER
↑
TOTAL TERABYTES
```



See pages 6 and 7 for more details on how to use FDREPORT with FATSCOPY.
A pdf of this newsletter is available at www.fdr.com/FYINewsFATSCOPY.pdf