

230.20 FDRSOS MESSAGES

This section describes the various printer and console messages that may be output by FDRSOS system and the various ABEND codes with which it may terminate.

**FDRSOS
MESSAGE FORMAT**

The general format of FDRSOS messages and WTORs is as follows:

FDRnnn – *message-text*

FDRnnn** – *message-text*

When “**” appears the message is an error message. The step ABENDs, or passes a return code of 08 or higher unless indicated otherwise in the specific message.

RETURN CODES

FDRSOS always passes a return code (step completion code) at the end of the step, unless it ABENDs. A return code of zero indicates that FDRSOS has performed all functions successfully. A return code of 04 indicates that the testing period for a trial version of the product has expired. Any other return code indicates that errors of some kind have occurred during this execution of FDR. Check the listing for the error messages.

ABEND CODES

FDRSOS ABEND codes range from a U0100 to a U0900. Most user ABENDs are preceded by an FDR message. Some FDRSOS ABENDs result in the entire FDRSOS step ABENDING (for errors such as invalid JCL and control statement errors), while some ABENDs only affect a subtask under FDRSOS (such as a dump or restore subtask). Subtask ABENDs are documented by an FDR319 message but they usually do not cause the entire step to ABEND; other subtasks may continue to execute and the step ends with a non-zero return code to indicate that some unusual condition occurred.

FDRSOS INSTALLATION AND MESSAGES
FDRSOS CONSOLE MESSAGES

230.21 FDRSOS CONSOLE MESSAGES

The following may appear on a z/OS operator's console during FDRSOS operations.

FDRW01 CONFIRM REQUEST TO *function* UNIT=uuuu,VOL=vvvvv,JOB=jjjjjj

Reason: The job indicated in the message wishes to restore or erase (as indicated by "*function*") the Open System volume specified. This confirmation can be suppressed by specifying the "CONFMESS=NO" operand on the RESTORE statement or "CONFERASE=NO" operand on the ERASE statement.

Action: Reply **YES** – Operator approves the operation.

Reply **NO** – Operator does not approve the operation; the operation is terminated. The subtask terminates with a [U0801](#) ABEND, but other restore or erase requests in the same FDRSOS step may proceed.

FDRW89 FDR - TRIAL VERSION FROM INNOVATION DATA PROCESSING EXPIRES IN 'nnn' DAYS - PLEASE CONTACT INNOVATION

Reason: This is a trial version of FDRSOS. The number of days the trial remains active is displayed. The product stops operating when the trial expires.

Action: When there are ten or fewer days before the trial is due to expire this message becomes non-deletable. Call INNOVATION DATA PROCESSING for assistance.

230.22 FDRSOS PRINTER MESSAGES

These messages may appear in FDRSOS printed output.

FDR001 FDR SAFEGUARD OPEN STORAGE -- FDRSOS VER *v.r/mmb* -- INNOVATION DATA PROCESSING DATE=*yy.ddd* PAGE *nnn*

Reason: This is the FDRSOS page heading, specifying the version level of FDRSOS. “*v.r*” indicates the version and release (e.g., 5.4), “*mm*” is a 2-digit number indicating the maintenance level and “*b*” is “P” for a production version, “T” for a trial, and “B” for a beta test version.

FDR002 *function* SUCCESSFULLY COMPLETED VOL=*vvvvvv*

Reason: The Open System volume with volume serial *vvvvvv* was successfully processed by the function indicated.

FDR006 *function* OPERATION CANCELLED BY OPERATOR

Reason: An operator replied “NO” to an FDRSOS request for approval to restore a disk (message [FDRW01](#)). An [U0801](#) ABEND follows.

FDR007 STARTING|ENDING TIME OF *function* -- *hh.mm.ss* -- UNIT=*address*,IN=*inputdd* ,OUTPUT=*outdd1 outdd2*

Reason: Documents the time that FDRSOS began or ended the function indicated. “*address*” is the System z device address of the Open System volume. “*inputdd*” is the DD name of the DD name of the Open System volume for DUMP, PRINT, and ERASE; this may be a DISKx name or a DD name dynamically allocated by FDRSOS. For RESTORE, it is the TAPEx DD name of the backup being restored. “*outdd1*” is the output DD name. If a duplicate backup was requested, it is shown by DD name “*outdd2*”.

FDR008 OPEN ERROR OR NO DD STATEMENT DD=*ddname* - *function* BYPASSED

Reason: An open error occurred for the “*ddname*” specified.

- 1.A tape DD statement specified by “*ddname*” is missing. A TAPEDD=x operand appeared on a MOUNT statement but the corresponding TAPEx DD statement was not found.
- 2.The DD statement SYSPRINx is missing. If MAXTASKS= was specified, there must be a SYSPRINx DD for every TAPEx DD.
- 3.An OPEN error occurred for the specified DDname. Check the job log for IBM error messages.

Action: The operation associated with the failing DD statement will be bypassed. Other operations in the same FDRSOS step may execute.

FDR012 NOT AN FDR *type* TAPE DSN=*dsname*

Reason: The input tape is not the correct format.

- 1.The backup data set input for a restore is not an FDRSOS-created backup.
- 2.The JCL specifies the wrong tape or disk volume serial numbers, or specifies the serials in the wrong order for a multi-volume backup data set
- 3.The FDRSOS backup file may have been written over.

“*type*” is BACKUP if the tape is not in FDR format at all, and SOS if it is in FDR format but is not an FDRSOS backup (i.e., is a regular FDR backup). The data set name printed is the backup data set name. A mini DUMP is printed displaying the first tape block read, which may help you understand what is really in this backup.

Action: The restore subtask abends with [U0205](#). If possible, correct the JCL to point to the proper backup and resubmit

FDRSOS INSTALLATION AND MESSAGES
FDRSOS PRINTER MESSAGES

**FDR014 BACKUP HAS MORE|LESS SECTORS THAN RESTORE DEVICE - RESTORED
 TERMINATED|CONTINUING**

Reason: During a RESTORE, FDRSOS determined that the size of the Open System volume that was backed up to the input backup data set was a different size than the target Open System volume. A MINI DUMP is printed displaying the FDRSOS header record.

Action: If the backup contained more data sectors, the restore is terminated. If it contained fewer data sectors, the restore continues but the restored volume may or may not be usable, depending on the system that uses the data.

FDR020 RACF VOLUME PROTECTION FAILED ON VOL=vvvvvv

Reason: A security check was done in the DASDVOL class for the volume serial indicated. The user was not authorized to READ that volser for DUMP and PRINT, or ALTER the volser for RESTORE or ERASE.

Action: The restore subtask abends with [U0801](#).

FDR031 DD=ddname - NUMBER OF CHARACTERS EXCEEDS 5 - STATEMENT IGNORED

Reason: FDRSOS encountered a DD statement starting with "DISK" but the total length of the DD name was more than five (more than one character after DISK, e.g., DISKAA).

Action: The DD statement is ignored. Correct the JCL and resubmit the job.

FDR032 NO VALID DISK(X) DD STATEMENTS WERE FOUND

Reason: FDRSOS did not find any Open System volumes to process. The volumes to process must be specified either by DISKx DD statements or MOUNT VOL= statements. If MOUNT statements were used it may be that the volume serials were misspelled, or the volumes have not been made available by an FDRSOS VARYON or LABEL operation.

Action: Correct the job stream and resubmit the job.

**FDR042 RESTORE FROM BACKUP OF VOL=vvvvvv UNIT=uuuu CREATED ON
 DATE=yy.ddd TIME=hh.mm.ss**

Reason: Documents the creation time and date of the backup from which a restore is being done, as well as the volume serial (vvvvvv) and original device address (uuuu) of the disk that was dumped.

**FDR090 DIAGNOSTIC MINI DUMP-FDRDMPRT VER v.r/nnb-INNOVATION DATA
 PROCESSING DATE/TIME -- yyddd/hh.mm.ss PAGE -- nn**

Reason: General page heading for the MINI DUMP processor listing the version, level, date, time, and page.

FDR091 REGS

Reason: General register contents formatted by the MINI DUMP processor.

FDR092 type LEN=nnnn(hhhh) LOC=lllll

Reason: Control block formatted by the MINI DUMP processor. "type" is the name of the control block, "nnnn" is the length in decimal, "hhhh" is the length in hex, and "lllll" is the storage location in hex.

FDR093 CCWS LEN=nnnn(hhhh)

Reason: CCWs formatted by the MINI DUMP processor.

FDR094 reason -- CCWS NOT PRINTED(TERMINATED)

Reason: CCW formatting was requested in a MINI DUMP. However, for the reason printed, CCW printing was terminated.

Action: Contact INNOVATION DATA PROCESSING Technical Support for further problem determination.

FDR099 NEAR RELATIVE DATA LOCATION *nnn* -- error description

Reason: The common parsing routine encountered an error in parsing the user specified control statements. The approximate location of the error was position *nnn*, counting the first position as 000.

Action: Correct error described in “*error description*” and re-submit job.

FDR122 OPERATION STATISTICS FOR SOS VOLUME...*volser*

Reason: This is the header for a table of statistics about the dump, restore, or print operation that was performed on the Open System volume indicated. This may include:

BYTES ON VOLUME – Total size, in bytes, of the Open System volume being processed

BYTES READ FROM DASD – Total number of bytes actually backed up from the Open System volume (should be the same as “bytes on volume” for full backups).

BYTES WRITTEN TO DASD – Total number of bytes actually restored to the Open System volume (should be the same as “bytes on volume” for full restores from full backups).

BYTES ON BACKUP – Total number of bytes actually written to or read from the backup. This is slightly higher than the DASD bytes because of control data

COMPRESSION SAVINGS – This will always be zero.

DASD SECTORS BACKED UP|WRITTEN – Number of 512 byte data sectors read from or written to the Open System volume.

BACKUP BLOCKS WRITTEN|READ – Number of physical blocks written to or read from the backup file.

DASD EXCPS – Number of write/read I/O requests issued to the Open System volume.

BACKUP FILE EXCPS – Number of write/read I/O requests issued to the backup file.

CPU TIME (SECONDS) – The CPU (TCB) time required to process this volume, in seconds and thousandths of a second.

ELAPSED TIME (MINUTES) – The actual time, in minutes and tenths, required to process this volume.

BACKUP|RESTORE TIME (EXCLUDING MOUNTS) – The actual time, in minutes and tenths, required to process this volume, excluding the time spent waiting for input or output tape volumes to be mounted (at OPEN or EOVS).

BACKUP COPY *n* ON *type* DSN=*dsname* VOL=*volumes* – Documents the location of the backup file created. “*n*” is the copy number (1 or 2) and “*type*” is DISK or TAPE.

RESTORE FROM DSN=*dsname* – Documents the name of the backup file being restored.

FDR129 I/O ERROR ON DISK PACK--LAST SEEK ADDRESS READ X'*bbbbbbbb*'

Reason: An I/O error or logical error was detected by FDRSOS on this volume. “*bbbbbbbb*” is the sector number (in hex) of the first sector referenced by the I/O that got the error (the actual sector in error may follow that sector). An IBM IOS000I message may also have been printed on the Job log. An [FDR149](#) message is printed detailing the I/O error.

Action: FDRSOS attempts to continue processing from this point, bypassing the data in error, but this may make the backup or the restored disk unusable. If more than MAXERR= errors occur, the operation is terminated with a [U0101](#) ABEND. Contact INNOVATION DATA PROCESSING Technical Support for assistance.

FDRSOS INSTALLATION AND MESSAGES
FDRSOS PRINTER MESSAGES

230.22

**FDR149 I/O TRACE SECT|CCHH=X'xxxxxxxx' mmm.mmm MSEC ttt DD=ddname UNIT=unit
CCW/DATA - IOB iobdata CCW/DATA - SENSE sensedata ccwdata**

Reason: This message is produced for FDRSOS internal traces and is also printed for I/O errors on either the Open System volume (in which case SECT= documents the relative sector number first referenced by the I/O operation on which the error occurred) or the backup file (CCHH= documents the disk location for backup files on DASD, and is meaningless for tape backups).

The elapsed time of the I/O in milliseconds is shown as “*mmm.mmm*”.

“*ttt*” Is an internal clock value.

“*ddname*” and “*unit*” Document the device this message relates to.

“*iobdata*” Documents the I/O termination status.

If a unit check (device error) occurred, “*sensedata*” documents the sense bytes returned by the device.

“*ccwdata*” Documents the CCW chain that was issued, along with 8 (occasionally 16) bytes of data associated with each CCW.

Action: Check the job log of the FDRSOS job for IBM messages that may relate to the error. If the cause of the error is not obvious, contact INNOVATION DATA PROCESSING Technical Support for assistance in interpreting and correcting the error.

FDR200 BLOCK DROPPED--(synadaf info)--(data block)

Reason: FDRSOS or FDRSOSTC has encountered a permanent BSAM read or write I/O error on a backup data set. The cause of the error is documented as “*synadaf info*” as provided by the IBM SYNAD exit. “*data block*” is the first 20 bytes of backup data block, if available. An IBM IOS000I I/O error message may also appear in the job's JOB LOG.

Action: The step is terminated with an [U0200](#) ABEND.

FDR201 FORCE END OF VOLUME TAKEN--BLOCK WILL BE REWRITTEN

Reason: During dump processing a tape I/O error caused a tape volume switch to occur. See message [FDR200](#) for details. If BSAM caused the volume to switch during error recovery before FDR was able to force the EOVS, this message is not issued. If z/OS device swapping (SWAP) was allowed to occur for cartridge drives, the message is not issued (the only way to tell if a SWAP occurred is to observe in the job log that the tape was dismounted from a different drive than that on which it was initially mounted).

FDR203 PREMATURE TAPE END OF FILE DSN=dsname

Reason: FDRSOS detected an end-of-file on the backup data set without encountering the FDR trailer identification record. Possible causes are:

- ❖ The backup that created this file did not complete successfully.
- ❖ The backup run completed successfully, but the backup file was not correctly cataloged.
- ❖ The JCL for the restore specifies volume serial numbers for the backup file, but the last volume has been omitted, or the volume serials are out of order.

Action: In the last two cases, you can do the restore by specifying the correct volume serial numbers on the DD statement for the backup file.

FDR204 TAPE BLOCK LENGTH CHECK--BLOCK BYPASSED

Reason: FDRSOS records the length of the block written internally. FDRSOSTC detected that the length of the block read from the input did not match the length recorded. An FDR MINI DUMP is printed. If message **FDR204** occurs many times, the cause is probably that you are copying from a tape that was created by using a utility program (such as IEBGENER) to copy an FDRSOS backup file. Most copy utilities cannot copy FDR backup tapes. FDRSOSTC or FATAR must be used to copy FDRSOS backups.

Action: FDRSOSTC continues processing bypassing this block. Data may be lost from the tape.

FDR206 TAPE BLOCK COUNT ERROR *nn* BLOCKS WERE READ, BUT *nn* WERE EXPECTED. VOLSER=*vvvvvv*

Reason: The number of blocks read from a backup tape did not match the block count in the tape trailer label. A MINI DUMP is printed of the DCB, UCB, and registers. The registers are from the block count exit. Register zero (0) contains the block count from the trailer label, which reflects the number of blocks written during the backup run. The fourth word of the DCB contains the count of blocks read during the restore.

Action: FDRSOS ignores the error and continue processing.

FDR210 I/O ERROR ON BACKUP DD=*ddname*

Reason: An I/O error has occurred writing the backup data set. An [FDR149](#) message follows to document the error.

Action: The backup subtask terminates immediately with an [U0200](#) ABEND.

FDR211 FDRSOS ERROR ON DD=*ddname* REASON=*reason*

Reason: FDRSOS RESTORE had an error attempting to initialize the DD statement shown, for the reason shown. Reason codes include:

- 1 – **NO MATCHING MOUNT TAPEDD** – A TAPE*x* DD was found in the JCL but there was no matching DISK*x* DD or MOUNT statement to indicate where to restore the backup.
- 2 – **UNIT/VOLSER NOT SPECIFIED** – UNIT= and/or VOL= must be specified on the MOUNT statement.
- 3 – **UNIT ADDRESS NOT FOUND** – The UNIT= operand was specified but no target DASD device with that address was found.
- 4 – **DD STATEMENT IS MISSING** – The TAPEDD=*x operand* was specified but no TAPE*x* DD statement was found.
- 5 – **VOLSER NOT FOUND** – The VOL= operand was specified but that volser was not found in the UCB of any target DASD device. You may need to execute the VARYON or LABEL function of FDRSOS.
- 6 – **TAPEDD NOT SPECIFIED** – TAPEDD= was not specified
- 7 – **NOT A VALID SOS DEVICE** – The unit or volume specified was not a valid Open System volume.

Action: FDRSOS will bypass this DD statement and continue processing.

FDR212 FDRSOS ERROR UNIT=*uuuu* REASON=*reason*

Reason: FDRSOS had an error attempting to initialize or process the Open System volume on the device address shown as "*uuuu*", for the reason shown. Reason codes include:

- 1 – **VARY FAILED - VOLSER *vvvvvv* IS A DUPLICATE** – Operation failed because the volume serial of the Open System volume is already assigned to another Open System or System z volume.
- 2 – **VOLSER FILLED IN BUT DOES NOT RESPOND** – An Open System UCB has a volume serial set, but the device does not respond. Check the enterprise storage subsystem.
- 3 – **DEVICE IS RESERVED TO ANOTHER MACHINE** – RESERVE=YES was specified (or defaulted) but the Open System volume is reserved to another system.
- 4 – **NOT A RESPONDING SOS UNIT** – Unit is not responding to I/O requests.
- 5 – **UNIT IS DUPLICATE OR INCLUDED IN PRIOR MOUNT** – The UNIT= value specified on the MOUNT statement is a duplicate of that on a previous MOUNT (or is included in a prefix on a previous MOUNT).
- 6 – **UNIT DOES NOT CONTAIN SPECIFIED VOLSER** – Both UNIT= and VOL= were specified, but the volume serial was not found on any of the devices specified.
- 7 – **TAPEDD=X FOR MOUNT COMMAND NOT FOUND** – TAPEDD= was omitted when required.
- 8 – **ERROR READING/WRITING THE LABEL SECTOR** – An I/O error occurring on the volume label from an Open System volume during a VARYON or LABEL operation.

FDRSOS INSTALLATION AND MESSAGES
FDRSOS PRINTER MESSAGES

- 9 – VOLUME DOES NOT CONTAIN A LABEL** – For a VARYON operation, the volume was not previously initialized by a LABEL operation.
- A – SETVOL MISSING REQUIRED ON LABEL COMMAND** – For a LABEL operation, the SETVOL= operand was omitted from the MOUNT statement.
- B – I/O ERROR ACQUIRING STATUS** – PRINT=STATUS was specified but an I/O error occurring reading the Open System volume.
- C – I/O ERROR ERASING SECTORS** – An I/O error occurring during an ERASE operation.
- D – SETVOL VOLSER CONTAINS INVALID CHARACTERS** – The volume label contained other than alphanumeric and national characters.
- E – UNIT ADDRESS IS INVALID OR NOT 4 CHARACTERS** – In a UNIT= parameter, either non-hexadecimal characters were specified, or the length was less than four and did not end with “*”. Device addresses must be 4-digit addresses.
- F – BCV/SNAP UNIT NOT FOUND OR NOT CONNECTED TO BCV** – A BCV or SNAP operation was requested but FDRSOS was not able to resolve internal Symmetrix device numbers to System z device addresses for the source volume BCV, or SNAP target. Possible causes: the BCVUNIT= or SNAPUNIT= address is invalid, VARYON was not executed against the devices.
- G – BCV/SNAP UNIT NOT SPLIT OR SYNCHRONIZED** – A BCV RE-ESTABLISH or SNAP RELEASE was requested, but the volume associated with the source volume is either still connected or a previous SPLIT or SNAP has not completely synchronized the device.
- H – MATCHING BCV/SNAP VOL NOT FOUND IN MVS SYSTEM** – A BCV or SNAP operation was requested, but FDRSOS was unable to identify the z/OS device address of the BCV or SNAP target. This will occur if you have not run a VARYON against the device addresses; if this was done, check your Symmetrix and z/OS configurations.
- I – LOAD FAILURE FOR MODULE EMCQCAPI** – Unable to load the EMC SNAP API load module. Make sure that the EMC load library is in the linklist or a STEPLIB.
- J – CANNOT DO A ESTABLISH/RE-EST FROM BCV VOLUME** – An ESTABLISH or RE-ESTABLISH BCV operation was requested, but the volume specified was the BCV volume, not the source volume. Change your MOUNT statement to point to the source.
- K – EMC CODE *nn* - reason** – An operation was requested, but the request to the Symmetrix subsystem failed with the indicated reason code “*nn*”. “*reason*” is a brief text explanation of the reason.
- L – CANNOT SPLIT BCV VOLUME PAIR NOT ESTABLISHED** – A SPLIT operation was requested, but the source volume was never ESTABLISHED with a BCV volume or the BCV has been reused with a different source volume.
- Q – CANNOT INITIALIZE LOCAL BACKUP VOL IN USE** – A LOCALBACKUP TYPE=INIT attempted to initialize a volume that already contained data. If you are sure that data is not required, ERASE the first 1000 blocks of the disk (see example in Section 210.20 “[FDRSOS Initialization Examples](#)”) and re-execute the LOCALBACKUP.
- R – FULL UNIT ADDRESS MUST BE SPECIFIED** – For a LABEL or LOCALBACKUP operation, the UNIT= operand on the MOUNT statement was a prefix. It must specify a full device address.
- S – SIZE OF LOCAL BACKUP CANNOT BE REDUCED** – A LOCALBACKUP TYPE=UPDATE specified SIZE= on a MOUNT statement, but the local backup volume was already larger than the value given.
- T – VOLUME NOT INITIALIZED FOR LOCAL BACKUP** – A LOCALBACKUP TYPE=UPDATE was executed, but the volume specified by the MOUNT statement did not point to a volume previously initialized as an FDR/UPSTREAM local backup volume.

Action: FDRSOS will bypass this Open System volume and continue processing.

action or reason description

function ERROR - UNIT=*uuuu* REASON=L - TARGET IN ACTIVE RELATIONSHIP

function ERROR - UNIT=*uuuu* REASON=L - PENDING ESTABLISH RETRY TIME EXHAUSTED

function ERROR - UNIT=*uuuu* REASON=L - CANNOT RESYNCHRONIZE VOLUME IN SIMPLEX STATUS

function ERROR - UNIT=*uuuu* REASON=L - CANNOT SPLIT VOLUME PAIR NOT DUPLEX STATUS

function ERROR - UNIT=*uuuu* REASON=S - CANNOT SPLIT VOLUME NOT PAIRED

function ERROR - UNIT=*uuuu* REASON=S - PENDING WAIT RETRY TIME EXCEEDED

function ERROR - UNIT=*uuuu* REASON=S - UNABLE TO IDENTIFY TARGET VOLUME

function ERROR - UNIT=*uuuu* REASON=U - ERROR INVALIDATING *type* VOL1 LABEL

function ERROR - UNIT=*uuuu* REASON=X - ERROR RESTORING STANDARD VOL1 LABEL

function ERROR - UNIT=*uuuu* REASON: UNIT IS NOT IN CONSISTENCY GROUP - *congroup*

function ERROR - THAW FAILURE RC=*nn*

function ERROR - DCE INITIALIZATION FAILED

function ERROR - CONSISTENT SPLIT REQUEST REQUIRES CTG=XX SPECIFICATION

function ERROR - SUSPEND FAILURE - CHECK CTG=*xx*

function CONSISTENCY GROUP TIMED OUT. BACKUP IS NOT CONSISTENT

FDR213 FDRSOS PSEUDO MOUNTED UNIT=*uuuu* VOL=*volser* - SYM-NUMBER=X'*ssss-ssss*'

Reason: FDRSOS successfully processed a VARYON statement for the Open System volume on device address "*uuuu*". Its volume serial is "*volser*" and its internal enterprise storage system ID is "*ssss-ssss*" (subsystem number and internal device number).

FDR214 FDRSOS PSEUDO DIS-MOUNTED UNIT=*uuuu* VOL=*volser*

Reason: FDRSOS successfully processed a VARYOFF statement for the Open System volume on device address "*uuuu*". Its volume serial was "*volser*".

FDR215 FDRSOS LABELED UNIT=*uuuu* TO VOL=*volser*

Reason: FDRSOS successfully processed a LABEL statement for the Open System volume on device address "*uuuu*". Its volume serial has been set to "*volser*".

FDRSOS INSTALLATION AND MESSAGES
FDRSOS PRINTER MESSAGES

230.22

**FDR216 STATUS OF SOS SCSI VOLUME UNIT=uuuu VOL=volser - SYMNUMBER=X'ssss-
ssss' UNIT=uuuu status message UNIT=uuuu IS UNKNOWN VOLUME TYPE**

Reason: If PRINT=STATUS is specified on an FDRSOS control statement, FDRSOS attempt to determine the type of each Open System volume processed. A block of **FDR216** messages are printed for each volume, identified by its device address "uuuu", volume serial "volser" and internal enterprise storage system ID "ssss-ssss" (subsystem number and internal device number). The header line shown always appears, following by one or more additional **FDR216** messages. For a RESTORE, this information is printed for the volume both before and after the restore. This information may be useful to you to confirm which Open System volumes correspond to which System z device addresses.

When the volume type is successfully identified, FDRSOS shows the type of Open System that created the volume (e.g., IBM AIX, HP-UX, SUN SOLARIS, NOVELL, etc.) plus additional information about the contents of the volume (volume or volume group identifications, volume group information, UNIX mount points, and other information; the details vary depending on the type of Open System).

If "**UNKNOWN VOLUME TYPE**" is printed, FDRSOS was unable to identify the type of Open System volume. However, FDRSOS is not sensitive to the format of the volume and will still able to process it successfully.

NOTE: The volume information displayed by FDRSOS is based on INNOVATION DATA PROCESSING's current understanding of the format of volumes created by each of the Open Systems supported, as obtained by research and experimentation. INNOVATION DATA PROCESSING will update the PRINT=STATUS display in subsequent releases of FDRSOS based on experience. If PRINT=STATUS does not display your Open System volumes correctly, please contact INNOVATION DATA PROCESSING so that we can obtain information necessary to improve the displays.

**FDR218 FDRSOS UNIT=uuuu WAS stat BCV/SNAP UNIT=bbbb - WAIT FOR
SYNCHRONIZATION DEFERRED**

Reason: TimeFinder/Clone SNAP targets are being used for FDRSOS backups (see Section 200.5 "[FDRSOS EMC TimeFinder™ Support](#)"). This message indicates the status of the SNAP target as a result of as a result the FDRSOS operation requested (SNAPPED or RESTORED). "uuuu" is the System z address of the source volume and "bbbb" is the address of the SNAP target.

FDRSOS initiates the requested operation on all volumes specified by MOUNT statements but does not wait for the function to complete within the Symmetrix subsystem.

"stat" is text that indicates the volume status:

SNAPPED TO TARGET - SNAP was executed

FDR219 FDRSOS UNIT=uuuu IS BEING DUMPED FROM BCV/SNAP UNIT=bbbb

Reason: TimeFinder/Clone SNAP targets are being used for FDRSOS backups and SNAP=USE was specified on the DUMP statement (see Section 200.5 "[FDRSOS EMC TimeFinder™ Support](#)"). This message indicates that source volume "uuuu" is actually being dumped from its point-in-time image on SNAP unit "bbbb".

FDR221 TAPEOUT SYNAD ERROR, DCB ADDRESS UNIDENTIFIED.

Reason: FDRSOSTC entered its SYNAD routine for TAPEOUT and the DCB passed was not the expected value. This is an internal error and should not occur.

Action: An [U0200](#) ABEND is issued with Reason Code 221 (in register 15). Examine JOBLOG and SYSLOG for any messages that may be the cause of the error on the TAPEOUT device. Correct these errors and resubmit. If necessary, contact INNOVATION DATA PROCESSING Technical Support for assistance.

FDR222 FDRSOS ERROR UPDATING VOLINFO REASON=reason

Reason: During a RESTORE with VOLRESET=NO, FDRSOS encountered an error attempting to preserve all of the volume ID information on the output Open System volume. "reason" documents the error:

- 1 – **AIX MAXIMUM LOGICAL VOLS EXCEEDED** – While attempting to update the logical volumes on an IBM AIX volume group, more than 255 logical volumes were encountered. This probably indicates that the Open System volume, although it appears to be formatted by AIX, is not properly formatted or has been overlaid.
- 3 – **NO LOGICAL VOLUME MANAGER ON BACKUP** – An HP/UX disk did not contain logical volume manager footprints.
- 4 – **PVID IN PHYSICAL HEADER MISMATCH** – An HP/UX disk contained different Physical Volume IDs (PVIDs) in several control blocks.
- 5 – **VGDA VOLUME GROUP ID DOES NOT MATCH** – An HP/UX disk contained different Volume Group IDs (VGIDs) in several control blocks.

FDR223 FDRSOS CREATED/UPDATED LOCAL BACKUP PARTITION

Reason: A LOCALBACKUP statement was executed successfully. An Open System volume was initialized for use as an FDR/UPSTREAM local backup (TYPE=INIT) or an existing local backup volume was updated with new defaults (TYPE=UPDATE).

FDR230 program type UNIT=uuuu REASON=reason

Reason: SOSINSTANT had an error attempting to special hardware facilities to get a point-in-time image of a volume for SOSINSTANT use. "type" is **WARNING** or **ERROR**. "uuuu" is the device address of the target disk and "reason" indicates the cause. Note that some reason codes have several versions depending on the hardware facility that failed. Reason codes include:

- 1 **MOUNT STATEMENT NOT SPECIFIED** – There was no MOUNT statements following a SNAP/SPLIT/PSPLIT/FCOPY statement. MOUNT statements are used to define the source volume and the target device for the SOSINSTANT copy.
- 2 **MOUNT STATEMENT NOT FOUND** – Some control statements were provided after the SNAP/SPLIT/PSPLIT/FCOPY statement, but none of them were MOUNT statements. Only MOUNT statements can follow that statement.
- 3 **typeUNIT= NOT SPECIFIED IN MOUNT STATEMENT** – A MOUNT statement does not contain the operand SNAPUNIT=, PPRCUNIT=, FLASHUNIT=, or BCVUNIT=. It is required.
- 4 **SOURCE AND typeUNIT ADDRESSES ARE EQUAL** – The unit on which the volume specified by VOL= is mounted is the same as the unit specified by xxxxUNIT=. A volume cannot be copied to itself.
- 5 **INCOMPATIBLE SOURCE AND type DEVICE TYPE** – The device type of the unit on which the volume specified by VOL= and the unit specified by xxxxUNIT= are not the same. You cannot SNAP from a 3380 to a 3390 or vice versa.
- 5 **TARGET VOLUME IS IN SPECIAL STATUS - CTG** –
- 6 **type UNIT NOT FOUND** – The device address specified by xxxxUNIT= was not found in the current I/O configuration. Be sure you specified a 4-digit hex address; add a leading zero if required.
- 6 **type MUST BE SPECIFIED AS A 4-DIGIT ADDRESS** –
- 6 **UCBVTOC FIELD NOT SET *CS*** –
- 7 **type UNIT NOT DASD** – The device address specified by xxxxUNIT= was defined as a type other than disk in the current I/O configuration.
- 8 **type UNIT IS NOT OFFLINE** – The disk address specified by xxxxUNIT= was not varied offline to z/OS. If you are sure that you want to use this device as an SOSINSTANT target, vary it offline. Note that SOSINSTANT completely overlays that target volume and all existing data on the volume is lost.

FDRSOS INSTALLATION AND MESSAGES
FDRSOS PRINTER MESSAGES

- 9 UNKNOWN DEVICE OR DEVICE NOT FLASHCOPY CAPABLE** – Device is not capable of FlashCopy or FlashCopy cannot be used between the source and target devices specified.
- B TARGET NOT READY FOR RESTORE - RETRY LATER** –
- F I/O ERROR DURING PROCESSING** – An unexpected I/O error occurred while processing the special hardware request. The error is documented by another message.
- Q CONTROLLER DOES NOT SUPPORT LRE/WFT** – Contact INNOVATION DATA PROCESSING for assistance.
- Q FLASHCOPY QUERY EXIT - DATA DISPLAY** –
- R TARGET VOLSER DOES NOT MATCH SOURCE** – The operand VERIFYVOLSER=YES was specified, but the current volsr of the target does not match the volsr of the source volume.
- S type IS NOT PAIRED WITH PRIMARY** –
- S FUNCTION *function* FAILED - RTNCD=*rc* RSNCD=*reas*** –
- S TARGET IS NOT IN SIMPLEX STATE** – The FlashCopy target volume is already paired with a different volume. FlashCopy cannot be used until the FlashCopy session is terminated.
- S SOURCE VOLUME IS NOT IN FLASHCOPY STATUS** – An error occurred while invoking the IBM FlashCopy API. Contact INNOVATION DATA PROCESSING for assistance.
- S SRC/TGT VOLUMES NOT PAIRED OR IN SIMPLEX STATE** – The FlashCopy source and target volumes are each already paired with a different volume OR they are not both in Simplex state. FlashCopy cannot be used on this pair until those FlashCopy sessions are terminated.
- S FLASHCOPY - ANTRQST FUNCTION UNEXPECTED STATUS *status*** –
- T FLASHCOPY VOL(S) ARE IN ACTIVE RELATIONSHIPS** – Either the FlashCopy source or target volume is already paired with a different volume. FlashCopy cannot be used on this pair until that FlashCopy session is terminated.
- T FLASHCOPY TARGET IS IN AN ACTIVE RELATIONSHIP** – The FlashCopy target volume is already paired with a different volume. FlashCopy cannot be used on this volume until that FlashCopy session is terminated.
- T FLASHCOPY ESTABLISH PAIR FAILURE** –
- T FLASHCOPY RELEASE FAILURE - WITHDRAW FUNCTION** – An attempt to release the relationship due to the use of FCOPY=(USE,REL) has failed. Review [FDR149](#) for information on current device status, return, and reason codes. Possibly due to the use of FCOPY=COPY or an external PCWITHDR being performed.
- X EMCQCAPI ERROR RC=*rrrrrrr* ACTION=*aa* IORC=*iiii*** – An error occurred invoking the EMC SNAP API. Error codes are displayed. If the API returned a text explanation of the error, a second line with MSG= is displayed. One common cause is that the EMCSCF address space is not active.
- X ANTRQST SERVICE IS NOT AVAILABLE – X**
- X CONSISTENT FLASHCOPY NOT SUPPORTED –**
- X UNABLE TO ACQUIRE RESERVE ON UNIT WITHIN TIME LIMIT –**
- X UNABLE TO ACQUIRE ENQ ON ALL UNITS WITHIN TIME LIMIT –**
- X UNABLE TO ACQUIRE ENQ RESERVE DUE TO INTERNAL ERROR –**

Action: In most cases, the volume will be bypassed. If additional MOUNT statements were specified, additional volumes will be processed.

***program type* - INTERNAL-code FUNCTION ERROR**

Reason: SOSINSTANT had an error attempting to special hardware facilities to get a point-in-time image of a volume for SOSINSTANT use. “*type*” will be WARNING or ERROR. “*code*” indicates the cause. Note that some reason codes have several versions depending on the hardware facility that failed. Reason codes include:

- M MAINLINE** – Not REESTABLISH, ESTABLISH, or SPLIT.
- V VOLMATCH** – Not ESTABLISH or SPLIT.

program type - text

Reason: SOSINSTANT had an error attempting to special hardware facilities to get a point-in-time image of a volume for SOSINSTANT use. "type" is **WARNING** or **ERROR**. "text" indicates the cause. Note that some reason codes have several versions depending on the hardware facility that failed. Reason codes include:

**SRC/TGT NOT IN SAME SUBSYSTEM –
SOURCE-TARGET MATCH NOT FOUND –
DATA =data –**

FDR302 CONTROL STATEMENT ERROR NEAR REL LOCATION *nn* -- REASON *x* -- JOB TERMINATED

Reason: An error was encountered during the processing of an user-supplied control statement. If "NEAR REL LOCATION *nn*" appears, the keyword or operand causing the error is at or near column "*nn*" on the input statement. The single character reason code defines the error:

- 1 – A SELECT/EXCLUDE statement did not specify any operands. Control statement was blank after the command name.
- 2 – Command on the first control statement was incorrectly specified; i.e.,: was not DUMP, RESTORE, PRINT, ERASE, LABEL, VARYON, or VARYOFF.
- 3 – Operand on the first control statement was incorrectly specified.
- 4 – Operand did not end with a blank or comma.
- 5 – SYSIN data set was empty.
- 6 – Expected continuation statement was not found. The previous statement ended with a comma and a blank.
- 7 – Invalid or incompatible operands were specified or a required operand was omitted.
- 8 – An operand on a SELECT/EXCLUDE statement specified a blank or comma after the equal sign.
- 9 – One of the operand values exceeded the maximum permitted number of characters or digits.
- F – An operand requiring a numeric value had non-numeric characters.
- G – An operand requiring a numeric value had too many digits.
- I – Keyword is invalid under the operation indicated.
- J – Control statement was completely blank.
- K – A required operand such as STARTBLK= was not specified on the preceding SELECT/EXCLUDE.
- Q – Keyword exceeded maximum value or was negative.
- R – TYPE=xxx was specified multiple times.
- S – An operand on the SELECT-type Command was specified multiple times or was mutually exclusive with another operand.
- U – The TYPE=xxx operand was missing or invalid on the DUMP, RESTORE, ERASE, or PRINT statement.
- V – The FROMBLK= value was greater than the TOBLK= value.

Action: The FDRSOS step is terminated; no further control statements are read. Correct error and resubmit job.

FDR303 CARD IMAGE--control statement image PARM ENTRY

Reason: Display all input control statements from the SYSIN data set. If "PARM ENTRY" appears after the control statement, entry was passed from the PARM FIELD on the EXEC statement.

FDRSOS INSTALLATION AND MESSAGES
FDRSOS PRINTER MESSAGES

FDR316 FDR DID NOT FIND REQUESTED *item*

Reason: This message is displayed when the statement identified by "*item*" did not get processed. This could occur when:

A MOUNT did not select any Open System volumes, perhaps because the UNIT= and/or VOL= operands were incorrectly specified or the volume specified by VOL= has not been mounted by a VARYON statement.

A SELECT/EXCLUDE statement specified a TAPEDD= or VOL= that did not match any volume being processed.

Action: Be sure that you specified 4-digit device addresses (for example, UNIT=01E0 or UNIT=01F*) even if your operating system supports only 3-digit addresses; add a leading zero if necessary. Verify that the UNIT=, TAPEDD=, or VOL= specifies values appropriate for your configuration and job stream.

FDR319 FDR OPERATION ABNORMALLY TERMINATED COMP CODE=Ssss Uuuuu

Reason: An FDRSOS dump or restore subtask has abnormally terminated with either a system ABEND code of "sss" or an user ABEND code of "uuuu" (which ever is non-zero). Check IBM documentation for the meaning of system ABENDs.

Action: FDRSOS terminates this Open System volume and continues processing. If the JCL includes a SYSUDUMP or SYSABEND DD statement, a diagnostic dump is produced in most cases. Check for other FDR messages that may be printed prior to the ABEND; these may help you understand the error. Check IBM documentation for the meaning of system ABENDs, see Section 230.23 "[FDRSOS ABEND Codes](#)" for the meaning of user ABENDs. If you are unable to determine the cause of the ABEND, contact INNOVATION DATA PROCESSING Technical Support; have all messages and the diagnostic dump available.

FDR324 DDNAME=ddname MISSING OR IN ERROR REASON x

Reason: The DD statement identified by "ddname" had an error identified by the single character reason code:

- 1** – The SYSIN DD statement was missing or could not be opened. An [U0401](#) ABEND occurs.
- E** – The "DISKx" DD statement appeared more than once.
- F** – DISP=MOD was specified on a TAPEx or TAPExx DD statement. This may also mean that you directed multiple backups to the same TAPEx DD by the same TAPEDD=x on multiple MOUNT statements.
- G** – Both TAPEx and TAPExx point to backup data sets on disk. You cannot create two simultaneous disk backups. You can create simultaneous backups on tape and disk.

FDR336 DYNAMIC ALLOCATION ERROR COMP=cc, CODE=nnnn, INFO=iiii, DDNAME=ddname

Reason: Dynamic allocation was requested for a disk volume or a data set (such as a disk or tape backup data set), but the allocation failed. "cc" is the return code in REG 15, "nnnn" and "iiii" are from the dynamic allocation parameter list. These are documented in the IBM manual *Authorized Assembler Services Guide*.

Frequently encountered CODE values include:

- 0210** – Requested data set not available (e.g., another job had the required backup data set allocated with DISP=OLD).
- 0220** – Requested volume not available (e.g., another job is using a tape volume required).
- 0484** – The operator replied "**NO**" to Message IEF235D.
- 1708** – Data set not found in the catalog (e.g., BACKUPDSN= was misspelled).

Action: This volume or data set operation is bypassed. If necessary, contact INNOVATION DATA PROCESSING for assistance.

FDR370 OPEN ERROR -- TAPE BYPASSED DSN=dsname

Reason: An error occurred opening the backup data set for a dump or restore.

Action: The operation is bypassed. Check for IBM messages in job log. If necessary, contact INNOVATION DATA PROCESSING Technical Support for assistance.

FDR390 NO SECTORS MET SELECTION CRITERIA

Reason: A TYPE=PARTIAL operation was executed, but the range of data specified by FROMBLK= and TOBLK= did not exist on the Open System volume processed. The values specified were probably larger than the size of the volume.

FDR400 FDR SAFEGUARD OPEN STORAGE -- FDRSOSTC VER v.r/mmb -- INNOVATION DATA PROCESSING DATE=yy.ddd PAGE nnn

Reason: This is the FDRSOSTC page heading, specifying the version level of FDRSOSTC. "v.r" indicates the version and release (e.g., 5.4), "mm" is a 2-digit number indicating the maintenance level, and "b" is "P" for a production version, "T" for a trial, and "B" for a beta test version.

FDR402 INVALID CONTINUATION

Reason: FDRSOSTC detected that the last control statement ended with a comma but no continuation statement was found.

Action: Correct and resubmit job.

FDR446 FIRST RECORD NOT FDR HEADER

Reason: The first record read from the backup data set was not the expected special FDRSOS header record.

Action: An [U0626](#) ABEND is issued. Check that the input data set is an FDRSOS backup and resubmit. Contact INNOVATION DATA PROCESSING Technical Support for assistance if the problem recurs.

FDR447 CONTROL RECORD NOT FOUND

Reason: Each set of backup records is preceded by a control record describing them. A control record was not found when it was expected. This may be due to tape errors.

Action: An [U0626](#) ABEND is issued. Contact INNOVATION DATA PROCESSING Technical Support for assistance.

FDR450 TAPEIN SUCCESSFULLY COPIED TO TAPEOUT--BLOCKS READ nnnnnn BLOCKS WRITTEN nnnnnn

Reason: One file has been successfully copied from TAPEIN to TAPEOUT (and optionally to TAPE2OUT as well) by FDRSOSTC. Blocks read and blocks written should be the same. This message is followed by message [FDR615](#) detailing the data sets read and written.

FDR451 BLOCK GREATER THAN 32760 TO OUTPUT ON DISK ...JOB TERMINATED

Reason: FDRSOSTC detected the input file was on tape and blocked at over 32k and the output file to TAPEOUT is on Disk. (Initial release of FDRSOSTC does not support this function. A future release will eliminate this restriction)

Action: An U0502 ABEND is issued. Contact INNOVATION DATA PROCESSING for assistance after obtaining a storage dump.

FDR465 function FAILED ON DDNAME=ddname-- MISSING OR MISSPECIFIED.

Reason: The "function" that failed is due to one of these items:

- ❖ "ddname" printed is missing or misspelled.
- ❖ OPEN failure occurred for "ddname" specified in message.
- ❖ READ JFCB failure occurred for "ddname" specified in message.

Action: An U0629 ABEND occurs. Correct the specified DDNAME and resubmit the job.

FDRSOS INSTALLATION AND MESSAGES
FDRSOS PRINTER MESSAGES

FDR484 INTERNAL LOGIC ERROR - JOB TERMINATED

Reason: FDRSOSTC has encountered an unexpected error condition.

Action: If this message is accompanied by another error message see that message for appropriate action. Otherwise ensure the SYSUDUMP DD was included in the job and obtain a storage dump then call INNOVATION DATA PROCESSING Technical Support.

FDR498 *program (version)* PROCESSING COMPLETED WITH ERRORS

Reason: The program listed in the message completed the required processing but recoverable errors were encountered.

Action: Check the output, correct and rerun or restart as appropriate.

FDR499 *program (version)* PROCESSING COMPLETED

Reason: The program listed in the message completed the required processing.

FDR516 *function* REGISTERS -- R0=xxxxxxx R1=xxxxxxx R15=xxxxxxx

Reason: A CAMLST catalog request or an OBTAIN request failed. The type of CAMLST function and the registers make diagnosing the problem relatively simple. The return codes from catalog management are documented in the IBM manual *DFSMSdfp Advanced Services*.

Action: Check the return code(s) and take corrective action if the error is apparent or call INNOVATION DATA PROCESSING Technical Support for assistance.

FDR604 ERROR OCCURED POSITIONING TAPEIN REASON CODE-x

Reason: FDRSOSTC detected an error when positioning the input tape. The reason code "x" may be:

- 1 – Tape mark not read when expected
- 2 – Tape mark read when not expected
- 3 – Trailer label read is not EOVS1/EOF1
- 4 – Header label read is not HDR1
- 5 – Tape drive unit check during positioning
- 6 – Other I/O error during positioning

Action: An [U0659](#) ABEND follows. This may be due to hardware problems with the tape drive. If it occurs with the same input tape on more than one tape drive, contact INNOVATION DATA PROCESSING for Technical Support.

FDR615 *ddddddd* DSN=*dsname* FILE=*fn* VOL=*vvvvvv*...

Reason: Printed by FDRSOSTC at the end of each file copied. One [FDR615](#) message is printed for TAPEIN, TAPEOUT, and TAPE2OUT (if present). It documents the input or output DDNAME, data set name, file number (0 if on disk), and up to 20 volume serials.

FDR997 FDR ABNORMALLY TERMINATED VOL=*vvvvvv*

Reason: This FDRSOS subtask for the volume indicated has encountered an error from which it cannot recover. Other messages may be printed to detail the error.

Action: The subtask terminates with an user ABEND; see Section 230.23 "[FDRSOS ABEND Codes](#)" to interpret the ABEND code. If necessary, contact INNOVATION DATA PROCESSING Technical Support for assistance.

FDR998 FDR DUMP|RESTORE COMPLETED WITH ERRORS VOL=*vvvvvv*

Reason: This FDRSOS subtask for the volume indicated ran to completion but errors occurred during the operation. Other messages may be printed to detail the error.

Action: Review the messages to determine if corrective action is necessary. If necessary, contact INNOVATION DATA PROCESSING Tech Support for assistance.

FDR998 FDR COMPLETED WITH ERRORS

Reason: The FDRSOS step had one or more errors. Other messages may be printed to detail the errors. The step completion code is set to 12.

Action: Review the messages to determine if corrective action is necessary. If necessary, contact INNOVATION DATA PROCESSING Technical Support for assistance.

FDR999 FDR SUCCESSFULLY COMPLETED

Reason: The FDRSOS step completed without errors. The step completion code is set to 0 (zero).

FDRSOS INSTALLATION AND MESSAGES
FDRSOS ABEND CODES

230.23 FDRSOS ABEND CODES

FDRSOS or its utility programs may ABEND with any of the following user ABEND codes. In many cases, a diagnostic message is printed before the ABEND, so look up any error messages that were printed first. If no message was printed that relates to this ABEND, then read the explanation below. Call INNOVATION DATA PROCESSING Technical Support if you need assistance understanding or resolving the error.

U0100 Open Error Trying to Open a DASD or Tape DCB

Action: Usually preceded by an [FDR324](#) message. Check the job log for IBM messages that may indicate the reason for the error.

U0101 Maximum I/O Errors Exceeded on a Direct-Access Device

Action: More disk I/O errors than are allowed by the MAXERR= operand occurred. If you want to complete the operation in spite of the errors, specify a larger MAXERR= value. However, many data sets may be invalid.

U0200 I/O Error on Backup Data Set

Action: A permanent I/O has occurred on the backup tape or disk data set. The backup is not usable. This can also occur if an RDJFCB, DEVTYPE, or OPEN fails.

U0201 Premature End-of-File on Input

Action: The end of a backup file was reached without finding the special FDR trailer record.

U0204 Invalid Block read

Action: An invalidly formatted block was read from a backup.

U0205 Not an FDRSOS Backup

Action: A restore detected that the backup was not created FDRSOS.

U0401 SYSIN DD Statement Error

Action: SYSIN DD statement missing or incorrectly specified or I/O error on SYSIN data set

U0402 SYSPRINT/SYSPRINn DD Statement Error

Action: One of the above DD statements is missing or incorrectly coded or I/O error occurred processing the data set. There must always be SYSPRINT DD statement, and there must be a SYSPRIN n DD for each TAPE x DD if MAXTASKS= n was specified. Add the missing JCL statements.

U0502 One or more Control Statements are in Error

U0600 Required DD Statement is Missing or in Error

Action: A message is always printed with the DDNAME and reason.

U0626 An FDR/DSF/ABR Tape Format is in Error

U0659 Internal logic error

U0660 Stack storage management error

Action: An internal error occurred.

U0801 Restore Canceled by Operator or security failure

Action: This ABEND can also be issued for other errors as described by messages in the listing.

U0888 Copy completed with errors

Action: Errors occurred during an FDRSOSTC step but they were not severe enough to cause the entire COPY to be terminated. The listing should be examined to see what errors occurred.