

SHARE PROGRAM LIBRARY AGENCY

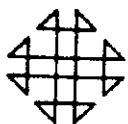


PROGRAM NUMBER

014009

University of Miami

1365 MEMORIAL DRIVE - CORAL GABLES, FLORIDA
(305) - 284-6257



CONTRIBUTED PROGRAM LIBRARY SUBMITTAL
(for IBM S/360, 1130 and 1800)

SHARE Program Library Agency
Triangle Universities Computation Center
P. O. Box 12076
Research Triangle Park, N. C. 27709

This form should be completed and submitted with the program package to PID at the address shown above. Standards and instructions for submitting programs are in your *User Group Reference Manual* or the *Contributed Program Submittal Standards Manual* available from PID.

- ① Program Order Number (to be filled in by PID) 360D-01.4.009
- ② System Type (machine) S./3.6.0.
- ③ Search Key S.U.P.E.R.-S.C.R.A.T.C.H././P.R.O.G.R.A.M.
/./T.O././A.U.T.O.M.A.T.I.C.A.L.L.Y././S.
C.R.A.T.C.H././U.N.W.A.N.T.E.D././D.A.T.A.
S.E.T.S././F.R.O.M././S.Y.S.T.E.M./.
- ④ Name of Author (if different than submitter's) R. D. SEAWRIGHT
- ⑤ Submitter's Name (direct technical inquiries to) R. D. SEAWRIGHT
- ⑥ Submitter's Address Cambridge Scientific Center
545 Technology Square
Cambridge, Mass. 02139
- ⑦ Title of Program SUPER-SCRATCH (SUPERSCR)
- ⑧ Submitter's User Group Affiliation Code and Installation Code S U C W
- ⑨ Submitter's Own Program Identification and Suffix (optional)
- ⑩ Primary Subject Code 0.1.4
- ⑪ Secondary Subject Codes 0.0.5 0.1.6
- ⑫ Operating or Monitor System Required 3.6.0 O.S.
- ⑬ New or Revision Code (if revision, show prior Program Order Number in item 1) N
- ⑭ Year Completed 6.7
- ⑮ Date of Submittal 0.2.0.8.6.8
- ⑯ Documentation (number of original pages submitted) 1.9
- ⑰ Abstract (should contain sufficient information for a reader to determine the value of the program). Listed on the reverse side of this form are subjects which may serve as a guide for a descriptive abstract.

CONTRIBUTED PROGRAM LIBRARY SUBMITTAL FORM

Subject Guide

- Purpose
- Programming Language used
- Version and modification level or release number of IBM Programming System used, or program order number for non-IBM authored program used
- Field of application
- Type of routine (main program, subroutine, etc.)
- Specific description of machine requirements
- Engineering Changes (EC) level of equipment (if pertinent)

ABSTRACT

SUPERSCR is designed to scratch all user data sets from a direct access device other than those specifically requested to remain. A list of data set names is constructed and placed in either or both of two locations:

- SYS1.PROCLIB, member = SAVE.
- SYSIN DD * when SUPERSCR is executed

The list of data set names are those that the user will want permanent to the system.

For statistical purposes a sequential data set named SYS1.STATLOG can be allocated into which SUPERSCR will write information concerning any purging of the direct access files. This feature is optional to the user.

SUPERSCR has been tested successfully on System/360 models 40, 50, and 65 running OS/360 PCP or MFT/I. SUPERSCR will run in the minimum OS/360 scheduler partition. Program execution time is negligible.

(Please attach additional pages if necessary) Total pages attached _____

Permission to Publish

"I hereby give anyone permission to reprint, reproduce, and distribute this program to anyone else."

⑮ Signature of Submitter and Date Robert D. Leavitt 4-26-68

⑰ Signature of Installation Addressee Robert D. Leavitt 4-26-68

T4SF

TABLE OF CONTENTS

Program Abstract	Page 1
Program Description	Page 2
User Considerations	Page 2
Recording Purge Action	Page 3
Card Deck Key	Page 4
Operating Instructions	Page 5
Sample Output	Page 6
Assembler Listing	Page 9

Super-Scratch (SUPERSCR)

Author R. D. Seawright

Revision: June 16, 1967

Direct inquiries to:

R. D. Seawright
 Union Carbide Corporation
 Cambridge Scientific Center
 545 Technology Square
 Cambridge, Massachusetts 02139

DISCLAIMER

Triangle Universities Computation Center (TUCC) serves solely as the distribution agent for contributed programs and does not test or maintain them. They are distributed essentially in the original form submitted by the author. Neither TUCC nor SHARE, INC., makes any warranty, expressed or implied, as to the documentation, function, or performance of the contributed programs.

Program Abstract

SUPERSCR is designed to scratch all user data sets from a direct access device other than those specifically requested to remain. A list of data set names is constructed and placed in either or both of two locations:

- (1) SYS1.PROCLIB, member = SAVE.
- (2) SYSIN DD * when SUPERSCR is executed

The list of data set names are those that the user will want permanent to the system.

For statistical purposes a sequential data set named SYS1.STATLOG can be allocated into which SUPERSCR will write information concerning any purging of the direct access files. This feature is optional to user.

In the past it was necessary for the computer operator to furnish a control card for each data set to be scratched. In order to prepare the control cards, the individual should know:

1. The data set name.
2. The volume containing the data set, i.e., DUPLICATE NAME ON VOLUME, an interesting problem when SYSOUT is on tape.
3. The data set retention status. It is possible for large scratch data sets to have been allocated to a volume and kept at job termination. A computer operator may or may not know which data sets can be scratched to free enough external storage to continue job stream processing.

SUPERSCR is particularly well suited for use in a production environment, since it keeps inefficiencies from creeping into the external storage arrangement. The by-products of using SUPERSCR can be summarized in the following remarks:

1. Use of the program will pose the need for data set naming standards.
2. Space allocation conventions can be set up.
3. A program librarian can centrally collect the names of all permanent data sets that are on-line to the system. This collection of names provides potential statistics for projecting storage requirements.
4. Continually monitoring the list of permanent data sets will effect efficient management of external storage.

Program Description

1. Program scratches unnecessary data sets on all on-line direct access devices to free storage.
2. The DSNAMES of data set scratched, volume involved, and tracks of storage freed by scratching action will be printed at SYSPRINT.
3. Data sets not to be scratched are so indicated by data sets defined by SYSUT1 and SYSIN DD cards. The dsnames are punched one per card by the user and placed in either or both data sets. SYSUT1 might define SYS1.PROCLIB while SYSIN is the input job stream.
4. Program execution will result in an automatic VTOC listing of all on-line direct access volumes.
5. Program will record purge data in SYS1.STATLOG if user provides a DD card defining the data set. The DDNAME should be STATLOG.
6. Program is written in Assembler language.
7. Data sets not to be scratched are so indicated by the user. SYSCTLG and SYS1.dsnames are not affected.
8. Suggest link editing the program into a system library, i.e. SYS1.LINKLIB.
9. Sys-res must be defined by a DD card whose DDNAME is DEVICE.

User Considerations (Please read before using program)

The execution of this program results in the scratching of all user data sets except the ones specified by the user. ALL ON-LINE DIRECT ACCESS DEVICES ARE AFFECTED BY THIS ACTION.

Before utilizing the program consider the following points:

Construct a list of the user data sets not to be scratched. Punch these dsnames into cards, one per card. A dsnames, up to 44 characters in length, may be punched beginning in any card column, but may not contain embedded blanks. Only one dsnames may be punched per card.

When these cards are prepared they will serve as input to SUPERSCR from either or both of two sources:

1. Place the cards as a member into SYS1.PROCLIB. Name member SAVE. The member may be added and updated using the data set utility IEBCPDAT. During execution of SUPERSCR the information in SAVE is used only if a DD card named SYSUT1 is provided. The card will define

SYS1.PROCLIB (or any other PDS), containing the member SAVE. In this manner, by deleting the SYSUT1 DD card, the user need not create SAVE.

2. As an addition or alternative to having the collection of dnames of protected data sets reside as a member of a PDS, the cards containing the dnames may be furnished as SYSIN to SUPERSCR.

Caution:

Input to SUPERSCR from SYSUT1, may require a little more maintenance than input from SYSIN only. However, the use of input from SYSUT1 will protect against the accidental loss of dname cards that would have entered the system from SYSIN. If both SYSUT1 and SYSIN are sources of input to SUPERSCR, the dnames in the two lists are concatenated. The dname of a protected data set may appear in either or both input sources. If the input source(s) to SUPERSCR contain no dnames, i.e., empty data sets, a message is printed at the console and the operator must reply 'U' to continue. The reply of any other character will result in job termination and no purging action on any device.

Recording Purge Action

The user may keep a record of any activity resulting from the execution of SUPERSCR by providing a DD card named STATLOG whenever the program is run. The DD card should define a sequential data. Example:

```
//STATLOG DD DSN=SYS1.STATLOG, DISP=(MOD,PASS),
UNIT=SYSDA, VOLUME=SER=serial
```

The data set SYS1.STATLOG might have been allocated using SPACE=(80, (100, 50)).

If the STATLOG DD card is furnished, the following information will be written to the next available record on SYS1.STATLOG.

1. DSN=NAME of data set scratched.
2. Volume serial number of direct access volume involved.
3. Date action taken as taken from SET DATE=yy.ddd.

SYS1.STATLOG may be periodically printed and/or punched at the user's option. This can be done using the data set utility IEBCPCH.

If the record of purge activity by SUPERSCR is not wanted, the user merely leaves out the STATLOG DD card.

Card Deck Key

Assembler language source deck, sequence 00010 through 06870 in cc 75-80; 687 cards.

Operating Instructions

1. Assemble source deck and link edit into SYS1. LINKLIB:

```
//SYSLMOD DD DSN=SYS1.LINKLIB (SUPERSCR),
          DISP=OLD, UNIT=SYSDA
```

2. Use IEHUPDAT to create a catalogued procedure to execute the load module. Input to IEHUPDAT:

```
. / ADD SCRATCH,00,0,1
. / NUMBR 00000000,00000000,00000010,00000010
/ STEP1 EXEC PGM=SUPERSCR
/ SYSPRINT DD SYSOUT=A
/ DEVICE DD UNIT=SYSDA, DISP=OLD,
            VOLUME=SER=ays-res
/ SYSUT1 DD DSN=SYS1.PROCLIB,UNIT=SYSDA,
            DISP=OLD
/ STATLOG DD DSN=SYS1.STATLOG,UNIT=SYSDA,
            DISP=(MOD,PASS), VOLUME=SER=serial
. / ENDUP
/*
```

SYSUT1 and STATLOG are optional DD cards as described above.

The DEVICE DD card must be provided.

3. Run the following job to execute the scratch program:

```
/ /PURGE JOB SUPER, SCRATCH, MSGLEVEL=1
/ /STEP EXEC PROC=SCRATCH
/ /SYSIN DD *
```

```
* Input cards containing dsnames of *
* Data sets not to be scratched *
/*
```

**SYSUT1	SCRATCHED FROM 222222 0020 TRACK(S) FREED.
**SYSUT2	SCRATCHED FROM 222222 0020 TRACK(S) FREED.
AAAAAAAA.AAAAAAAAA.AAAAAAAAA.AAAAAAAAA.00000001	SCRATCHED FROM 222222 0150 TRACK(S) FREED.
**SYSUT1.*	SCRATCHED FROM 222222 0020 TRACK(S) FREED.
**SYSUT2.*	SCRATCHED FROM 222222 0020 TRACK(S) FREED.
**SYSUT3.*	SCRATCHED FROM 222222 0040 TRACK(S) FREED.
**SYSUT1.*.*	SCRATCHED FROM 222222 0020 TRACK(S) FREED.
**SYSUT2.*.*	SCRATCHED FROM 222222 0020 TRACK(S) FREED.
**SYSUT3.*.*	SCRATCHED FROM 222222 0040 TRACK(S) FREED.
**SYSUT1.*.*.*	SCRATCHED FROM 222222 0020 TRACK(S) FREED.
**SYSUT2.*.*.*	SCRATCHED FROM 222222 0020 TRACK(S) FREED.
**SYSUT3.*.*.*	SCRATCHED FROM 222222 0040 TRACK(S) FREED.
**SYSUT1.*.*.*.*	SCRATCHED FROM 222222 0020 TRACK(S) FREED.
**SYSUT2.*.*.*.*	SCRATCHED FROM 222222 0020 TRACK(S) FREED.
**SYSUT3.*.*.*.*	SCRATCHED FROM 222222 0040 TRACK(S) FREED.
AAAAAAAA.AAAAAAAAA.AAAAAAAAA.AAAAAAAAA.00000012	SCRATCHED FROM 111111 0100 TRACK(S) FREED.
AAAAAAAA.AAAAAAAAA.AAAAAAAAA.AAAAAAAAA.00000020	SCRATCHED FROM 111111 0100 TRACK(S) FREED.
AAAAAAAA.AAAAAAAAA.AAAAAAAAA.AAAAAAAAA.00000001	SCRATCHED FROM 111111 0100 TRACK(S) FREED.
AAAAAAAA.AAAAAAAAA.AAAAAAAAA.AAAAAAAAA.00000010	SCRATCHED FROM 111111 0100 TRACK(S) FREED.
**SYSUT1	SCRATCHED FROM 111111 0020 TRACK(S) FREED.
**SYSUT2 Sample output from SUPERSCR	SCRATCHED FROM 111111 0020 TRACK(S) FREED.

-6-

AAAAAAAA.AAAAAAAAA.AAAAAAAAA.AAAAAAAAA.00000009	SCRATCHED FROM 111111 ON 173/67.
TEST1	SCRATCHED FROM 222222 ON 173/67.
TEST2	SCRATCHED FROM 222222 ON 173/67.
**SYSUT1	SCRATCHED FROM 222222 ON 173/67.
**SYSUT2	SCRATCHED FROM 222222 ON 173/67.
AAAAAAAA.AAAAAAAAA.AAAAAAAAA.AAAAAAAAA.00000030	SCRATCHED FROM 222222 ON 173/67.
**SYSUT1	SCRATCHED FROM 222222 ON 365/99.
**SYSUT2	SCRATCHED FROM 222222 ON 365/99.
**SYSUT3	SCRATCHED FROM 222222 ON 365/99.
**SYSUT1.*	SCRATCHED FROM 222222 ON 365/99.
**SYSUT2.*	SCRATCHED FROM 222222 ON 365/99.
**SYSUT1.*.*	SCRATCHED FROM 222222 ON 365/99.
**SYSUT2.*.*	SCRATCHED FROM 222222 ON 365/99.
**SYSUT1.*.*.*	SCRATCHED FROM 222222 ON 365/99.
**SYSUT2.*.*.*	SCRATCHED FROM 222222 ON 365/99.
**SYSUT3.*	SCRATCHED FROM 222222 ON 365/99.

END OF DATA FOR SDS OR MEMREF

Sample of purge history

,

MEMBER NAME SUPERSCR

LA 5,4(4) DNAME IN DD ENTRY
CLC 0(8,5),DEVNAME IS DNAME 'DEVICE'
BE DEVNAME YES - GET UCB PNTR FOR THIS DD ENTRY
CLC 0(8,5),UTIDNAME IS DNAME 'SYSUT1'
BE UTIDNAME YES - GET UCB PNTR FOR THIS DD ENTRY
CLC 0(8,5),LOGDNAME IS DNAME 'STATLOG'
BNE NEXTNAME NO - CHECK NEXT TIOT ENTRY
UT 0(1,1) YES - SET FLAG FOR PURGE RECORD REQUEST
B NEXTNAME
UTIDNAME
B NEXTNAME
B NEXTNAME
5,18(4) ADDRESS OF UCB POINTER IN TIOT
5,11(4) ADDRESS OF UCB STORE FOR LATER USE
5,5 CLEAR A 5 FOR IC
5,0(4) INSERT DD ENTRY LENGTH
AR 4,5 BUMP TIOT POINTER
B TIOTSKCH
L 4,CVTSYSAD(3) SYS-RES UCB
MVC IPLDEV(3),UCBNAME(4) IPL DEVICE NAME
UNPK YEAR(5),CVTDATE(13,3) UNPACK DATE YYDDO
UT DAY(2),X'F0' FIX SIGN
MVC DATE(25(3),DAY FORMAT DAY
MVC DATE(29(2),YEAR FORMAT YEAR
L 3,CVTILK(2(3) ADDRESS OF UCB ADDRESS TABLE
ST 3,UCBLNK STORE FOR DEVICE PROCESSING
ST 3,UCBPNTR ALWAYS AT FIRST ENTRY OF UCB ADDR TABLE
EJECT
* THIS SECTION READS INPUT FROM EITHER OF TWO SOURCES -
* (1) SYSIN DD *
* (2) DATA SET NAMED ON SYSUT1 DD CARD
*
LA 7,CULIST ADDR AT WHICH TO BUILD LIST OF PROTECTED DSNAMES
SR 6,6
ST 6,ECBGO CLEAR ECB
OPEN IUCBSYSIN,INPUT1
TM 0(1,1) WAS STATLOG DD CARD SUPPLIED
BZ SYSIN NO - BYPASS OPEN OF RECORDING AREA
OPEN IUCBSTATL,OUTPUT1 OPEN RECORDING AREA
READ IUCBSYSI,SP,UCBSYSIN,AREA
CHECK DECBYSI
BAL 2,CHECKLEN CHECK CARD IMAGE FORMAT
B SYSIN
ENDSYSIN CLCSE IUCBSYSIN
TM 0(1,1) WAS SYSUT1 DD CARD SUPPLIED
BZ SETCOUNT NO
OPEN IUCBSYSUT,INPUT1
FIND IUCBSYSUT,MEMBER,D FIND MEMBER NAMED 'SAVE'
SYSUT1 READ DECBYSU,SP,UCBSYSUT,AREA
CHECK DECBYSU
BAL 2,CHECKLEN CHECK CARD IMAGE FORMAT
B SYSUT1
ENDSYSUT CLOSE DECBYSUT
B SETCOUNT
EJECT
* THIS SUBROUTINE SCANS INPUT CARD IMAGES TO DETECT BLANK INPUT
* OR INPUT THAT DOES NOT BEGIN IN CARD COLUMN LINES. SUPERSCR
* PROCESSING LINES NOT TERMINATE IF SUCH A CONDITION IS DETECTED.
CHECKLEN EQU *

MEMBER NAME SUPERSCR

SR 5,5
LA 3,80
LA 4,AREA CARD IMAGE AREA
CHKBLNK1 CLC 0(4),X'40'
BNE NOTBLNK
LA 4,1(4)
BCT 3,CHKBLNK1
B SYSIN
NOTBLNK LR 8,4
CHKBLNK2 CLC 0(4),X'40'
BE QUITLOOK
LA 4,1(4)
BCT 3,CHK3LNK2
QUITLOOK LA 9,44
CR 5,9
BH TDMUCH
MOVEIN BCTR 5,0
EX 5,MOVEXX
LA 6,1(6)
LA 7,44(7)
BR 2
TDMUCH LR 5,9
B MOVEIN
EJECT
* THIS SUBROUTINE SCANS UCB ADDRESS TABLE FOR DEVICES THAT ARE
* DIRECT ACCESS AND ONLINE. THE UCB ADDRESS TABLE IS PROCESSED
* SERIALY WITH THE CURRENT PNTR IN R 3. RETURN IS AS FOLLOWS -
* R 4 = PNTR TO NEXT AVAILABLE UCB
* R 4 = ZERO IF NO MORE UCB'S ARE TO BE PROCESSED
*
L 3,UCBLNK NEXT ENTRY IN UCB LOOKUP TABLE FOR PROCESSING
CLC 0(2,3),FENCE END OF TABLE
BE NOUCB YES
LH 4,0(3) LOAD UCB ADDRESS FROM TABLE
LTR 4,4 CHECK FOR DUMMY UCB ENTRY
BZ NEXT IT IS
CLC DEVLCLASS(4),X'23' CHECK FOR DEVICE IS DIRECT ACCESS
BNE NEXT DEVICE IS NOT DIRECT ACCESS
STRSTAT(4),X'80' CHECK FOR DEVICE IS ON-LINE
BU DEVICEOK DEVICE IS ON-LINE
LA 3,2(3) UPDATE POINTER TO UCB LOOKUP TABLE
B DEVICE2 GO PROCESS NEXT DEVICE
*
EQU
*
B AROUND BRANCH OPTION TO USER
*
* THESE INSTRUCTIONS IN FOR 'READ-ONLY' US/360 SYS-RES.
CLC IPLDEV(3),JCONAME(14) IS THIS UCB FOR IPL DEVICE
BE NEXT YES - DISREGARD
*
* AROUND
EQU *
*
L 9,11(4) UCB ADDR OF UCB PNTR IN TIOT FOR 'DEVICE' DD CARD
STH 4,0(4) CONNECT UCB FOR CURRENT DEVICE TO TIOT
LA 3,2(3) UPDATE POINTER TO UCB LOOKUP TABLE
SI 3,UCBLNK
BH 14

```

MEMBER NAME    SUPERSCR
NGUOCH  SH     4,4 CLEAR R 4 TO INDICATE NO MORE DEVICES IN TABLE
        BT     14
        EJECT
* THIS SECTION CHECKS TO SEE IF THERE IS INPUT TO SUPERSCR
* SPECIFYING USNAME PROTECTION. IF NO SUCH INPUT EXISTS THE
* OPERATOR IS NOTIFIED. THE OPERATOR MUST REPLY 'U' IN ORDER
* TO CONTINUE THE JOB.
* SETCOUNT  ST 6,COUNTSET NUMBER OF USNAMES PROTECTED - 100 MAX ALLOWED
        LTR 6,6 ARE ANY USNAMES PROTECTED
        BNZ RESUME YES
        WTO 'NO USN DATA SETS PROTECTED EXCEPT SYSL.'
        MTOR 'REPLY U TO CONTINUE',GUORNOGU,1,ECBGD
        WAIT 1,ECB=ECBGD
        CCL GUORNOGU,X'E4' OLD OPERATOR REPLY 'U'
        BNE XCEPTION NU - WRAP UP JOB
        EJECT
* THIS SECTION READS VTUC AND DETERMINES DATA SETS TO BE
* SKRATCHED. USNAMES BEGINNING WITH 'SYSL.' AND 'SYSCTLG'
* ARE PROTECTED.

```

```

*
RESUME EQU
LA 14,CLOSEL SET UP ADDRESS FOR EODAD
ST 14,EOWBRCH
MVI AREA,X'40' BLANK
MVC AREA+1(79),AREA CLEAR AREA
MVC AREA+6(32),DATE MOVE IN DATE IN CASE BAL 14,RECORD
RESUME1 BAL 14,DEVICE GET NEXT DEVICE FOR PUNING
LTR 4,4 CHECK FOR END OF DEVICES
BZ LISTVIO THAT IS ALL - GO LIST VIOC'S
BZ VOLIST+2(14),UCBTP(14) GET DEVICE TYPE
MVC VOLJCB(10CB)
MVI JF,X'J4' VIOC DNAME
MVC JF+1(43),JF
MVC JF+1(13(6),SRTEVOL(14) MOVE IN VOLUME SERIAL
OPEN (OCB,INPUT),TYPE=J
*
VOLUME EQU
SR 4,4
LA 5,TABLE CONSTRUCT LIST OF USNAMES TO BE PURGED HERE
READ DECB,SF,OCB,DATAAREA
CHECK DECB
CLI FORMAT,X'F1' CHECK FOR FORMAT 1 DSCB
BE FORMAT1
CLI FORMAT,X'F4' CHECK FOR FORMAT 4 DSCB
BNE READ
FIRKMAT4A MVC TRKCYL(2),DATAAREA*64 MOVE IN TRACKS PER CYLINDER
B READ
FORMAT1A CLC DATAAREA(5),SYS1 IS DATA SET SYS1.
BE READ YES - BEAT IT
CLC DATAAREA(7),SYSCTL6 HOW ABOUT THE CATALOG
BE READ NO ACTION HERE
FIXIT L 7,COUNTSET NUMBER OF USNAMES PROTECTED
LTR 7,7 ARE ANY PROTECTED
BZ FILL IN NONE
LA 6,CLIST LIST OF USNAMES PROTECTED
CLC DATAAREA(44),O(16) COMPARE CURRENT DNAME AGAINST LISTS
BE READ
LA 6,44(16)
BCT 7,CYCLE

```

```

MEMBER NAME SUPERSCR
FILLIN MVC
0(14015),DATAAREA MOVE IN USNAME OF DATA SET TO BE ZOTED
LA 4(114) COUNT OF USNAMES IN TABLE FOR CURRENT VOLUME
LA 3,SIZESCR MAX NUM DATA SETS CAN BE SCRATCHED AT ONE TIME
CR 4,3 CHECK FOR LIMIT REACHED
BL READ NOT REACHED
DAL 14,SCRATCH LIMIT REACHED, SCRATCH MAX NUMBER
B VOLUME FINISH VOLUME
EJECT DIRECT ACCESS DEVICES CLUSE ISSUED HERE
EQU *
L 14,EQVBRCH
BR 14
EQU *
CLUSE DCB
BAL 14,SCRATCH
B RESUME1 SCRATCHING COMPLETE ON THIS VOLUME -- GET NEXT
EQU *
CLUSE DCB
MVC MESSTAB+21(30),MESSTAB+1
MVC MESSTAB+31(6H),LISTIO
L 6,TOTCWL CYLINDERS OF FREE STORAGE UN VOLUME AFTER PURGE
CVD 6,DOUBLE1
UNPK MESSTAB+13(4),DOUBLE1+6(2)
DI MESSTAB+16,X'FO'
SN 6,6
LC 6,TOTTRK+3 TRACKS OF FREE STORAGE UN VOLUME AFTER PURGE
CVD 6,DOUBLE1
UNPK MESSTAB+39(4),DOUBLE1+6(2)
DI MESSTAB+42,X'FO'
BAL 14,WRITE
MVC MESSTAB+21(70),MESSTAB+1
MVC MESSTAB+31(53),LISTII
LH 6,BLKXDCB BLANK DSCB'S UN VOLUME AFTER PURGE
CVD 6,DOUBLE1
UNPK MESSTAB+13(4),DOUBLE1+6(2)
DI MESSTAB+16,X'FO'
BAL 14,WRITE
B DEVWIOC
EJECT
THIS SUBROUTINE ISSUES THE SCRATCH SVC AND THEN ISSUES
A BAL 14,GETTRKS TO CALCULATE THE NUMBER OF TRACKS FREED
BY SCRATCHING ACTION.
GENERAL REGISTERS ARE SET AS FOLLOWS -
R 2 = USED BY GETTRKS
R 3 = USED BY GETTRKS
R 4 = NUMBER OF DATA SETS TO BE SCRATCHED FROM VOLUME
R 5 = ADDR OF DSNAME OF DATA SET TO BE SCRATCHED
R 6 = USED BY GETTRKS
R 7 = USED BY GETTRKS
*
SCRATCH EQU *
ST 14,SCRSAVE
LTR 4,4 NUMBER OF DATA SETS TO BE PURGED
BD 0(14) NONE
LA 5,TABLE DSNAMEs TO BE SCRATCHED
MVC VOLST+0(6),JCF+1(8 MOVE IN VOLUME SERIAL
DATAAREA(1401,015)

```

MEMBER NAME SUPERSCR
 LA 5,140(5)
 SA 0,0 CLEAR R 0 FOR SCRATCH SVC
 SCRATCH CAN
 MVC MESSTAB+2(130),MESSTAB+1
 STC 15,FULLONE+3
 TM FULLONE+3,X'FF'
 RC 8,R15MX0
 CL1 FULLONE+3,X'04'
 BE R15MX4
 CL1 FULLONE+3,X'08'
 BE R15MX8
 EQU *
 FLAG,X'01' TEST FOR PURGE RECORD REQUESTED
 EXTENT1 NOT REQUESTED - THERE WAS NO 'STATLOG' DD CARD
 14,RECORG
 EQU *
 6,DATAAREA+107 PNTR TO EXTENT DESCRIPTION
 BAL 14,GETTRKS
 CVD 3,DOUBLE1 NUMBER OF TRACKS FREED BY PURGE ACTION
 UNPK TRACKS(4),DOUBLE1+6(2)
 OT TRACKS+3,X'F0'
 MVC MESSTAB+2(144),DATAAREA
 MVC MESSTAB+6(16),LIST1
 MVC MESSTAB+6(16),JF+118 VOLUME INVOLVED IN PURGE ACTION
 MVC MESSTAB+70(4),TRACKS
 MVC MESSTAB+75(15),LIST4
 MVI MESSTAB,X'11'
 BAL 14,WRITE
 BCT 4,AGAIN
 L 14,SCRSAVE
 BR 14
 EJECT
 THIS SUBROUTINE RECORDS IN SYST,STATLOG THE
 (1) DSNAME OF DATA SET SCRATCHED
 (2) VOLUME SERIAL NUMBER INVOLVED
 (3) DATE ACTION TAKEN
 THE STATISTICAL INFORMATION CAN BE RETRIEVED THROUGH THE
 USE OF DATA SET UTILITY 'IEUPTCH'
 EQU *
 ST 14,RECSAVE SAVE RETURN
 MVC AREA(4),DATAAREA
 MVC AREA+5(16),JF+118
 WRITE DECBSTAT,SP,DCBSTATIL,AREA
 CHECK DECBSTAT
 L 14,RECSAVE RESTORE RETURN
 BR 14
 EJECT
 CONDITION MESSAGES
 MVC MESSTAB+2(116),LIST2
 MVC MESSTAB+18(6),JF+118
 MVI MESSTAB,X'11'
 BAL 14,WRITE
 B ENDOJB
 MVC MESSTAB+2(116),LIST3
 MVC MESSTAB+18(6),JF+118
 MVI MESSTAB,X'11'
 BAL 14,WRITE
 EQU *

-14-

MEMBER NAME SUPERSCR
 MVC MESSTAB+2(130),MESSTAB+1
 BAL 14,SKIP
 MVC MESSTAB+2(112),LISTEND
 MVI MESSTAB,X'89'
 BAL 14,WRITE
 L 13,SAVEAREA+4
 RETURN (14,12)
 EJECT
 THIS SUBROUTINE WILL CALCULATE TOTAL TRACKS ALLOCATED TO A
 DATA SET.
 EQU *
 GETTRKS
 MVC CCA(8),0(16)
 LH 3,CCA
 MH 3,TRKCYL
 AH 3,MHA
 STH 3,TRKSA
 LH 3,CCB
 MH 3,TRKCYL
 AH 3,MHB
 SH 3,TRKSA
 LA 3,1(3)
 STH 3,PRIMARY
 CL1 8(6),X'00' EMPTY EXTENT DESCRIPTION
 BE 0(14) YES - NUM TRKS FREED BY SCRATCH NOW IN R 3
 LA 6,10(6) UPDATE PNTR TO EXTENT DESCRIPTION
 MVC CCA(8),0(16)
 LH 3,CCA
 MH 3,TRKCYL
 AH 3,MHA
 STH 3,TRKSA
 LH 3,CCB
 MH 3,TRKCYL
 AH 3,MHB
 SH 3,TRKSA
 LA 3,1(3)
 STH 3,SECONDARY
 SR 7,7
 IC 7,DATAAREA+59
 BCTR 7,0
 MR 2,7
 AH 3,PRIMARY
 BR 14
 EJECT
 MESSAGE ISSUED HERE TO INDICATE THAT JOB WAS NOT COMPLETFD
 BECAUSE NO DATA SETS WERE PROTECTED AND OPERATOR DID NOT
 REPLY TO.
 EQU *
 XCEPTION
 MVC MESSTAB+2(130),MESSTAB+1
 MVI MESSTAB,X'09'
 MVC MESSTAB+2(124),LIST6
 BAL 14,WRITE
 MVC MESSTAB+2(178),LIST7
 MVI MESSTAB,X'11'
 BAL 14,WRITE
 B ENDOJB
 EJECT
 THIS SECTION PROVIDES A VTIC LISTING OF ALL VOLUMES THAT
 MIGHT HAVE BEEN AFFECTED BY THE CURRENT RUNNING OF SUPERSCR.
 EQU *
 LISTVIUC

-15-

MEMBER NAME	SUPERSCN	MEMBER NAME	SUPERSCN
LA	14, CLOSEZ	GLI	FORMAT, X, F1
ST	14, EVBRCH	BE	FORMAT18
L	3, UC, PERM	B	READVLOC
ST	3, UC, BLOCK	FORMAT18	MVC
EQU	*	SR	MESSTAB+21(130), MESSTAB+1
BAL	14, DEVICE GET UCB PNTA	6, 6	MESSTAB+21(44), DATAAREA
LTR	4, 4 CHECK RETURNED UCB ADDR	6, FULLONE	
BZ	ENDJOB NU MORE DEVICES	6, DATAAREA+53	
RJJCGB	(DCB)	IC	6, DOUBLE1
MVI	JF, X, 04, VIOC DSNAME	CVD	MESSTAB+52(21), DOUBLE1+6(12)
MVC	JF, X, 1(43), JF	UNPK	MESSTAB+53, X, F0
MVC	JF, X, 1(16), SRTEVULI(4)	DI	FULLONE+21(2), DATAAREA+54
OPEN	(UCB, INPUT), TYPE=J	MVC	6, FULLONE
BAL	14, SKIP	L	6, DOUBLE1
MVI	MESSTAB, X, 13, SKIP 2 LINES IMMEDIATELY	CVD	MESSTAB+49(3), DOUBLE1+6(2)
BAL	14, WRITE	DI	MESSTAB+51, X, F0
MVI	MESSTAB, X, 09	SR	6, 6
MVC	MESSTAB+42(16), JF+118	IC	6, DATAAREA+56
MVC	MESSTAB+18(23), LIST8	CVD	6, DOUBLE1
BAL	14, WRITE	UNPK	MESSTAB+60(21), DOUBLE1+6(12)
MVC	MESSTAB+18(92), LIST9	DI	MESSTAB+61, X, F0
BAL	14, WRITE	MVC	FULLONE+21(2), DATAAREA+57
READ	DECBF4, SF, UCB, DATAAREA	L	6, FULLONE
CHECK	DECBF4	CVD	6, DOUBLE1
MVC	BLKDCB(12), DATAAREA+50	UNPK	MESSTAB+57(13), DOUBLE1+6(12)
READ	DECBF5, SF, UCB, DATAAREA	DI	MESSTAB+59, X, F0
CHECK	DECBF5	TM	DATAAREA+82, X, F0
SR	5, 5 CLEAR 5	ISAM	
ST	5, TOTCYL	TM	DATAAREA+82, X, 40
ST	5, TOTTRK	SEQ	
ST	5, FULLONE	TM	DATAAREA+82, X, 20
LA	4, DATAAREA	TM	DIRECT
LA	4, 4(4)	TM	DATAAREA+82, X, 02
LA	2, 8 NUM OF F5 EXTENTS IN FIRST PART OF DSCB	BZ	CLEAR1
LA	14, AVAIL18 LOAD RETURN ADDRESS	MVC	MESSTAB+66(110), PARTACC
F5EXTENTS	MVC	B	SETEXTINT
L	6, FULLONE	MVC	MESSTAB+66(110), ISAMACC
LTR	6, 6	B	SETEXTINT
HZ	FL	MVC	MESSTAB+66(110), SEQACC
STH	5, HALF R 5 STILL CONTAINS ZERO	B	SETEXTINT
MVC	HALF+1(11), 4(4) TRACKS	MVC	MESSTAB+66(110), DIRACC
L	3, TOTTRK	B	SETEXTINT
AM	3, HALF	MVC	MESSTAB+66, X, 40
ST	3, TOTTRK	MVC	MESSTAB+67(9), MESSTAB+66
MVC	HALF(2), 2(4) CYLINDERS	IC	6, 6
L	3, TOTCYL	6, DATAAREA+59	
AM	3, HALF	CVD	6, DOUBLE1
ST	3, TOTCYL	UNPK	MESSTAB+80(5), DOUBLE1+5(13)
LA	4, 5(4)	DI	MESSTAB+84, X, F0
BCY	2, F5EXTENTS	MVC	MESSTAB+90(61), DATAAREA+45
UN	14	MVC	FULLONE+21(2), DATAAREA+51
LA	4, 1(4) BYPASS F5	L	6, FULLONE
LA	2, 18 REMAINING F5 EXTENTS IN DSCB	CVD	6, DOUBLE1
LA	14, F1 LOAD RETURN ADDRESS	UNPK	MESSTAB+10(15), DOUBLE1+5(13)
B	F5EXTENTS G) PRUGESS F5 EXTENTS	DI	MESSTAB+177, X, F0
EQU	*	BAL	14, WRITE
READVLOC	DECBF1, SF, UCB, DATAAREA	B	READVLOC
CHECK	DECBF1	EJECT	

-18-

-19-

```

MEMBER NAME SUPERSCR
LIST2 DC CL16* UNABLE TO FIND *
LIST3 DC CL16* UNUSUAL END DN *
LIST4 DC CL16* TRACK(S) FREED *
LIST5 DC CL56* AVAILABLE EXTENTS OF CONTIGUOUS TRACKS ON VOLUME C
*
LIST6 DC CL24* OPERATOR TERMINATED JOB *
LIST7 DC CLRC* IF CONTINUED, ALL USER DATA SETS EXCEPT SYS1.INAME*
* WOULD HAVE BEEN SCRATCHED *
LIST8 DC CL24* CONTENTS OF VTOC ON VOL *
LIST9 DC CL92* DATA SET NAME CREATED PURGE FC
* FILE TYPE EXTENTS FILE SERIAL VOL. SEQ. *
LIST10 DC CL68* THERE ARE EMPTY CYLINDERS PLUS EMPTY TRACC
* AS ON THIS VOLUME *
LIST11 DC CL56* THERE ARE BLANK DSCBS IN THE VTOC ON THIS VOLUME
* ME *
*
LISTEND DC CL12* UTILITY END *
DATE DC CL32* SCRATCHED FROM XXXXX ON DDD/YY *
PARTIAL DC CL10* PARTITIONED *
ISAMACC DC CL10* ISAM *
SEQACC DC CL10* SEQUENTIAL *
DIRACC DC CL10* DIRECT *
GOODRCGO DS CL1
FENCE DC XL2* FFFF *
IPLDEV DC CL3* *
YEAR DC CL2* YY *
DAY DC CL3* DDD *
FLAGS DC X* 00 *
TABLE EQU *
DS 25CL140
*
TABLEEND EQU *
TABLEEND-TABLE//140
SIZESCR EQU 0
CVITCBP EQU 32
CVIPRLTV EQU 40
CVIILK2 EQU 48
CVTSYSD EQU 56
CVIDATE EQU 3
SRTESTAT EQU 13
UCBNAME EQU 16
UCBTYP EQU 12
TCBTJG EQU 18
DEVCLASS EQU 28
SRTEVOLT EQU 44
DCRDLBAD EQU *
CLIST EQU *
* LUOCL44 *
*
CLISTEND EQU *
SIZESAVE EQU *
STRIKEND EQU *
* ICLISTEND-CLIST//44 *
*
END LF DATA FOR SDS OR MEMBER

```