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SHARE PROGRAM LIBRARY SUBMITTAL FORM



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SPLA

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This form should be completed and submitted with the program package to the SHARE Program Library Agency at the address shown above. Standards and instructions for submitting programs are in the SHARE Reference Manual, Section 6.

(1) Program Number (to be filled by SPLA) 370D-05.2.017

(2) Title of Program SUVAROFF: 'VARY OFFLINE' -
Commands for DASD devices via
the volume SERIAL NO.,
SEAS S15-009

(3) System Type(s) (Machine) S/370

(4) Search Key(s)

(5) Programming Systems/Languages OS VS1, ASSEMBLER

(6) Primary Subject Code

(7) Minimum System Requirements OS VS1

(8) New (N) or Revision (R) (if revision, show prior Program Number in Item 1) N

(9) Date of Submittal 12/78

(10) Documentation (number of original pages submitted) 18

(11) Author's Name and Address Suter Robert
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SWITZERLAND

(12) Direct Technical Inquiries to Name & Address
(if different than Author)

SAME

(13) Submitter's Installation Membership Code SEAS S15

(14) 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.

SHARE PROGRAM LIBRARY SUBMITTAL FORM

Subject Guide:

- Purpose
- Programming Language used
- Version and modification level or release number
- Field of application
- Type of routine (main program, subroutine, etc.)
- Specific description of machine requirements

(ATTACHED)

DISTRIBUTION TAPE:

NO LABEL

FILE 1 - SUBAROFF - DCB=(RECFM=FB, LRECL=80,
BLKSIZE=17120)

FILE 2 - USER MOD - DCB=(RECFM=FB, LRECL=80,
BLKSIZE=6240)

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

An "Acknowledgement of Assistance" statement must be attached to this Submittal Form.

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(15) Signature of Submitter and Date _____

(15) Signature of Installation Addressee _____

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Catalogue number (to be filled by EUROCOPI): SEAS-S15-009

Owner: (Name) ... Zürcher Kantonalbank SEAS code: ... S 015

(Address) ... Abteilung EDV, Bahnhofstrasse 9, CH-8022 Zürich
Postfach

Name and address of individual to whom technical enquiries about the submitted item should be sent:

(Name) ... Suter Robert

(Address) ... Zürcher Kantonalbank, Abteilung EDV

Bahnhofstrasse 9, Postfach, CH-8022 Zürich

Title (max. 2 lines in English):

SUVAROFF 'Vary Offline'-Commands for DASD-devices
via the volume serial number

Brief abstract:

The only possibility to set offline a disk-device under OS/VSI is the 'VARY'-Command, which requires as operand the unit-address. SUVAROFF offers the possibility to set offline DASD-devices via the volume serial number, without the specification of an unit-address. That's an advantage especially for configurations with shared DASD-devices and offers with automated system initialization (ASI-Feature for IPL) more flexibility.

Keywords (according to the standard classification scheme):

abgesandt an: SEAS Program Distribution Agency (SPDA)
Eurocopi-Dept. A. J.R.C. Euratom

I - 21020 Ispra, Italy

am: 1.6.77

Type of contribution:

- ☒ Complete program and documentation
- ☐ Documentation for complete program
- ☐ Program fragment and documentation
- ☐ Documentation of program fragment

Please cross the squares concerned

Scope of distribution:

- ☐ SEAS members only
- ☒ SEAS members and EUROCOPI subscribe

In the case of computer program material:

Medium ☒ Card deck

☐ Magnetic tape: Label:

Tracks:

Density:

Please cross the square concerned

Computer systems for which the item is valid:

Hardware: IBM /370

Software: VS1

Is the item a description of a program or program fragment that is offered for a fee?

☐ Yes ☒ No Please cross the square concerned

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(Address)

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Date of Submission:

Zürich, 1. Juni 1977

SEAS-S 15.009

SUVAROFF

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TABLE OF CONTENTS

	Page
Abstract.....	2
Program Description.....	3
Installation.....	6
Messages.....	8
Program Listing.....	9
User Modification Listing.....	13

1. Abstract

The only possibility to set offline a disk-device under OS/VSI is the 'VARY'-Command, which requires as operand the unit-address. SUVAROFF offers the possibility to set offline DASD-devices via the volume serial number, without the specification of an unit-address. That's an advantage especially for configurations with shared DASD-devices and offers with automated system initialization (ASI-Feature for IPL) more flexibility.

2. Program Description

2.1 General Considerations

SUVAROFF is written in ASSEMBLER language and uses the MCCR-Macro (SVC 34). Therefore it must be authorized under APF (Authorized Program Facility) (see under 3.2.)

2.2 Function

SUVAROFF issues VARY-OFFLINE-Commands for DASD-devices on the base of the PRESRES-list (see 'OS/VS1 Planning and Use Guide'). This list is located in the 'SYS1.PARMLIB' via the Auto-IPL-Member and each PRESRES-ENTRY is then used as criteria for issuing a vary-offline-command for the unit on which the corresponding volume is mounted.

2.3 Declaration of the Auto-IPL-name

You have two possibilities to make known the name of the Auto-IPL-Member.

- a) If you have installed the user modification (as explained under 3.3), SUVAROFF gets this name automatically.
 - b) If you don't use the user modification, SUVAROFF asks for the IPL-Name via the console (see under 4.).
-

2.4 Format of the PRESRES-ENTRY

(see also: 'OS/VSl Planning and Use Guide')

Each PRESRES-ENTRY is 80 bytes long and has an 'Optional-Information-Field'. SUVAROFF uses 3 bytes of this field, namely the bytes no. 21 - 23.

- a) If you specify 'ON' in this field (Pos. 21 - 23), then the unit on which the corresponding volume is mounted, will not be varied offline.
- b) If you specify 'OFF' in this field (Pos. 21 - 23), then the unit on which the corresponding volume is mounted, will be varied offline.
- c) If you specify neither 'ON' nor 'OFF', then the unit with the corresponding volume is varied offline only if the 'Mount Priority' is specified with 'N'.

<u>Examples:</u>	Pos. 21
VOL001,1,2,3330	↓ ON
VOL002,1,2,3330	OFF
VOL003,1,2,3330	
VOL004,1,2,3330,N	ON
VOL005,1,2,3330,N	OFF
VOL006,1,2,3330,N	

In this example the units on which the volumes VOL002, VOL005 and VOL006 are mounted, will be varied offline.

SUVAROFF

Program Description

5

2.5 JCL for SUVAROFF

```
//      EXEC  PGM=SUVAROFF
//STEPLIB DD  DSN=.....,DISP=SHR
//SYSPRINT DD  SYSOUT=A,DCB=(BLKSIZE=133,LRECL=133,RECFM=FA)
//PARMLIB DD  DSN=SYS1.PARMLIB,DISP=SHR
```

3. Installation

3.1 Assembly and Link

- a) SUVAROFF must be link edited in an authorized library (see APF in 'OS/VS1 Planning and Use Guide').
- b) If you use the user modification (see 2.3.a) then the constant 'IPLNAME' must eventually corrected before the assembly run. IPLNAME corresponds to the offset in the Module IEAPATCH, on which the IPL-Name was saved by the user-modification.

3.2 Authorization

SUVAROFF uses the MGCR-Macro and must therefore be authorized under APF (see 'OS/VS1 Planning and Use Guide').

Example for authorization in SMP-Format:

```
++VER (X050).  
++ZAP (IEFSDPPT).  
    EXPAND IEFSDPPT(8)  
    NAME    IEFSDPPT  
    VER     0515B 00  
* SET      SUVAROFF IN AUTH.-LIST:  
    REP     0515B    E2E4,E5C1,D9D6,C6C6,00
```

3.3 User-Modification (optional)

If you want, that SUVAROFF operates without console communication (see 2.3.a) you have to install a simple user modification. This modification effects:

- a) a branch from modules IEANIPSP into the user patch area (module IEAPATCH) is done.
- b) the name of the current IPL-members is stored in the patch area.

This modification is Release dependent. The modification for OS/VS1 Rel. 5.0 and Rel. 6.0 are attached to the Source-Code (in SMP-Format).

Note: When the modification is installed, a Re-IPL is necessary to activate it.

4. Messages

- . SPLØØ15A IPL MEMBER NOT FOUND, ENTER NAME OF LAST IPL
OR 'STOP'

This message is written on the console, if you have not installed the user modification or if the SYS1.PARMLIB does not contain the specified member.

Reply: The name of the correct IPL-Member,
or 'STOP' to terminate SUVAROFF

- . SPLØØ14A AUTOMATIC VARY OFFLINE FOR DASD FAILED

This message is written on the console, if any error-condition has occurred. More information is written on SYSPRINT-data-set. SUVAROFF terminates.

SUVAROFF

Program Listing

9

```

*          S U V A R O F F          00000100
*****
*          PROGRAM: S U V A R O F F          * 00000300
*          -----          * 00000400
*          * 00000500
*          * 00000600
*          * 00000700
*          * 00000800
*          * 00000900
*          * 00001000
*          * 00001100
*          * 00001200
*          * 00001300
*          * 00001400
*          * 00001500
*          * 00001600
*          * 00001700
*          * 00001800
*          * 00001900
*          * 00002000
*          * 00002100
*          * 00002200
*          * 00002300
*          * 00002400
*          * 00002500
*          * 00002600
*          * 00002700
*          * 00002800
*          * 00002900
*****
*          SUVAROFF CSECT          00003000
*          PRINT NOGEN          00003200
R0          EQU 0          00003300
R1          EQU 1          00003400
R2          EQU 2          00003500
R3          EQU 3          00003600
R4          EQU 4          00003700
R5          EQU 5          00003800
R6          EQU 6          00003900
R7          EQU 7          00004000
R8          EQU 8          00004100
R9          EQU 9          00004200
R10         EQU 10         00004300
R11         EQU 11         00004400
R12         EQU 12         00004500
R13         EQU 13         00004600
R14         EQU 14         00004700
R15         EQU 15         00004800
          SAVE (14,12) ,,SUVAROFF 00004900
          BALR R9,0          00005000
          USING *,R0          00005100
          LR R6,R13          00005200
          LA R13,AREA        00005300
          ST R13,8(0,R6)      00005400
          ST R6,4(0,R13)      00005500
          B BEG              00005600
AREA        DS 9D            00005700
          00005800
          00005900

```


SUVAROFF

Program Listing

10

	EJECT		00006000
BEG	DS	OH	00006100
CVTADDR	EQU	X'10'	00006200
CVTILK2	EQU	X'28'	00006300
CVTPATCH	EQU	X'DC'	00006400
IPLNAME	EQU	X'10'	00006500
UCBTYP	EQU	X'10'	00006600
UCRSTAT	EQU	X'03'	00006700
UCBVOLI	EQU	X'1C'	00006800
UCBNAME	EQU	X'0D'	00006900
DASD	EQU	X'20'	00007000
UCRONLI	EQU	X'80'	00007100
UCBSYSR	EQU	X'02'	00007200
	EJECT		00007300
	USING	PRESARM,R10	00007400
	LA	R10,AREA1	00007500
	L	R1,CVTADDR	00007600
	L	R2,CVTILK2(R1)	00007700
	ST	R2,UCRLIST	00007800
	L	R2,CVTPATCH(R1)	00007900
	MVC	AUTONAME,IPLNAME(R2)	00008000
	OPEN	(SYSPRINT,OUTPUT)	00008100
	OPEN	(PARMLIB)	00008200
	R	AO	00008300
AOA	XC	ECBWTOR,ECBWTOR	00008400
	MVC	AUTONAME,BLANK	00008500
	WTOR	*SPL0015A IPL MEMBER NOT FOUND, ENTER NAME OF LAST IPL 0*	00008600
		R '*STOP*',AUTONAME,8,ECBWTOR,ROUTCDE=4,DESC=5	00008700
	WAIT	ECB=ECBWTOR	00008800
	CLC	AUTONAME(4),=C*STOP*	00008900
	BE	ERR1	00009000
	EQU	*	00009100
AO	FIND	PARMLIB,AUTONAME,D	00009200
	C	R15,=F*4*	00009300
	BE	AOA	00009400
	BH	ERR2	00009500
	MVI	TABCHAR+C*P*,X*FF*	00009600
A1	READ	DEC01,SF,PARMLIB,AREA1	00009700
	CHECK	DEC01	00009800
	TRT	AREA1,TABCHAR	00009900
	BC	11,A1	00010000
	CLC	0(3,R1),=C*PRE*	00010100
	SNE	A1	00010200
	LR	R3,R1	00010300
	MVI	TABCHAR+C*P*,X*00*	00010400
	MVI	TABCHAR+C*P*,X*FF*	00010500
	TRT	0(10,R1),TABCHAR	00010600
	BC	11,ERR4	00010700
	SR	R1,R3	00010800
	BCTR	R1,R0	00010900
	MVC	AUTONAME,BLANK	00011000
	EX	R1,MOVENAME	00011100
	MVI	EOFFLAG,X*FF*	00011200
	FIND	PARMLIB,AUTONAME,D	00011300
	C	R15,=F*4*	00011400
	BE	ERR1	00011500
	BH	ERR2	00011600
	MVI	TABCHAR+C*P*,X*FF*	00011700
A2	READ	DEC02,SF,PARMLIB,AREA1	00011800

SUVAROFF

Program Listing

11

	CHECK DEC32		00011900
	CLC VARY,=C'OFF'	TEST USER FIELD	00012000
	BE A3A	BRANCH IF 'OFF' SPECIFIED	00012100
	CLC VARY(2),=C'ON'		00012200
	BE A2	BRANCH IF 'ON' SPECIFIED	00012300
	TRT DEVICE(9),TABCHAR	TEST LENGTH OF ENTRY	00012400
	BC 2,ERR4	FORMAT ERROR	00012500
	CLI 0(R1),C'	TEST MOUNT PRIORITY	00012600
	BE A2	BRANCH IF NOT SPECIFIED	00012700
	CLI 1(R1),C'N'	MOUNT PRIORITY = 'N' ?	00012800
	BNE ERR4	FORMAT ERROR	00012900
A3A	EQU *		00013000
	L R4,UCBLIST	GET UCB LOOKUP TABLE	00013100
A3	LH R5,0(R4)	LOAD NEXT UCB ADDR.	00013200
	LTR R5,R5		00013300
	BZ A4	DUMMY UCB	00013400
	SM A2	LAST UCB	00013500
	CLI UCBTYP+2(R5),DASD	UCB FOR A DASD DEVICE ?	00013600
	BNE A4		00013700
	TM UCSTAT(R5),UCBONLI	IS THIS UNIT ONLINE ?	00013800
	BZ A4		00013900
	TM UCSTAT(R5),UCBSYSR	SYSRES VOLUME ?	00014000
	BO A4		00014100
	CLC VOL,UCBVOLI(R5)	CRITICAL VOLUME MOUNTED ?	00014200
	BNE A4		00014300
	MVC UNIT,UCBNAME(R5)	MOVE UNIT ADDR.	00014400
	L R0,AUTHOR		00014500
	MOCR COMMAND	ISSUE VARY OFFLINE COMMAND	00014600
	MVC AREA2+1(15),COMMAND+3		00014700
	PUT SYSPRINT,AREA2	PUT COMMAND ON SYSPRINT	00014800
	MVC AREA2,BLANK		00014900
	B A2	CONTINUE WITH NEXT PRESRES ENTRY	00015000
A4	LA R4,2(R4)	CONTINUE WITH NEXT UCB	00015100
	B A3		00015200
	EJECT		00015300
ERR1	MVC AREA2+1(L*MSG1),MSG1		00015400
	MVC AREA2+1+L*MSG1(L*AUTONAME),AUTONAME		00015500
	B ERROR		00015600
ERR2	MVC AREA2+1(L*MSG2),MSG2		00015700
	MVC AREA2+1+L*MSG2(L*AUTONAME),AUTONAME		00015800
	B ERROR		00015900
ERR3	MVC AREA2+1(L*MSG3),MSG3		00016000
	MVC AREA2+1+L*MSG3(L*AUTONAME),AUTONAME		00016100
	B ERROR		00016200
ERR4	MVC AREA2+1(L*MSG4),MSG4		00016300
	MVC AREA2+1+L*MSG4(80),AREA1		00016400
	B ERROR		00016500
ERROR	PUT SYSPRINT,AREA2		00016600
	MVC AREA2,BLANK		00016700
	WTO *SPLOD14A AUTOMATIC VARY OFFLINE FOR DASD FAILED*,		*00016800
	ROUTCDE=4,DESC=2		00016900
	B A10		00017000
EODAD	CLI EOFFLAG,X'FF'	EOF WHILE PROCESSING	00017100
	BNE ERR3	PRESRES MEMBER ?	00017200
A10	CLOSE PARMLIB		00017300
	CLOSE SYSPRINT		00017400
	L R13,AREA+4		00017500
	RETURN (14,12),RC=0		00017600
	LTORG		00017700

SUVAROFF

Program Listing

12

```

EJECT
MOVE NAME MVC AUTONAME(0),0(R3) 00017200
SYSPRINT DCB DSORG=PS,MACRF=(PM),DDNAME=SYSPRINT 00017900
PARMLIB DCB DSORG=PO,MACRF=(R),DDNAME=PARMLIB,EODAD=EODAD 00018000
AREA1 DC CL80" 00018100
AREA2 DC CL133"7" 00018200
DS OF 00018300
AUTHOR DC X"8000E000" 00018400
COMMAND DC H"19" 00018500
DC H"0" 00018600
DC CL2"V" 00018700
UNIT DC CL3" 00018800
DC CL10",OFFLINE" 00018900
AUTONAME DC D"0" 00019000
ECHWTR DC F"0" 00019100
BLANK DC CL133" 00019200
EOFFLAG DC X"00" 00019300
TABCHAR DC Z56X"00" 00019400
UCRADDR DC F"0" 00019500
UCRLIST DC F"0" 00019600
MSG1 DC C"**** ERROR, MEMBER NOT FOUND: " 00019700
MSG2 DC C"**** ERROR, PERMANENT I/O-ERROR BY: FIND " 00019800
MSG3 DC C"**** ERROR, NO PRE.....MEMBER IN MEMBER: " 00019900
MSG4 DC C"**** ERROR, FORMAT-ERROR: " 00020000
EJECT 00020100
PRESARM DSECT 00020200
VOL DS CL6 00020300
DS CL1 00020400
MOUNT DS CL1 00020500
DS CL1 00020600
USE DS CL1 00020700
DS CL1 00020800
DEVICE DS CL4 00020900
VLONG DS CL5 00021000
VARY DS CL3 00021100
REST DS CL57 00021200
END 00021300
00021400

```

SUVAROFF

User Modification Listing

13

```

*      USER MODIFICATION FOR PROGRAM 'SUVAROFF' (OPTIONAL)
++VER (X050) /*
      USER MODIFICATION FOR PROGRAM 'SUVAROFF' (OPTIONAL)
      WRITTEN IN 'SMP' - FORMAT (SEE PROGRAM-DOCUMENTATION )
      THIS MODIFICATION IS APPLICABLE TO OS/VS1 REL. 5.0

      */
++ZAP (IEANIPSP) .
NAME IEANIPSP
VER 0920 5910,26FE,4720,B5B4
VER 0928 D207,C37C,C1C6,0610
VER 0930 4410,B9DA,07FF
* STORE R15 AND GOTO PATCH AREA
REP 0920 50F0,B930,58F0,0010
REP 0928 58F0,F0DC,47F0,F018
* SAVE LOCATION FOR R15
REP 0930 0000,0000,0000
++ZAP (IEAPATCH) .
NAME IEAPATCH
VER 00 0000,0008
VER 10 0000,0000,0000,0000
VER 18 0000,0000,0000,0000
VER 20 0000,0000,0000,0000
VER 28 0000,0000,0000,0000
VER 30 0000,0000,0000,0000
* LENGTH
REP 00 0000,0038
* AREA FOR IPL-NAME
REP 10 4040,4040,4040,4040
* COPY FROM IEANIPSP
REP 18 5910,26FE,4720,B5B4
REP 20 D207,C37C,C1C6,0610
* STORE IPL-NAME, LOAD R15 AND RETURN
REP 28 4410,B9DA,D207,F010
REP 30 C37C,58F0,B930,07FF

      00000100
      00000200
      00000300
      00000400
      00000500
      00000600
      00000700
      00000800
      00000900
      00001000
      00001100
      00001200
      00001300
      00001400
      00001500
      00001600
      00001700
      00001800
      00001900
      00002000
      00002100
      00002200
      00002300
      00002400
      00002500
      00002600
      00002700
      00002800
      00002900
      00003000
      00003100
      00003200
      00003300
      00003400
      00003500
      00003600

++VER (X060) /*
      USER MODIFICATION FOR PROGRAM 'SUVAROFF' (OPTIONAL)
      WRITTEN IN 'SMP' - FORMAT (SEE PROGRAM-DOCUMENTATION )
      THIS MODIFICATION IS APPLICABLE TO OS/VS1 REL. 6.0

      */
++ZAP (IEANIPSP) .
NAME IEANIPSP
VER 094A 5910,2772,4720,B5E2
VER 0952 D207,C37C,C1C6,0610
VER 095A 4410,BA10,07FF
* STORE R15 AND GOTO PATCH AREA
REP 094A 50F0,B95A,58F0,0010
REP 0952 58F0,F0DC,47F0,F018
* SAVE LOCATION FOR R15
      00003700
      00003800
      00003900
      00004000
      00004100
      00004200
      00004300
      00004400
      00004500
      00004600
      00004700
      00004800
      00004900
      00005000
      00005100
      00005200
      00005300
      00005400

```

SUVAROFF

User Modification Listing

14

REP 095A 0000,0000,0000	00005500
*+ZAP (IEAPATCH)	00005600
NAME IEAPATCH	00005700
VER 00 0000,0008	00005800
VER 10 0000,0000,0000,0000	00005900
VER 18 0000,0000,0000,0000	00006000
VER 20 0000,0000,0000,0000	00006100
VER 28 0000,0000,0000,0000	00006200
VER 30 0000,0000,0000,0000	00006300
* LENGTH	00006400
REP 00 0000,0038	00006500
* AREA FOR IPL-NAME	00006600
REP 10 4040,4040,4040,4040	00006700
* COPY FROM IEANIPSP	00006800
REP 18 5910,2772,4720,85E2	00006900
REP 20 D207,C37C,C1C6,0610	00007000
* STORE IPL-NAME, LOAD R15 AND RETURN	00007100
REP 28 4410,BA10,D207,F010	00007200
REP 30 C37C,58F0,B95A,07FF	00007300