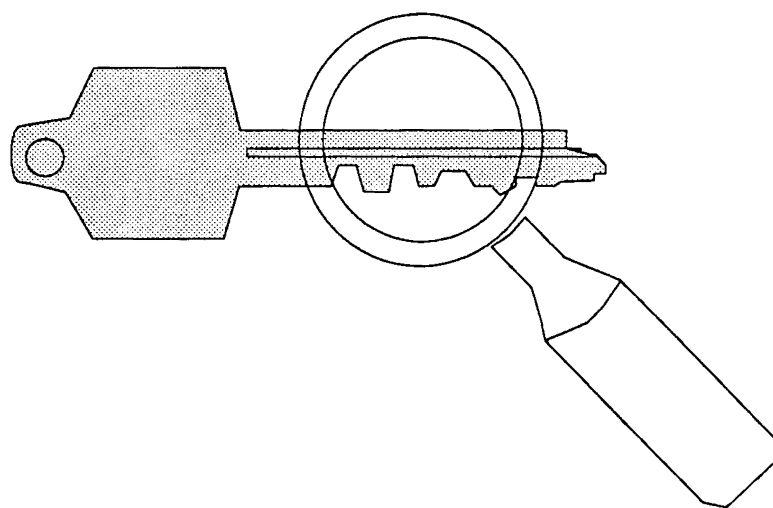


CONSUL/RACF



Sample output

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Unloading the database

```
CNRACF 1.1.b 02/15/91 22.26  C O N S U L / R A C F  D A T A B A S E  U T I L I T Y  24 Feb 1991 23:34
page      1
(C) COPYRIGHT 1989, 1991, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP,
THE NETHERLANDS

CNR017I 00 Processing started for SYSRAC01 SHR101 SYS1.RACF.PRIM1
CNR017I 00 Processing started for SYSRAC02 SHR101 SYS1.RACF.PRIM2
           at 24 Feb 1991 23:34 running RACF 1.8.1
           Non-restructured database format

CNR033I 00 SYS1.RACF.PRIM1 has 28535 segments in use, 79345 segments free (26% used)
           Index uses 4%. Space beyond 44% never used.

CNR033I 00 SYS1.RACF.PRIM2 has 107335 segments in use, 110281 segments free (49% used)
           Index uses 13%. Free space completely fragmented.

CNR800I 00 Maximum profile length is 33978 bytes for GROUP SYS1

CNR005I 00 110428 profiles read, 110428 profiles selected (100%)
```

Fig 1. Sample UNLOAD output

Removing a user

```

CNRACF 1.1.a 01/06/91 23.40  CONSUL / RACF  DATABASE  UTILITY  14 Jan 1991 13:19      page 1
(C) COPYRIGHT 1989, 1990, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP, THE NETHERLANDS

SYSIN: REMOVE USER=SYSPAVB

CNR004I 00 Processing started for SYSUT1
          Unloaded by program CNRACF 1.1.a      01/06/91 23.40 job EUSRSCHA at 13 Jan 1991 11:44
          Source dataset 1 was SPRG19 SYS1.M9002.ICH.PRIMARY
          Non-restructured database format

CNR005I 00 5990 profiles read, 5990 profiles selected (100%)
CNR087I 00 Number of detail error messages is 51

M E S S A G E S  R E M O V E  P E R M I T                               13 Jan 1991 11:44      page 2
(C) COPYRIGHT 1989, 1990, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP,

CNR068I 00 Removing id - SYSPAVB referenced 65 times
CNR248I 04 Removing qualif SYSPAVB of generic dataset profile SYSPAVB.* - delete profile
CNR248I 04 Removing qualif SYSPAVB of generic dataset profile SYSPAVB.CCWAN***.* - delete profile
CNR248I 04 Removing qualif SYSPAVB of generic dataset profile SYSPAVB.MICSDOC.* - delete profile
CNR248I 04 Removing qualif SYSPAVB of generic dataset profile SYSPAVB.PRIVATE.* - delete profile
CNR263I 04 Removing notify SYSPAVB general resource profile FACILITY SCNF.*
CNR263I 04 Removing owner SYSPAVB general resource profile FACILITY $SUBMITBY.U.AVBCO01.EUSR*
CNR063I 04 Removing owner SYSPAVB general resource profile PROGRAM IOCNF*
CNR061I 04 Removing owner SYSPAVB on group SYSPAVB1 - make SYS1
CNR063I 04 Removing owner SYSPAVB general resource profile FACILITY SCNF.*
CNR063I 04 Removing owner SYSPAVB general resource profile FACILITY $SUBMITBY.U.AVBCO012.*
CNR063I 04 Removing owner SYSPAVB general resource profile FACILITY $SUBMITBY.U.AVBCO01.EUSR*
CNR060I 04 Removing owner SYSPAVB on user SYSPROX - make SYS1
CNR064I 04 Removing permit SYSPAVB general resource profile PROGRAM IOCNF*
CNR064I 04 Removing permit SYSPAVB general resource profile PROGRAM IOCNF156
CNR064I 04 Removing permit SYSPAVB general resource profile TSOAUTH ACCT
CNR064I 04 Removing permit SYSPAVB general resource profile TSOAUTH JCL
CNR064I 04 Removing permit SYSPAVB general resource profile TSOAUTH MOUNT
CNR064I 04 Removing permit SYSPAVB general resource profile TSOAUTH OPER
CNR064I 04 Removing permit SYSPAVB general resource profile TSOAUTH RECOVER
CNR064I 04 Removing permit SYSPAVB general resource profile TSOPROC TSOPROCI
CNR064I 04 Removing permit SYSPAVB general resource profile TSOPROC TSOSMI
CNR064I 04 Removing permit SYSPAVB general resource profile TSOPROC TSOTESTI
CNR050I 04 Removing permit SYSPAVB in access list generic dataset EUSRSCH.RACFTEST.WARN.*
CNR064I 04 Removing permit SYSPAVB general resource profile ACCTNUM *
CNR064I 04 Removing permit SYSPAVB general resource profile FACILITY SCNF.*

M E S S A G E S  ( R E ) M O V E  U S E R / G R O U P 13 Jan 1991 11:44      page 3
(C) COPYRIGHT 1989, 1990, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP, THE NETHERLANDS

CNR281I 00 Removing user SYSPAVB from SYSPAVB1 as requested
CNR281I 00 Removing user SYSPAVB from SYSAPPL as requested
CNR281I 00 Removing user SYSPAVB from SYSBASE as requested
CNR281I 00 Removing user SYSPAVB from SYSBUDG as requested
CNR281I 00 Removing user SYSPAVB from SYSDASD as requested
CNR281I 00 Removing user SYSPAVB from SYSDB as requested
CNR281I 00 Removing user SYSPAVB from SYSOPR as requested
CNR281I 00 Removing user SYSPAVB from SYSTAPE as requested
CNR281I 00 Removing user SYSPAVB from SYSUSER as requested
CNR283I 00 Deleting user id SYSPAVB group SYSP as requested
CNR039I 00 CNRACF used 3.0 CPU seconds and took 5 wait clock seconds
    
```

Fig 2. Sample REMOVE USER= output

Commands generated

```

/* Commands generated by REMOVE PERMIT */
dd 'SYSPAVB.*' generic
dd 'SYSPAVB.CCWAN%%%' generic
dd 'SYSPAVB.MICSDOC.*' generic
dd 'SYSPAVB.PRIVATE.*' generic
ralt FACILITY $CNF.* nonotify
ralt FACILITY $SUBMITBY.U.AVBCO01.EUSR* nonotify
ralt PROGRAM IOCNF* owner(SYS1 )
ralt PROGRAM IOCNF156 owner(SYS1 )
alg SYSPAVB1 owner(SYS1 )
ralt FACILITY $CNF.* owner(SYS1 )
ralt FACILITY $SUBMITBY.U.AVBCO012.* owner(SYS1 )
ralt FACILITY $SUBMITBY.U.AVBCO01.EUSR* owner(SYS1 )
alu SYSPROX owner(SYS1 )
pe IOCNF* cl(PROGRAM ) delete id(SYSPAVB )
pe IOCNF156 cl(PROGRAM ) delete id(SYSPAVB )
pe ACCT cl(TSOAUTH ) delete id(SYSPAVB )
pe JCL cl(TSOAUTH ) delete id(SYSPAVB )
pe MOUNT cl(TSOAUTH ) delete id(SYSPAVB )
pe OPER cl(TSOAUTH ) delete id(SYSPAVB )
pe RECOVER cl(TSOAUTH ) delete id(SYSPAVB )
pe TSOPROCL cl(TSOPROC ) delete id(SYSPAVB )
pe TSOSM1 cl(TSOPROC ) delete id(SYSPAVB )
pe TSOTEST1 cl(TSOPROC ) delete id(SYSPAVB )
pe 'EUSRSCH.RACFTST.WARN.*' generic delete id(SYSPAVB )
pe * cl(ACCTNUM ) delete id(SYSPAVB )
pe $CNF.* cl(FACILITY) delete id(SYSPAVB )
/* Commands generated by (RE)MOVE USER/GROUP */
remove SYSPAVB group(SYSPAVB1)
remove SYSPAVB group(SYSAPPL )
remove SYSPAVB group(SYSBASE )
remove SYSPAVB group(SYSBUDG )
remove SYSPAVB group(SYSDASD )
remove SYSPAVB group(SYSDB )
remove SYSPAVB group(SYSOPR )
remove SYSPAVB group(SYSTAPE )
remove SYSPAVB group(SYSUSER )
deluser SYSPAVB /* dfltgrp=SYSP */

```

Fig 3. Sample REMOVE USER= output on CMDOUT

Finding and removing orphan permits

```
CNRACF 0.0.3 01/31/90 14.47  C O N S U L / R A C F  D A T A B A S E  U T I L I T Y  3 Feb 1990 17:25
(C) COPYRIGHT 1989, 1990, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP

SYSIN: print pagelen=60
SYSIN: VERIFY PERMIT

CNR004I 00 Processing started for SYSUT1
          Unloaded by program CNRACF 0.0.3   01/31/90 14.47 job           at 3 Feb 1990 17:23
          Source dataset 1 was SHR101 SYS2.RACF.PRIM1
          Source dataset 2 was SHR101 SYS2.RACF.PRIM2

CNR005I 00 115029 profiles read, 115029 profiles selected (100%)
CNR068I 04 Undefined id - @GD477 referenced 1 times as owner or permit
CNR068I 04 Undefined id - @GD588 referenced 6 times as owner or permit
CNR046I 04 Undefined permit @GD588 in access list of non-VSAM GDF101 DMSOS.DMSBACKP.D90006.THM0510.TSS3945
CNR046I 04 Undefined permit @GD588 in access list of non-VSAM GDF101 DMSOS.DMSBACKP.D90013.THM0316.TSS2335
CNR046I 04 Undefined permit @GD588 in access list of non-VSAM GDF101 DMSOS.DMSBACKP.D90020.THM0416.TSS0206
CNR046I 04 Undefined permit @GD588 in access list of non-VSAM GDF101 DMSOS.DMSBACKP.D90027.THM0238.TSS1131
CNR046I 04 Undefined permit @GD588 in access list of non-VSAM GDF101 DMSOS.DMSBACKP.D90034.THM0704.TSS3342
CNR046I 04 Undefined permit @GD477 in access list of non-VSAM GDF101 DMSOS.DMSIMARC.D89272.THM1843.TSS3914
CNR046I 04 Undefined permit @GD588 in access list of non-VSAM PRDS01 SYS4.PSBCICE
```

Fig 4. Sample VERIFY PERMIT output

Checking for program existence

```

CNRACF 0.0.0 09/27/89 12.21  C O N S U L / R A C F  D A T A B A S E  U T I L I T Y
(C) COPYRIGHT 1989, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP

SYSIN: VERIFY PROGRAM

CNR004I 00 Processing started for SYSUT1

CNR044I 04 Dataset not found for program          *      - DCM201 DCOM.CBLIB#Z
CNR044I 04 Dataset not found for program          @IUTXPRT - DCM201 DCOM.CBLIB#Z
CNR044I 04 Dataset not found for program          DBUTLTY  - DCM201 DCOM.CBLIB#Z
CNR044I 04 Dataset not found for program          IDBATC   - DCM201 DCOM.CBLIB#Z
CNR044I 04 Dataset not found for program          SCPSUTIL - DCM201 DCOM.CBLIB#Z
CNR044I 04 Dataset not found for program          IEBGENER - EMV001 SYS1.LINKLIST.SSM3002
CNR044I 04 Dataset not found for program          *      - FMVS01 SYS1.LINKLIB
CNR044I 04 Dataset not found for program          DSIOST   - FMVS01 SYS1.LINKLIB
CNR044I 04 Dataset not found for program          ICHDSM00 - FMVS01 SYS1.LINKLIB
CNR044I 04 Dataset not found for program          ICHUT100 - FMVS01 SYS1.LINKLIB
CNR044I 04 Dataset not found for program          ICHUT200 - FMVS01 SYS1.LINKLIB
CNR044I 04 Dataset not found for program          ICHUT300 - FMVS01 SYS1.LINKLIB
CNR044I 04 Dataset not found for program          ICHUT400 - FMVS01 SYS1.LINKLIB
CNR044I 04 Dataset not found for program          IDCBD01  - FMVS01 SYS1.LINKLIB
CNR044I 04 Dataset not found for program          IDCCLA01 - FMVS01 SYS1.LINKLIB
CNR044I 04 Dataset not found for program          IDCSC01  - FMVS01 SYS1.LINKLIB
CNR044I 04 Dataset not found for program          IEBGENER - FMVS01 SYS1.LINKLIB
CNR044I 04 Dataset not found for program          LOOKLOG  - FMVS01 SYS1.LINKLIST.SLUC660
CNR044I 04 Dataset not found for program          ADSAR003 - FMVS01 SYS1.LINKLIST.SSL7500
CNR044I 04 Dataset not found for program          *      - FMVS01 SYS1.LINKLIST.SSM3100
CNR044I 04 Dataset not found for program          ZE015JBN - FMVS01 SYS1.LINKLIST.ZSE3822
CNR044I 04 Dataset not found for program          IEBGENER - FMV001 SYS1.LINKLIST.SSM3002
CNR044I 04 Dataset not found for program          *      - GDF101 SYS2.DMSLINK
CNR044I 04 Dataset not found for program          ADSAR003 - GDF101 SYS2.DMSLINK
CNR044I 04 Dataset not found for program          ADSMI002 - GDF101 SYS2.DMSLINK
CNR044I 04 Dataset not found for program          *      - SHR101 SYS1.LINKLIST.NOSMP.DMS77LNK
CNR044I 04 Dataset not found for program          ADSAR003 - SHR101 SYS1.LINKLIST.NOSMP.DMS77LNK
CNR044I 04 Dataset not found for program          ADSMI002 - SHR101 SYS1.LINKLIST.NOSMP.DMS77LNK
CNR044I 04 Dataset not found for program          *      - SPG001 TZ.W207.ROS LINK

CNR005I 00 34873 profiles read, 34873 profiles selected (100%)

```

Fig 5. Sample VERIFY PROGRAM output

Removing unused discrete profiles

```

CNCRAC 0.0.1 09/27/89 12.21  C O N S U L / R A C F  D A T A B A S E  U T I L I T Y
(C) COPYRIGHT 1989, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP

SYSIN: VERIFY ONVOLUME

CNRO04I 00 Processing started for SYSUT1
CNRO93I 04 EMVS01 has 1 discrete profile(s) for non-RACF indicated datasets
CNRO94I 04 EMVS01 has 1 discrete profile(s) without dataset on the volume
CNRO95I 04 EPGXX1 has 2 discrete profile(s) but volume not mounted
CNRO94I 04 EXN001 has 2 discrete profile(s) without dataset on the volume
CNRO93I 04 FMC001 has 4 discrete profile(s) for non-RACF indicated datasets
CNRO94I 04 FMC001 has 6 discrete profile(s) without dataset on the volume
CNRO90I 04 FMVS01 message limit exceeded - 82 detail message(s) suppressed
CNRO95I 04 FMVS01 has 132 discrete profile(s) but volume not mounted
CNRO90I 04 PRD008 message limit exceeded - 41 detail message(s) suppressed
CNRO95I 04 PRD008 has 91 discrete profile(s) but volume not mounted
CNRO94I 04 WORK01 has 3 discrete profile(s) without dataset on the volume
CNRO41I 04 Discrete profile found but RACF indicator not set      EMVS01 SMP.EMVS01.SMPTLOG
CNRO41I 04 Discrete profile found but RACF indicator not set      FMC001 SMF1.SMFDUMPF.G0001V00
CNRO41I 04 Discrete profile found but RACF indicator not set      FMC001 SMF1.SMFDUMPF.G0002V00
CNRO41I 04 Discrete profile found but RACF indicator not set      FMC001 SMF1.SMFDUMPF.G0003V00
CNRO41I 04 Discrete profile found but RACF indicator not set      FMC001 SMF1.SMFDUMPF.G0004V00
CNRO42I 04 Discrete profile present but no dataset on volume      EMVS01 SMP.EMVS01.SMPTLOG
CNRO42I 04 Discrete profile present but no dataset on volume      EXN001 EEB.C010.VERKIEZA.TK890WD1
CNRO42I 04 Discrete profile present but no dataset on volume      EXN001 TR.F013.RF154KNV.GD830812
CNRO42I 04 Discrete profile present but no dataset on volume      WORK01 $GDMSA.MSA701.PRTGLN13
CNRO42I 04 Discrete profile present but no dataset on volume      WORK01 $GDMSA.MSA701.PRTGLN14
CNRO42I 04 Discrete profile present but no dataset on volume      WORK01 $GDMSA.MSA701.TOPTION2
CNRO43I 04 Discrete profile present but volume not mounted      EPGXX1 SYS2.LOGREC#E.TRENDSDS.G0285V00
CNRO43I 04 Discrete profile present but volume not mounted      EPGXX1 SYS2.LOGREC#E.TRENDSDS.G0289V00
CNRO43I 04 Discrete profile present but volume not mounted      FMVS01 SMP.EMVS01.SMPTLOG
CNRO43I 04 Discrete profile present but volume not mounted      FMVS01 SYS1.ADFMAC1
CNRO43I 04 Discrete profile present but volume not mounted      FMVS01 SYS1.BLGFMT
CNRO43I 04 Discrete profile present but volume not mounted      FMVS01 SYS1.BLGNPLS
CNRO43I 04 Discrete profile present but volume not mounted      FMVS01 SYS1.BNJPNL1
CNRO43I 04 Discrete profile present but volume not mounted      FMVS01 SYS1.BNJPNL2
CNRO43I 04 Discrete profile present but volume not mounted      FMVS01 SYS1.BNJSRC1
CNRO43I 04 Discrete profile present but volume not mounted      FMVS01 SYS1.BROADCAST
CNRO43I 04 Discrete profile present but volume not mounted      PRD008 $EBGSB.ISE103.CM760E01.G0025V00
CNRO43I 04 Discrete profile present but volume not mounted      PRD008 $EBGSB.ISE103.CM760E01.G0026V00
CNRO43I 04 Discrete profile present but volume not mounted      PRD008 $EBGSB.ISE103.CM760E01.G0027V00

CNRO05I 00 34873 profiles read, 34873 profiles selected (100%)
    
```

Fig 6. Sample VERIFY ONVOLUME output

Finding specific profile field contents

```
CNRACF 0.0.6 04/22/90 19.14  C O N S U L / R A C F  D A T A B A S E  U T I L I T Y  22 Apr 1990
(C) COPYRIGHT 1989, 1990, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP,

SYSIN: SELECT CLASS=DATASET, UNIVACS>=UPDATE
SYSIN: LIST CLASS, KEY, UNIVACS

CNR017I 00 Processing started for SYSRAC01 SPRG15 HRF1802.Y00.PRIMARY
          at 22 Apr 1990 23:02 running RACF 1.8.1

DATASET  SYS1.BROADCAST                UPDATE
DATASET  SYS1.DIRACC                   UPDATE
DATASET  EUSRROB.LOGREC                 UPDATE
DATASET  CAT1.USER*                     UPDATE
DATASET  SYS2.TPREG.*                   CONTROL
DATASET  SYS2.ICES.STV4M0.DD2           UPDATE
DATASET  SYS2.BD0211                    UPDATE
DATASET  SYS2.PROCESS.*                 UPDATE
DATASET  SYS2.MARCK2.*                  UPDATE

CNR033I 00  HRF1802.Y00.PRIMARY has 6462 segments in use, 123742 segments free (4% used)
          Index uses 0%.  Space beyond 5% never used.

CNR005I 00 5461 profiles read, 9 profiles selected (0%)
```

Fig 7. Sample SELECT with field value selection

Listing profile fields

```

CNRACF 1.0.2 06/24/90 12.38  C O N S U L / R A C F  D A T A B A S E  U T I L I T Y  26 Jun 1990 17:41  page 1
(C) COPYRIGHT 1989, 1990, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP, THE NETHERLANDS

SYSIN: print title='Program profile overview'
SYSIN: select class=program
SYSIN: sortlist class, key(8), memlist, uacc, userid, useracs

CNR004I 00 Processing started for SYSUT1
          Unloaded by program CNRACF 1.0.2 06/24/90 12.38 job at 26 Jun 1990 10:56
          Source dataset 1 was SHR101 SYS2.RACF.PRIM1

CNR005I 00 27564 profiles read, 62 profiles selected (0%)
PROGRAM $CCFP001 SYS1.LINKLIST.NOSMP.SLI3801/SHR102/PADCHK READ
PROGRAM * SYS2.ROSLINK/SHR105/NOPADCHK READ
          SYS2.ROSLINK/SHR105/NOPADCHK
          SYS1.LINKLIST.SSM3100/*****/NOPADCHK
          SYS2.PACOLIB2/SHR102/NOPADCHK
          SYS1.LINKLIST.NOSMP.COBLIB/SHR101/NOPADCHK
          SYS2.DMSLINK/GDF101/NOPADCHK
          SYS1.ISPLOAD/*****/NOPADCHK
          SYS1.LINKLIST.PDF2000/*****/NOPADCHK
          SYS2.LIBRCCFX.V03L08P0.LOADTEST/SPG001/NOPADCHK
          SYS1.LINKLIST.NOSMP.DMS.V7L7M0.DMSLINK/SHR101/NOPADCHK
PROGRAM #CALCLIB SYS2.ROSLINK/SHR105/PADCHK READ
PROGRAM #MAKELIB SYS2.ROSLINK/SHR105/NOPADCHK READ
PROGRAM ADDGROUP SYS1.LINKLIB/*****/PADCHK NONE SYS1 READ #GDPRB READ
PROGRAM ADSAR003 SYS2.DMSLINK/GDF101/NOPADCHK READ
PROGRAM ADSMI002 SYS2.DMSLINK/GDF101/PADCHK READ
          SYS1.LINKLIST.NOSMP.DMS.V7L7M0.DMSLINK/SHR101/PADCHK
PROGRAM AG SYS1.LINKLIB/*****/PADCHK NONE SYS1 READ

CNRACF 1.0.2 06/24/90 12.38  C O N S U L / R A C F  D A T A B A S E  U T I L I T Y  26 Jun 1990 17:41  page 2
Program profile overview

PROGRAM DELGROUP SYS1.LINKLIB/*****/PADCHK NONE SYS1 READ #GDPRB READ
PROGRAM DELUSER SYS1.LINKLIB/*****/PADCHK NONE SYS1 READ #GDPRB READ
PROGRAM DG SYS1.LINKLIB/*****/PADCHK NONE SYS1 READ #GDPRB READ
PROGRAM DSIOST SYS1.LINKLIB/*****/PADCHK NONE SYS1 READ #GDPRB READ
PROGRAM DU SYS1.LINKLIB/*****/PADCHK NONE SYS1 READ #GDPRB READ
PROGRAM EX SYS1.CMDLIB/*****/NOPADCHK READ #GD501 ALTER
PROGRAM EXEC SYS1.CMDLIB/*****/NOPADCHK READ #GD501 ALTER
PROGRAM ICHCAG00 SYS1.LINKLIB/*****/PADCHK NONE
PROGRAM ICHCDG00 SYS1.LINKLIB/*****/PADCHK NONE
PROGRAM ICHCDU00 SYS1.LINKLIB/*****/PADCHK NONE
PROGRAM ICHDSM00 SYS1.LINKLIB/*****/PADCHK NONE #GDAEP READ
          SYS1 READ #GDICO READ
PROGRAM ICHUT100 SYS1.LINKLIB/*****/PADCHK NONE SYS1 READ #GDICO READ #GDPRB READ
PROGRAM ICHUT200 SYS1.LINKLIB/*****/PADCHK NONE SYS1 READ #GDPRB READ
PROGRAM ICHUT300 SYS1.LINKLIB/*****/PADCHK NONE SYS1 READ #GDPRB READ
PROGRAM ICHUT400 SYS1.LINKLIB/*****/PADCHK NONE SYS1 READ #GDICO READ #GD501 ALTER
          SYS1 ALTER
PROGRAM ICKDSF SYS1.LINKLIB/*****/PADCHK NONE SYS1 ALTER DMSOS READ
PROGRAM IEHATLAS SYS1.LINKLIB/*****/PADCHK NONE SYS1 ALTER #GDTMS READ
PROGRAM IEHINITT SYS1.LINKLIB/*****/PADCHK NONE SYS1 ALTER #GD501 ALTER
PROGRAM LIBRFFR SYS2.ROSLINK/SHR105/NOPADCHK READ
          SYS2.ROSLINK/SHR105/PADCHK
PROGRAM LIBSERV SYS2.ROSLINK/SHR105/PADCHK READ
          SYS2.ROSLINK/SHR105/PADCHK
PROGRAM LIBSERVE SYS2.ROSLINK/SHR105/PADCHK READ
          SYS2.ROSLINK/SHR105/PADCHK
PROGRAM LIBUTIL SYS2.ROSLINK/SHR105/PADCHK READ
          SYS2.ROSLINK/SHR105/PADCHK
PROGRAM LOOKLOG SYS1.LINKLIST.SLU0660/*****/PADCHK NONE #GDAEP READ
          SYS1 READ
PROGRAM ROSCOPY SYS2.ROSLINK/SHR105/PADCHK READ
          SYS2.ROSLINK/SHR105/PADCHK
PROGRAM ROSDATA SYS2.ROSLINK/SHR105/PADCHK READ
          SYS2.ROSLINK/SHR105/PADCHK
PROGRAM RTDS6000 CICS.DISOSS34.DSVLOAD/CICS21/PADCHK READ
          CICS.V01L07P0.LOADLIBZ/DCM102/PADCHK
PROGRAM SASSBEND SYS2.LINKLIB/SHR102/NOPADCHK READ
PROGRAM SASSBSTR SYS2.LINKLIB/SHR102/NOPADCHK READ
PROGRAM SASSINCD SYS2.LINKLIB/SHR102/NOPADCHK READ
PROGRAM STRBCCV SYS1.LINKLIST.NOSMP.STROBE80/SHR102/NOPADCHK NONE #QSOND ALTER
          SYS1 ALTER #QSOND ALTER
PROGRAM STRBVPH1 SYS1.LINKLIST.NOSMP.STROBE80/SHR102/NOPADCHK NONE #QSOND ALTER
          SYS1 ALTER #GD254 ALTER
PROGRAM TLMAIN SYS1.LINKLIST.STL3100/*****/NOPADCHK READ #GD254 ALTER
          SYS2.PANLINK/SHR103/NOPADCHK
PROGRAM TLTSO SYS1.LINKLIST.STL3100/*****/NOPADCHK READ #GD254 ALTER
          SYS2.PANLINK/SHR103/NOPADCHK
    
```

Fig 8. Sample output of LISTPROG command member

Reporting non-redundancy reasons for profiles

CNRACTF 0.0.3 01/31/90 14.47 CONSUL / RACF DATABASE UTILITY 3 Feb 1990 17:31 page 1										
(C) COPYRIGHT 1989, 1990, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP, THE NETHERLANDS										
SYSIN: print pagelen=60										
SYSIN: select qual=#gdaep										
SYSIN: report nonredundant										
CNR004I 00 Processing started for SYSUT1										
Unloaded by program CNRACTF 0.0.3 01/31/90 14.47 job at 3 Feb 1990 17:23										
Source dataset 1 was SHR101 SYS2.RACF.PRIM1										
Source dataset 2 was SHR101 SYS2.RACF.PRIM2										
CNR005I 00 115029 profiles read, 16437 profiles selected (14%)										
CNR900I 00 Of the 362 profiles tested 82 are redundant (22%)										
LIST OF NON-REDUNDANT DATA SET PROFILES OF #GDAEP 3 Feb 1990 17:23 page 2										
(C) COPYRIGHT 1989, 1990, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP, THE NETHERLANDS										
Type	Volume	Datasetname	User/group	access	program	UACC	Success	Failure	Erase	First reason
GENERIC		#GDAEP.*	#GDAEP	OWNER		NONE	READ			- candidate -
NONVSAM	SHR102	#GDAEP.TESTACCT.GDG	#GDS01	OWNER		NONE	READ			User no connect
			-> #GDS993	READ						
			#GDAEP	UPDATE						
GENERIC		CICS.*	#GDS01	ALTER						
			#GDAEP	OWNER		READ	READ			- candidate -
			#GDAEP	ALTER						
NONVSAM	CICS20	CICS.BACKUP.SYSOUT#L	#GDAEP	OWNER		NONE	READ			User no connect
			-> DMSOS	UPDATE						
			-> DMSBACK1	ALTER						
			#GDAEP	UPDATE						
NONVSAM	CICS21	CICS.DISOSS34.JARS#A	#GDAEP	OWNER		NONE	READ			Extra group
			-> #GDPRB	ALTER						
			#GDAEP	UPDATE						
NONVSAM	CICS21	CICS.DISOSS34.JARS#K	#GDAEP	OWNER		NONE	READ			Extra group
			-> #GDPRB	ALTER						
			#GDAEP	UPDATE						
NONVSAM	CICS21	CICS.STAIRS43.ACCOUNT	#GDIC2	OWNER		NONE	READ			Missing group
NONVSAM	CICS20	CICS.UCSLIB	#GDAEP	OWNER		NONE	READ			Extra group
			-> #GDPRB	READ						
			#GDI151	ALTER						
			#GDAEP	UPDATE						
GENERIC		CICS#.*	#GDAEP	OWNER		READ	READ			- candidate -
			#GDAEP	ALTER						
VSAM	DCM102	CICS#.DISOSS34.CAAPIQ	#GDICA	OWNER		NONE	READ			Missing group
VSAM	DCM102	CICS#.DISOSS34.CASOCB	#GDICA	OWNER		NONE	READ			Missing group
VSAM	DCM102	CICS#.DISOSS34.CASRDS	#GDICA	OWNER		NONE	READ			Missing group
GENERIC		CICS#.INTFACE.ROSDISOS.VSQ0#*	#GDI151	OWNER		NONE	READ			- candidate -
			*	UPDATE	RTDS6000					
			*	UPDATE	Z102#K					
			*	UPDATE	Z102					
			#GD254	ALTER						
			#GDAEP	UPDATE						
VSAM	DCM102	CICS#.INTFACE.ROSDISOS.VSQ0#K	#GDI151	ALTER						
			#GDI151	OWNER		NONE	READ			Missing user
			*	UPDATE	RTDS6000					
			*	UPDATE	Z102#K					
			*	UPDATE	Z102					
			#GDAEP	UPDATE						
VSAM	DCM102	CICS#.INTFACE.ROSDISOS.VSQ0#O	#GDI151	ALTER						
			#GD366	OWNER		NONE	READ			User privileged
			-> *	UPDATE	Z102#O					
			-> #GDAEP	ALTER						
			-> #GD366	ALTER						
VSAM	DCM102	CICS#.INTFACE.ROSDISOS.VSQ0#Z	#GDI151	OWNER		NONE	READ			Extra group
			-> *	UPDATE	Z102#Z					
			#GDAEP	UPDATE						

Fig 10. Sample REPORT NONREDUNDANT output

Reporting user or group scope

```

CNRACF 1.1.b 02/03/91 15.51  C O N S U L / R A C F  D A T A B A S E  U T I L I T Y  12 Feb 1991 16:35
(C) COPYRIGHT 1989, 1991, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP,

SYSIN: report scope=ccis, datasets

CNR132I 00 Configuration for system IPO1 running MVS/SP2.2.3 (XA) with DFP 3.1.1
        created by program CNFCOLL 2.0.0 01/19/91 18.09 job GRACISOA 12 Feb 1991 15:54:48.22
CNR004I 00 Processing started for SYSUT1
        Unloaded by program CNRACF 1.1.a 01/26/91 23.45 job GRACISOA at 12 Feb 1991 15:54
        Source dataset 1 was SYSV19 SYS1.M9002.ICH.PRIMARY
        Non-restructured database format

CNR005I 00 6026 profiles read, 6026 profiles selected (100%)
CNR143I 00 Number of profiles in selected scope is 579
    
```

page 2

S C O P E R E P O R T F O R I D C C I S 12 Feb 1991 15:54
(C) COPYRIGHT 1989, 1991, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP,

Class	Type	Profile name	Volume	Access	Via	When
FACILITY		\$JOBCLASS.*		READ	- UACC	-
FACILITY		\$JOBCLASS.P		ALTER	- WARN	-
DATASET	GENERIC	CAT1.*		READ	- UACC	-
	clustr	CAT1.N9006.#00	TSO005			
	index	CAT1.N9006.#00.CATINDEX	TSO005			
	data	CAT1.N9006.#00	TSO005			
	clustr	CAT1.SMS1	SYSV22			
	index	CAT1.SMS1.CATINDEX	SYSV22			
	data	CAT1.SMS1	SYSV22			
DATASET	GENERIC	CAT1.#00		READ	- UACC	-
DATASET	GENERIC	CAT1.USER*		UPDATE	- UACC	-
	clustr	CAT1.USER1	TSO006			
	index	CATINDEX.T33B69F0.VID87085.T9C7A4FC	TSO006			
	data	CAT1.USER1	TSO006			
	clustr	CAT1.USER2	TSO006			
	index	CATINDEX.TCF0EB1E.VID89046.T9FDFC7F	TSO006			
	data	CAT1.USER2	TSO006			
PROGRAM		IOCNF156		READ	- UACC	-
DATASET	GENERIC	IPO1.*		CONTROL	CCIS	
DATASET	GENERIC	ISP.*		READ	- UACC	-
	nvsam	ISP.V3R1MO.ISPLOAD	SYSV19			
	nvsam	ISP.V3R1MO.ISPMLIB	SYSV19			
	nvsam	ISP.V3R1MO.ISPPLIB	SYSV19			
	nvsam	ISP.V3R1MO.ISPSLIB	SYSV19			
	nvsam	ISP.V3R1MO.ISPTLIB	SYSV19			
DATASET	GENERIC	SYSPMCS.*.*.LOAD		READ	- UACC	-
	nvsam	SYSPMCS.P.MICS.USER.LOAD	MICS00			
	nvsam	SYSPMCS.T.MICS.USER.LOAD	MICS00			
	nvsam	SYSPMCS.V.MICS.USER.LOAD	MICS00			
DATASET	GENERIC	SYSPMCS.*.*.LOAD		READ	- UACC	-
	nvsam	SYSPMCS.MICS.PSP.LOAD	MICS00			
	nvsam	SYSPMCS.MICS.TEST.LOAD	MICS00			
	nvsam	SYSPMCS.MICS.USER.LOAD	MICS00			
DATASET	GENERIC	SYSPMCS.*.LOAD		READ	- UACC	-
	nvsam	SYSPMCS.MICS.LOAD	MICS00			
	nvsam	SYSPMCS.UGA.LOAD	MICS00			
DATASET	GENERIC	SYS1.*		READ	- UACC	-
	clustr	SYS1.PAGE.OVFL00	SYSV22			
	data	SYS1.PAGE.OVFL00.DATA	OVFL00			
	clustr	SYS1.PAGE.VSYSV22.COMMON	SYSV22			
	data	SYS1.T995545C.VDD90164.TA23F2FD	SYSV22			
	clustr	SYS1.PAGE.VSYSV22.LOCAL1	SYSV22			
	data	SYS1.TB5441AA.VDD90164.TA23F2FE	SYSV22			
	clustr	SYS1.PAGE.VSYSV22.PLPA	SYSV22			
	data	SYS1.T25DBB72.VDD90170.TA24683F	SYSV22			
	clustr	SYS1.STGINDEX	SYSV22			
	index	SYS1.T7EBBE9A.VID90164.TA23F2FD	SYSV22			
	data	SYS1.T7EBBA70.VDD90164.TA23F2FD	SYSV22			
TSOPROC		TSOPROC1		READ	- UACC	-
TSOPROC		TSOSM1		READ	- UACC	-

Fig 11. Sample REPORT DATASETS output

Verifying the protection of sensitive datasets

```

CNRACF 0.0.6 04/22/90 19.14  C O N S U L / R A C F  D A T A B A S E  U T I L I T Y  22 Apr 1990 22:32      page  1
(C) COPYRIGHT 1989, 1990, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP, THE NETHERLANDS

SYSIN: REPORT SENSITIVE

CNR132I 00 Configuration for system ASX1 running MVS/SP2.2.0 (XA)      with DFP 2.3.0
      created by program IOCNF155 1.5.5 03/26/90 21.17 job SYSPROBZ  26 Mar 1990 21:30:44.69
CNR017I 00 Processing started for SYSRAC01 SPRG15 HRF1802.Y00.PRIMARY
      at 22 Apr 1990 22:32 running RACF 1.8.1

CNR033I 00 HRF1802.Y00.PRIMARY has 6462 segments in use, 123742 segments free (4% used)
      Index uses 0%. Space beyond 5% never used.

CNR005I 00 5461 profiles read, 5461 profiles selected (100%)
CNR087I 00 Number of detail error messages is 29

S E N S I T I V E  D A T A S E T  P R O T E C T I O N  O V E R V I E W  22 Apr 1990 22:32      page  2
(C) COPYRIGHT 1989, 1990, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP, THE NETHERLANDS
    
```

Type	Volume	Datasetname	User/group	access	program	UACC	Success	Failure	Erase	Shortcomings
GENERIC		EUSRHOU.APF.LOAD	SYSMJLN	OWNER		NONE		READ		No update audit
nvsam	DASD05	EUSRHOU.APF.LOAD	SYSMSYS	ALTER						
			SYSM	UPDATE						
			SYSP	UPDATE						
			EUSR	UPDATE						
GENERIC		HRF1802.*	SYSMGT	OWNER		NONE		READ		No read audit
nvsam	SPRG15	HRF1802.Y00.PRIMARY	SYSSEC	READ						No update audit
			SYSAUD	READ						No erase
			SYSBPR	READ						
			SYSMSYS	ALTER						
			SYSMJLN	ALTER						
GENERIC		M8904I.*	SYSMGT	OWNER		NONE		READ		No update audit
nvsam	SPRG14	M8904I.LINKLIB	SYSMSYS	ALTER						
			RCIV	READ						
			SYSM	READ						
			SYAC	READ						
			SYSBASE	UPDATE						
GENERIC		SYS1.*	SYS1	OWNER		READ		READ		No update audit
nvsam	SPRG13	SYS1.SVCLIB	SYSPCJK	ALTER						
nvsam	SPRG13	SYS1.LINKLIB	SYSMSYS	ALTER						
nvsam	SPRG15	SYS1.TEST.LINKLIB	SYS1	ALTER						
nvsam	DASD06	SYS1.ASM2.V310.LOAD	SYSMCAH	UPDATE						
nvsam	DASD06	SYS1.TALEN.LINKLIB	SYSMJLN	ALTER						
nvsam	SPRG16	SYS1.ISPF.M8904.ISPLLIB.RC	SYSMFDH	ALTER						
nvsam	SPRG16	SYS1.ISPF.M8904.ISPLLIB	SYACDAG	ALTER						
nvsam	SPRG14	SYS1.VSF2LOAD	SYSBASE	UPDATE						
nvsam	SPRG14	SYS1.VSF2COMP	IBMUSER	ALTER						
nvsam	SPRG14	SYS1.GDDMLOAD								
GENERIC		SYS1.CNM*	SYSMJLN	OWNER		READ		READ		No update audit
nvsam	SPRG14	SYS1.CNMLINK	SYSMSYS	ALTER						
			SYSNET	UPDATE						
			SYSBASE	UPDATE						
			SYSMJLN	ALTER						
GENERIC		SYS1.NCPLIB	IBMUSER	OWNER		READ		UPDATE		No update audit
nvsam	SPRG16	SYS1.NCPLIB	SYSMSYS	ALTER						
			SYSBASE	UPDATE						
			SYSNET	UPDATE						
GENERIC		SYS1.NLDMLIB	SYSMJLN	ALTER		READ		UPDATE		No update audit
nvsam	SPRG14	SYS1.NLDMLIB	IBMUSER	OWNER						
			SYSMSYS	ALTER						
			SYSBASE	UPDATE						
			SYSNET	UPDATE						
GENERIC		SYS1.NPDALIB	SYSMJLN	ALTER		READ		UPDATE		No update audit
nvsam	SPRG14	SYS1.NPDALIB	IBMUSER	OWNER						
			SYSMSYS	ALTER						
			SYSBASE	UPDATE						
			SYSNET	UPDATE						
GENERIC		SYS1.TEST.NCPLIB	SYSMJLN	ALTER		READ		UPDATE		No update audit
nvsam	SPRG16	SYS1.TEST.NCPLIB	IBMUSER	OWNER						
			SYSMSYS	ALTER						
			SYSBASE	UPDATE						
			SYSNET	UPDATE						

Fig 12. Sample REPORT SENSITIVE output

Verifying the protection of AC=1 APF modules

```

CNRACF 1.1.b 02/03/91 15.51  CONSUL / RACF  DATABASE  UTILITY  13 Feb 1991 16:58      page  1
(C) COPYRIGHT 1989, 1991, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP, THE NETHERLANDS

SYSIN: report AC1

CNR132I 00 Configuration for system ASX1 running MVS/SP2.2.3 (XA)      with DFP 3.1.1
          created by program CNFCOLL 2.0.0 01/19/91 18.09  job CFOASCHZ  3 Feb 1991 12:06:38.32
CNR017I 00 Processing started for SYSRAC01 SPRG19 SYS1.M9002.ICH.PRIMARY
          at 13 Feb 1991 16:58 running RACF 1.8.1
          Non-restructured database format

CNR033I 00 SYS1.M9002.ICH.PRIMARY has 10011 segments in use, 120189 segments free (7% used)
          Index uses 0%. Space beyond 7% never used.
CNR168I 00 Maximum profile length is 33102 bytes for GROUP SYS1

CNR005I 00 7611 profiles read, 7611 profiles selected (100%)

APF MODULE PROTECTION OVERVIEW 13 Feb 1991 16:58      page  3
(C) COPYRIGHT 1989, 1991, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP, THE NETHERLANDS
Module  UACC  AuthAttr Member  Datasename  Volser  xLPA Lnk  PROGRAM  DATASET  profile
AD      READ  AC=1   ICHCAD00 SYS1.LINKLIB  SPRG18  1
ADDGROUP NONE  AC=1   ICHCAG00 SYS1.LINKLIB  SPRG18  1  ADDGROUP  SYS1.*
ADDSD   READ  AC=1   ICHCAD00 SYS1.LINKLIB  SPRG18  1
ADDUSER READ  AC=1   ICHCAU00 SYS1.LINKLIB  SPRG18  1
ADFMDF03 READ  AC=1   ADFMDF03 SYS1.LINKLIB  SPRG18  1
ADRDSU  READ  AC=1   ADRDSU   SYS1.LINKLIB  SPRG18  1
ADRRELV READ  AC=1   ADRRELV  SYS1.LINKLIB  SPRG18  1
AG      NONE  AC=1   ICHCAG00 SYS1.LINKLIB  SPRG18  1  AG
AHLGTF  READ  AC=1   AHLGTF   SYS1.LINKLIB  SPRG18  1
Key 0
AHLVCOFF READ  AC=1   AHLVCOFF SYS1.LPALIB  SPRG18  P 1
AHLVCON  READ  AC=1   AHLVCON  SYS1.LPALIB  SPRG18  P 1
ALD      READ  AC=1   ICHCCD00 SYS1.LINKLIB  SPRG18  1
ALG      READ  AC=1   ICHCCG00 SYS1.LINKLIB  SPRG18  1
ALTDSD  READ  AC=1   ICHCCD00 SYS1.LINKLIB  SPRG18  1
ALTER   READ  AC=1   IDCAM01  SYS1.COMDLIB  SPRG18  5
ALTGROUP READ  AC=1   ICHCCG00 SYS1.LINKLIB  SPRG18  1
ALTUSER NONE  AC=1   ALTUSER  CFOASYS.APF.LOAD  DASD05  *
ALTUSER READ  AC=1   ICHCCU00 SYS1.LINKLIB  SPRG18  1
ALU     READ  AC=1   ICHCCU00 SYS1.LINKLIB  SPRG18  1
AMASPZAP NONE  AC=1   AMASPZAP SYS1.LINKLIB  SPRG18  1  AMASPZAP  SYS1.*
    
```

Fig 13. Sample REPORT AC1 output

Profiles used by SMS

CNRACF 1.1.2 05/20/91 00.26 CONSUL/RACF DATABASE UTILITY 15 Sep 1991 20:48 page 1 (C) COPYRIGHT 1989, 1991, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP, THE NETHERLANDS																																				
Input: SYSIN JES2.JOB06518.SI000101 1 print title='DFP segment report' 2 newlist 3 print subtitle='resource owners with their default management class and storage class' 4 select class-user, mgmtclas<>' ' 5 select class-group, mgmtclas<>' ' 6 sortlist class, key(8), mgmtclas, storclas, dataclas 7 newlist 8 print subtitle='datasets with a resource owner and their RACF owner' 9 select class-dataset, resowner<>' ' 10 sortlist class, key, resowner, owner, uacc, userid, useracs																																				
CNR004I 00 Processing started for SYSUT1 SMS001 EUSRROB.CNRDEMO.CNRACF.UNLOAD Unloaded by program CNRACF 1.1.2 05/20/91 00.26 job SYSPROBR at 27 Jul 1991 22:04 Source dataset 1 was SPRG19 SYS1.M9002.ICH.PRIMARY Non-restructured database format CNR005I 00 7950 profiles read, 7950 profiles selected (100%)																																				
CNROUPT CNRACF 1.1.0 03/22/91 14.53 CONSUL/RACF PROFILE LISTING 27 Jul 1991 22:04 page 2 DFP segment report resource owners with their default management class and storage class <table border="0"> <tr> <td>GROUP</td> <td>SBCD</td> <td>NONMIG</td> <td></td> </tr> <tr> <td>USER</td> <td>SYSCTAP</td> <td>FASTMIG</td> <td></td> </tr> <tr> <td>USER</td> <td>SYSPACC</td> <td>FASTMIG</td> <td>BASE</td> </tr> <tr> <td>USER</td> <td>SYSPMCT</td> <td>WRITMOST</td> <td>BASE</td> </tr> <tr> <td>USER</td> <td>SYSPROX</td> <td>FASTMIG</td> <td>BASE</td> </tr> <tr> <td>USER</td> <td>SYSVTAP</td> <td>FASTMIG</td> <td></td> </tr> </table>		GROUP	SBCD	NONMIG		USER	SYSCTAP	FASTMIG		USER	SYSPACC	FASTMIG	BASE	USER	SYSPMCT	WRITMOST	BASE	USER	SYSPROX	FASTMIG	BASE	USER	SYSVTAP	FASTMIG												
GROUP	SBCD	NONMIG																																		
USER	SYSCTAP	FASTMIG																																		
USER	SYSPACC	FASTMIG	BASE																																	
USER	SYSPMCT	WRITMOST	BASE																																	
USER	SYSPROX	FASTMIG	BASE																																	
USER	SYSVTAP	FASTMIG																																		
CNROUPT CNRACF 1.1.0 03/22/91 14.53 CONSUL/RACF PROFILE LISTING 27 Jul 1991 22:04 page 3 DFP segment report datasets with a resource owner and their RACF owner <table border="0"> <tr> <td>DATASET</td> <td>SYSTCP.SMTP.*</td> <td>SYSSMTP</td> <td>SYSTCPIP</td> <td>NONE</td> <td>SYSSMTP</td> <td>ALTER</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>SYSTCPIP</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>READ</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>SYSNFS</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>UPDATE</td> </tr> </table>		DATASET	SYSTCP.SMTP.*	SYSSMTP	SYSTCPIP	NONE	SYSSMTP	ALTER							SYSTCPIP							READ							SYSNFS							UPDATE
DATASET	SYSTCP.SMTP.*	SYSSMTP	SYSTCPIP	NONE	SYSSMTP	ALTER																														
						SYSTCPIP																														
						READ																														
						SYSNFS																														
						UPDATE																														
CNR039I 00 CNRACF used 1.3 CPU seconds and took 2 wall clock seconds																																				
Fig 14. SMS default classes on GROUP and USER profiles																																				

Profiles used by Applications

```

CNRACF 1.1.2 05/20/91 00.26  C O N S U L / R A C F  D A T A B A S E  U T I L I T Y  20 Sep 1991 16:36      page 1
(C) COPYRIGHT 1989, 1991, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP, THE NETHERLANDS

Input:  SYSIN      JES2.JOB01278.SI000101

1 | /* show all profiles and datasets beginning with sysl.jsxlog */
2 |   select class=dataset, mask=sysl.jsxlog.**
3 |   select class=user;   select class=group; select class=connect
4 |   report nonredundant, dataset

CNR132I 00 Configuration for system THD1 running MVS/SP2.2.3 (XA) with DFP 3.1.1
          created by program CNFCOLL 2.0.3 06/22/91 22.19 job SYSPSECR 20 Sep 1991 16:35:45.49
CNR017I 00 Processing started for SYSRAC01 SPRG19 SYS1.M9002.ICH.PRIMARY
          at 20 Sep 1991 16:36 running RACF 1.8.1
          Non-restructured database format
CNR033I 00 SYS1.M9002.ICH.PRIMARY has 10805 segments in use, 119395 segments free (8% used)
          Index uses 0%. Space beyond 8% never used.
CNR168I 00 Maximum profile length is 1350 bytes for TAPEVOL DFHSM0
CNR005I 00 8121 profiles read, 5471 profiles selected (67%)
CNR142I 00 Of the 4 profiles tested 0 are redundant (0%)
CNR087I 00 Number of detail error messages is 6

L I S T  O F  N O N - R E D U N D A N T  D A T A S E T  P R O F I L E S  20 Sep 1991 16:36      page 2
(C) COPYRIGHT 1989, 1991, HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP, THE NETHERLANDS

Type  Volume  DatasetaName          User/group  access  program  UACC  Success  Failure  Erase  First reason
-----
GENERIC          SYS1.JSXLOG.*.*
nv$am  DASD05  SYS1.JSXLOG.JES328X      SYS1       OWNER   READ          READ          No generic
nv$am  DASD05  SYS1.JSXLOG.RMT133      SYSNET     ALTER
nv$am  DASD05  SYS1.JSXLOG.RMT134      SYSBASE    ALTER
nv$am  DASD05  SYS1.JSXLOG.RMT135      JES328X    UPDATE
nv$am  DASD05  SYS1.JSXLOG.RMT136
nv$am  DASD05  SYS1.JSXLOG.RMT137
nv$am  DASD05  SYS1.JSXLOG.RMT138
nv$am  DASD05  SYS1.JSXLOG.RMT139
nv$am  DASD05  SYS1.JSXLOG.RMT140
nv$am  DASD05  SYS1.JSXLOG.RMT141
nv$am  DASD05  SYS1.JSXLOG.RMT142
nv$am  DASD05  SYS1.JSXLOG.RMT143
nv$am  DASD05  SYS1.JSXLOG.RMT144
nv$am  DASD05  SYS1.JSXLOG.RMT145
nv$am  DASD05  SYS1.JSXLOG.RMT146
nv$am  DASD05  SYS1.JSXLOG.RMT149
nv$am  DASD05  SYS1.JSXLOG.RMT150
nv$am  DASD05  SYS1.JSXLOG.RMT2
nv$am  DASD05  SYS1.JSXLOG.RMT89
GENERIC          SYS1.JSXLOG.RMT1
nv$am  DASD05  SYS1.JSXLOG.RMT1        SYSP       OWNER   NONE          READ          Universal acces
                               JES328X    UPDATE
                               SYSPTST   UPDATE
GENERIC          SYS1.JSXLOG.RMT147
nv$am  DASD05  SYS1.JSXLOG.RMT147      SYS1       OWNER   READ          READ          Extra group
                               -> EUSR    UPDATE
                               SYSNET   ALTER
                               SYSBASE  ALTER
                               JES328X  UPDATE
GENERIC          SYS1.JSXLOG.RMT148
nv$am  DASD05  SYS1.JSXLOG.RMT148      SYS1       OWNER   NONE          READ          Universal acces
                               SYSNET   ALTER
                               SYSBASE  ALTER
                               JES328X  UPDATE
                               WWBOTJS  UPDATE
                               SYSCHSM  UPDATE

CNR039I 00 CNRACF used 4.3 CPU seconds and took 14 wall clock seconds
    
```

Fig 15. Dataset profiles used by JES328X

Profiles used by Applications

CNRACF 1.1.2 05/20/91 00.26 CONSUL/RACF DATABASE UTILITY 20 Sep 1991 16:41 page 1			
(C) COPYRIGHT 1989, 1991. HANS SCHOONE AND CONSUL RISK MANAGEMENT B.V., VEENWEG 112, 2631 RB NOOTDORP, THE NETHERLANDS			
Input: SYSIN JES2.JOB01279.SI000101			
1	/* show user profiles for CMA-SPOOL */		
2	select class=user, usrcnt>0		
3	sortlist class, key(8), usrcnt, usrxm, usrflg, usrdata		
CNR017I 00 Processing started for SYSRAC01 SPRG19 SYS1.M9002.ICH.PRIMARY			
at 20 Sep 1991 16:41 running RACF 1.8.1			
Non-restructured database format			
CNR033I 00 SYS1.M9002.ICH.PRIMARY has 10805 segments in use, 119395 segments free (8% used)			
Index uses 0%. Space beyond 8% never used.			
CNR168I 00 Maximum profile length is 1350 bytes for TAPEVOL DFHSM0			
CNR005I 00 8121 profiles read, 19 profiles selected (0%)			
CNROUPT CNRACF 1.1.0 03/22/91 14.53 CONSUL/RACF PROFILE LISTING 20 Sep 1991 16:41 page 2			
USER	CCRPD26	1	PRNTINFO
USER	CCSPS07	1	PRNTINFO
USER	CCSPS24	1	PHONE
USER	CCSPS35	1	PRNTINFO
USER	CCSPS46	1	PRNTINFO
USER	CCSPS47	1	PRNTINFO
USER	CCSPS48	2	PRNTINFO
USER	CCSPS52	1	PRNTINFO
USER	CCSPS55	1	PRNTINFO
USER	CCSPS64	2	PHONE
USER	CCSPS65	1	PRNTINFO
USER	CCSPS66	2	PHONE
USER	CCSPS67	3	PHONE
			ACTCODE
			K-00758-XXOB-001
USER	CCSPS78	1	PRNTINFO
USER	CCTSS25	1	PRNTINFO
USER	CCTSS34	6	PRNTINFO
			ESFDPR (P656003)
			ESFDPR (PCH674)
			81266
			ESFDPR (P053G904)
			ESFDPR (P053G904)
			ESFDPR (RMT28)
			ESFDPR (P053GB04)
			ESFDPR (P053GB04)
			ESFDPR (P053GB04)
			81265
			ESFDPR (P053GB04)
			ESFDPR (P053GB04)
			81265
			ESFDPR (P053G904)
			81265
			K-00758-XXOB-001
			ESFDPR (P053G904)
			ESFDPR (P053G904)
			ESFDPR (P722001)
			ESFDPR (P053GB01)
			ESFDPR (P053GB02)
			ESFDPR (P053GB03)
			ESFDPR (P053GB04)
			ESFDPR (P053GB05)
			ESFDPR (P053GB06)
USER	CCTSS44	1	PRNTINFO
USER	DEMONTC	1	PRNTINFO
USER	DEMONTN	1	PPDATA
			02708DEMONS
CNR039I 00 CNRACF used 1.3 CPU seconds and took 4 wall clock seconds			

Fig 16. Contents of USER data fields used by CMA-SPOOL

Interactive component

```

18:05 ----- CONSUL/RACF CLASS OPTION OVERVIEW ----- ROW 12 OF 61
Command input ==> _                               Scroll ==> CSR
Enter S or / before class to display all class options
    
```

Class name	Opt Pos	Related classes grouping member	Protect status	Profile type	Dflt UACC	Oper OK	Profiles resident	Global active
FACILITY	8		Noaudit		NONE			Glob
FCICSFCT	5	HCICSFCT	Noaudit		NONE		n/a	Glob
FIELD	121		Noaudit		NONE			
FIMS	101	HIMS	Inactive	Discrete	NONE		n/a	
GCICSTRN	5	TCICSTRN	Noaudit		NONE		n/a	Glob
GDASDVOL	0	DASDVOL	Noaudit		ACEE	OPER	n/a	Glob
GIMS	4	TIMS	Noaudit		NONE		n/a	Glob
GLOBAL	6	GMBR	Noaudit		NONE		n/a	Glob
GMBR	6	GLOBAL	Noaudit		NONE		n/a	Glob
GTERMINL	2	TERMINAL	Noaudit		ACEE		n/a	Glob
HCICSFCT	5	FCICSFCT	Noaudit		NONE		n/a	Glob
HIMS	101	FIMS	Inactive	Discrete	NONE		n/a	
JCICSJCT	5	KCICSJCT	Noaudit		NONE		n/a	Glob
KCICSJCT	5	JCICSJCT	Noaudit		NONE		n/a	Glob
MCICSPPT	5	NCICSPPT	Noaudit		NONE		n/a	Glob
MGMTCLAS	123		Inactive	Discrete	NONE			
NCICSEPT	5	MCICSPPT	Noaudit		NONE		n/a	Glob
OIMS	101	WIMS	Inactive	Discrete	NONE		n/a	

```

18:06 ----- CONSUL/RACF class FACILITY option display ----- CNRICDT 1.1.0
Command input ==> _                               Scroll ==> CSR
    
```

Profile syntax rules		Class properties	
	1st	Rest	
Alphabetic allowed	Yes	Yes	Class identifier 19
National allowed	Yes	Yes	POSIT (options set id) 8
Numeric allowed	Yes	Yes	Default UACC NONE
Special allowed	Yes	Yes	Default not-found RC
Maximum length		39	Generic scan limit (quals)
Class activity options		Profile residency options	
Protection active	Yes		Profiles not allowed No
GLOBAL (fast path) active	Yes		Profiles RACLISTed No
Generics allowed	Yes		Profiles in dataspace
Generic commands allowed	Yes		Profiles GENLISTed No
OPERATIONS honored	No		RACLIST required No
Class audit options		Mandatory access control properties	
Command auditing active	No		SECLABEL required
Statistics collected	Yes		Reverse MAC checking
Logoptions			