CA-Top Secret®

Report and Tracking Guide
Release 3.0
VSE

SP1

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Contents

About This Guide

Purpose

The purpose of the *Report and Tracking Guide* is to provide system administrators and auditors with instructions on how to obtain different types and levels of reports of security information.

This guide provides descriptions of the CA-Top Secret TSSUTIL, TSSTRACK, TSSAUDIT, TSSCFILE, TSSCPR, and TSSCHART utility programs.

Descriptions are also provided for the TSSREPORT, TSSREPORT2, and TSSREPORT3 utilities used to customize reports using CA-Earl.

Organization

Chapter	Description
1	Describes the TSSUTIL batch utility. This utility generates formatted reports about security events found in SMF (System Management Facility) data sets and/or the Audit/Tracking File.
2	Describes the TSSTRACK online utility program. This program allows security administrators and auditors to track security-related events in a realtime manner for one or more systems. This utility is only available for the Audit/Tracking File.
3	Describes the TSSAUDIT batch utility. This utility provides the auditor with a tool capable of monitoring changes made to the CA-Top Secret security file as well as sensitive VSE data areas.
4	Describes the TSSCHART utility. This utility builds a tree structure of the CA-Top Secret security file and can be used as an effective implementation tool.
5	Describes the TSSCFILE batch utility. This utility provides system administrators and auditors with customized reports.
6	Describes the TSSCPR batch utility. This utility provides system administrators with a record layout of the CPF Recovery File contents. This record can then be run through TSSREPORT3 to produce an preformatted CA-Earl report.
7	Describes the TSSREPORT, TSSREPORT2 and TSSREPORT3 utilities. These utility apply the capability of CA-Earl to TSSCFILE, TSSUTIL and TSSCPR to provide formatted summaries of TSS data.
Index	Provides an efficient way to locate specific material.

CA-Top Secret Publications

The following publications are supplied with CA-Top Secret:

Title	Contents
Installation Guide	CA-Top Secret installation for VSE, including: installation and maintenance steps, startup and shutdown considerations, backup and recovery procedures, and Security File conversion.
Command Functions Guide	Comprehensive reference to the TSS command and CA-Top Secret resources.
Control Options Guide	Comprehensive reference of CA-Top Secret control options.
Implementation: BATCH, STC and APPC Guide	Provides for setting up security in Batch, STC and APPC environments.
Implementation: CICS Guide	Provides for setting up security in a CICS environment.
Messages and Codes Guide	Provides all CA-Top Secret messages and codes.
Planning Guide	General guide for planning a successful CA-Top Secret security implementation and describing the latest enhancements to CA-Top Secret.
Report and Tracking Guide	Details the use of TSSUTIL, TSSTRACK, TSSAUDIT, TSSCFILE and TSSCPR and provides sample reports.
Troubleshooting Guide	Includes CA-Top Secret debugging options and facilities, information to be prepared prior to contacting Technical Support, and an explanation of customer support.
User Guide	Conceptual overview of CA-Top Secret architecture and capablilities. Also includes implementation instructions that span all facilities, including: implementation how to's, customization, and the CA-Top Secret utilities.

All guides are updated as required. Instructions accompany each update package.

Related Publications

The common component services formerly known as CA90s have been enhanced and renamed CA Common Infrastructure Services, CA-CIS. All the documentation for the services exists in the following publications supplied by Computer Associates:

Name	Contents
CA-CIS Administrator Guide	A guide for system administrators.
CA-CIS CAICCI User Guide	Describes how to use the communication protocols needed for cross-system communication.
CA-CIS Installation Guide	Tells how to install the CA-CIS.
CA-CIS Message Guide	Lists messages and codes for CA-CIS.
CA-CIS Reference Guide	Describes how to access and use the VSE common components.
CA-CIS Systems Programmer Guide	Details the programming requirements for command, security, and signon exits.

The following publications relate to CA-Top Secret and are available from Computer Associates:

Title	Operating System
CA-EARL Reference Guide	MVS/VM/VSE
CA-EARL User Guide	MVS/VM/VSE
CA-EARL Systems Programmer Guide	VSE
CA-EARL Examples Guide	MVS/VM/VSE

Command Notation

Enter the following exactly as they appear in command descriptions:

UPPERCASE	identifies commands, keywords, and keyword values which must be coded exactly as shown.
MIXEDcase	identifies acceptable command abbreviations. The UPPER-CASE letters represent the minimum abbreviation possible. The lowercase letters of the command may be entered for further clarification **Note:** In some cases, the command processor may require a more detailed abbreviation due to user-defined resource being the same as a command abbreviation. In these cases, either enter the complete command or code a national or numeric character in one of the first four positions of the user-defined resource.
underlining	identifies default operands. These operands do not need to be entered to take effect.
Symbols	"" / * # () , must be coded exactly as shown.

The following items clarify command syntax; do not type when they appear:

lowercase	indicates keyword values which you must supply.
[ ]	identifies optional keywords.
|	separates alternative keywords or values; choose one.
{ }	indicates that you must enter one of the keywords.
...	means the preceding value may be repeated more than once.

The following table indicates the appropriate command format.

Sample Command	Explanation
TSS PER(acid) DSN(dsname)	You must supply a value for the ACID and for the data set name.
MODE(DORM|IMPL|WARN|FAIL)	You must choose **only** one of the keywords.
TSS {ADDto } (acid) MCSAUTH {(INFO) } {REMove } {(MASTER)} {REPlace} {(SYS) } {(IO) } {(CONS) } {(ALL) }	You must select a command function, enter the name of an ACID, enter the MCSAUTH keyword, and select an operand from the list.

Chapter 1. TSSUTIL Utility

The batch utility program, TSSUTIL, processes security-related activity recorded in SMF data sets and the CA-Top Secret Audit/Tracking File.

The TSSUTIL EXTRACT option selects incidents for archiving; the REPORT option produces a report of selected activity. (A sample report appears at the end of this Chapter.)

All security events should be logged via the TSS LOG option in order to use the full range of options available with TSSUTIL. This limits selection to data available as a result of TSS LOG options. Multiple and different reports can be generated using the same SMF or Audit/Tracking File input data upon a single execution of TSSUTIL.

The following considerations affect the TSSUTIL utility:

1. Reports are produced with events in chronological order as found in SMF or Audit/Tracking Files. No sorting is performed.
2. Report and tracking depends greatly upon the correct specification of logging options. The LOG option allows you to request the type of events to be logged, specify where logging information is recorded, and choose where violation notification is to be made.
3. The following logging options are required to obtain security information:

   LOG(INIT,...) requests logging of all job/session initiations and terminations.
   LOG(SMF,...) requests SMF recording of selected events.
   LOG(ACCESS,...) requests logging of all resource access. (This is applicable only to TSSUTIL.)
4. Separate log options can be set for each facility.
5. In order to obtain audited events, you must be auditing resources and/or user activity:

```
TSS ADD(acid) AUDIT
TSS PERMIT(acid) resource(value) ACTION(AUDIT)
```

Note: A DRC of '09' will always be audited.

1.1 Authority and Scope

To use TSSUTIL, an acid must possess REPORT authority. This administrative authority may be given by anyone who has REPORT authority with the following:

```
TSS ADMIN(acid) ACID(REPORT) RESOURCES(REPORT)
```

You can only extract those incidents that are generated for ACIDs within the scope of your authority. The scopes are:

SCA every event

LSCA every event within the LSCAs scope

ZCA entire zone or specific divisions, departments or ACIDs within the zone

VCA entire division or specific departments or ACIDs within the division

DCA entire department or specific ACIDs within the department

USER himself

Note: When using EVENT(VIOL) or EVENT(AUDIT), VCAs and DCAs can extract incidents that are generated for resources within their scope, whether or not the ACID causing the event is within their scope. VCAs using EVENT (VIOL|AUDIT) and specifying a department will get resources within that department's scope. For more details on EVENT, refer to the heading entitled: "TSSUTIL Report Selection Criteria" found in this Chapter.

1.2 TSSUTIL JCL

TSSUTIL works against the Audit/Tracking File. The Audit/Tracking File is a direct-access file providing immediate access. The Audit/Tracking File also allows use of TSSTRACK to monitor security events online (in real-time).

JCL for using TSSUTIL in batch is outlined below.

1.2.1 VSE Environment

```
// JOB UTIL
// ID USER=SYSA,PWD=SYSA
// DLBL SMFIN,'CAI.TOP.SECRET.AUDIT1',99/365,SD
// EXTENT SYS0XX,XXXXXX,1,0,X,XXXX
// DLBL SMFIN2,'CAI.TOP.SECRET.AUDIT2',99/365,SD
// EXTENT SYS0XX,XXXXXX,1,0,X,XXXX
// TLBL SMFOUT,'AUDIT.OUTPUT.TAPE'
// ASSGN SYS005,XXX
// EXEC TSSUTIL
REPORT EVENT(ALL)
EXTRACT DATE(YYDDD,YYDDD) TIME(000000,240000)
/*
```

TSSUTIL DLBL Statements

DLBL Statement Description

UTILOUT Defines an output data set for the formatted report of security incidents based on selection criteria.

UTILGRO Generates a file which can also be used as input to other user-written programs to produce customized reports.

Note: Only violations get written to this data set.

EARLOUT Generates Easy Access Report Language (CA-EARL) formatted record types that can be used as input to produce customized reports.

SMFOUT Defines an output data set used only for EXTRACT. SMFOUT can be allocated on tape or disk.

SMFIN Defines an input data set to TSSUTIL. SMFIN can represent a backup copy of Audit data from a previously extracted tape. SMFIN can also refer to the Audit/Tracking File as illustrated in the first JCL example.

SMFIN1 Defines an input data set to TSSUTIL. SMFIN1 can represent a secondary backup copy of Audit data from a previously extracted tape. SMFIN1 can also refer to a secondary Audit/Tracking File as illustrated in the first JCL example.

1.3 Formatted Record Types for GRO Reports

The TSSUTIL GRO record is formatted as follows:

Position	Length	Description
1	1	Reserved
2	8	Date in MM/DD/YY format
10	8	Time in HH:MM:SS format
18	4	System id
22	8	ACID
30	8	Jobname
38	8	Facility name
46	4	User's mode
50	2	Violation count
52	8	Program in control
60	8	Requested access
68	8	Allowed access
76	4	Return code
80	2	Detail error reason code (DRC)
82	3	Security drive (SVC)
85	6	System prefix and job number
91	8	Terminal id
99	8	Resource type
106	256	Resource name
362	256	Volume
681	6	Volume
689	44	Reserved for future use (currently contains blanks)

Only one TSSUTIL report per job step is recommended when requesting GRO records. Multiple reports can result in duplicate GRO input records, generating inaccurate charts. To produce multiple reports in one step and create a GRO file, code a disposition of MOD (DISP=MOD) on the UTILGRO DLBL statement.

1.4 Formatted Record Types

The following formatted record types give the offsets and full lengths for each record that can be used to generate CA-EARL reports from TSSUTIL output.

```
  3    7     5       DATE (PACKED YYDDDF)
  8    13    6       TIME OF DAY (HHMMSS)
  14   21    8       ACID NAME
  22   29    8       DEPARTMENT NAME
  30   37    8       DIVISION NAME
  38   45    8       ZONE NAME
  46   53    8       JOB NAME
  54   61    8       TERMINAL ID
  62   62    1       TYPE (S=STC,J=JOB,....)
  63   69    7       JOB NUMBER
  70   77    8       FACILITY NAME
  78   81    4       USER'S MODE
  82   83    2       RETURN CODE
  84   86    3       DETAIL REASON CODE
  87   94    8       AUDIT INDICATOR
  95   102   8       BYPASS INDICATOR
 103   110   8       SUSPENSION INDICATOR
 111   130   20      SPARE
                     START OF VARIABLE DATA
```

```
 ID:        "IN        ="  USER INITIATION
 131   162   32             NAME OF USER
```

```
 ID:        "RE OR DS  ="  RESOURCE VALIDATION
 131   138  8        RESOURCE CLASS
 139   146  8        REQUESTED ACCESS
 147   154  8        REQUESTED ACCESS
 155   162  8        REQUESTED ACCESS
 163   170  8        ALLOWED ACCESS
 171   178  8        ALLOWED ACCESS
 179   186  8        ALLOWED ACCESS
 187   194  8        PROGRAM IN CONTROL
 195   197  3        CALLING SVC
 198   200  3        VIOLATION COUNT (FOR SESSION)
```

```
ID:        "RE        ="  RESOURCE VALIDATION (NON-DATASET)
201   456  256                     RESOURCE NAME
```

```
ID:        "DS        ="  RESOURCE VALIDATION (DATASET)
201   244   44      DATASET NAME
245   250   6       VOLUME SERIAL
```

```
ID:         "MD        ="  PARAMETER FILE/MODIFY OPTIONS
131   386   256      PARM/MODIFY OPTION
```

```
ID:         "LG        ="  INSTALLATION LOGGING
131 174  44  INSTALLATION DEFINED
```

1.5 TSSUTIL Verbs

You should begin a control statement with a verb that indicates whether a report or extraction is required. The verbs are as follows:

REPORT option,option,...	Produces a formatted report of security incidents selected according to the selection criteria options: one line per event, or two lines per event if LONG is specified.
END	Separates multiple reports. Indicates the end of a selection request. Additional REPORT or EXTRACT requests may follow.
EXTRACT option,option,...	Writes records to the SMFOUT file for later processing. Records are selected according to the selection criteria records. This will also produce a report of selected records if the LIST control option has been specified.

1.6 TSSUTIL Report Selection Criteria

The selection criteria options will select the types of incidents to be processed. You can specify any option, but each option can be specified once only. For example,

```
DEPT(XYZ,ABC)
```

is valid, but

```
DEPT(XYZ) DEPT(ABC)
```

is not. To be eligible for processing, **all** selection criteria must be met within each SMF or Audit/Tracking File record. The list of selection criteria is as follows:

ACCESS
ACCESSOR
CLASS
DATASET
DATE
DEPT
DIV
DRC
EVENT
FACILITY
JOBNAME
LINECNT
LIST
LONG
MODE
NOLEGEND
RESCLASS
RESOURCE
SYSID
TERMINAL
TIME
TITLE
UNDEF
VOLUME
ZONE

1.6.1 ACCESS

Selects a level of access to data set, volume, CICS, UR1, UR2, and FIELD requests. Only those incidents whose access matches the requested access level will be selected. A maximum of eight levels can be specified.

```
ACCESS(level,level,...,(resclass))
```

level Used to select incidents with matching requested access level.

resclass|dataset
Access level names given are defined in the RDT for the resource class name given. If resource class is not given, DATASET is used as the default. Specification of a resource class name is optional.

1.6.2 ACCESSOR

Selects records produced by jobs or sessions running under a specific ACID. A maximum of eight ACIDs can be specified.

```
ACCESSOR(acid,acid*,*,...)
ACID
A
```

acid Is a specific ACID name. If you specify more than one, separate them with commas.

acid* Is an ACID prefix, all ACIDs that begin with the given prefix will be selected.

***** Selects undefined ACIDs including *MISSING*, *UNDEF*, and *BYPASS*.

ACID(*) may only be used by an SCA.

1.6.3 CLASS

Selects records that refer to a specific resource class.

```
CLASS(type)
```

The type can be only one of the following single character codes:

a	CA-IDMS SUBSCHEMA
b	CA-IDMS AREA
c	Database
d	IMS DBD
e	JESINPUT
f	IBM Facility
g	TSO account number
h	TSO authority
i	TSO procedure name
j	TSO performance group
k	VAX file
l	VAX device
m	VM IUCV
n	VM VMCF
o	TSAF
p	JESSPOOL
q	JESJOBS
r	OPERCMDS
s	CICS CEMT SPI
t	DEVICES (for VTAM 3.2)
u	CA REPORT
v	CA TAPE
w	SMESSAGE (TSO/E)
x	VTAMAPPL (VTAM 3.2)
y	CAADMIN
z	CAVAPPL
'	SYSCONS
A	Application
B	Audited job submission
C	Mode By User
D	Data set
E	CICS DCT
F	CICS FCT
G	Authentication call
H	TOTAL file
I	ACID xe03type
J	CICS JCT
K	Terminal unlock
L	Terminal lock

M	UR1
N	UR2
O	TSS control options
P	Program
Q	CICS PPT
R	Data base field
S	DL/1 PSB
T	Terminal
U	Abstract
V	Tape volume
W	DASD volume
X	Transaction
Y	USERn
Z	CICS TST
1	Change propagation
2	CA Jobname
3	CA Panel
4	DUFXTR
5	DUFUPD
6	user logging
7	VM MDISK
8	VM CPCMD
9	VM Diagnose
0	VM Network
*	Reserved
#	VM RDR
%	Logging DB2 resources
$	VM DCSS
@	VM Dial
+	Logging installation exit call
=	CACMD
-	CA Scheduler
?	Extract
<	Operation commands
>	Owned transactions
.	Dataset
/	Dasdvolt
"	Tapevolt
!	CA Station
&	Recipid
:	Reserved
¢	VMANAPPL
]	UNVEDIT
\	UNVRPRT
–	UNVPGM
,	CPU
|	SDSF userclass
}	VM Machine

{ IBMGROUP
` PROPCNTL
_ Librarian resource CALIBMEM

; Librarian resource CACCFMEM
¬ Librarian resource CACCFDSN
(SMS management class
) SMS storage class

Note: Class O records only display when specifically requested and they can only be requested by the SCA and MSCA.

1.6.4 DATASET

Selects records that refer to any of the specified data set prefixes. A maximum of eight data set prefixes can be specified.

```
DATASET(dsnprx,...)
DSN
D
```

dsnprx Is a data set prefix. All records that refer to data set(s) matching the prefix(es) are selected. If you specify more than one prefix, separate them with commas.

1.6.5 DATE

Selects records based on a date or range of dates.

```
DATE(date1[,date2])
DATE(TODAY)
DATE(-nn)
```

date1 Is a base Julian date (yyddd). If you specify only one date, records produced on or after that date are selected.

date2 Is a limiting Julian date (yyddd). If you specify two dates, records produced on and between those dates are selected.

To select records produced on a single day, specify date1 equal to date2.

TODAY If you specify TODAY, then the Julian date for this day is substituted.

-nn If you specify -nn, where 'nn' is a value from 00 to 99, then the Julian date subtracted from the current date is used, and will produce a report including records from the selected date to the current date. For example, DATE(-01) means yesterday and today; DATE(-00) is today.

1.6.6 DEPT

Selects one or more departments for which Security Records will be selected. A maximum of eight Department ACIDs can be specified.

```
DEPT(dept,...)
```

dept Specifies the department name.

1.6.7 DIVISION

Selects the division for which Security Records will be selected. One Division ACID can be specified.

```
DIV(div)
```

division Specifies the division name.

1.6.8 DRC

Selects all records that are flagged with the specified error code(s).

```
DRC(code,... |IN|DS|VL|RS|PW)
```

code Specifies a detailed error reason code in hexadecimal format: 00 through FF--up to a maximum of 32 total DRCs.

IN	Selects all initiation violation codes.	01 - 1D
DS	Selects all data set violation codes.	65 - 72
VL	Selects all volume violation codes.	73 - 81
RS	Selects all resource violations.	82 - 9F
PW	Selects all password and OID violations.	07 - 0F

1.6.9 EVENT

Selects one or more of the incidents to be chosen.

```
EVENT(ALL|ACCESS,JOBS,INIT,TERM,VIOL,AUDIT,AUDTA)
```

ALL Selects all events.

ACCESS Selects resource and facility accesses.

JOBS Selects job/session initiations and terminations.

INIT Selects only job/session initiations.

TERM Selects only job/session terminations.

VIOL Selects access violations.

AUDIT Selects audited incidents.

AUDTA Displays OK+A events and prevents OK+B events from displaying.

Note:

- The default is ALL.
- VIOL and AUDIT allow extended scope checking for DCAs and VCAs. See 1.1, “Authority and Scope” on page 1-2 for more information.
- A DRC of '09' will always be audited.

1.6.10 FACILITY

Selects records produced by jobs or sessions using one or more specific system facilities.

```
FACILITY(ALL|fac,...)
FAC
F
```

ALL Includes all facilities.

fac Is a system facility defined to CA-Top Secret: BATCH, STC, TSO, IMS, CICS, NCCF, CA-ROSCOE, WYLBUR, or any installation-defined facility.

The default is ALL.

1.6.11 HISTORY

When used in conjunction with the ACID keyword, selects ACIDs that have been deleted from the Security File. For example, if ACID USER10 has been deleted, the following statement would report on the events USER10 created:

REPORT EVENT (ALL) ACID(USER10) HISTORY

```
HISTORY
```

Note: This keyword can only be used by an SCA or the MSCA.

1.6.12 JOBNAME

Selects records produced by specific jobs or online sessions. A maximum of eight jobnames can be specified.

```
JOBNAME(jobname, job*,...)
JOB
J
```

jobname Specifies a specific jobname or online userid.

job* Specifies a jobname or TSO userid PREFIX. All jobnames that start with the supplied prefix will be selected.

1.6.13 LINECNT(nn)

Changes the default line count of 53 information lines for the report listing.

```
LINECNT(nn)
```

nn Specifies the new line count, in the range 10 to 99.

1.6.14 LIST

Requests the simultaneous production of a report listing when used with the EXTRACT verb.

```
LIST
```

1.6.15 LONG

Requests the long format (two lines per event) of a report.

```
LONG
```

1.6.16 MODE

Selects all events that were recorded while the user was in the specified mode.

```
MODE(DORMANT|WARN|IMPL|FAIL)
```

1.6.17 NOLEGEND

Suppresses generation of legend at the bottom of all reports in current job execution.

```
NOLEGEND
```

1.6.18 RESCLASS

Selects any resource class defined in the RDT.

```
RESCLASS(resource class name)
```

resource class name
Any resource that has been predefined or dynamically defined to the RDT.

1.6.19 RESOURCE

Selects records that refer to all resource prefixes. You may use the RESOURCE and RESCLASS options together to select a specific type of resource.

```
RESOURCE(resprx,...)
RES
R
```

resprx Is a prefix (up to 8-characters) for an online or RJE terminal, command, program, application or installation-defined resource. All records that refer to resource(s) matching the prefix(es) are selected. If you specify more than one prefix, separate them with commas.

1.6.20 SYSID

Selects records produced on a specific system or CPU. Use SYSID to select records from an SMF file in which SMF records from multiple systems have been merged.

```
SYSID(smfid)
```

smfid The four-character SMF-id of the required system.

1.6.21 TERMINAL

Selects all events associated with a specific terminal or reader. This includes all events, not only initiations.

```
TERMINAL(termprx,...)
TERM
T
```

termprx Is a prefix for an online terminal or RJE reader.

1.6.22 TIME

Selects records produced at a specific time or during a specific time period (up to but not including 24 hours).

```
TIME(time1 [,time2] )
```

time1 Is a time (hhmmss) within a 24-hour time frame. By specifying only one time, you select the records produced ON or AFTER that time.

time2 Is a time (hhmmss) within a 24-hour time frame. By specifying two times, you select all records produced ON and BETWEEN those times.

To select records produced at a specific time, specify time1 equal to time2. For example, TIME(181500,181500) would only select records produced at 6:15 PM, not an entire 24 hour period.

1.6.23 TITLE

Provides up to 39 characters to replace the characters "CA-Top Secret" on the report title line.

```
TITLE(text...)
```

1.6.24 UNDEF

Indicates whether or not events with undefined (*UNDEF*) or missing (*MISSING) ACIDs will be selected.

```
UNDEF(INC|EXC)
```

INC Includes undefined or missing ACID events.

EXC Excludes undefined or missing ACID events.

The default is UNDEF(INC).

1.6.25 VOLUME

Selects records that refer to any of the specified prefixes.

```
VOLUME(volprx,...)
VOL
V
```

volprx Is a volume prefix. All records that refer to any volume(s) matching the prefix(es) are selected. If you specify more than one prefix, separate each of them with commas.

1.6.26 ZONE

Select the zone for which Security Records will be selected. Only one Zone ACID can be specified.

```
ZONE(zone,...)
```

zone Specifies the zone name.

1.7 Sample TSSUTIL Selection Criteria

Produce two reports without legends: the first, a total violation report; the second, audit entries:

```
NOLEGEND
REPORT EVENT(VIOL) END
REPORT EVENT(AUDIT) END
```

Select all TSO data set violations that occurred yesterday and today:

```
DATE(-01) DRC(DS) FACILITY(TSO)
```

Select all events logged on April 26, 1990 for jobs FINBUD01 and FINBUD02:

```
J(FINBUD01,FINBUD02) DATE(90116,90116) EVENT(ALL)
```

Select all violations by all users in the Finance Department (If submitted by a VCA or DCA, violations against all resources owned in the Finance Department as well as by users in the Finance Department):

```
DEPT(FINANCE) EVENT(VIOL)
```

Select all violations against volumes with the prefix WORK by users B1010, B1020, B1030:

```
A(B1010,B1020,B1030) V(WORK) EVENT(VIOL)
```

Select all jobs submitted from terminal R15.RD1:

```
RES(R15.RD1) RESCLASS(TERMINAL) EVENT(INIT)
```

Select all updates against SYS1.SPFPARMS from the CPU SYS3:

```
SYSID(SYS3) EVENT(ACCESS) DSN(SYS1.SPFPARMS) ACCESS(UPDATE)
```

Select all test CICS transactions with violations so that the report generates two lines per security incident:

```
RESCLASS(OTRAN) FAC(CICSTEST) EVENT(VIOL) LONG
```

Select illegal CPU SYS2 access attempts for the second shift:

```
EVENT(VIOL) RES(CPU.SYS2) TIME(160000,235959)
```

Select all IMS production sign-on password violations:

```
DRC(PW) F(IMSPROD)
```

Select all batch jobs that are undefined:

```
FAC(BATCH) ACID(*)
```

Select all operator authentication failures:

```
EVENT(ALL) JOB(PROD*)
```

Select CICS production and test violations against payroll files:

```
EVENT(VIOL) RES(PAY) FAC(CICSPROD,CICSTEST)
```

Select all unsuccessful terminal unlocks:

```
RESCLASS(TERMINAL)
```

Select specific audited terminals:

```
EVENT(AUDIT) TERM(188,189,18A)
```

Select all uses of selected system utilities:

```
EVENT(ALL) RES(IMASPZAP,IEHPROGM,IEHINITT)
```

1.8 TSSUTIL Report Description

If the REPORT option is used, the TSSUTIL report function produces a fixed-format report whose content is determined by the selection criteria. One report line is generated for each security incident unless the LONG selection criterion, which generates two report lines, is used. A final summary shows retrieval statistics, and if NOLEGEND is not specified, two legends are produced at the end of each report to describe the various areas and codes.

The title line of each report page indicates the sequence number of the report being produced, as several reports can be produced with one run of the utility. A subtitle, controlled by the TITLE option, can be used to identify different reports or to provide a company or department name.

The following pages show sample reports and legends of the TSSUTIL batch utility executed with the specified selection criteria. Field descriptions follow the sample reports.

```
CA-TOP SECRET SECURITY VERSION 3.0         SECURITY REPORT/EXTRACT UTILITY
              INCOMING CONTROL STATEMENTS :
INPUT(ALL)
REPORT EVENT(ALL) END
CA-TOP SECRET SECURITY VERSION 3.0         SECURITY ACTIVITY/INCIDENTS REPORT # 01           09/14/98  10:19:41        PAGE 001

  DATE     TIME   SYSI ACCESSOR JOBNAME  FFM VC PROGRAM  R-ACCESS A-ACCESS SRC/DRC SEC RESOURCE (TYPE & NAME)      JOBID  TERMINAL
-------- -------- ---- -------- -------- --- -- -------- -------- -------- ------- --- ---------------------------- ------ --------
   1        2       3     4        5      6  7     8      9         10          11    12  13

09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT READ               OK+B     D        VSE.PRD1.LIBRARY             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT READ               OK+B     ? PRD1                                INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT READ               OK+B     D        VSE.PRD1.LIBRARY             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT READ               OK+B     ? PRD1                                INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT READ               OK+B     D        VSE.PRD2.LIBRARY             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT READ               OK+B     ? PRD2                                INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT READ               OK+B     D        VSE.PRD2.LIBRARY             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT READ               OK+B     ? PRD2                                INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT READ               OK+B     D        VSE.PRD2.LIBRARY             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT READ               OK+B     ? PRD2                                INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT READ               OK+B     D        VSE.PRD2.LIBRARY             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT READ               OK+B     ? PRD2                                INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
09/14/98 12:59:34 VSEA CICSTEST SECCICS  B W   $JOBACCT                    OK+A     P $IJBSLA                             INTRDR
```

Figure 1-1. TSSUTIL Report Using EVENT(ALL) DATE(TODAY)

The following information is displayed on the report.

1 **DATE -** The date when the related incident was recorded. The format of the date is controlled by the DATE control option specified at CA-Top Secret initialization. The default is month/day/year. This may vary if using European, military, or other date format. Selection criterion is DATE.

2 **TIME -** Time of day when the incident was recorded. The report is for the most part time-sequenced; however, this is controlled by the logging function of VSE. TSSUTIL does not sort the incidents, so some events might be out of sequence. You may also notice that blocks of events will have the same time stamp--especially true for online violations. CICS and other online facilities record incidents indirectly to AUDIT. The CA-Top Secret address space does the actual logging every 15 to 300 seconds (based on the time value set by the TIMER control option). Selection criterion is TIME.

3 **SYSID -** The CA-CIS CPUID that logged the event. Selection criterion is SYSID.

4 **ACCESSOR -** The ACID that was in effect for the user. ACIDs that begin with an asterisk '*' are special to CA-TOP SECRET:

BYPASS indicates that the user is bypassing security.
MISSING indicates that the ACID was not supplied on a job card.
UNDEF indicates an undefined user.

Selection criterion is ACID.

5 **JOBNAME -** Either the name of a batch job, the procedure name of a started task (STC), or the userid of an online user. The jobname is usually the same for a TSO user. The jobname for the online region will appear with that of an online user ACID. Selection criterion is JOBNAME.

6 **FFM -** Represents two data items: FACILITY ID and MODE. The facility being used is represented by one or two characters. The most common facility codes are:

B=BATCH
C=CICSPROD
K=CICSTEST
I=IMSPROD
R=CA-ROSCOE
S=STARTED TASK
T=TSO
V=VM

FACILITY codes for other facilities may be obtained by entering:

```
TSS MODIFY FAC(fac) at the console.
```

The mode of the user is represented by the last single character that shows:

D=DORMANT
W=WARN
I=IMPL
F=FAIL

For example, TW shows a TSO user in WARN mode. Selection criteria are FACILITY and MODE.

7 **VC -** Represents a consecutive accumulation of violations for the duration of the session or job. It is displayed only with violation entries.

8 **PROGRAM -** Shows the name of the program in control at the time the security incident was recorded. Common program names are:

$JOBACCT - VSE JOB ACCOUNT/BATCH INITIATOR

A program name will not always be present, especially if the event was recorded through an online data base system such as CICS. Selection criterion is RESOURCE. (Select RESOURCE only if you are looking for explicitly owned program usage.)

9 **R-ACCESS -** Shows the requested access level as defined in the RDT for the current resource (usually data set, volume, or CICS file).

If an access mask does not uniquely define an access level, the access mask is displayed preceded by an asterisk. In this case; the access mask displayed represents more than one access level.

Note: A requested access of FETCH will appear as READ in VSE.

10 **A-ACCESS -** Shows the allowed access level as defined in the RDT for the current resource. Indicates how the resource (usually data set, volume, or CICS file) was accessed by the user of job.

If an access mask does not uniquely define an access level, the access mask is displayed preceded by an asterisk. In this case; the access mask displayed represents more than one access level.

11 **SRC/DRC -** Shows the return code presented to the system (caller) and the associated detailed error reason code. This indicates whether the access was successful or was failed. If it was successful, one of the following codes will display.

OK indicates that the request was successful.

OK+A indicates a successfully audited incident.

OK+B indicates a successfully bypassed access.

OK+P indicates that data set access is allowed as a result of ACTION(password) being on the rule that granted the access.

Otherwise, the return and detail codes are shown in the format ***rr*-dd**, where 'rr' is the return code and 'dd' is the detailed error reason code. For example, *30*-0F indicates a terminal or reader violation during initiation; *08*-65 indicates a data set is not accessible.

The selection criteria is EVENT(VIOL,AUDIT) to get all violations and audit entries and DRC to get only the specific violations as explained by the detailed error reason codes.

Return codes and the Detailed Error Reason Codes are documented in
as well as in the *Messages and Codes Guide*.

12 **SEC -** Shows the VSE, vendor or customer security driver requesting security validation. This will be represented by a three-character mnemonic or by a hexadecimal value for the SVC in control. The following codes will appear:

ADA Database
BLP BLP
CAT Catalog management
CRE Create dataset
DES Data encryption
EOV End of volume
FAP Fetch access protection
FEV FEOV
HSM HSM
INC RACINITC

INI Job/STC/session initiation
INY RACINITY
LCF Command/program
LKD "AC=1"
LST IMS/CICS initiation
OPJ Open-J
OPN Open
REN Rename-DSN
SCR Delete-DSN
SUB Submit
TMS Tape management
TRM Termination
VSM VSAM-Catalog management
XX SVC number in hex

13 **RESOURCE -** Shows a one character code and up to a 248 character resource name. For initiations, the name of the user will appear via the NAME= keyword. For job submissions, the name of the job and associated ACID will appear. For data set access, the volume serial number and data set name will usually both appear. The class code will be one of the following:

```
A = APPL              W = DASD VOLUME
B = SUBMIT            X = X-ACTN
D = DSNAME            Y = USER?
E = CICS-DCT          Z = CICS-TST
F = FCT               f = IBMFAC
G = AUTH              g = TSOACCT
H = FILE              h = TSOAUTH
I = IMSDBD            i = TSOPROC
J = JCT               p = JESSPOOL
K = UNLOCK            r = OPERCMDS
L = LOCK              6 = USERLOG
M = UR1               7 = VM MINIDISK
N = UR2               8 = VM CP CMD
O = OPTIONS           9 = VM DIAGNOSE
P = PROGRAM           % = DB/2
Q = CICS-PPT          > = OTRAN
R = FIELD             # = VM RDR
S = PSB               $ = VM DCSS
T = TERMINAL          @ = VM DIAL
U = ABSTRACT          ? = NONPRINTABLE
V = VOLUME              RESOURCE TYPE
```

Note: A second report line will generate to display the full 248 character resource name if needed. The resource name will be preceded by RES=.

The selection criteria are as follows:

DATASET for data sets

VOLUME for volumes

RESOURCE for other resources

RESCLASS for specific class

OPERCMDS for operator commands.

14 **JOBID -** Shows the POWER job number. The job number may be preceded by one of the following codes:

J Job

S Started task

T TSO

15 **TERMINAL -** Shows the terminal for an online user or the reader through which a batch job was submitted (POWER only). Jobs submitted from the internal reader are listed as INTRDR. Selection criterion is TERMINAL.

```
// JOB UTIL                                                     DATE 12/03/1998, CLOCK 13/07/11
ID ===> Parameters Suppressed <===
// EXEC TSSUTIL
CA-TOP SECRET SECURITY VERSION 3.0         SECURITY REPORT/EXTRACT UTILITY
              INCOMING CONTROL STATEMENTS :
INPUT(ALL)
REPORT EVENT(ALL) DATE(-01) LONG
CA-TOP SECRET SECURITY VERSION 3.0         SECURITY ACTIVITY/INCIDENTS REPORT # 01          12/03/98  13:06:48       PAGE

  DATE      TIME     SYSID ACCESSOR  JOBNAME   FACILITY  MODE  VC  PROGRAM   R-ACCESS A-ACCESS  SRC/DRC  SEC  JOBID   TERMINAL
--------  --------   ----- --------  --------  --------  ----  --  --------  -------- --------  -------  ---  ------  --------

   1        2        3      4         5         6         7     8   9         10       11        12       13

            16   RESOURCE  TYPE & NAME :

12/02/98  06:33:38  VSEB  *MISSING  TSSRSVCS  BATCH     WARN      $JOBACCT                      *1C*-03  INI          INTRDR
                    RESOURCE  TYPE & NAME :             NAME=*MISSING
12/02/98  06:34:08  VSEB  *MISSING  TSSAUTH9  BATCH     WARN      $JOBACCT                      *1C*-03  INI          INTRDR
                    RESOURCE  TYPE & NAME :             NAME=*MISSING
12/02/98  06:34:38  VSEB  *MISSING  LINKEDIT  BATCH     WARN      $JOBACCT                      *1C*-03  INI          INTRDR
                    RESOURCE  TYPE & NAME :             NAME=*MISSING
12/02/98  06:34:38  VSEB  *MISSING  TSSCBPT   BATCH     WARN      $JOBACCT                      *1C*-03  INI          INTRDR
                    RESOURCE  TYPE & NAME :             NAME=*MISSING
12/02/98  06:34:38  VSEB  *MISSING  LINKEDIT  BATCH     WARN      $JOBACCT                      *1C*-03  INI          INTRDR
                    RESOURCE  TYPE & NAME :             NAME=*MISSING
12/02/98  06:35:39  VSEB  CHRJ004   TSSCHART  BATCH     WARN      $JOBACCT                        OK+A                INTRDR
                    RESOURCE TYPE & NAME : AC VOLUME
12/02/98  06:35:39  VSEB  CHRJ004   TSSCHART  BATCH     WARN      $JOBACCT                        OK+A                INTRDR
                    RESOURCE TYPE & NAME : AC VOLUME
12/02/98  06:35:39  VSEB  CHRJ004   TSSCHART  BATCH     WARN      $JOBACCT                        OK+A                INTRDR
                    RESOURCE TYPE & NAME : AC VOLUME
12/02/98  06:35:39  VSEB  CHRJ004   TSSCHART  BATCH     WARN      $JOBACCT                        OK+A                INTRDR
                    RESOURCE TYPE & NAME : AC VOLUME
12/02/98  06:35:39  VSEB  CHRJ004   TSSCHART  BATCH     WARN      $JOBACCT                        OK+A                INTRDR
                    RESOURCE TYPE & NAME : AC VOLUME
12/02/98  06:35:39  VSEB  CHRJ004   TSSCHART  BATCH     WARN      $JOBACCT                        OK+A                INTRDR
                    RESOURCE TYPE & NAME : AC VOLUME
12/02/98  06:35:39  VSEB  CHRJ004   TSSCHART  BATCH     WARN      $JOBACCT                        OK+A   INI          INTRDR
                    RESOURCE  TYPE & NAME :             NAME=CHRJ004
12/02/98  06:35:39  VSEB  CHRJ004   TSSCHART  BATCH     WARN      $JOBACCT                        OK+A                INTRDR
                    RESOURCE TYPE & NAME : AC VOLUME
12/02/98  06:35:39  VSEB  CHRJ004   TSSCHART  BATCH     WARN      $JOBACCT                        OK+A                INTRDR
                    RESOURCE TYPE & NAME : AC VOLUME
12/02/98  06:35:39  VSEB  *MISSING  TSSGENTB  BATCH     WARN      $JOBACCT                      *1C*-03  INI          INTRDR
                    RESOURCE  TYPE & NAME :             NAME=*MISSING
12/02/98  06:36:09  VSEB  *MISSING  TSSSFRVT  BATCH     WARN      $JOBACCT                      *1C*-03  INI          INTRDR
                    RESOURCE  TYPE & NAME :             NAME=*MISSING
12/02/98  06:36:09  VSEB  *MISSING  TSSOPCOM  BATCH     WARN      $JOBACCT                      *1C*-03  INI          INTRDR
                    RESOURCE  TYPE & NAME :             NAME=*MISSING
12/02/98  06:36:09  VSEB  *MISSING  TSSSEC    BATCH     WARN      $JOBACCT                      *1C*-03  INI          INTRDR
                    RESOURCE  TYPE & NAME :             NAME=*MISSING
12/02/98  06:36:09  VSEB  *MISSING  AUTHA     BATCH     WARN      $JOBACCT                      *1C*-03  INI          INTRDR
                    RESOURCE  TYPE & NAME :             NAME=*MISSING
12/02/98  06:36:39  VSEB  *MISSING  CAS9TS42  BATCH     WARN      $JOBACCT                      *1C*-03  INI          INTRDR
                    RESOURCE  TYPE & NAME :             NAME=*MISSING
12/02/98  06:36:39  VSEB  *MISSING  TSSWRAUD  BATCH     WARN      $JOBACCT                      *1C*-03  INI          INTRDR
                    RESOURCE  TYPE & NAME :             NAME=*MISSING
12/02/98  06:36:39  VSEB  *MISSING  TSSEFRAK  BATCH     WARN      $JOBACCT                      *1C*-03  INI          INTRDR
                    RESOURCE  TYPE & NAME :             NAME=*MISSING
12/02/98  06:37:09  VSEB  *MISSING  TSSMSGT   BATCH     WARN      $JOBACCT                      *1C*-03  INI          INTRDR
                    RESOURCE  TYPE & NAME :             NAME=*MISSING
12/02/98  06:37:09  VSEB  *MISSING  TSSMNGR   BATCH     WARN      $JOBACCT                      *1C*-03  INI          INTRDR
                    RESOURCE  TYPE & NAME :             NAME=*MISSING
12/02/98  06:37:09  VSEB  *MISSING  TSSKSEC   BATCH     WARN      $JOBACCT                      *1C*-03  INI          INTRDR
                    RESOURCE  TYPE & NAME :             NAME=*MISSING
```

Figure 1-2. TSSUTIL Report Using EVENT(ALL) DATE(-01) LONG

The following information is displayed on the report.

1 **DATE -** The date when the related incident was recorded. The format of the date is controlled by the DATE control option specified at CA-Top Secret initialization. The default is month/day/year. This may vary if using European, military, or other date format. Selection criterion is DATE.

2 **TIME -** Time of day when the incident was recorded. The report is for the most part time-sequenced; however, this is controlled by the VSE logging function. TSSUTIL does not sort the incidents, so some events might be out of sequence. You may also notice that blocks of events will have the same time stamp--especially true for online violations. CA-ROSCOE, CICS, IMS and other online facilities record incidents indirectly to SMF. The CA-Top Secret address space does the actual logging every 15 to 300 seconds (based on the time value set by the TIMER control option). Selection criterion is TIME.

3 **SYSID -** The CA-CIS CPUID that logged the event. Selection criterion is SYSID.

4 **ACCESSOR -** The ACID that was in effect for the user. ACIDs that begin with an asterisk '*' are special to CA-TOP SECRET.

BYPASS indicates that the user is bypassing security.
UNDEF indicates an undefined user.
MISSING indicates that the ACID was not supplied on a job card.

Selection criterion is ACID.

5 **JOBNAME -** Either the name of a batch job, or the userid of an online user. The jobname is usually the same for a CISC user. The jobname for the online region will appear with that of an online user ACID. Selection criterion is JOBNAME.

6 **FACILITY -** Shows the facility being used. The most common facilities are:

BATCH
CICSPROD
CICSTEST
VM

7 **MODE -** Shows the mode of the user. Valid modes are:

DORM
FAIL
IMPL
WARN

8 **VC -** Represents a consecutive accumulation of violations for duration of the session or job. It is displayed only with violation entries.

9 **PROGRAM -** Shows the name of the program in control at the time the security incident was recorded. A common program name in $JOBACCT - batch initiator.

A program name will not always be present, especially if the event was recorded through an online data base system such as CICS. Selection criterion is RESOURCE. (Select RESOURCE only if you are looking for explicitly owned program usage.)

10 **R-ACCESS -** Shows the requested access level as defined in the RDT for the current resource (usually data set, volume, or CICS file).

If an access mask does not uniquely define an access level, the access mask is displayed preceded by an asterisk. In this case; the access mask displayed represents more than one access level.

Note: A requested access of FETCH will appear as READ in VSE.

11 **A-ACCESS -** Shows the allowed access level as defined in the RDT for the current resource. Indicates how the resource (usually data set, volume, or CICS file) was accessed by the user of job.

If an access mask does not uniquely define an access level, the access mask is displayed preceded by an asterisk. In this case; the access mask displayed represents more than one access level.

12 **SRC/DRC -** Shows the return code presented to the system (caller) and the associated detailed error reason code. This indicates whether the access was successful or was failed. If it was successful, one of the following codes will display.

OK indicates that the request was successful.

OK+A indicates a successfully audited incident.

OK+B indicates a successfully bypassed access.

OK+P indicates a successfully issued password.

Otherwise, the return and detail codes are shown in the format ***rr*-dd**, where 'rr' is the return code and 'dd' is the detailed error reason code. For example, *30*-0F indicates a terminal or reader violation during initiation; *08*-65 indicates a data set is not accessible.

The selection criteria is EVENT(VIOL,AUDIT) to get all violations and audit entries and DRC to get only the specific violations as explained by the detailed error reason codes.

Return codes and the Detailed Error Reason Codes are documented in
as well as in the *Messages and Codes Guide*.

13 **SEC -** Shows the VSE, vendor or customer security driver requesting security validation. This will be represented by a three-character mnemonic or by a hexadecimal value for the SVC in control. The following codes will appear:

ADA Database
BLP BLP
CAT Catalog management
CRE Create dataset
DES Data encryption
EOV End of volume
FAP Fetch access protection
FEV FEOV
HSM HSM
INC RACINITC
INI Job/STC/session initiation
INY RACINITY
LCF Command/program
LKD "AC=1"
LST IMS/CICS initiation
OPJ Open-J
OPN Open

PGM Attach, link or load request
REN Rename-DSN
SCR Delete-DSN
SUB Submit
TMS Tape management
TRM Termination
VSM VSAM-Catalog management
XX SVC number in hex

14 **JOBID -** Shows the POWER job number. The job number may be preceded by one of the following codes:

J Job

S Started task

T TSO

15 **TERMINAL -** Shows the terminal for an online user or the reader through which a batch job was submitted (POWER only). Jobs submitted from the internal reader are listed as INTRDR. Selection criterion is TERMINAL.

16 **RESOURCE -** Shows the eight-character resource type and up to a 248-character resource name. The resource varies greatly and does not always appear.

For initiations, the name of the user will appear.

For job submissions, the name of the job and associated ACID will appear.

For data set access, the volume serial number and data set name will both appear. The selection criteria are as follows:

DATASET for data sets

VOLUME for volumes

RESOURCE
for other resources

RESCLASS for specific class

OPERCMDS
for operator commands.

The Security/Activity Report Legend provides information on the data areas found on the TSSUTIL report.

```
---------- LEGEND FOR SECURITY/ACTIVITY REPORT ----------


DATE     = DATE ON WHICH INCIDENT OCCURRED    (NOT SORTED)
TIME     = TIME AT WHICH THE EVENT OCCURRED
SYSI     = SYSTEM IDENTIFICATION  (CA-CIS CPUID)
ACCESSOR = ACCESSOR SECURITY IDENTIFICATION  (ACID)
JOBNAME  = BATCH JOB NAME;  STC PROC NAME;  ONLINE USER ID
FF       = TYPE OF FACILITY: B=BATCH T=TSO  S=STARTED TASK
           V=VM  I=IMSPROD  C=CICSPROD K=CICSTEST R=ROSCOE
M        = MODE:   D=DORMANT    W=WARN    F=FAIL    I=IMPL
VC       = NUMBER OF VIOLATIONS ACCUMULATED BY JOB/SESSION
PROGRAM  = NAME OF PROGRAM IN CONTROL DURING SECURITY CALL
R-ACCESS = REQUESTED ACCESS LEVEL:
A-ACCESS = ALLOWED ACCESS LEVEL:
               AN ACCESS MASK IS SHOWN PRECEDED BY AN '*'
               IF THE ACCESS MASK REPRESENTS MORE THAN ONE
               ACCESS LEVEL NAME.
SRC/DRC  = SRC=SEC'Y CODE: 00=OK  +A=AUDIT +B=BYPASS +P=PW
           * FOR RESOURCE ACCESS: 04 OR 08 = ACCESS DENIED
           * FOR JOB INITIATION:  08=PASSWORD IS INCORRECT
              0C=PASSWORD EXPIRED 10=NEW  PASSWORD INVALID
              18=FAILED INST/EXIT 1C=ACCESS NOT AUTHORIZED
              20=SECURITY DORMANT 28=OPER-ID CARD REQUIRED
              2C=BAD OPER-ID CARD 30=TERMINAL UNAUTHORIZED
              34=UNAUTH APPLICATN
         = DRC=DETAIL ERROR REASON CODE  (EXPLAINED BELOW)
SEC      = SYSTEM DRIVER ISSUING SECURITY CHECK:
               OPN=OPEN  EOV=END-VOL/OPN  OPJ=OPEN-J
               FEV=FEOV  CRE=CREATE-DSN  SCR=DELETE-DSN
               REN=RENAME-DSN  CAT=CVOL/CATLG-MNGT  HSM=HSM
               LST=IMS/CICS INITIATION  TMS=TAPE MANAGEMENT
               SUB=SUBMIT  VSM=VSAM-CATLG-MNGT  LCF=CMD/PGM
               INI=JOB/STC/SESSION START  INY=RACINITY
               INC=RACINITC BLP=BLP ADA=DATABASE LKD="AC=1"
               FAP=FETCH ACCESS PROTECTION TRM=TERMINATION
               DES=DATA ENCRYPT  XX=SVC NUMBER IN HEX
RESOURCE = RESOURCE TYPE & NAME OF ACCESSED RESOURCE
               A=ADABAS B=SUBMIT  D=DSNAME E=CICS-DCT F=FCT
               G=AUTH H=FILE I=IMSDBD J=JCT K=UNLOCK L=LOCK
               M=UR1 N=UR2 O=OPTIONS  P=PROGRAM  Q=CICS-PPT
               R=FIELD  S=PSB  T=TERMINAL  U=ABSTRACT
               V=VOLUME  W=DASD VOLUME  X=X-ACTN  Y=USER?
               Z=CICS-TST  6=USERLOG   %=DB/2  >=OTRAN
               7=VM MINIDISK  8=VM CP CMD  9=VM DIAGNOSE
               #=VM RDR  $=VM DCSS  @=VM DIAL  f=IBMFAC  r=OPERCMDS
               g=TSOACCT  h=TSOAUTH  i=TSOPROC
               ?= NONPRINTABLE RESOURCE TYPE  p=JESSPOOL
JOBID    = JES2 JOB NUMBER               S=STC J=JOB T=TSO
TERMINAL = ONLINE TERMINAL NAME   OR JES2 READER OR REMOTE
```

Figure 1-3. Security/Violation Report Legend

The following information appears on the Security/Violation Report Legend:

DATE The date on which the incident occurred (not sorted)

TIME The time at which the event occurred.

SYSI System Identification (CA-CIS CPUID)

ACCESSOR The accessor security identification (ACID)

JOBNAME The batch jobname, STC procname, or online user id.

FF - Type of Facility

B=BATCH

C=CICSPROD
I=IMSPROD
K=CICSTEST
R=ROSCOE
S=STARTED TASK
T=TSO
V=VM

M - Mode

D=DORMANT
F=FAIL
I=IMPL
W=WARN

VC The number of violations accumulated by JOB/SESSION.

PROGRAM The name of the program in control during the security call.

R-ACCESS The requested access level. An access mask is shown preceded by an '*' if the access mask represents more than one access level name.

A-ACCESS The allowed access level. An access mask is shown preceded by an '*' if the access mask represents more than one access level name.

SRC/DRC Security reason code, detailed reason code:

00=OK
+A=AUDIT
+B=BYPASS
+P=PW

For resource access:

04 OR 08 = ACCESS DENIED

For job initiation:

08=PASSWORD IS INCORRECT
0C=PASSWORD EXPIRED
10=NEW PASSWORD INVALID
18=FAILED INST/EXIT
1C=ACCESS NOT AUTHORIZED
20=SECURITY DORMANT
28=OPER-ID CARD REQUIRED
2C=BAD OPER-ID CARD
30=TERMINAL UNAUTHORIZED
34=UNAUTH APPLICATN

Detailed Error Reason Codes are described on the next page of the report.

SEC System driver issuing security check:

ADA=DATABASE
BLP=BLP
CAT=CVOL/CATLG-MNGT
CRE=CREATE-DSN
DES=DATA ENCRYPT

EOV=END-VOL/OPN
FAP=FETCH ACCESS PROTECTION
FEV=FEOV
HSM=HSM
INC=RACINITC
INI=JOB/STC/SESSION START
INY=RACINITY
LCF=CMD/PGM
LKD="AC=1"
LST=IMS/CICS INITIATION
OPJ=OPEN-J
OPN=OPEN
REN=RENAME-DSN
SCR=DELETE-DSN
SUB=SUBMIT
TMS=TAPE MANAGEMENT
TRM=TERMINATION
VFX=RACROUTE REQ=VERIFYX
VSM=VSAM-CATLG-MNGT
XX=SVC NUMBER IN HEX

RESOURCE The type and name of the accessed resource.

```
A = APPL              W = DASD VOLUME
B = SUBMIT            X = X-ACTN
D = DSNAME            Y = USER?
E = CICS-DCT          Z = CICS-TST
F = FCT               f = IBMFAC
G = AUTH              g = TSOACCT
H = FILE              h = TSOAUTH
I = IMSDBD            i = TSOPROC
J = JCT               p = JESSPOOL
K = UNLOCK            r = OPERCMDS
L = LOCK              6 = USERLOG
M = UR1               7 = VM MINIDISK
N = UR2               8 = VM CP CMD
O = OPTIONS           9 = VM DIAGNOSE
P = PROGRAM           % = DB/2
Q = CICS-PPT          > = OTRAN
R = FIELD             # = VM RDR
S = PSB               $ = VM DCSS
T = TERMINAL          @ = VM DIAL
U = ABSTRACT          ? = NONPRINTABLE
V = VOLUME                RESOURCE TYPE
```

JOBID The POWER job number:

S=STC
J=JOB
T=TSO

TERMINAL The online terminal name or POWER Reader or remote.

The Detailed Violation Error Reason Code Legend provides an explanation of all codes in hexadecimal format that appear in the 'SRC/DRC' column of the report.

```
---------------- DETAILED VIOLATION ERROR REASON CODES LEGEND ----------------

01=ACID SUSPENDED    02=FAILED BY SITE EXIT    03=ACID MISSING
04=FACILITY DEACTIVATED   05=ACID EXPIRED    06=SYSTEM FACILITY NOT AUTHORIZED
07=PASSWORD MISSING  08=TSO PASSWORD SUPPLIED AT LOGON   09=PASSWORD INCORRECT
0A=PASSWORD EXPIRED, NEW PASSWORD NOT SUPPLIED    0B=NEW PASSWORD INVALID
0C=CA-TSS     INACTIVE-END OF DAY    0D=OPERATOR ID CARD REQUIRED
0E=OPERATOR ID CARD INVALID    0F=NEW PASSWORD REVERIFY FAILED
10=CANCELLED-EXCESSIVE VIOLATIONS  11=STC UNDEFINED
13=LOCKED-TOO MANY VIOLATIONS   14=ACID ALREADY SIGNED ON   15=ILLEGAL ACID ID
16=REMOTE JOB ENTRY TERMINAL NOT AUTHORIZED FOR SUBMISSION
17=CROSS-MEMORY FAILURE         18=SUSPENDED USER ON HOLIDAYS        19=NOATS
1A=TERMINAL OR READER IS NOT AN AUTHORIZED SOURCE
1B=PASSWORD VIOLATION THRESHOLD EXCEEDED  1C=ACID INACTIVE TOO LONG
1D=VOICE/IMAGE REJECTION    1E=INTERNAL INTERFACING ERROR
1F=NO AUTHORITY FOR FUNCTION    20=INTERNAL INTERFACING ERROR
21=INTERNAL SYSTEM ERROR    22=TSS COMMAND FAILURE    23=UNKNOWN FACILITY
24=INTEGRITY ERROR      25=INIT ERROR          26=INTEGRITY ERROR
2C=INSUFFICIENT CSA STORAGE     41=INVALID VOLSER
46=ACID NOT DEFINED   47=ACID ALREADY EXISTS   4C=INVALID RESOURCE NAME/LENGTH
4D=ERROR DURING BACKUP   4E=(INST)DATA NOT PRESENT   51=VOLUME NOT FOUND
52,53=VOLUME NOT OWNED   54,55=VOLUME ALREADY DEFINED
56=VOL PREFIX NOT OWNED         57=DSN/PREFIX NOT DEFINED
58=DSN/PREFIX ALREADY DEFINED   59=PREFIX OWNED    5A=RESOURCE ALREADY DEFINED
5B=RESOURCE NOT FOUND   5C=RESOURCE NOT OWNED     64=TSS IS INACTIVE
65=DSN INACCESSIBLE   66=X-AUTH'D DATASET ACCESS NOT GRANTED
67=ACCESS DENIED FOR GLOBALLY RESTRICTED DATASET
68=FETCH DENIED    69=CANNOT DELETE - ERASE DISALLOWED
6A=ILLEGAL DATASET  ACCESS  THROUGH  NON-PRIVILEGED  PROGRAM/FILEPOOL
6B=ILLEGAL DATASET ACCESS THROUGH UNAUTHORIZED TASK/LIBRARY/SFS FILE
6C=FETCH VIOLATION  6D=DATASET ACCESS  FAILED BY INSTALLATION EXIT
6E=DATASET ACCESSED AT ILLEGAL TIME    6F=DATASET ACCESSED ON UNAUTHORIZED DAY
70=DATASET ACCESSED THROUGH UNAUTH FACILITY    73=VOLUME ACCESS DENIED BY EXIT
74=BLP ACCESS UNAUTHORIZED    75=VOLUME NOT OWNED
77=CROSS-AUTHORIZED VOLUME ACCESSED AT  UNAUTHORIZED LEVEL
78=CANNOT CREATE DATASETS ON THIS VOLUME   79=SYSTEM ERROR DURING VALIDATION
7A=ATTEMPTED TO  ACCESS ENTIRE VOLUME WITHOUT SPECIFICATION OF DATASET NAME
7E=VOLUME ACCESS NOT ALLOWED ON THIS DAY      7F=VOLUME ACCESS DENIED BY TIME
80=VOLUME ACCESSED THROUGH UNAUTH FACILITY  81=VOLUME ACCESSED BY UNPRIV PGM
88=RESOURCE ACCESS DENIED
8C=IMS XACTN REQUIRES PASSWORD   8E=IMS XACTN PASSWORD BAD
90=RESOURCE ACCESS DENIED BY INSTALLATION EXIT  91=RESOURCE DENIED THIS DAY
92=RESOURCE DENIED THIS TIME 93=TERMINAL LOCKED  94=UNLOCK FAILED BAD PASSWORD
95=RESOURCE ACCESS BY UNPRIV PROGRAM 96=RESOURCE ACCESS BY UNAUTH FACILITY
97=UNAUTH RESOURCE ACCESS LEVEL    98=TERMINAL LOCKED - EXCESSIVE VIOLATIONS
99=JOB/ACID SECURITY BYPASS  9A=SUBMIT FAILED - UNAUTH FACILITY
9B=SUBMIT FAILED-BAD PGM 9C=SUBMIT FAILED BY EXIT 9D=SUBMIT FAILED UNAUTH ACID
9E=NO LCF AUTHORITY    9F=UNAUTH PROGRAM EXECUTION ATTEMPT
A0=FACILITY ACCESS NOT ALLOWED AT THIS TIME   A1=FACILITY ACCESS DENIED BY DAY
```

Figure 1-4. Detailed Violation Error Reason Codes Legend

The following Detailed Reason Codes appear on the TSSUTIL report, for a complete description of these codes, refer to the *Messages and Codes Guide*.

01 ACID suspended
02 Failed by sit exit
03 ACID missing
04 Facility deactivated
05 ACID expired
06 System facility not authorized
07 Password missing
08 TSO password supplied at logon
09 Password incorrect
0A Password expired, new password not supplied
0B New password invalid

0C CA-TSS inactive-end of day
0D Operator ID card required
0E Operator ID card invalid
0F New password reverify failed
10 Cancelled-excessive violations
11 STC undefined
13 Locked-too many violatoins
14 ACID already signed on
15 Illegal ACID id
16 Remote job entry terminal not authorized for submission
17 Cross-memory failure
18 Suspended user on holidays
19 NOATS
1A Terminal or reader is not an authorized source
1B Password violation threshold exceeded
1C ACID inactive too long
1D Voice/image rejection
1E Internal interfacing error
1F No authority for function
20 Internal interfacing error
21 Internal system error
22 TSS command failure
23 Unknown facility
24 Integrity error
25 Init error
26 Integrity error
2C Insufficient CSA storage
41 Invalid volser
46 ACID not defined
47 ACID already exists
4C Invalid resource name/length
4D Error during backup
4E (INST)DATA not present
51 Volume not found
52 Volume not owned
53 Volume not owned
54 Volume already defined
55 Volume already defined
56 Vol prefix not owned
57 DSN/prefix not defined
58 DSN/prefix already defined
59 Prefix owned
5A Resource already defined
5B Resource not found
5C Resource not owned
64 TSS is inactive
65 DSN inaccessible
66 X-AUTH'D dataset access not granted
67 Access denied for globally restricted dataset

68 Fetch denied
69 Cannot delete - erase disallowed
6A Illegal dataset access through non-privileged program/filepool
6B Illegal dataset access through unauthorized TASK/LIBRARY/SFS file
6C Fetch violation
6D Dataset access failed by installation exit
6E Dataset accessed at illegal time
6F Dataset accessed on unauthorized day
70 Dataset accessed through unauth facility
73 Volume access denied by exit
74 BLP access unauthorized
75 Volume not owned
77 Cross-authorized volume accessed at unauthorized level
78 Cannot create datasets on this volume
79 System error during validation
7A Attempted to access entire volume without specification of datasetname
7E Volume access not allowed on this day
7F Volume access denied by time
80 Volume accessed through unauth facility
81 Volume accessed by unpriv pgm
88 Resource access denied
8C IMS XACTN required password
8E IMS XACTN password bad
90 Resource access denied by installation exit
91 Resource denied this day
92 Resource denied this time
93 Terminal locked
94 Unlock failed bad password
95 Resource access by unpriv program
96 Resource access by unauth facility
97 Unauth resource access level
98 Terminal locked - excessive violations
99 JOB/ACID security bypass
9A Submit failed - unauth facility
9B Submit failed-bad pgm
9C Submit failed by exit
9D Submit failed unauth ACID
9E No LCF authority
9F Unauth program execution attempt
A0 Facility access not allowed at this time
A1 Facility access denied by day

If you wish to customize reporting without TSSUTIL, see the *SMF Type 80 Record Layout* section.

1.9 TSSUTIL Abend and Return Codes

1.9.1 Abend Codes

Code	Description
1600	Failure to open file SYSPRINT This is the only abend code. All other abend codes have been replaced by an error message issued to SYSPRINT with a final return code of 8.

1.9.2 Return Codes

Code	Description
RC=0	All reports processed successfully.
RC=4	One or more reports with no incidents found matching selection criteria.
RC=8	An error has been found and an error message was issued to file SYSPRINT. The execution is terminated.

1.9.3 SMF Type 80 Record Layout

The following layout is for the SMF type 80 record. If you wish to customize reporting rather than use TSSUTIL, you can review the layout of the SMF type 80 record shown below.

Table 1-1 (Page 1 of 5). SMF Type 80 Record Layout

SMF80FLG	DS	X	X'02'VS2
SMF80RTY	DS	X	80 DECIMAL
SMF80TME	DS	XL4	TIME
SMF80DTE	DS	CL4	DATE
SMF80SID	DS	CL4	SYSTEM ID
SMF80DES	DS	XL2	DESCRIPTOR FLAGS
SMF80EVT	DS	X	EVENT CODE:
$S80INIT	EQU	1	JOB INITIATION
$S80AUTH	EQU	2	AUTHORIZATION CHECK
$S80CMD	EQU	50	AUTH COMMAND
$S80PSWD	EQU	51	PASSWORD CHANGE
$S80COPT	EQU	52	TSS CONTROL OPTIONS
$S80AVO	EQU	55	AVO REQUEST
$S80VOL	EQU	56	VOLUME UPDATE
$S80NVOL	EQU	57	TAPEMNGT ADD VOL
$S80DVOL	EQU	58	TAPEMNGT DELETE VOLUME
$S80DUF	EQU	59	DYNAMIC (INSTDATA) UPDATE
$S80ABND	EQU	60	USER ABEND IN TSSVSE
$S80XDIS	EQU	61	EXIT DISABLED
$S80STSS	EQU	62	START TSS ADDRESS SPACE
$S80PTSS	EQU	63	STOP TSS ADDRESS SPACE
$S80STCA	EQU	64	STC OPERATOR ACCOUNTABILITY
$S80STAT	EQU	65	STATISTICS DUMP
*			
SMF80EVQ	DS	X	EVENT CODE QUALIFIER
SMF80USR	DS	CL8	ACCESSOR ID
	DS	XL2	
	DS	XL2	
	DS	XL2	
	DS	XL2	

Table 1-1 (Page 2 of 5). SMF Type 80 Record Layout

SMF80REL	DS	CL2	OFFSET TO 1ST EXTENSION
SMF80CNT	DS	XL2	# OF EXTENSION SECTIONS
SMF80ATH	DS	X	AUTHORITY
	DS	X	
	DS	X	
	DS	X	
SMF80TRM	DS	CL8	TERMINAL ID
SMF80JBN	DS	CL8	JOBNAME
SMF80RST	DS	XL4	READER TIME
SMF80RSD	DS	XL4	READER DATE
SMF80UID	DS	CL8	SMF USERID
SMF80VER	DS	X	RACF VERSION
LSMF80	EQU	*-SMF80	
SMF80REX	DSECT		
SMF80DTP	DS	X	DATA TYPE:
$S80XCMD	EQU	103	IMAGE OF TSS COMMAND
$S80XSRI	EQU	104	SRIPL/PW/AVO
$S80XOPT	EQU	105	IMAGE OF TSS OPTIONS
$S80XFLG	EQU	109	COPY OF FLOG
$S80XHDR	EQU	255	AUDIT/FILE HEADER RECORD
$S80XEND	EQU	0	AUDIT/FILE WRAPPER
SMF80DLN	DS	X	LENGTH OF DATA IN EXT SECTION
SMF80DTA	DS	0X	VARIABLE DATA SECTION
*			
	DS	A	RESERVED
	DS	X	RESERVED
	DS	X	RESERVED
FLIND2	DS	X	AUDIT REASON INDICATOR:
$FLI2ACT	EQU	X'80'	ACTION AUDIT
$FLI2RSC	EQU	X'40'	RESOURCE AUDIT
$FLI2USR	EQU	X'20'	USER AUDIT
$FLI2FAC	EQU	X'10'	FACILITY AUDIT
*			
	DS	X	RESERVED
	DS	X	RESERVED

Table 1-1 (Page 3 of 5). SMF Type 80 Record Layout

FLFLAGS	DS	X	LOGGING INDICATORS:
$LOGVIOL	EQU	X'80'	VIOLATION
$LOGFORC	EQU	X'40'	FORCED LOG-OUT
$LOGFAIL	EQU	X'20'	TRUE FAILURE
$LOGAUDT	EQU	X'10'	AUDITED EVENT
*			
FLDATE	DS	XL3	DATE (PACKED YYDDDF)
	DS	X	RESERVED
FLTIME	DS	XL4	TIME OF DAY (HHMMSSTH)
FLRACC	DS	XL2	REQUESTED ACCESS
FLAACC	DS	XL2	ALLOWED ACCESS
FLRETCOD	DS	X	RETURN CODE
FLDETLRC	DS	X	DETAIL REASON CODE
FLJOBTYP	DS	X	FACILITY
FLSVC	DS	X	CALLING SVC
FLCLASS	DS	X	RESOURCE CLASS:
$ARAPPL	EQU	C'A'	APPLICATION
$ARSUBM	EQU	C'B'	SUBMIT ACID
$RRCHANG	EQU	C'C'	SECURITY FILE CHANGE
$ARDSN	EQU	C'D'	DSN PREFIX
$ARDCT	EQU	C'E'	CICS DCT
$ARFCT	EQU	C'F'	CICS FCT
$ARJCT	EQU	C'J'	CICS JCT
$ARTSS	EQU	C'O'	TSS OPTIONS
$ARPGM	EQU	C'P'	PROGRAM
$ARTERM	EQU	C'T'	TERMINAL
$ARVOL	EQU	C'V'	TAPE VOLUME
$ARDASDV	EQU	C'W'	DASD VOLUME
$ARXACTN	EQU	C'X'	TRANSACTION
*			
FLMODE	DS	X	USER'S MODE:
$DORM	EQU	X'80'	DORMANT MODE
$WARN	EQU	X'40'	WARN MODE
$FAIL	EQU	X'20'	FAIL MODE
$IMPL	EQU	X'30'	IMPL MODE

Table 1-1 (Page 4 of 5). SMF Type 80 Record Layout

*			
FLJOBNUM	DS	XL2	JOBNUMBER (JES FORMAT)
FLNVIOL	DS	X	VIOLATION COUNT (FOR SESSION)
	DS	XL2	RESERVED
	DS	XL2	RESERVED
FLACID	DS	CL8	ACID NAME
FLJOB	DS	CL8	JOB NAME
FLVOLSER	DS	CL6	VOLUME SERIAL
	DS	CL2	RESERVED
FLPGM	DS	CL8	PROGRAM IN CONTROL
FLRES	DS	CL44	RESOURCE NAME
FLIND1	DS	X	INDICATORS:
$FLBYPSS	EQU	X'80'	USER IS BYPASSING SEC'Y
$FLNOTIF	EQU	X'40'	ACTION(NOTIFY)
$FLSUSP	EQU	X'20'	SUSPEND ACID
$FLFRAK	EQU	X'10'	FRACHECK-INITIATED LOG
$FLRENMO	EQU	X'04'	RENAME OLD DSN DATA
$FLRENMN	EQU	X'02'	RENAME NEW DSN DATA
$FLRENM	EQU	$FLRENMO+ $FLRENMN	RENAME OLD AND NEW
$FLVSAM	EQU	X'01'	VSAM CATALOG DATA
*			
FLINDEV	DS	CL8	INPUT DEVICE (TERMINAL/READER)
FLATTR1	DS	XL1	USER ATTRIBUTES:
$AMULTPW	EQU	X'80'	PASSWORD PER FACILITY
$ATSOMPW	EQU	X'40'	MULTIPLE TSO UADS PASSWORDS
$ANOADSP	EQU	X'20'	DONT USE ADSP (INIT)
$ANOPWC	EQU	X'10'	USER CANT CHANGE PASSWORD
$AAUDIT	EQU	X'08'	AUDIT THIS ACID
$AOID	EQU	X'04'	OIDCARD REQUIRED
$ATRACE	EQU	X'02'	TRACE THIS USER
$ANOSUBK	EQU	X'01'	CAN SUBMIT ANY ACID
*			
FLATTR2	DS	XL1	USER ATTRIBUTES:
$A14LIB	EQU	X'80'	PRIV LIB(S) PRESENT IN A/REC

Table 1-1 (Page 5 of 5). SMF Type 80 Record Layout

$AERROR	EQU	X'40'	ACT/REC ON FILE IS IN ERROR
$ASUSPND	EQU	X'20'	ACID IS SUSPENDED
$ANORESK	EQU	X'10'	NO RESOURCE CHECKING
$ANOVOLK	EQU	X'08'	NO VOLUME CHECKING
$ANODSNK	EQU	X'04'	NO DATASET CHECKING
$ANOLCFK	EQU	X'02'	NO LCF CHECKING
*			
FLATTR3	DS	XL1	USER ATTRIBUTES:
$AMRO	EQU	X'80'	MRO-SECURITY RECORDS IN CSA
$ASHRPRF	EQU	X'40'	SHARED COMMON PROFILES
$ACON	EQU	X'20'	CONSOLE AUTHORITY
$AGAP	EQU	X'10'	GLOBALLY ADMINISTRABLE PROF
$ADUFXTR	EQU	X'08'	DUF EXTRACT
$ADUFUPD	EQU	X'04'	DUF UPDATE
$ASUSPUN	EQU	X'02'	SUSPEND UNTIL IN EFFECT
$ANOVMMD	EQU	X'01'	NO MINI DISK CHECKING
*			
	DS	X	RESERVED
FLRTME	DS	XL3	READER START TIME
FLRDTE	DS	XL3	READER START DATE

Chapter 2. TSSTRACK Utility

TSSTRACK allows administrators and auditors to monitor security-related events in real time for one or more systems. Information is obtained from the CA-Top Secret Audit/Tracking File, providing you with a complete, up-to-date display of violations and other audited events. A single terminal can be used to monitor activity on all systems using CA-Top Secret and a common Audit/Tracking File.

As distributed, this utility is executable under CICS. TSSTRACK can be used at both 3270 terminals with 80 or 132 character widths. Only 3270 terminals are supported under CICS.

TSSTRACK is designed primarily for continuous monitoring of security-related events. If you wish to extract information about particular events, execute the batch TSSUTIL program. You cannot run TSSTRACK from RACF/SAC compatibility mode.

The following considerations affect the TSSTRACK utility:

1. Security related events are displayed in chronological order as found in the Audit/Tracking File(s). No sorting is performed.
2. Report and tracking depends greatly upon the correct specification of logging options. The LOG option allows you to request the type of events to be logged; specify where logging information is recorded; and choose where violation notification is to be made.
3. The following logging option is required to obtain security information:
   - LOG(INIT,...) requests logging of all job/session initiations and terminations.
4. Each facility can be separately monitored.
5. In order to obtain audited events, you must be auditing resources and/or user activity.
6. The security authority under which TSSTRACK is executed.

2.1 Authority and Scope

To use TSSTRACK, you must be defined as a security administrator (SCA, LSCA, ZCA, VCA or DCA) or the MSCA and have the following administrative authority:

```
TSS ADMIN(acid) ACID(REPORT,AUDIT) RESOURCES(REPORT,AUDIT)
```

Only those events associated with ACIDs within your scope are tracked. For example, a divisional administrator receives information only about events involving ACIDs in her division. (The scope of authority is determined by the assigned ACID type when you were defined to CA-Top Secret.)

2.2 Allocating the Audit/Tracking File

TSSTRACK uses the CAIAUD1 and CAIAUD2 Files. CAIAUD2 is required when two Audit/Tracking Files are currently used by CA-Top Secret.

If invoked as a command, the file(s) currently used by CA-Top Secret are automatically allocated by TSSTRACK and deallocated at TSSTRACK termination.

In order to use other Audit/Tracking files, you must allocate the files prior to executing TSSTRACK.

The CAIAUD1 (and CAIAUD2) DLBL JCL statements or STD labels must be added to the JCL for the CICS Region.

The CICS ACID must have, at least, READ access for the Audit/Tracking File(s), and must always be allocated with a disposition of SHR.

2.3 Invoking TSSTRACK

TSSTRACK can be executed under CICS in two different modes: INTERACTIVE and CONTINUOUS. (Theses modes are explained later in this chapter).

To invoke TSSTRACK in interactive mode under CICS, enter:

```
TSS TRACK=ON{,options,options,...}
```

To invoke TSSTRACK in continuous mode under CICS, enter:

```
TSS TRACK=ON,FOR(hh:mm) {,options,options,...}
```

To designate only a specified number of minutes for the FOR keyword, omit the colon. For example, if you only want to run TSSTRACK for 15 minutes you would enter:

```
TSS TRACK=ON,FOR(15)
```

Selection Criteria/Control Options may be supplied on the TSSTRACK command in with the CA-Top Secret CICS Transaction.

Note: The maximum number of characters (including spaces) that may be entered for criteria options is 100.

TSSTRACK control options only pertain to TSSTRACK and should not be confused with Security File Control Options which set system-wide defaults and are stored in the Parameter File. If there are no control options passed to TSSTRACK when it is invoked, the following prompt is displayed:

```
TSS TRACK{,options,options,options,..}
```

```
   CA-Top Secret SECURITY VERSION 3.0  ONLINE TRACKING mm/dd/yy hh:mm:ss

AVAILABLE OPTIONS ARE:  DATE(YYDDD!TODAY!-##) TIME(HHMM) SYSID(????)
   SIDCOL(#)  EVENT(ALL|VIOL,AUDIT,JOBS,AUDTA)  FACILITY(ALL|???,...)|F(...)
   ACID(????????)|A(????????) DRC(??,??,...)|DRC  INTERVAL(##) LINES(##)
   WIDTH(##) SCROLL(##|YEST|NO) SIGNAL(ON|OFF) HOLD|RESUME CURRENT HELP
   HARDCOPY(?|OFF)|HARDC(?,##) LOCK|UNLOCK  STOP|END
```

Figure 2-2. TSSTRACK Options Prompt

Note: The pound signs (#) and question marks (?) indicate that values must be supplied.

2.3.1 TSO Users

Once you press the ENTER key, the security-related information will be continuously displayed. The INTERVAL selection criterion will specify how frequently the Audit/Tracking File is to be checked for new events. New selection criteria values can be entered at any time by pressing the PA1 key on 3270 terminals or the BREAK key on non-3270 terminals. (Remote 3270 terminals in SNA environments may need to use the ATTN key.) This causes an interruption of the tracking information display and the input prompt is reissued. You may then enter the desired selection criteria. To return to the tracking information display, press the ENTER key.

If DATE or TIME is specified after displaying the requested tracking information, TSSTRACK will display the "option" prompt when the current date and time is reached in the Audit/Tracking file after the ENTER key is pressed.

TSSTRACK is terminated by interrupting the tracking information display as described above, then entering the STOP or END selection criteria.

2.3.2 CICS Users in Interactive Mode

In the interactive mode, you must press the ENTER key to update the screen. TSSTRACK does not continuously display the security-related information as in TSO or as in the continuous mode in CICS.

New selection criteria values can be entered at any time by pressing the PF3 or PF15 key. This causes an interruption of the tracking information display and the input prompt is reissued. You can then enter the desired selection criteria where the cursor is positioned.

TSSTRACK is terminated by interrupting the tracking information display as described above, then entering the STOP or END selection criteria.

2.3.3 CICS Users in Continuous Mode

In continuous mode, TSSTRACK takes over the terminal for the time specified when TSSTRACK was invoked. Once the ENTER key is pressed, security-related information is continuously displayed. The INTERVAL selection criterion will specify how frequently the Audit/Tracking File is to be checked for new events. In order to interrupt TSSTRACK in this mode, or stop it before the specified time has expired, enter the following from another terminal:

```
TSS TRACK=OFF,TERM=(ALL|terminal,...)
```

This allows the user to either stop processing TSSTRACK from all terminals, or only specified terminals.

2.4 Selection Criteria/Control Options

The selection criteria are listed alphabetically, with brief descriptions and the defaults, if any. All selection criteria are discussed in detail after the alphabetical listing.

Note: The ACID, LINES, WIDTH, FACILITY, EVENT, SIDCOL, SIGNAL and SYSID options, once set, will remain in effect for the duration of the TSSTRACK session.

ACID Specifies an ACID for the tracking information display.

CURRENT Forces TSSTRACK to display information for the current date and time. This is the default if no other Selection Criteria is specified when TSSTRACK is first invoked.

DATE Specifies the starting date for the tracking information display. The default is TODAY.

DRC Requests information about the detailed error reason codes used in the tracking display.

END Terminates TSSTRACK.

EVENT Specifies the type of security-related events for which tracking information is to be displayed. The default is AUDIT,VIOL.

FACILITY Specifies the facilities for which tracking information is to be displayed.

HELP Requests summary information about the abbreviations used in the tracking information display.

HOLD Temporarily freezes the tracking information display.

INTERVAL Specifies how often TSSTRACK is to check the Audit/Tracking File for new events. The default is 15 seconds.

LINES Specifies the maximum number of lines that may be used on the 3270 terminal screen.

LOCK Locks the terminal while TSSTRACK is running.

RESUME Resumes normal TSSTRACK processing after the pause forced by the HOLD parameter.

SCROLL Specifies whether the tracking information display on a terminal is to be paged forward automatically, as necessary, to create space for new display lines. The default value is YES for 3270s; NO for non-3270s.

SIDCOL Specifies the column of the AUDIT-ID from which the one-character system identifier will be taken for the TSSTRACK Information Display.

SIGNAL Specifies whether the audible alarm is to be sounded when information about a new event is written to the terminal, if so equipped. The default is ON.

STOP Terminates TSSTRACK.

SYSID Specifies the CA-CIS CPUID identifier of the CPU for which tracking information is to be displayed.

TIME Specifies the starting time for the tracking information display.

UNLOCK Unlocks the terminal after the password is entered.

WIDTH Specifies the maximum number of columns that may be used on the 3270 terminal screen.

2.4.1 ACID

Specifies an ACID for tracking information display.

```
ACID(acid)
A
```

acid Specifies an ACID to be monitored. The default is null. Once used the ACID specification remains for the duration of the TSSTRACK session. To reset the ACID enter: **ACID( )**

2.4.2 CURRENT

Forces TSSTRACK to display event information using the current date and time. This is the default if date and/or time was not specified when TSSTRACK was first invoked.

```
CURRENT
```

2.4.3 DATE

Specifies the starting date for the tracking information display. All events logged from this date through the current date are displayed.

```
DATE(-nnn|yyddd|TODAY)
```

-nnn Specifies the number in days subtracted from the current date which calculates the starting date for the tracking information display. This number 'nnn' may be an integer from 0 to 365. Specifying 0 generates the same result as specifying TODAY.

yyddd Specifies the Julian date to be used as the starting date for the tracking information display.

TODAY Specifies that the current date is to be used as the starting date for the tracking information display.

If DATE is omitted, a default of TODAY and the current time are used.

Note: Specifying the DATE selection criteria sets the SCROLL control option value to NO, unless SCROLL is specified *after* the DATE selection criteria. After displaying the requested tracking information, TSSTRACK will display the "option" prompt when the current date and time is reached in the Audit/Tracking file after the ENTER key is pressed.

2.4.4 DRC

Requests information about the detailed error codes used in the tracking information display.

```
DRC[(xx,xx,xx,...)]
```

If hexadecimal DRC codes are not coded within parenthesis, message TSS8193A is issued requesting a list of DRC's separated by commas.

No other selection criteria should be entered with DRC. When DRC is entered, TSSTRACK responds with the prompt:

ENTER LIST OF DETAILED REASON CODES SEPARATED BY COMMAS

You can then enter the appropriate error reason codes. For example, to display information about reason codes 01, 67, and 6D, enter:

```
01,67,6D
```

The following information is displayed:

```
01-ACID HAS BEEN SUSPENDED
67-GLOBAL DATASET ACCESS DENIED
6D-DATASET ACCESS FAILED BY INSTALLATION EXIT
```

2.4.5 END

Terminates TSSTRACK.

```
END
```

When END is entered, the following message is issued:

```
ONLINE TRACKING TERMINATED
```

Note: No other selection criteria should be entered with END. This selection criterion cannot be used in continuous mode under CICS.

2.4.6 EVENT

Specifies the type of security-related events for which tracking information is to be displayed.

```
EVENT(ALL|AUDIT,JOBS,VIOL,AUDTA)
```

ALL Information is to be displayed for all types of security-related events.

event Specifies security-related event(s) for which information is to be displayed. This may be one or more of the following:

- **AUDIT** Audited events are to be displayed.
- **JOBS** Job initiations and terminations being tracked are to be displayed.
- **VIOL** Security violations are to be displayed.
- **AUDTA** Displays OK+A events and prevents OK+B events from being displayed.

If more than one event is specified, the types of events should be separated by commas. If EVENT is omitted, a default of AUDIT, VIOL is used.

Note: The EVENT selection criterion can be used in conjunction with the FACILITY and SYSID selection criteria to monitor very specific types of events.

2.4.7 FACILITY

Specifies the facilities for which tracking information is to be displayed.

```
FACILITY(ALL|facility,...)
FAC
F
```

ALL Information is to be displayed for all facilities. FAC(ALL) is also used to reset the FACILITY option prior to the termination of the TSSTRACK session.

facility Specifies facility or facilities for which information is to be displayed. May be any facility defined in the site's Systems Facilities Matrix or one of the default facility names provided by CA-Top Secret.

If FACILITY is omitted, a default of ALL is used.

The CICS and IMS Facilities Matrix entries usually refer only to the production versions, not test versions.

Note: The FACILITY selection criterion can be used in conjunction with the EVENT and SYSID selection criteria to monitor very specific types of events.

2.4.8 HELP

Requests summary information about the abbreviations used in the tracking information display.

```
HELP
```

No other selection criteria should be entered with HELP.

Information is displayed concerning the following:

- Resource class code
- Facility codes
- Mode codes
- Access codes
- Security drivers

To obtain information about the detailed error reason codes used in the tracking information display, use the DRC selection criterion.

2.4.9 HOLD

Temporarily freezes the tracking information display.

```
HOLD
```

No other selection criteria should be entered with HOLD. To return to the tracking information display in TSO, press the PA1 key; in CICS interactive mode, press the PF3 or PF15 key. In either case, then enter RESUME. In continuous mode under CICS, you cannot use this selection criterion.

HOLD is valid only at 3270 terminals. It is ignored if entered from a non-3270 terminal.

2.4.10 INTERVAL

Specifies how often the Audit/Tracking File is to be checked for new events.

```
INTERVAL(nnn)
```

nnn Interval (in seconds) that TSSTRACK is to wait before examining the Audit/Tracking File for new events. May be an integer between 01 and 600.

If INTERVAL is omitted, a default of 15 is used.

2.4.11 LINES

```
LINES(nn)
```

nn Maximum number of lines that may be used on your terminal screen. May be an integer between 10 and 48.

If LINES is omitted, TSSTRACK uses the maximum number of lines available on the terminal screen.

2.4.12 LOCK

```
LOCK
```

Locks the terminal while TSSTRACK is running. If you terminate TSSTRACK, use TSS UNLOCK to unlock the terminal. In CICS interactive mode, you can also enter the UNLOCK selection criterion before terminating TSSTRACK to unlock the terminal.

2.4.13 RESUME

Allows TSSTRACK processing to continue after a pause caused by the HOLD parameter.

```
RESUME
```

Note: If desired, other selection criteria can be entered with RESUME. RESUME is valid in interactive mode under CICS. It is ignored if entered from a non-3270 terminal.

2.4.14 SCROLL

Specifies whether output is to be paged forward as necessary to accommodate new tracking information.

```
SCROLL(NO|YES|##)
```

NO Display is to be paged forward only when the ENTER key is pressed.

Due to the overhead involved with SCROLL(NO) in CICS, it is recommended that you use YES.

YES Display is to be paged forward automatically when there is no more space on the screen for the new output.

In CICS interactive mode, YES will page forward when the ENTER key is pressed.

Display is to be paged forward automatically when there is no more space on the screen for the new output line. After scrolling forward, TSSTRACK will wait before scrolling to the next screen.

If SCROLL is omitted, a default of YES is used for 3270 terminals; NO for non-3270 terminals.

2.4.15 SIDCOL

Specifies the column of the AUDIT-ID from which the one-character CPU identifier will be taken for the TSSTRACK display.

```
SIDCOL(#)
```

The AUDIT id column number. The default is 4. For example, if the CPUID is "VSEA" and SIDCOL(4), TSSTRACK will display "A". If SIDCOL(2) was specified, TSSTRACK would display "EA".

2.4.16 SIGNAL

Specifies whether the audible alarm is to be sounded each time information about a new event is written to the terminal.

```
SIGNAL(OFF|ON)
```

OFF The audible alarm feature is to be suppressed.

ON The audible alarm is to be sounded each time information about a new event is written to the terminal.

If SIGNAL is omitted, a default of ON is used.

Note: The SIGNAL selection criterion is ignored when entered from terminals not equipped with the audible alarm feature.

2.4.17 STOP

Terminates TSSTRACK.

```
STOP
```

2.4.18 SYSID

Specifies the identifier of the system for which tracking information is to be displayed.

```
SYSID(smfid)
```

smfid CA-CIS CPUID for which tracking information is to be displayed.

If SYSID is omitted, tracking information is displayed for all systems.

2.4.19 TIME

Specifies the starting time for the tracking information display.

```
TIME(hhmm)
```

hhmm Starting time (in hours and minutes) for the tracking information display.

If TIME is omitted, the current time is used as the starting time if the DATE selection criterion has not been specified. If the DATE has been specified, the starting time is 12 AM on the date specified.

2.4.20 UNLOCK

```
UNLOCK
```

Unlocks the terminal after the password is entered. Message TSS8176A, requesting a password, will be issued.

2.4.21 WIDTH

Specifies the maximum number of columns that may be used on the 3270 screen.

```
WIDTH(nnn)
```

nnn Maximum number of columns that may be used. May be an integer between 80 and 132.

If WIDTH is omitted, a default of 80 is used.

2.5 Sample TSSTRACK Executions

The examples below illustrate various ways that TSSTRACK can be used.

1. Provide tracking information for all security events logged from 5 PM until the current time is reached. When the current time is reached, the TSSTRACK selection criteria/control options prompt is displayed. The display is to be positioned to the first event logged during this period and is to be scrolled forward only when the ENTER key is pressed. Hardcopy of the display should be produced and routed to SYSOUT class A when TSSTRACK terminates.

```
TIME(1700) SCROLL(NO) HARDCOPY
```

2. Provide tracking information for all security violations logged in the last two days on System 033E. The display should be positioned to start with the first event logged during this period and should be scrolled forward only when the ENTER key is pressed. No hardcopy is to be produced.

```
DATE(-2) SYSID(033E) EVENT(VIOL) SCROLL(NO)
```

3. Provide tracking information for all batch events logged from the current date and time until TSSTRACK terminates or alternate selection criteria are entered. The Audit/Tracking File should be examined every 60 seconds for new events.

```
EVENT(ALL) FACILITY(BATCH) INTERVAL(60)
```

2.6 TSSTRACK Output Description

The following is a sample of the output of TSSTRACK. Individual field descriptions follow the sample output.

```
   CA-Top Secret SECURITY  VERSION 3.0  ONLINE TRACKING   06/08/94 17:14:12
                           1   -- 06/31/94 --

 2 3 4 . 5       6   7       8    9    10     11  12        13

S-TIME-VC-JOB/USR -FFM-ACIDNAME-RDR/TERM-DRC-R/ACCES/A-SEC-PROGRAM--RES/CLS/NAME
=-====-==-========-====-========-========-===-==========-====-========-=====-=======
1 0941    GOTPA01  B W GOTPA01  L57.JR1  OKA      NONE LCF          PROG BLSRACC
1 0941    ROSCOE60 R F WYATH01  K18L3032 OKA READ READ OPN DSNSBTSK DSN  *BELOW*
                    DSN=SYS1.PROCLIB                                  VOL=MVXAE1
1 0942    GREPE02  T F GREPE02  B22IX150 OKA READ READ OPN ISPTASK  DSN  *BELOW*
                    DSN=SYS1.PROCLIB                                  VOL=MVXAE1
1 0944    CARDE02  T F CARDE02  A45L2029 OKA READ READ OPN EXEC     DSN  *BELOW*
                    DSN=SYS2.CLIST                                    VOL=MVSLIB
1 0944    CARDE02  T F CARDE02  A45L2029 OKA READ READ OPN EXEC     DSN  *BELOW*
                    DSN=SYS1.RMFCLS                                   VOL=MVXAE1
1 0944    CARDE02  T F CARDE02  A45L2029 OKA READ READ OPN EXEC     DSN  *BELOW*
                    DSN=SYS1.SBLSCLI0                                 VOL=MVXAE1
1 0944    GREPE02  T F GREPE02  B22IX150 OKA      NONE LCF          PROG ISRUDL
1 0944    CARDE02  T F CARDE02  A45L2029 OKA      NONE LCF          PROG ISPF
1 0944    CARDE02  T F CARDE02  A45L2029 OKA      NONE LCF          PROG ISPMAIN
```

Figure 2-3. TSSTRACK Display Screen

1 **dd/mm/yy -** Date on which tracked events shown occurred (line 2 of heading). Heading line 1 contains the current date and time to the right.

2 **S -** One-character system identifier. Taken from the CPU's CA-CIS CPUID on which the event occurred. See SIDCOL option.

An asterisk (*) in column 2 of the display line indicates a new event.

3 **TIME -** Time at which tracked event occurred.

4 **VC -** Accumulated violation count since start of session for ACID associated with tracked event.

5 **JOB/USR -** Name of batch job, started task, or user responsible for tracked event.

6 **FFM -** A one- or two-character identifier for the facility (FF) and a one-character identifier for the security mode (M) involved. Facility codes are:

B=BATCH
C=CICSPROD
I=IMSPROD
K=CICSTEST
N=NCCF
S=STC
T=TSO
V=VM
X=IMSTEST

Security modes are:

D=DORMANT
F=FAIL
I=IMP
W=WARN

7 **ACIDNAME -** Name of ACID associated with user or job responsible for tracked event.

8 **RDR/TERM -** POWER reader or online terminal associated with tracked event.

9 **DRC -**

Detailed error reason code or one of the following:

OK Incident was logged without violation

OKA Incident was audited without violation

OKB Incident was audited because of security bypass

Information about the detailed error reason code can be obtained by using the DRC selection criterion.

An asterisk in column 2 of the display line indicates a new event.

10 **R/ACCESS/A -** Access level requested (R) and allowed(A). Usually the first four characters of the access level defined in the RDT, except for the following:

ALOG=AUTOLOG
ALTR=ALTER
BRWS=BROWSE
CREI=CREATEIN
CRTB=CRETAB
CRTE=CREATE
CRTS=CRETS
CTRL=CONTROL
DELT=DELETE
LOGN=LOGON
IMGC=IMAGCOPY
INDX=INDEX
INSR=INSERT

NSHR=NOSHR
PKAD=PACKADM
RCVR=RECOVDB
SCRT=SCRATCH
SLCT=SELECT
SRGL=SURROGATE
UPDT=UPDATE

11 **SEC -** Security driver identifier:

ADA=DATABASE
BLP=OPEN-TAPE-BLP
CAT=CATALOG-MANAGEMENT
CRE=CREAT-DSN
DES=DATA-ENCRYPTION
EOV=OPEN-EOV
FAP=FETCH-ACCESS-PROTECTION
FEV=FORCE-EOV
HSM=IBM/HSM
INC=RACINITC
INI=JOB/STC/SESSION START
INY=RACINITY
LST=IMS/CICS-INITIATION
OPJ=OPEN-TYPE-J
OPN=OPEN
REN=RENAME-DSN
SCR=DELETE-DSN
SUB=SUBMIT
TMS=TAPE-MANAGEMENT
TRM=JOB/STC/SESSION TERMINATION
VSM=VSAM
??=HEXADECIMAL-SVC-NUMBER.

12 **PROGRAM -** Name of program in control when tracked event took place.

13 **RES/CLS/NAME -** A resource class code, followed by the resource name. The first four characters of the resource class are used as the resource class code, with the following exceptions:

APCL=APPCLU
APPL=APPL
CCCM=CACCFMEM
CCFD=CACCFDSN
DBD =DBD
DSN =DATASET
DB2 =DB2
D2BF=DB2BUFFP
D2DB=DB2DBASE
D2PL=DB2PLAN
D2ST=DB2STOGP
D2SY=DB2SYS

D2TB=DB2TABLE
D2TS=DB2TABSP
FLD =FIELD
PNL =PANEL
SMSG=SMESSAGE
SUB =ALT-ACID
TSOG=TSOPRFG
TSOT=TSOAUTH
TST =TST
VOL =VOLUME
VXFI=VXFILE
VTAP=VTAMAPPL
VXDV=VXDEVICE
USRL=USERLOG
WRTR=WRITER
XACT=TRANSACTION

On an 80 character screen, *BELOW* appears in the RES/CLS/NAME column indicating that the remaining resource information will be displayed in the next line.

Chapter 3. TSSAUDIT Utility

The batch utility program TSSAUDIT allows the auditor to monitor changes to the CA-Top Secret security file and sensitive VSE data. The type of security information depends upon the control statements selected. Each control statement is discussed in detail following a description of the JCL necessary to execute TSSAUDIT.

TSSAUDIT can be used to perform the following tasks:

- List changes made to the CA-Top Secret Security File. A change to a specified ACID or all changes can be listed, a date or range of dates, and a specified string, if desired.
- List security file information about one or more ACIDs including attributes and privileges.

3.1 TSSAUDIT JCL

JCL for using TSSAUDIT in batch is outlined below.

```
* $$ JOB JNM=AUDIT,CLASS=0,DISP=D
* $$ LST CLASS=A,RBS=2000
// JOB AUDIT
// ID USER=MSCA,PWD=TORONTO
// EXEC TSSAUDIT
CHANGES
PRIVILEGES
/*
/&
* $$ EOJ
```

CHANGES Lists changes made to the CA-Top Secret Security File. Requires ACID(REPORT) and RESOURCE(REPORT) authorities to run this function.

PRIVILEGES Lists Security File information about one or more ACIDs. Requires ACID(REPORT,AUDIT) and RESOURCE(REPORT,AUDIT) authorities to run this function.

3.1.1 CHANGES Control Statement

Lists changes made to the CA-Top Secret Security File.

```
                  CA(acid) ]
CHANGES           [DATE(-nn) ]
                  [STRING(string) ]
```

CA Only those changes made by the specified control ACID are to be listed. If omitted, all changes are listed.

DATE Only those changes made on or after the starting date are listed. The starting date to search the Recovery File is obtained by subtracting the number of days ('nn') from the current date. The value 'nn' can be any number from 00 to 99. If omitted, no date restrictions are applied.

STRING Only those changes containing the specified string entries are listed.

Because TSSAUDIT reads the entire CA-Top Secret Recovery File into memory when the CHANGES control statement is specified, the program's REGION size may need to be increased when the CHANGES control statement is specified. Insufficient storage is indicated by a U2719 abend.

Each record in the Recovery File is subjected to the following checks to determine if it meets your selection criteria.

1. Was the change made within the period implied by the DATE operand? (If the DATE is omitted, all those changes made from the beginning date of the Recovery File are listed.)
2. Was the change made by the ACID indicated in the CA operand? (This check is bypassed if the CA operand was omitted.)
3. Is the change within your scope? (Only those changes within your scope will be listed.) For example, a VCA can list changes for her division, and all departments within her division.
4. Does the change contain the string specified in the STRING operand? (This check is bypassed if the STRING operand was omitted.)

3.1.2 PRIVILEGES Control Statement

Lists Security File information about one or more ACIDs.

```
PRIVILEGES [SHORT]
```

SHORT Information is listed only for those ACIDs that have administrative authority or any of the following attributes or privileges:

Abbreviation	Attribute
ASUS	Administrative SUSPEND
AUD	AUDIT attribute
CONS	CONSOLE attribute
DUFU	DUFUPD attribute
DUFX	DUFXTR attribute
GAP	GAP attribute on profile
MRO	MRO attribute
MPW	MULTIPW attribute
NADS	NOADSP attribute
NATS	NOATS attribute
NDSN	NODSNCHK privilege
NLCF	NOLCFCHK privilege
NPWC	NOPWCHG attribute
NRES	NORESCHK privilege
NSUB	NOSUBCHK privilege
NSUS	NOSUSPEND privilege
NVMD	NOVMDCHK privilege
NVOL	NOVOLCHK privilege
OID	OIDCARD attribute
SUSP	SUSPEND ACID
TMPW	TSOMPW attribute
TRA	TRACE attribute

In the listing produced by the PRIVILEGES control statement, underlining of attributes indicates that the attributes are in a profile to which the specified ACID is attached. If the PRIVILEGES control statement is specified, you must be the MSCA or have the following administrative authority:

```
TSS ADMIN (Auditor's acid) ACID(REPORT,AUDIT)
    RESOURCES(REPORT,AUDIT)
```

3.2 Sample Control Statements

1. All Security File changes made in the past five days by the ACID named PAYROLL are listed.

```
// JOB AUDIT
// ID USER=MSCA,PWD=TORONTO
// EXEC TSSAUDIT
CHANGES CA(PAYROLL) DATE(-5)
/*
```

2. All Security File changes that included the string "CICS" are listed.

```
// JOB AUDIT
// ID USER=MSCA,PWD=TORONTO
// EXEC TSSAUDIT
CHANGES STRING(CICS)
/*
```

3.3 Sample TSSAUDIT Listings

The following pages contain sample output listings of TSSAUDIT using various control statements. The samples consist of:

- A listing of changes.
- A listing of Privileges and Attributes.

```
CA-TOP SECRET SECURITY VERSION 3.0                    AUDIT UTILITY                    09/14/98   10:20:41       PAGE 001
                                                      ____________




 INCOMING PARAMETER ===>      CHANGES
CA-TOP SECRET SECURITY VERSION 3.0                    AUDIT UTILITY                    09/14/98   10:20:41       PAGE 002
                                                                 ____________
                                        ----- LISTING OF CHANGES TO SECURITY FILE -----
   1        2        3     4    5                                      6

CHANGER    DATE     TIME    SYSID TYPE                    COMMAND/IMAGE
======== ======== ======== ===== ==== ================================================================================================

MSCA     09/14/98 08:23:05 VSEX  PW   TSS REP(MSCA    ) PASSWORD(????????)
MSCA     09/14/98 08:23:05 VSEX  CMND TSS CREATE(DEPT000A) NAME('CA-CIS USER FOR CUI ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:06 VSEX  CMND TSS CREATE(DEPT000B) NAME('CA TOP SECRET       ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:06 VSEX  CMND TSS CREATE(DEPT000C) NAME('$XXCS               ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:06 VSEX  CMND TSS CREATE(DEPT000D) NAME('$CHARLIE            ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:07 VSEX  CMND TSS CREATE(DEPT000E) NAME('$QQNID              ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:07 VSEX  CMND TSS CREATE(DEPT000F) NAME('$BC WORKSTATION     ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:07 VSEX  CMND TSS CREATE(DEPT000G) NAME('$MAINFRAME SUPPORT  ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:08 VSEX  CMND TSS CREATE(DEPT000H) NAME('$PRODUCT DEVELOPMENT') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:08 VSEX  CMND TSS CREATE(DEPT000I) NAME('$NEW MOTO RAY GROUP ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:08 VSEX  CMND TSS CREATE(DEPT000J) NAME('$RATE SYST GROUP    ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:09 VSEX  CMND TSS CREATE(DEPT000K) NAME('$QGDFAD             ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:09 VSEX  CMND TSS CREATE(DEPT000L) NAME('$EGFAOTL            ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:09 VSEX  CMND TSS CREATE(DEPT000M) NAME('$REPORT EDDIE       ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:10 VSEX  CMND TSS CREATE(DEPT000N) NAME('$TOTAL HOURS        ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:10 VSEX  CMND TSS CREATE(DEPT0000) NAME('$XPS SUPPORT        ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:10 VSEX  CMND TSS CREATE(DEPT0000) NAME('$GSS                ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:11 VSEX  CMND TSS CREATE(DEPT0001) NAME('$PRINCETON INTERNAL ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:11 VSEX  CMND TSS CREATE(DEPT0002) NAME('$STATUTORY REGULATIO') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:11 VSEX  CMND TSS CREATE(DEPT0003) NAME('$XOGPROD            ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:12 VSEX  CMND TSS CREATE(DEPT0004) NAME('$KEYQSUP            ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:12 VSEX  CMND TSS CREATE(DEPT0005) NAME('$GSSX               ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:12 VSEX  CMND TSS CREATE(DEPT0006) NAME('$VSE/CICS SUPPORT   ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:13 VSEX  CMND TSS CREATE(DEPT0007) NAME('$HGRED              ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:13 VSEX  CMND TSS CREATE(DEPT0008) NAME('$DATA BASE SUPPORT  ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:13 VSEX  CMND TSS CREATE(DEPT0009) NAME('$MVS/VSE XA  GROUP  ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:14 VSEX  CMND TSS CREATE(DEPT000A) NAME('$FINANCIAL SYSTEMS  ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:14 VSEX  CMND TSS CREATE(DEPT000B) NAME('$OPERATIONS/ CUSTOM ') TYPE(DEPARTMENT)
MSCA     09/14/98 08:23:14 VSEX  CMND TSS CREATE(DEPT000C) NAME('$OPERATIONS DOC     ') TYPE(DEPARTMENT)
```

1 **CHANGER -** Lists the ACID of the administrator who made the change.

2 **DATE -** Lists the date on which the change was made. (Date information appears in the form specified in CA-Top Secret's DATE startup option.)

3 **TIME -** Lists the time at which the change was made

4 **SYSID -** Lists the identifier of the CPU on which the change was made.

5 **TYPE -** Indicates the type of change:

- CMND - TSS command
- PW - Password change
- AVO - Automatic Volume Ownership
- DUF - DUFUPD

6 **COMMAND/IMAGE -** Lists the TSS command used to make the change or a simulated TSS command for PW, AVO, DUF.

If the CHANGES control statement is specified, you must have READ access authority for the CA-Top Secret Recovery File. In addition, if you are not the MSCA, you must have the following administrative authority:

```
TSS ADMIN (Auditor's acid) ACID(REPORT) RESOURCES(REPORT)
```

```
  INCOMING PARAMETER ===>      CHANGES CA(ROBIA01) DATE(-01)
 CA-Top Secret SECURITY V5.1                          AUDIT UTILITY                          08/25/97   09:27:26    PAGE 002
+
-                                        ----- LISTING OF CHANGES TO SECURITY FILE -----




-                                                ALL CHANGES WITHIN SCOPE LISTED

                                                   TSS COMMAND CHANGES = 00000
                                                      PASSWORD CHANGES = 00000
                                                       DYNAMIC UPDATES = 00000
```

Figure 3-1. CHANGES CA(acid) DATE(-nn) - Continued

A listing of Privileges and Attributes using:

```
PRIVILEGES SHORT
```

```
 INCOMING PARAMETER ===>      PRIVILEGES
CA-TOP SECRET SECURITY VERSION 3.0                      AUDIT UTILITY                          09/14/98   10:20:41    PAGE 130

                                   ----- CROSS-REFERENCE OF PRIVILEGES AND ATTRIBUTES -----
  1     2                                                  3

ACIDNAME TYPE                                        ATTRIBUTES & PRIVILEGES
======== ==== ================================================================================================================

$DEFAULT USER  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
$XTASK   USER  -    -    -    -    -    -    -    -    -    -    -    -  NPWC   -    -    -    -    -    -    -    -    -
ABKEHAR  USER  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
AAIBN00  USER  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
ACHRGSA  USER  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
ADFSGEB  USER ASUS  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -  SUSP  -    -
AMAVIS0  USER  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
AAEGATE  USER  -    -    -    -    -    -    -    -    -    -    -    -  NPWC   -    -    -    -    -    -    -    -    -
ASIGHER  USER ASUS  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -  SUSP  -    -
ASGANCO  USER ASUS  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -  SUSP  -    -
ARE ROWI SCA   -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -*ADMIN
AGRHFRE  USER  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
ASULLEY  USER ASUS  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -  SUSP  -    -
AOIHGHF  USER ASUS  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -  SUSP  -    -
AOIEFY0  USER ASUS  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -  SUSP  -    -
ALKGIOQ  USER  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
AAIOHDD  USER  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
APOIEER  USER ASUS  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -  SUSP  -    -
ABARGR0  USER ASUS  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -  SUSP  -    -
ASASCED  USER ASUS  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -  SUSP  -    -
BDADFON  USER  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
BAIAFAA  USER ASUS  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -  SUSP  -    -
BQWEGD0  USER  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
ATREAV7  USER  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
AHGBRE8  USER  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
@EFGAGRP PROF  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
@LASRBGP PROF  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
@RTARYRP PROF  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
@SHGRTAT PROF  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
ALATARTS PROF  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
ALLPRODS PROF  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
BATCHGRP PROF  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
CNSL     PROF  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
FB       PROF  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
F1       PROF  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
F2       PROF  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
F3       PROF  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
F4       PROF  -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
EOJ AUDIT                                                  DATE 09/14/1998, CLOCK 10/21/14, DURATION   00/00/26
```

1 **ACIDNAME -** Lists security information for the specified ACID.

2 **TYPE -** Lists the type of ACID record.

3 **ATTRIBUTES & PRIVILEGES -** Lists any of the above-mentioned attributes that the ACID might have. If the ACID has administrative authority, *ADMIN* will appear in the last column.

Chapter 4. TSSCHART Utility

TSSCHART builds a tree structure of the full CA-Top Secret Security File in memory consisting of control blocks representing divisions, departments, profiles, and users. This tree structure is then filtered, depending on user parameters. These parameters, which reside in the SYSIPT are completely free format The tree structure is also automatically filtered according to the administrator's scope; that is, an administrator may only chart those ACIDs within his scope of authority. After the tree structure is appropriately filtered, TSSCHART "walks through" the tree, and uses the Security File to print more detailed information.

Note: The administrator must have RESOURCE(REPORT) and ACID(REPORT) authority to run TSSCHART.

4.1 TSSCHART Required JCL

```
// JOB CHART
// ID USER=MSCA,PWD=TORONTO
// EXEC TSSCHART
(options)
/*
```

4.2 TSSCHART Keywords

The following principal keywords are used with TSSCHART:

CHART
RESOURCE
PAGE
DEPT or XDEPT
DIV or XDIV
ZONE or XZONE
PROF or XPROF
USER or XUSER

Each keyword and its optional parameters are described in the following sections. The optional parameters for each keyword can be separated either by commas or spaces. For example:

```
CHART(ACIDS,RESOURCE,VCA)
```

or

```
CHART(ACIDS RESOURCE VCA)
```

If the optional parameters for a keyword exceed the length of the line, end the line with a parenthesis. Begin the next line with the keyword followed by the remainder of the parameters in parentheses.

For example:

```
DIVISION(div,div,div,div,.....................)
DIVISION(div,*EJECT*)
```

This rule applies to all keywords with multiple optional parameters that might exceed the length of the line.

Error messages and abend codes for TSSCHART can be found in the *Messages and Codes Guide.*

4.2.1 CHART

Determines the type of chart to be printed, and the data to be included in the chart.

```
CHART(ACIDS,RESOURCE,STATS,SCA,LSCA,ZCA,VCA,DCA)
```

ACIDS Includes the zone, division, department, profile, and user names in the chart.

RESOURCE Includes resource ownership elements on the chart (resources owned by the zone, division, department, profile, and users). If ACIDS is specified with RESOURCE, resources owned by profiles and users are omitted.

STATS Includes Security File statistics (record sizes, etc.) with each block on the chart.

SCA Includes resources owned by SCAs on the chart. This parameter implies CHART(RESOURCE).

LSCA Includes resources owned by LSCAs on the chart. This parameter implies CHART(RESOURCE).

ZCA Includes resources owned by zonal administrators on the chart. This parameter implies CHART(RESOURCE).

VCA Includes resources owned by divisional administrators on the chart. This parameter implies CHART(RESOURCE).

DCA Includes resources owned by departmental administrators on the chart. This parameter implies CHART(RESOURCE).

The default is CHART(ACIDS).

4.2.2 RESOURCE

Specifies the class resources to be included on the resource chart.

```
              [  (ABSTRACT,APPL,CICS,DATASET,     ]
    RESOURCE  [  FIELD,GENERAL,IDMS,IMS,PROGRAM,  ]
              [  TERMINAL,VOLUME,ALL)             ]
```

ABSTRACT Includes abstract resources on the chart.

APPL Includes applications on the chart.

CICS Includes CICS resources (DCT, FCT, PPT,...)

DATASET Includes DSN resources.

FIELD Includes user-defined fields.

GENERAL Includes UR1, UR2 resources.

IDMS Includes CA-IDMS subschemas and areas.

IMS Includes IMS PSB and DBD resources.

PROGRAM Includes program resources.

SMS Includes all SMS resources.

TERMINAL Includes terminal resources.

TSO Includes all TSO resources.

VM Includes all VM resources.

VOLUME Includes volume resources.

ALL Includes all of the above classes of resources.

If CHART(RESOURCE) is used, the default is RESOURCE(ALL); otherwise, the default is RESOURCE(NONE).

4.2.3 PAGE

Specifies the page size for TSSCHART. This is useful for printing charts on non-standard size pages, since blocks will not cross page boundaries.

```
PAGE(nn)
```

nn Specifies the page size which can be from 01 to 99. The value for *nn* must be two digits.

The default for PAGE is 66.

4.2.4 DEPT or XDEPT

Specifies those departments to be included (DEPT) or excluded (XDEPT) from the chart. XDEPT is treated hierarchically. Once a department has been excluded, you cannot then report on users or profiles that fall within the excluded department.

```
DEPT | XDEPT(dept,...,*ALL*,*NONE*,*DIV*,*EJECT*)
```

dept Includes or excludes any valid specified department name(s).

ALL Includes or excludes all departments.

NONE Includes or excludes no departments.

DIV Includes or excludes only those departments belonging to divisions.

EJECT Causes a page eject at each new department.

The default is DEPT(*ALL*) or XDEPT(*NONE*)

4.2.5 DIV or XDIV

Specifies those divisions to be included or excluded from the chart. XDIV is treated hierarchically. Once a division has been excluded, you cannot then report on departments, users, or profiles that fall within the excluded division.

```
DIV | XDIV(div,...,*ALL*,*NONE*,*REG*,*EJECT*)
```

div Includes or excludes any valid specified division name(s).

ALL Includes or excludes all divisions.

NONE Includes or excludes no divisions.

REG Includes or excludes those divisions belonging to zones.

EJECT Causes a page eject at each new division.

The default is DIV(*ALL*) or XDIV(*NONE*)

Note: *EJECT* must be either the last item in the list or the only item.

4.2.6 ZONE or XZONE

Specifies those zones to be included or excluded from the chart. XZONE is treated hierarchically. Once a zone has been excluded, you cannot then report on divisions, departments, users, or profiles that fall within the excluded zone.

```
ZONE | XZONE(zone,...,*ALL*,*NONE*,*EJECT*)
```

zone Includes or excludes any valid specified zone name(s).

ALL Includes or excludes all zones.

NONE Includes or excludes no zones.

EJECT Causes a page eject at each new zone.

The default is ZONE(*ALL*) or XZONE(*NONE*)

4.2.7 PROF or XPROF

Specifies those profiles to be included (PROF) or excluded (XPROF) from the chart.

```
PROF | XPROF(prof,...,*ALL*,*NONE*)
```

prof Includes or excludes any valid specified profile name(s).

ALL Includes or excludes all profiles.

NONE Includes or excludes no profiles.

The default is PROF(*ALL*) or XPROF(*NONE*)

4.2.8 USER or XUSER

Specifies those user-level ACIDs to be included or excluded from the chart.

```
USER | XUSER(acid,...,*ALL*,*NONE*)
```

acid Includes or excludes any valid specified user-level acidnames.

ALL Includes or excludes all users.

NONE Includes or excludes no users.

The default is USER(*ALL*) or XUSER(*NONE*)

4.3 TSSCHART Sample Executions

An MSCA needs a listing of all ACIDs in the Security File as well as resource ownership. In addition, he wants to know the size of the ACID records on the Security File and may also like page ejects on new divisions.

```
CHART(ACIDS,RESOURCE,SCA,LSCA,ZCA,VCA,DCA,STATS)
DIV(*EJECT*)
```

An SCA only wants a chart of all ACIDs in the Security File accompanied by the ACID record size. Separate pages are requested for each new division.

```
CHART(ACIDS,STATS)
DIV(*EJECT*)
```

An SCA needs to chart all departments not belonging to divisions.

```
CHART(ACIDS)
XDEPT(*DIV*)
```

A VCA decides to obtain a listing of data sets and volumes within his division.

```
CHART(RESOURCE)
RESOURCE(DATASET,VOLUME)
```

A VCA needs a chart containing only users in specific departments to which they belong.

```
CHART(ACIDS)
PROF(*NONE*)
DEPT(SYSTEMS)
```

An SCA wishes to list a particular division and the department(s) attached to it. He also needs all ACIDs and owned resources, who owns the resources, and the size of the ACID records of the Security File. A page eject will occur when a division is to be charted.

```
CHART(ACIDS,RESOURCE,VCA,DCA,STATS)
RESOURCE(ALL)
DIV(DEVLDIV *EJECT*)
DEPT(*DIV*)
```

This last sample will contain the actual output on the following page, with a description of the specific blocks on the tree structure.

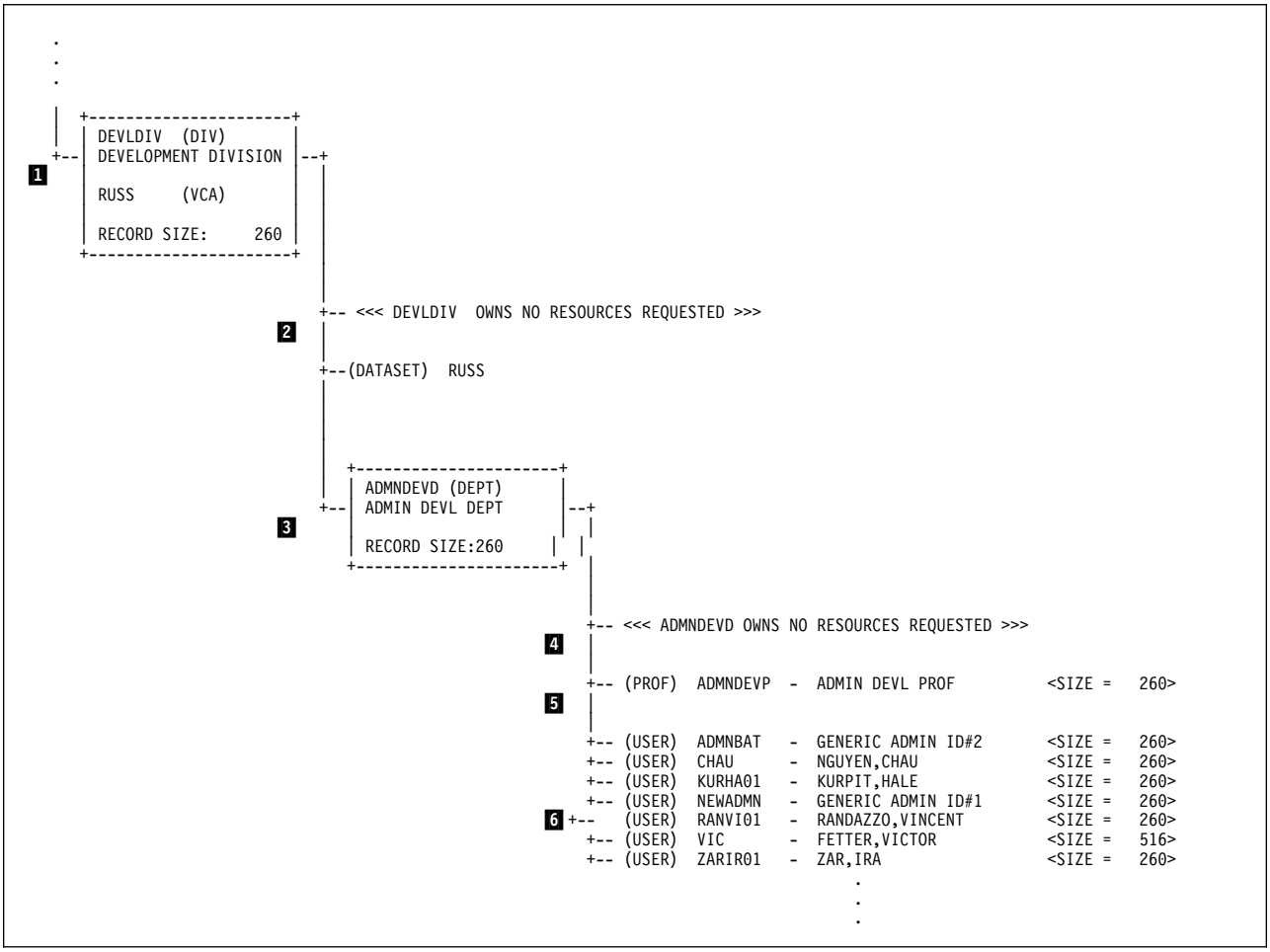


Figure 4-1. TSSCHART Sample Output

1 Division ACID, name of division, VCA ACID, and record size.

2 Resources owned by division as well as resources owned by VCA.

3 Department ACID, name of department, and record size.

4 Resources owned by department. Notice that TSSCHART informs you if no resources are owned that you requested.

5 Profile ACIDs, names of profiles, and record sizes.

6 User ACIDs, names of ACIDs, and record sizes.

Chapter 5. TSSCFILE Utility

TSSCFILE is a batch utility that gives the user the ability to produce customized reports with information extracted from the CA-Top Secret Security File. By specifying the TSS LIST, TSS MODIFY, TSS WHOOWNS, TSS WHOHAS and the TSS WHOAMI command(s) as input to the utility, you can select information desired from the CA-Top Secret Security File.

The utility parses the output of the particular TSS informational retrieval commands (LIST, MODIFY, WHOOWNS, WHOHAS and WHOAMI) and produces a file of fixed format records which, in turn, can be used to generate customized reports using any report writing utility or customer-written program.

5.1 Authority and Scope

All scope and administrative authority restrictions are honored by this utility, thereby preventing unauthorized access to the CA-Top Secret Security File.

In order to execute TSSCFILE, you must have or be given the following administrative authorities via the TSS ADMIN function:

```
TSS ADMIN(acid) ACID(REPORT) RESOURCE(REPORT) DATA(authority level(s))
TSS ADMIN(acid) ACID(AUDIT) [if administrator needs to see the
                                AUDIT field on the 0700 record]
```

5.2 JCL Requirements

In order to execute TSSCFILE, use the following JCL:

```
// JOB CFILE
// ID USER=MSCA,PWD=TORONTO
// DLBL OUT,'CFILE.OUTPUT.FILE',,0,SD,BLKSIZE=xxxx  (Note 1)
// EXTENT SYS0XX,XXXXXX,1,0,XX,XXXX
// EXEC TSSCFILE,PARM='PRINTDATA'
(TSS LIST command functions)
/*
```

Note:

1. BLKSIZE may or may not be needed. Add BLKSIZE to the DLBL statement to override the default blocksize. This is often needed for COBOL progams.
2. By specifying 'PRINTDATA' in the PARM field, TSSCFILE will print formatted records written to the PRINT data set.

   If 'PRINTDATA' is not specified, only the TSS informational retrieval command(s) used as ????? to the IN DLBL statement, along with messages indicating whether or not the functions were successful, will be printed.
3. Running TSSCFILE with a large command such as TSS LIST (for all ACIDs) causes a high number of I/Os and the job may go into a WAIT status and then timeout. You may wish to code a time limit of 1440 on the job to prevent the timeout.

The following is a description of the DLBL statements used with TSSCFILE:

DLBL Statement Description

OUT Contains formatted records of information extracted from the CA-Top Secret Security File.

The following defaults are used with TSSCFILE:

OUT LRECL=300, BLKSIZE=3600, RECFM=FB

5.3 Sample Formatted Security File Records

TSSCFILE generates a fixed format record for each data line produced by the TSS LIST command(s). Each record contains a four to six character record identifier.

All records are described in this Chapter using the following format: start column, end column, field length, and description. For example:

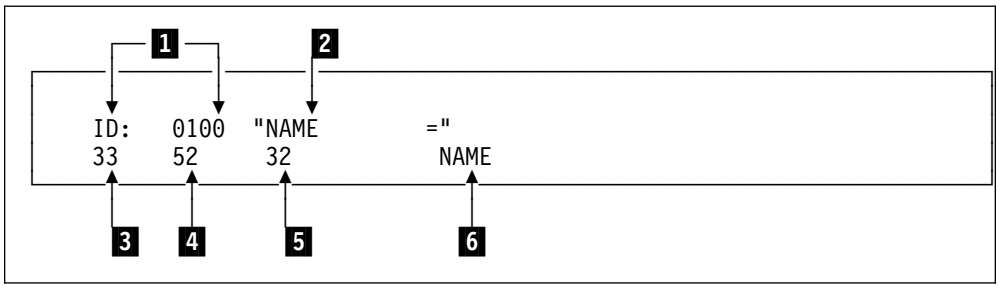
FIELD START COL	FIELD END COL	FIELD LENGTH	DESCRIPTION
33	52	20	NAME

The following record heading is standard on all records:

1	2	2	RESERVED
3	4	2	RESERVED
5	8	4	RECORD ID 1
9	10	2	RECORD ID 2
11	11	1	CONTINUE FLAG: "C"
12	14	3	RESERVED
15	22	8	ACID
23	32	10	RESERVED

Note: The record IDs and the continue flags are discussed on the following page.

Each record of a TSSCFILE output is described within a boxed area as follows:



1 Indicates the ID associated with this type of TSSCFILE output record. The record ID is four to six positions in length and is part of the record header. The first four positions identify the record ID. If displayed, positions five and six identify the hexadecimal code representing the resource being listed.

2 Indicates the keyword that identifies the type of information found on the TSS information retrieval command output. This keyword is also found with each TSSCFILE record description and its associated ID. The actual printed output of TSSCFILE does not show keywords (e.g., "NAME =").

3 Indicates the starting column of the field containing information within a specific TSSCFILE record--column 33 in this example. The record header comprises the first 32 characters.

4 Indicates the ending column of the field--column 52 in this example.

5 Indicates the length of the field--32 characters in this example.

6 Indicates the information found within the specific column positions.

A record ID can have more than one field described. (See record ID 0500 as an illustration.)

All fields within a printed TSSCFILE record output are left justified.

All formatted records are described under the heading: "Formatted Record Types."

An illustration of the output of a CA-Top Secret information retrieval command and how TSSCFILE formats the same output to the PRINT data set follows.

```
READY
  TSS LIST(USER02) DATA(ALL,PAS)
ACCESSORID = USER02    NAME       = TEST ACID
TYPE       = USER      SIZE       =      512  BYTES
DEPT ACID  = TESTDEPT  DEPARTMENT = TEST DEPARTMENT
DIV ACID   = TESTDIV   DIVISION   = TEST DIVISION
CREATED    = 07/23/97  LAST MOD   = 07/25/97  08:52
XA TSOACCT = 11111111                                  OWNER(BOBBBY01 )
XA TSOAUTH = CONSOLE                                   OWNER(BOBBBY01 )
XA TSOAUTH = JCL                                       OWNER(BOBBBY01 )
XA TSOPROC = TSOPROC                                   OWNER(BOBBBY01 )
INSTDATA   = 739-4001
-----------  SEGMENT TSO
TSOCOMMAND = ISPF
TSODEFPRFG = 255
TSODEST    = LOCALC
TSOHCLASS  = X
TSOJCLASS  = A
TSOLACCT   = 11111111
TSOLPROC   = TSOPROC
TSOLSIZE   = 0002048
TSOMCLASS  = X
TSOMSIZE   = 0004096
TSOOPT     = MAIL,NOTICES
TSOSCLASS  = *
TSOUDATA   = ABCD
TSOUNIT    = SYSDA
PASSWORD   =

TSS0300I  LIST     FUNCTION SUCCESSFUL
```

Figure 5-1. Example of TSS LIST Command Output

```
         TSSCFILE                              PAGE   1

*=============================================================================*
  TSS LIST(USER02) DATA(ALL)
*=============================================================================*
         TSSCFILE     SECURITY FILE DATA


                              3
<.........HEADING...........><....+....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8...
<0001                        ><TSS LIST(USER02) DATA(ALL)                                                    >
<0100      USER02            ><TEST-USER                          >
<0200      USER02            ><USER    >
1  <0300     USER02            ><APPCDEPTAPPC DE   PT         >
<0500    2 USER02            ><01/30/9502/02/9   512:48>
<170087    USER02            ><TSOACCT 1111111   1
<170088    USER02            ><TSOAUTH CONSOLE                    >
<170088    USER02            ><TSOAUTH JCL                              >
4  <170089   USER02            ><TSOPROC TSOPROC                    >
<2600      USER02            ><021INSTDATA   =    739-4001
                              <
                              <                                                  >
<4010      USER02            ><TSO                                >
<3508      USER02            ><ISPF                                                                    >
<3506      USER02            ><255>
<3509      USER02            ><LOCALC  >
<3510      USER02            ><X>
<3502      USER02            ><A>
<3501      USER02            ><12345678                           >
<3500      USER02            ><TSOPROC >
<3504      USER02            ><0002048>
<3503      USER02            ><X>
<3511      USER02            ><0004096 >
<3507      USER02            ><NOMAIL      NONOTICES        >
<3512      USER02            ><*        >
5  <3505     USER02         5    ><ABCD>
<3513      USER02            ><SYSDA   6        >
```

Figure 5-2. Example of TSSCFILE Format Records

Following is the legend for the numbered items in the TSSCFILE Format Records example.

1 Record ID which contains TSSCFILE output information associated with a specific data line of a TSS LIST command. In other words, record ID 0200 is associated with the information found in "TYPE=" of the TSS LIST command data line.

2 ACID associated with the TSS LIST command found in record ID 0001. Numbers 1 and 2 are found in the record heading.

3 Indicates the starting column on the grid for significant information within a TSSCFILE printed output, which is column 33. (It can also be considered as relative position 1.)

4 Record IDs 170087 thru 170089 indicate the TSO-related resources that the ACID is allowed to access.

5 The record heading is delimited by less than (<) and greater than (>) signs. They are placed one position before and one position after the 32-character length of the record heading.

6 Delimiters are also used here to show the length of potential significant information within the bounds of the data portion of a TSSCFILE record.

Note: Blanks will be supplied for any field that does not contain data. If a "C" appears after a record ID as part of the record heading, it indicates that the following record will continue the current record.

5.4 Formatted Record Types

All formatted records are described within boxed areas. When any formatted record appears on TSSCFILE output, it simply contains the desired information and not the keyword used to identify the particular data line on a TSS information retrieval command (e.g., "NAME =", "TYPE =", etc.). Also, the TSSCFILE output merely supplies the specific information in the designated column positions for each field. For example, when record ID 0500 appears as TSSCFILE output, it will only contain the actual dates for when it was created, modified, etc., and not the descriptors such as: DATE CREATED, DATE MODIFIED, etc.

```
ID:    0001              DATA DELIMITER
33     112    80         TSS LIST COMMAND
```

```
ID:   0100      "NAME        ="
33    64        32             NAME
```

```
ID:    0200      "TYPE      ="
33     40         8            ACID TYPE
41     48         8            ACID SIZE
```

```
ID:    0300      "DEPT ACID ="
33     40         8            DEPT ACID
41     72         32           DEPT NAME
```

```
ID:    0400      "DIV ACID  ="
33     40         8            DIV ACID
41     72         32           DIV NAME
```

```
ID:    0450       "ZONE ACID  ="
33     40          8           ZONE ACID
41     72          32          ZONE NAME
```

```
ID:    0500       "CREATED   ="
33     40          8           DATE CREATED
41     48          8           DATE LAST MODIFIED
49     53          5           TIME LAST MODIFIED
```

```
ID:    0501       "EXPIRES   ="
33     40          8           DATE OF EXPIRE
```

```
ID:    0502       "SUSPENDED   ="
33     40          8           DATE SUSPENSION ENDS
```

```
ID:    0600       "PROFILES  ="
33     40          8           PROFILE ACID
41     48          8           PROFILE UNTIL DATE
```

```
ID:    0675       "FCT       ="
33     40          8           FCT/PREFIX (OWNED)
42     49          8           FCT/PREFIX (OWNED)
51     58          8           FCT/PREFIX (OWNED)
60     67          8           FCT/PREFIX (OWNED)
69     76          8           FCT/PREFIX (OWNED)
```

```
ID:    0700        "ATTRIBUTES="
33     40           8          "MULTIPW "
41     48           8          "NOADSP  "
49     56           8          "AUDIT   "
57     64           8          "NOPWCHG "
65     72           8          "OIDCARD "
73     80           8          "TRACE   "
81     88           8          "SUSPEND "
89     96           8          "MRO     "
97     104          8          "CONSOLE "
105    112          8          "GAP     "
113    120          8          "DUFXTR  "
121    128          8          "DUFUPD  "
129    136          8          "TSOMPW  "
137    144          8          "NOATS   "
145    152          8          "ACEDEFAU"
153    160          8          "ASUSPEND"
```

Note: These fields are position-dependent. If a field is blank, it indicates that the ACID does not possess this particular attribute.

```
ID:    0800        "BYPASSING ="
33     40           8                  "NODSNCHK"
41     48           8                  "NOVOLCHK"
49     56           8                  "NOLCFCHK"
57     64           8                  "NOSUBCHK"
65     72           8                  "NORESCHK"
73     80           8                  "NOVMDCHK"
81     88           8                  "NOSUSPEN"
```

Note: These fields are position-dependent. If a field is blank, it indicates that the ACID does not possess this particular attribute.

```
ID:    0900        "LAST USED ="
33     40           8              DATE LAST USED: MM/DD/YY
41     45           5              TIME LAST USED: HH.MM
46     49           4              CPU
50     57           8              FAC
58     62           5              COUNT
```

```
ID:    1000        "MASTER FAC="
33     40           8              MASTER FACILITY
```

```
ID:    1100        "LOCK TIME ="
33     37           5              LOCK TIME (MINUTES) OR "NEVER"
38     45           8              LOCK TIME FACILITY
```

```
ID:    1200        "LANGUAGE  ="
33     33           1              LANGUAGE PREFERENCE CODE
```

```
ID:    1300        "TIME ZONE ="
33     35           3              TIME ZONE+ or - NN
```

```
ID:    1400        "DSN/PREFIX="
33     58           26             DSN/PREFIX(OWNED)
59     86           26             DSN/PREFIX(OWNED)
```

```
ID:    1500        "VOLUMES   ="
33     38           6              VOLSER(OWNED)
39     40           2              ATTRIBUTES
41     46           6              VOLSER(OWNED)
47     48           2              ATTRIBUTES
```

```
ID:    1600        "VMMDISKS  ="
33     45           13             VMMDISK
46     58           13             VMMDISK
```

```
ID:    1700        "RESOURCE  ="
33     40           8              RESOURCE CLASS NAME
41     48           8              RESOURCE ENTITY
46     56           8              RESOURCE ENTITY
57     64           8              RESOURCE ENTITY
65     72           8              RESOURCE ENTITY
73     80           8              RESOURCE ENTITY
```

```
ID:    1800        "RESOURCE  ="
33     40           8              RESOURCE CLASS NAME
41     66           26             RESOURCE ENTITY
67     92           26             RESOURCE ENTITY
```

```
ID:    1900        "WHOOWNS   ="
33     40           8              RESOURCE CLASS
41     48           8              OWNING ACID
49     92           44             RESOURCE ENTITY
```

```
ID:    1950        "WHOHAS   ="
33     40           8              RESOURCE CLASS
41     48           8              OWNING ACID
49     92           44             RESOURCE ENTITY
```

```
ID:    1975        WHOHAS FACILITY Information
33     40           8              literal "FACILITY"
44     51           8              ACID NAME HAVING REQUESTED FACILITY
52     59           8              "UNTIL" DATE, IF ANY
60     67           8              FACILITY NAME
```

```
ID:    2001        "XA ACID   ="
33     40           8              XAUTH RESOURCE CLASS NAME
41     48           8              XAUTH OWNER ACID
49     56           8              XAUTH UNTIL DATE
57     64           8              XAUTH ACID
```

Note: The term "entity" refers to the name of the resource within that resource class. (i.e., DSNAME abc.data)

```
ID:    2002        "XA DATASET="
33     40           8              XAUTH RESOURCE CLASS NAME
41     48           8              XAUTH OWNER ACID
49     56           8              XAUTH UNTIL DATE
57     102          46             XAUTH DATA SET
```

```
ID:    2003        "XA VOLUME ="
33     40           8              XAUTH RESOURCE CLASS NAME
41     48           8              XAUTH OWNER ACID
49     56           8              XAUTH UNTIL DATE
57     62           6              XAUTH VOLSER
63     64           2              ATTRIBUTES
```

```
ID:    2004        "XA MINIDISK="
33     40           8              XAUTH RESOURCE CLASS NAME
41     48           8              XAUTH OWNER ACID
49     56           8              XAUTH UNTIL DATE
57     69           13             XAUTH MINIDISK
```

```
ID:    2005        "XA xxxxxxx="
33     40           8              XAUTH RESOURCE CLASS NAME
41     48           8              XAUTH OWNER ACID
49     56           8              XAUTH UNTIL DATE
57     100          44             XAUTH RESOURCE
```

Note: The x's refer to resource names defined in the RDT.

```
ID:    2006        "XAUTH     ="
33     202          169            XAUTH DIRECTORY
                                   (Size for directory XAUTH)
```

```
ID:    2007        "WHOHAS XAUTH"
33     40           8              XAUTH RESOURCE CLASS NAME
41     48           8              XAUTH PERMITTED ACID
49     56           8              XAUTH UNTIL DATE
57     64           8              XAUTH UNTIL DATE
65     109          46             XAUTH DATA SET
```

```
ID:    2008        "WHOHAS ADMIN"
33     40           8              XAUTH RESOURCE CLASS NAME
41     48           8              XAUTH OWNER ACID
49     56           8              XAUTH UNTIL DATE
57     102          46             XAUTH DATA SET
```

```
ID:     2011       "ACCESS    ="        XAUTH ACCESS LEVELS
33      40          8                   "NONE    "
41      48          8                   "ALL     "
49      56          8                   "READ    "
57      64          8                   "WRITE   "
65      72          8                   "UPDATE  "
73      80          8                   "FETCH   "
81      88          8                   "CREATE  "
89      96          8                   "NOCREATE"
97      104         8                   "SCRATCH "
105     112         8                   "CONTROL "
113     120         8                   "BLP     "
121     128         8                   "FEOV    "
129     136         8                   "PURGE   "
137     144         8                   "DELETE  "
145     152         8                   "BROWSE  "
153     160         8                   "REPLACE "
161     168         8                   "CONSOLE "
169     176         8                   "DIAGNOSE"
177     184         8                   "INQUIRE "
185     192         8                   "SET     "
193     200         8                   "EXECUTE "
201     208         8                   "PERFORM "
209     216         8                   "DISCARD "
217     224         8                   "ALTER   "
225     232         8                   "INDEX   "
233     240         8                   "INSERT  "
241     248         8                   "USE     "
249     256         8                   user-defined access level
```

Note: These fields are position-dependent. If a field is blank, it indicates that the ACID does not have the particular authorized access level. Record 2011 has also been stabilized and will no longer be updated for additional access levels. You should use record 2021 instead.

Any record identifiers from 2011 to 2016 can follow any record identifiers from 2001 to 2005.

```
ID:     2012       "DAYS      ="         XAUTH DAYS
33      35          3                    "ALL"
36      38          3                    "MON"
39      41          3                    "TUE"
42      44          3                    "WED"
45      47          3                    "THU"
48      50          3                    "FRI"
51      53          3                    "SAT"
54      56          3                    "SUN"
57      61          5                    XAUTH TIMES
```

Note: These fields are position-dependent. If a field is blank, it indicates that the ACID is not authorized for the particular day.

```
ID:     2013       "LIBRARY   ="
33      78          46              XAUTH LIBRARY
```

```
ID:     2014       "PRIVPGM   ="
33      40          8              XAUTH PRIVPGM
41      41          1              "G" IF GENERIC
42      49          8              XAUTH PRIVPGM
50      50          1              "G" IF GENERIC
51      58          8              XAUTH PRIVPGM
59      59          1              "G" IF GENERIC
60      67          8              XAUTH PRIVPGM
68      68          1              "G" IF GENERIC
69      76          8              XAUTH PRIVPGM
77      77          1              "G" IF GENERIC
```

```
ID:     2015       "FAC       ="    AUTH FAC
33      40          8                FACILITY NAME
41      48          8                FACILITY NAME
49      56          8                FACILITY NAME
57      64          8                FACILITY NAME
65      72          8                FACILITY NAME
73      80          8                FACILITY NAME
81      88          8                FACILITY NAME
89      96          8                FACILITY NAME
97      104         8                FACILITY NAME
105     112         8                FACILITY NAME
```

```
ID:     2016        "ACTION    ="
33      40           8               "FAIL    "
41      48           8               "DENY    "
49      56           8               "AUDIT   "
57      64           8               "NOTIFY  "
65      72           8               "PASSWORD"
73      80           8               "NODSN   "
81      88           8               "EXIT    "
89      96           8               "REVERIFY"
97      104          8               "VMPRIV  "
```

Note: These fields are position-dependent. If the field is blank, the ACID does not have this particular parameter of the ACTION keyword.

```
ID:    2017        "VMUSER    ="
33     40           8              XAUTH VMUSER
41     41           1              "G" IF GENERIC
42     49           8              XAUTH VMUSER
50     50           1              "G" IF GENERIC
51     58           8              XAUTH VMUSER
58     58           1              "G" IF GENERIC
59     66           8              XAUTH VMUSER
67     67           1              "G" IF GENERIC
68     75           8              XAUTH VMUSER
76     76           1              "G" IF GENERIC
```

```
ID:     2018        "FILE      ="
33      49           17              FILE RESTRICTION
```

```
ID:    2019       "POOL RESTRICTION  ="
33     40          8                   POOL RESTRICTION
41     48          8                   POOL RESTRICTION
49     56          8                   POOL RESTRICTION
57     64          8                   POOL RESTRICTION
65     72          8                   POOL RESTRICTION
```

```
ID:    2021        "ACCESS    ="    XAUTH ACCESS LEVELS
```

Note: These access levels are not position dependent.

```
ID:    2022        "ADMIN  BY ="
33     40           8        ADMINISTERING ACID
41     44           4        DONE ON THIS SMFID
45     54           10       DATE ADMIN'D   MM/DD/YYYY
55     63           8        TIME ADMIN'D   HH:MM:SS
```

```
ID:    2023        "DAY/TIME  ="
33     40           8        NAME OF CALENDAR TO BE USED
41     48           8        NAME OF TIMEREC TO BE USED
```

```
ID:    2024        "RESTRICT  ="
33     40           8        NAME OF MAPREC TO BE USED
41     48           8        NAME OF SELECT(IN) TO BE USED
49     56           8        NAME OF SELECT(OUT) TO BE USED
```

```
ID:    2025        "RESTRICT  ="
33     40           8        NAME OF MASKREC TO BE USED
41     48           8        NAME OF SELECT(IN) TO BE USED
49     56           8        NAME OF SELECT(OUT) TO BE USED
```

```
ID:    2026        "SYSID     ="
33     36           4        SYSID RESTRICTION
```

```
ID:    2027        "APPLDATA  ="
33     40           8        SYSTEMVIEW APPLDATA VALUE
```

```
ID:    2028        "SCRIPTIN  ="
33     40           8        SYSTEMVIEW SCRIPTIN VALUE
```

```
ID:    2029        "SCRIPTIP  ="
33     40           8        SYSTEMVIEW SCRIPTIP VALUE
```

```
ID:    2100        "FACILITY  ="
33     40           8              FACILITY
```

Note: Record identifiers 2100 to 2102 refer to the Limited Command Facility (LCF).

```
ID:    2101       "AUTH CMDS ="
                  IF PRESENT, THIS RECORD ALWAYS FOLLOWS
                  RECORD 2100.
33     40          8                 AUTHORIZED COMMANDS
41     41          1                 COMMAND FLAG
42     49          8                 AUTHORIZED COMMANDS
50     50          1                 COMMAND FLAG
51     58          8                 AUTHORIZED COMMANDS
59     59          1                 COMMAND FLAG
60     67          8                 AUTHORIZED COMMANDS
68     68          1                 COMMAND FLAG
```

Note: The one-character flag will either be V for password reverify or G for generic prefix.

```
ID:    2102       "EXMP CMDS ="
                   IF PRESENT, THIS RECORD ALWAYS FOLLOWS
                   RECORD 2100.
33     40           8                EXEMPT COMMANDS
41     41           1                COMMAND FLAG
42     49           8                EXEMPT COMMANDS
50     50           1                COMMAND FLAG
51     58           8                EXEMPT COMMANDS
59     59           1                COMMAND FLAG
60     67           8                EXEMPT COMMANDS
68     68           1                COMMAND FLAG
```

Note: The one-character flag will either be V for password reverify or G for generic prefix.

```
ID:    2200         "SOURCES   ="
33     40            8                SOURCES
41     48            8                SOURCES
49     56            8                SOURCES
57     64            8                SOURCES
```

```
ID:    2300         "OPIDENT   ="
33     35            3                OPIDENT
36     38            3                OPPRTY
```

```
ID:    2301         "SITRAN    ="
33     40            8                SITRAN
41     48            8                SITRAN FACILITY
```

```
ID:    2400         "OPCLASS   ="
33     34            2                OPCLASS
35     36            2                OPCLASS
37     38            2                OPCLASS
39     40            2                OPCLASS
41     42            2                OPCLASS
43     44            2                OPCLASS
45     46            2                OPCLASS
47     48            2                OPCLASS
49     50            2                OPCLASS
51     52            2                OPCLASS
53     54            2                OPCLASS
55     56            2                OPCLASS
57     58            2                OPCLASS
59     60            2                OPCLASS
61     62            2                OPCLASS
63     64            2                OPCLASS
65     66            2                OPCLASS
67     68            2                OPCLASS
69     70            2                OPCLASS
71     72            2                OPCLASS
73     74            2                OPCLASS
75     76            2                OPCLASS
77     78            2                OPCLASS
79     80            2                OPCLASS
```

```
ID:    2500          "SCTYKEY   ="
33     35             3                SCTYKEY
36     38             3                SCTYKEY
39     41             3                SCTYKEY
42     44             3                SCTYKEY
45     47             3                SCTYKEY
48     50             3                SCTYKEY
51     53             3                SCTYKEY
54     56             3                SCTYKEY
57     59             3                SCTYKEY
60     62             3                SCTYKEY
63     65             3                SCTYKEY
66     68             3                SCTYKEY
69     71             3                SCTYKEY
72     74             3                SCTYKEY
75     77             3                SCTYKEY
78     80             3                SCTYKEY
```

```
ID:    2600          "INSTDATA  ="
33     35             3                LENGTH OF INSTDATA
36     290            255              INSTDATA
```

```
ID:    2700          "USER      ="
33     40             8                USER DEFINED RESOURCE
41     41             1                TYPE
42     49             8                USER DEFINED RESOURCE
50     50             1                TYPE
51     58             8                USER DEFINED RESOURCE
59     59             1                TYPE
60     67             8                USER DEFINED RESOURCE
68     68             1                TYPE
```

```
ID:    2800         "ACIDS     ="
33     40            8                ACID WITHIN DEPT/DIV/ZONE
41     42            2                ACID TYPE
43     50            8                ACID WITHIN DEPT/DIV/ZONE
51     52            2                ACID TYPE
53     60            8                ACID WITHIN DEPT/DIV/ZONE
61     62            2                ACID TYPE
63     70            8                ACID WITHIN DEPT/DIV/ZONE
71     72            2                ACID TYPE
```

Note: The one- or two-character value for ACID TYPE can be any of the following:

P Profile

VC VCA

V VCA or DIV ACID

DC DCA

D DCA or DEPT ACID

ZC ZCA

Z ZCA or ZONE ACID

LC LSCA

SC SCA

A blank indicates a user ACID.

```
ID:   2801          "ACID      ="
33    40             8               ACID
41    41             1               ACID TYPE
42    49             8               PROFILE UNTIL DATE
```

```
ID:   2901          "FACILITIES="
                                    SAME FORMAT AS RECORD 2015
```

```
ID:   2902          "ACID      ="
33    40      8     "ACID    "       DUMMY RES CLASS NAME
41    48      8      ADMIN AUTHORITY
49    56      8      ADMIN AUTHORITY
57    64      8      ADMIN AUTHORITY
65    72      8      ADMIN AUTHORITY
73    80      8      ADMIN AUTHORITY
81    89      8      ADMIN AUTHORITY
90    97      8      ADMIN AUTHORITY
98    105     8      ADMIN AUTHORITY
106   113     8      ADMIN AUTHORITY
114   121     8      ADMIN AUTHORITY
```

```
ID:     2903      " LIST DATA ="
33      40          8              DUMMY RES CLASS NAME
41      48          8              ADMIN AUTHORITY
49      56          8              ADMIN AUTHORITY
57      64          8              ADMIN AUTHORITY
65      72          8              ADMIN AUTHORITY
73      80          8              ADMIN AUTHORITY
81      89          8              ADMIN AUTHORITY
90      97          8              ADMIN AUTHORITY
98      105         8              ADMIN AUTHORITY
106     113         8              ADMIN AUTHORITY
114     121         8              ADMIN AUTHORITY
```

```
ID:     2904   "MISC1     ="
33      40      8          "MISC1  "     DUMMY RES CLASS NAME
41      48      8                        ADMIN AUTHORITY
49      56      8                        ADMIN AUTHORITY
57      64      8                        ADMIN AUTHORITY
65      72      8                        ADMIN AUTHORITY
73      80      8                        ADMIN AUTHORITY
81      89      8                        ADMIN AUTHORITY
90      97      8                        ADMIN AUTHORITY
98      105     8                        ADMIN AUTHORITY
106     113     8                        ADMIN AUTHORITY
114     121     8                        ADMIN AUTHORITY
```

```
ID:    2905    "MISC9     ="
33     40       8           "MISC9   "   DUMMY RES CLASS NAME
41     48       8                        ADMIN AUTHORITY
49     56       8                        ADMIN AUTHORITY
57     64       8                        ADMIN AUTHORITY
65     72       8                        ADMIN AUTHORITY
73     80       8                        ADMIN AUTHORITY
81     89       8                        ADMIN AUTHORITY
90     97       8                        ADMIN AUTHORITY
98     105      8                        ADMIN AUTHORITY
106    113      8                        ADMIN AUTHORITY
114    121      8                        ADMIN AUTHORITY
```

```
ID:    2906     "RESOURCES ="
33     40        8         "RESOURCE"    DUMMY RES CLASS NAME
41     48        8                       ADMIN AUTHORITY
49     56        8                       ADMIN AUTHORITY
57     64        8                       ADMIN AUTHORITY
65     72        8                       ADMIN AUTHORITY
73     80        8                       ADMIN AUTHORITY
81     89        8                       ADMIN AUTHORITY
90     97        8                       ADMIN AUTHORITY
98     105       8                       ADMIN AUTHORITY
106    113       8                       ADMIN AUTHORITY
114    121       8                       ADMIN AUTHORITY
```

```
ID:    2907     "xxxxxxxx  ="
33     40        8               RESOURCE CLASS NAME FROM RDT
41     48        8               ADMIN AUTHORITY
49     56        8               ADMIN AUTHORITY
57     64        8               ADMIN AUTHORITY
65     72        8               ADMIN AUTHORITY
73     80        8               ADMIN AUTHORITY
81     89        8               ADMIN AUTHORITY
90     97        8               ADMIN AUTHORITY
98     105       8               ADMIN AUTHORITY
106    113       8               ADMIN AUTHORITY
114    121       8               ADMIN AUTHORITY
```

Note: xxxxxxxx is the 8-character resource name from the RDT.

```
ID:    2908     "MISC2     ="
                              SAME FORMAT AS RECORDS 2904
                              AND 2905.
```

```
ID:    2909     "SCOPE     ="
33     40        8               "SCOPE      "
41     48        8               "ZONE ACID  "
```

```
ID:    2910     "MISC8     ="
33     40       8           "MISC8   "   DUMMY RES CLASS NAME
41     48       8                        ADMIN AUTHORITY
49     56       8                        ADMIN AUTHORITY
57     64       8                        ADMIN AUTHORITY
65     72       8                        ADMIN AUTHORITY
73     80       8                        ADMIN AUTHORITY
```

```
ID:    2911     "   ACCESS ="
                              IF PRESENT, THIS RECORD ALWAYS
                              FOLLOWS
                              RECORDS 2901-2907.
                              SAME FORMAT AS RECORD 2011
```

```
ID:    2912     "MISC3     ="
33     40       8           "MISC3   "   DUMMY RES CLASS NAME
41     48       8                        ADMIN AUTHORITY
49     56       8                        ADMIN AUTHORITY
57     64       8                        ADMIN AUTHORITY
65     72       8                        ADMIN AUTHORITY
73     80       8                        ADMIN AUTHORITY
```

```
ID:    2921      "   ACCESS ="     XAUTH ACCESS LEVELS
                                   SAME FORMAT AS RECORD 2021.
```

```
ID:    3000      "PASSWORD  ="
33     40         8              PASSWORD
41     48         8              EXPIRES DATE
49     51         3              INTERVAL
52     59         8              FACILITY IF ACID HAS MULTIPW
                                 ATTRIBUTE
```

Note: The password will not be displayed if the user does not have authority to list passwords.

```
ID:     3090      "MODE      ="
33      40         8               XAUTH MODE
```

```
ID:     3100      "STC       ="
33      40         8               STC
41      48         8               ACID
49      54         6               "STCACT"
```

```
ID:    3200       "PHYSKEY   ="
33     35          3             EBCDIC LENGTH OF PHYSKEY
36     290         255           PHYSKEY
```

```
ID:     3250       "DEFDATA       ="
33      40          8             DEFNODES
```

```
ID:     3260       "XA PROGRAM    ="
33      40          8             PROGRAM
```

Note: The following records are generated from the TSS LIST(RDT) command.

```
ID:     3301     "RESOURCE CLASS="
33      40        8                RDT RESOURCE CLASS NAME
```

```
ID:     3302     "ATTRIBUTE ="
33     46       14                RDT RESOURCE ATTRIBUTE
47     60       14                RDT RESOURCE ATTRIBUTE
61     74       14                RDT RESOURCE ATTRIBUTE
75     88       14                RDT RESOURCE ATTRIBUTE
89     102      14                RDT RESOURCE ATTRIBUTE
103    116      14                RDT RESOURCE ATTRIBUTE
117    130      14                RDT RESOURCE ATTRIBUTE
131    147      14                RDT RESOURCE ATTRIBUTE
148    161      14                RDT RESOURCE ATTRIBUTE
162    175      14                RDT RESOURCE ATTRIBUTE
176    189      14                RDT RESOURCE ATTRIBUTE
190    203      14                RDT RESOURCE ATTRIBUTE
```

```
ID:    3303     "ACCESS    ="
33     40        8                RDT RESOURCE ACCESS LEVEL
41     44        4                RDT RESOURCE ACCESS MASK
45     52        8                RDT RESOURCE ACCESS LEVEL
53     56        4                RDT RESOURCE ACCESS MASK
57     64        8                RDT RESOURCE ACCESS LEVEL
65     68        4                RDT RESOURCE ACCESS MASK
69     76        8                RDT RESOURCE ACCESS LEVEL
77     80        4                RDT RESOURCE ACCESS MASK
81     88        8                RDT RESOURCE ACCESS LEVEL
89     92        4                RDT RESOURCE ACCESS MASK
```

```
ID:    3304      "DEFACC ="
33     40          8              RDT RESOURCE DEFAULT ACCESS
```

```
ID:    3400      "xxxxxxxx  ="    EXTENDED ADMINISTRATION
                                  AUTHORITIES
33     40         8               EXT ADMIN RES CLASS NAME
41     48         8               EXT ADMIN RES OWNER ACID
49     94         46              EXT ADMIN RES NAME
```

```
ID:    3500      "TSOLPROC  ="
33     40         8               TSOLPROC
```

```
ID:    3501      "TSOLACCT  ="
33     72         40              TSOLACCT
```

```
ID:    3502      "TSOJCLASS ="
33     33         1               TSOJCLASS
```

```
ID:    3503      "TSOMCLASS ="
33     33         1               TSOMCLASS
```

```
ID:    3504       "TSOLSIZE  ="
33     39          7              TSOLSIZE
```

```
ID:    3505       "TSOUDATA  ="
33     36          4              TSOUDATA
```

```
ID:    3506       "TSODEFPRFG="
33     35          3              TSODEFPRFG
```

```
ID:    3507       "TSOOPT    ="   OPTIONS
33     44 12      "MAIL"    OR "NOMAIL"
45     56 12      "NOTICES" OR "NONOTICES"
57     68 12      "OIDCARD" OR "NO OIDCARD"
```

```
ID:    3508        "TSOCOMMAND="
33     112          80             TSOCOMMAND
```

```
ID:    3509        "TSODEST   ="
33     40           8              TSODEST
```

```
ID:    3510        "TSOHCLASS ="
33     33           1              TSOHCLASS
```

```
ID:    3511        "TSOMSIZE  ="
33     39           7              TSOMSIZE
```

```
ID:    3512        "TSOSCLASS ="
33     33           1              TSOSCLASS
```

```
ID:    3513        "TSOUNIT   ="
33     40           8              TSOUNIT
```

```
ID:    3600        "SMSSTOR   ="
33     40           8              SMSSTOR
41     48           8              SMSMGMT
```

```
ID:    3601        "SMSDATA   ="
33     40           8              SMSDATA
41     48           8              SMSAPPL
```

```
ID:    3700        "FACILITY  ="
33     40           8              FACILITY NAME
41     48           8              UNTIL DATE
```

```
ID:     3701     "DAYS      ="
33      35        3             FACILITY (ALL) If present
36      38        3             MONDAY
39      41        3             TUESDAY
42      44        3             WEDNESDAY
45      47        3             THURSDAY
48      50        3             FRIDAY
51      53        3             SATURDAY
54      56        3             SUNDAY
57      61        5             FACILITY TIME
```

```
ID:     3702     "ACTION    ="      FACILITY ACTIONS
                                    SAME FORMAT AS RECORD 2016
```

```
ID:     3703     "ADMINBY   ="
33      40        8        ADMINISTERING ACID
41      44        4        DONE ON THIS SMDIF
45      54        10       DATE ADMIN'D MM/DD/YYYY
55      63        8        TIME ADMIN'D HH:MM:SS
```

```
ID:     3704     "DAY/TIME  ="
33      40        8        NAME OF CALENDAR TO BE USED
41      48        8        NAME OF TIMEREC TO BE USED
```

```
ID:     3705     "SYSID     ="
33      36        4        SYSID restriction
```

```
ID:     3800     "DLF       ="      DLF RESOURCES
33      76        44               DATA SET NAME
77      82        6                RETAIN ATTRIBUTE
```

```
ID:     3810      "JOBNAMES  ="
33      40         8                JOBNAME #1
41      48         8                JOBNAME #2
49      56         8                JOBNAME #3
57      64         8                JOBNAME #4
65      72         8                JOBNAME #5
```

```
ID:      4000    "ACCOUNT      ="
33       35       3                LENGTH OF ACCOUNT
36       290      255              WAACCNT VALUE
```

```
ID:      4001     "NAME       ="
33       35       3                LENGTH OF NAME
36       95       60               WANAME VALUE
```

```
ID:     4002      "BUILDING    ="
33      35         3                LENGTH OF BUILDING
36      95         60               WABLDG VALUE
```

```
ID:     4003      "DEPARTMENT    ="
33      35         3                LENGTH OF DEPARTMENT
36      95         60               WADEPT VALUE
```

```
ID:    4004       "ROOM NUMBER   ="
33     35          3                LENGTH OF ROOM NUMBER
36     95          60               WAROOM VALUE
```

```
ID:    4005       "ADDRESS1       ="
33     35          3                 LENGTH OF ADDRESS1
36     95          60                WAADDR1 VALUE
```

```
ID:    4006       "ADDRESS2       ="
33     35          3                   LENGTH OF ADDRESS2
36     95          60                  WAADDR2 VALUE
```

```
ID:    4007       "ADDRESS3       ="
33     35          3                   LENGTH OF ADDRESS3
36     95          60                  WAADDR3 VALUE
```

```
ID:    4008       "ADDRESS4       ="
33     35          3                   LENGTH OF ADDRESS4
36     95          60                  WAADDR4 VALUE
```

```
ID:    4010        "-------- SEGMENT"
33     40           8                  SEGMENT
```

```
ID:    4011      FDT DATA EITHER SYSTEM OR USER-DEFINED
33     40            8    FDTNAME FOR THIS FIELD DATA
41     51            11   FDT DISPLAY VALUE WHEN ACID IS LISTED
52     300           249  FIRST 249 BYTES OF FIELD DATA
```

```
ID:    4012      FDT DATA CONTINUATION
33     300           268  CONTINUATION OF 4011 (IF NEEDED)
```

Note: Records types 4100 through 4105 are created as a result of the TSS WHOAMI command.

```
ID:    4100     "ACIDNAME(  )     "
33     40          8              ACID
41     44          4              ACID TYPE
45     48          4              MODE
49     57          9              UNDEFINED
58     63          6              NOADSP
```

```
ID:    4101     "FACILITY(  )     "
33     40           8                FACILITY
41     48           8                TERMINAL
49     51           3                LOCKTIME
52     54           3                TIMEZONE
```

```
ID:    4102     "SYSTEMID(   )    "
33     40           8                SYSTEMID
41     48           8                LOG:
49     54           6                  ALL|NONE
55     60           6                  ACCESS|ACC
61     66           6                  INIT
67     72           6                  SMF
73     78           6                  SEC9
79     84           6                  NMSG
```

```
ID:    4103     "INSTDATA(   )     "
33     288          256              INSTDATA
```

```
ID:   4104      "BYPASSING(     )   "
33    40            8                BYPASS ATTRIBUTE
41    48            8                BYPASS ATTRIBUTE
49    56            8                BYPASS ATTRIBUTE
57    65            8                BYPASS ATTRIBUTE
66    74            8                BYPASS ATTRIBUTE
```

```
ID:   4105      "STORAGE(   )      "
33    40             8                STORAGE
41    48             8                PROFILES
```

```
ID:   4110      FDT FDTNAME(         )
33    40             8                FDT FDTNAME
```

```
ID:   4112      FDT SEGMENT NAME(         )
33    42            10                FDT SEGMENT NAME
```

```
ID:   4113      FDT MAXLEN(          )
33    43            11                FDT SEGMENT NAME
```

```
ID:   4114      FDT DISPLAY VALUE(          )
33    43            11                FDT DISPLAY VALUE
```

```
ID:   4115      FDT RESOURCE ATTRIBUTES
33    88            55                FDT RESOURCE ATTRIBUTES
```

```
ID:   4200      UAF NAME
33    151          119                VAX UAF NAME
```

```
ID:   4210      GROUP #
33    37             5                VAX GROUP NUMBER
```

```
ID:   4220      GROUP NAME
33    35             3               VAX GROUP NAME
```

```
ID:   4230      PRIM DAYS =
33    35             3               MON
37    39             3               TUE
41    43             3               WED
45    47             3               THU
49    51             3               FRI
53    55             3               SAT
57    59             3               SUN
```

```
ID:   4240      SCNDY DAYS =
33    35             3               MON
37    39             3               TUE
41    43             3               WED
45    47             3               THU
49    51             3               FRI
53    55             3               SAT
57    59             3               SUN
```

```
ID:   4250      PRIMARY =
33    57            24          VAX PRIMARY SHIFT
```

```
ID:   4260      DAY HOURS =
33    57            24          VAX DAY HOURS
```

```
ID:   4270      NETWORK =
33    56            24          FULL ACCESS OR NO ACCESS
```

```
ID:   4280      BATCH =
33    56            24          VAX BATCH NAME
```

```
ID:   4290      LOCAL =
33    56            24          VAX LOCAL NAME
```

```
ID:   4300      DIALUP =
33    56            24          VAX DIALUP RESOURCE
```

```
ID:   4310      REMOTE =
33    56            24          VAX REMOTE ACCESS
```

```
ID:   4320      PDISKQUOTA=
33    56            24          VAX DISK
```

```
ID:   4330      DEFDIR =
33    56            22          VAX DEFAULT DIRECTORY
```

```
ID:   4350      DFLT PRIVS=
33    40             8          VAX DEFAULT PRIVILEGES
41    48             8          VAX DEFAULT PRIVILEGES
49    56             8          VAX DEFAULT PRIVILEGES
57    64             8          VAX DEFAULT PRIVILEGES
65    72             8          VAX DEFAULT PRIVILEGES
73    80             8          VAX DEFAULT PRIVILEGES
81    89             8          VAX DEFAULT PRIVILEGES
```

```
 ID:   4360      AUTH PRIVS=
 33    40             8           VAX AUTHORIZED PRIVILEGES
 41    48             8           VAX AUTHORIZED PRIVILEGES
 49    56             8           VAX AUTHORIZED PRIVILEGES
 57    64             8           VAX AUTHORIZED PRIVILEGES
 65    72             8           VAX AUTHORIZED PRIVILEGES
 73    80             8           VAX AUTHORIZED PRIVILEGES
 81    89             8           VAX AUTHORIZED PRIVILEGES
```

```
ID:    4361      "LOGIN FLAGS="
 33    40             8           ALOGIN
 41    48             8           CAPTIVE
 49    56             8           CLIDEF
 57    64             8           DISCTLY
 65    72             8           DISPWCHG
 73    80             8           DISMAIL
 81    88             8           DISIMAGE
 89    97             8           DISNEWM
 98    105            8           DISRECON
106    111            8           DISREPOR
112    119            8           DISWELCO
120    127            8           RESTRICT
```

```
ID:    4362       "LGICMD     ="
33     95            33           LGICMD value
```

```
ID:    4363       "TABLES     ="
33     44            12           TABLES value
```

```
ID:    4364       "LOGFAIL    ="
33     40             8           BATCH
41     48             8           DETACHED
49     56             8           DIALUP
57     64             8           LOCAL
65     72             8           NETWORK
73     80             8           REMOTE
81     88             8           SUBPROC
```

```
ID:    4365       "FMODE      ="
33     40           8            WAIT
41     48           8            IGNORE
49     56           8            CRASH
```

```
ID:    4366       "AUDIT     ="
33     40           8            ACL
41     48           8            AUDIT
49     56           8            AUTHORIZ
57     64           8            INSTALL
65     72           8            MOUNT
```

```
ID:    4367       "BREAKIN    ="
33     37           5            BREAKIN TIME OUT VALUE
```

```
ID:    4368       "CLI        ="
33     44           12           CLI VALUE
```

```
 ID:   4380      XA VXFILE =
 33    50            8           VAX FILE XAUTH
```

```
 ID:    4401       "UID       ="
 33     42          10             UID
```

```
 ID:    4402       "GID       ="
 33     42          10             GID
```

```
ID:    4403        "HOME      ="
33     100          68              HOME
```

```
ID:    4404        "OMVSPGM   ="
33     100          68              OMVSPGM
```

```
ID:    4405        "DLFTGRP   ="
33     40           8               DLFTGRP
```

```
ID:    4501        "MCSALTG   ="
33     40           8               MCSALTG
```

```
ID:    4502        "MCSAUTH   ="
33     33           1               MCSAUTH
```

```
ID:    4503        "MCSAUTO   ="
33     35           3               MCSAUTO
```

```
ID:    4504        "MCSCMDS   ="
33     40           8               MCSCMDS
```

```
ID:    4505        "MCSDOM    ="
33     38           6               MCSDOM
```

```
ID:    4506        "MCSKEY    ="
33     40           8              MCSKEY
```

```
ID:    4507        "MCSLEVL   ="
33     46           14             MCSLEVL
```

```
ID:    4508        "MCSLOGC   ="
33     38           6              MCSLOGC
```

```
ID:    4509        "MCSMFRM   ="
33     41           9              MCSMFRM
```

```
ID:    4510        "MCSMGID   ="
33     35           3              MCSMGID
```

```
ID:    4511        "MCSMOM    ="
33     56           24             MCSMOM
```

```
ID:    4512        "MCSROUT   ="
33     100          68             MCSROUT
```

```
ID:    4513        "MCSSTOR   ="
33     42           10             MCSSTOR
```

```
 ID:    4514        "MCSUD     ="
 33     35           3              MCSUD
```

Note: The following record types are created as a result of a TSS LIST(SDT) command. Output records produced vary depending on the type of keyword listed.

```
ID:     5000        TSS LIST(SDT) TIMEREC(xxxxxx)
 33     40           8      TIMEREC NAME
 41     48           8      UNUSED
 49     56           8      ADMIN BY ACID NAME
 57     60           4      SMF ID WHERE ADMIN WAS DONE
 61     70           10     DATE OF LAST CHANGE MM/DD/YYYY
 71     78           8      TIME OF LAST CHANGE HH:MM:SS
 79     110          32     USER RECORD DESCRIPTION
```

```
ID:     5001        TSS LIST(SDT) TIMEREC(XXXXXX)
 33     34           2      STARTING HOUR FOR THIS RECORD
 35     36           2      ENDING HOUR FOR THIS RECORD
 37     56           20     15 MINUTE TIME INTERVAL VALUES
```

```
ID:     5005        TSS LIST(SDT) CALENDAR(XXXXXX)
 33     40           8      CALENDAR RECORD NAME
 41     48           8      UNUSED
 49     52           4      YEAR THIS RECORD APPLIES TO
 53     60           8      ADMIN BY ACID NAME
 61     64           4      SMF ID WHERE ADMIN WAS DONE
 65     74           10     DATE OF LAST CHANGE MM/DD/YYYY
 75     82           8      TIME OF LAST CHANGE HH:MM:SS
 83     114          32     USER RECORD DESCRIPTION
```

```
ID:     5006        TSS LIST(SDT) CALENDAR(XXXXXX)
 33     35           3      MONTH THIS RECORD APPLIES TO
 36     66           31     VALUES FOR DAYS OF THE MONTH
```

```
ID:     5010        TSS LIST(SDT) MAPREC(XXXXXX)
 33     40           8      MAPREC RECORD NAME
 41     48           8      UNUSED
 49     56           8      ADMIN BY ACID NAME
 57     60           4      SMF ID WHERE ADMIN WAS DONE
 61     70           10     DATE OF LAST CHANGE MM/DD/YYYY
 71     78           8      TIME OF LAST CHANGE HH:MM:SS
 79     110          32     USER RECORD DESCRIPTION
```

```
ID:     5011        TSS LIST(SDT) MAPREC(XXXXXX)
 33     34           2      FIELD NUMBER
 35     35           1      BLANK
 36     59           24     FIELD NAME
 60     60           1      BLANK
 61     63           3      ROW NUMBER
 64     64           1      BLANK
 65     67           3      COLUMN NUMBER
 68     68           1      BLANK
 69     71           3      LENGTH VALUE
 72     72           1
 73     78           6      CHAR|BIN|PACKED|ZONED|HEX
```

```
ID:     5015        TSS LIST(SDT) MASKREC(XXXXXX)
 33     40           8      MASKREC RECORD NAME
 41     48           8      UNUSED
 49     56           8      ADMIN BY ACID NAME
 57     60           4      SMF ID WHERE ADMIN WAS DONE
 61     70           10     DATE OF LAST CHANGE MM/DD/YYYY
 71     78           8      TIME OF LAST CHANGE HH:MM:SS
 79    110           32     USER RECORD DESCRIPTION
```

```
ID:     5016        TSS LIST(SDT) MASKREC(XXXXXX)
 33     34            2     MASK NUMBER
 35     35            1     BLANK
 36     59            24    MASK NAME
 60     60            1     BLANK
 61     63            3     OFFSET NUMBER
 64     64            1     BLANK
 65     67            3     LENGTH VALUE
 68     68            1     BLANK
 69     74            6     CHAR|BIN|PACKED|ZONED|HEX
 75     75            1     BLANK
 76    119            44    MASK VALUE
```

```
ID:     5020        TSS LIST(SDT) SELECT(XXXXXX)
 33     40             8    SELECT RECORD NAME
 41     48             8    UNUSED
 49     56             8    ADMIN BY ACID NAME
 57     60             4    SMF ID WHERE ADMIN WAS DONE
 61     70             10   DATE OF LAST CHANGE MM/DD/YYYY
 71     78             8    TIME OF LAST CHANGE HH:MM:SS
 79    110             32   USER RECORD DESCRIPTION
```

```
ID:     5021        TSS LIST(SDT) SELECT(XXXXXX)
 33     299          268    SELDATA field
```

```
ID:     5025        TSS LIST(SDT) RECORD(XXXXXX)
ID:   5025
33      40             8    RLP RECORD NAME
41      48             8    UNUSED
49      56             8    ADMIN BY ACID NAME
 57     60             4    SMF ID WHERE ADMIN WAS DONE
61      70             10   DATE OF LAST CHANGE MM/DD/YYYY
71      78             8    TIME OF LAST CHANGE HH:MM:SS
79      110            32   USER RECORD DESCRIPTION
```

```
ID:     5026
33       34            2    FIELD NUMBER
35       35            1    BLANK
36       59            24   FIELD NAME
60       60            1    BLANK
61       65            5    OFFSET VALUE
66       66            1    BLANK
67       68            2    FIELD LENGTH
69       69            1    BLANK
70       75            6    CHAR|BIN|PACKED|ZONED|HEX
```

Note: The following record types are created as a result of a TSS MODIFY command. Output records produced vary depending on the type of MODIFY executed.

Output from MODIFY(STATUS(BASE)):

```
ID:    9500       "AUTH(xxxxxxxx,yyyyyyyy)"
33     40            8     MERGE|OVERRIDE
41     48            8     ALLOVER|ALLMERGE
```

```
ID:    9501       "ADMINBY(xxx)"
33     36            3      YES|NO
```

```
ID:    9502       "CACHE(xxx)"
33     36            3      ON|OFF
```

```
ID:   9503        "AUDIT FILE(NNN%)"
33    36              4     NNN%
```

```
ID:   9504        "RECOVERY FILE(NNN%)"
33    36              4     NNN%
```

```
ID:   9505        "SECURITY FILE(NNN%)"
33    36              4     NNN%
```

```
ID:     9506      "ID=XXXXXXXX"
33     40             8     ID USED DURING SECURITY FILE CREATE
```

```
ID:    9507       "SHRFILE(xxxxxxxx)"
33     40            8     YES|NO|SECURITY
```

```
ID:    9508       "BACKUP(xxxxxx-HH:MM)"
33     40            8     ACTIVE|INACTIVE
41     45            5     HH;MM BACK UP WILL TAKE PLACE
```

```
ID:    9509       "LAST CHANGED ON MM/DD/YY AT HH:MM"
33     40            8     LAST CHANGED DATE
41     45            5     LAST CHANGED TIME
```

```
ID:    9510       "AUTOERASE(XXX)"
33     35            3     YES|NO
```

```
ID:    9511       "CANCEL(XXX)"
33     35            3     YES|NO
```

```
ID:    9512       "DATE(XX/XX/XX)"
33     40            8     DATE FORMAT
```

```
ID:    9513       "DEBUG(XXX)"
33     35            3     ON|OFF
```

```
ID:    9514       "DIAGTRAP(OFF|XXX,NAME,DRC)"
33     35            3     OFF|KERF|SVC|DB1|DB2|SFS|FRA...
36     43            8     NAME
44     46            3     DRC
```

```
ID:    9515       "SECTRACE(XXX,YYY)"
33     35         3        ON|ACT
36     38         3        WTL|WTO
```

```
ID:    9516       "IOTRACE(OFF|XXXX)"
33     35         3        IOTRACE(ON)
36     38         3        IOTRACE(SRI)
```

```
ID:    9517       "SFSDIAG(OFF|XXXXXX)"
33     33          1         SFSDIAG(1)
34     34          1         SFSDIAG(2)
```

```
ID:    9518       "GTRACE(XXX)"
33     35          3         ON|OFF
```

```
ID:    9519        "DOWN(BX,SX,TX,OX)"
33      33         1          BATCH MODE
34      34         1          STC MODE
35      35         1          TSO MODE
36      36         1          OTHER MODE
```

```
ID:     9520       "EXIT(XXX)"
33     35          3         ON|OFF
```

```
ID:     9521       "EXPDAYS(NN)"
33     34          2         EXPDAYS VALUE
```

```
ID:     9522       "LOG(AAA,BBB,CCC,...)"
33     38          6          NONE|ALL
39     44          6          ACC
45     50          6          INIT
51     56          6          SMF
57     62          6          SEC9
63     68          6          MSG
```

```
ID:     9523       "LOGBUFF(NNNN)"
33      36        4           NUMBER OF LOG BUFFERS ALLOWED
```

```
ID:     9524       "CURBUFF(NNNN)"
33      36        4           NUMBER OF CURRENT LOG BUFFER ALLOCATED
```

```
ID:     9525       "MODE(XXX)"
33      36        4           RACF
37      40        4           ZEOD
41      44        4           DORM|WARN|IMPL|FAIL
```

```
ID:     9526       "SWAP(XXX)"
33      35        3           YES|NO
```

```
ID:     9527       "SYSOUT(X,YYYYYYYY)"
33      33        1           SYSOUT CLASS
34      41        8           SYSOUT DESTINATION
```

```
ID:     9528       "TAPE(XXX)"
33      35        3           OFF|DSN|DEF
```

```
ID:     9529       "TEMPDS(XXX)"
33      35        3           YES|NO
```

```
ID:     9530       "TIMER(NNN)"
33      35         3          TIMER VALUE
```

```
ID:     9531       "CMDNUM(NN)"
33      34         2         NUMBER OF COMMAND PROCESSORS
```

```
ID:     9532       "MFACCESS(XXXX)"
33      36          4         MFACCESS MODE
```

```
ID:     9533       "VTHRESH(NNN,CCC,...,XXX)"
33      35          3         NNN VTHRESH COUNT
36      39          4         NOTIFY
40      43          4         SUSPEND
44      47          4         CANCEL
48      51          4         WARN
```

```
ID:     9534       "STATUS(XXXX,XXXX,XXXX,XXX...)"
33      40          8         VERSION
41      48          8         BASE
49      56          8         CPF
57      64          8         JES
65      71          8         PASSWORD
72      79          8         FACMODE
80      87          8         TSSPC
88      95          8         TSSVAX
```

```
ID:     9535       "TEXTTSS(XXXXXXXXXXXXXXXXXXXXX)"
33      56         24          TEXTTSS
```

```
ID:     9536       "PRODUCTS(XXXX,XXXX,...)"
33      39          7          TSO|TSOE
40      46          7          ACF/2
49      56          8          CA-TAPE
57      64          8          RACF
65      72          8          ADABASE
```

```
ID:     9537       "ADSP(XXXX)"
33      35          3          YES|NO
```

```
ID:     9538       "DLIB(XXXX)"
33      35          3          YES|NO
```

```
ID:     9539       "ADABASE(NNN,NNN,...)"
33      35          3          ADABASE SVC #1
36      38          3          ADABASE SVC #2
39      41          3          ADABASE SVC #3
42      44          3          ADABASE SVC #4
```

```
ID:     9540       "DB2FAC(SSSS=CCCCCCCC,...)"
33      36          4          SUBSYSTEM NAME
37      44          8          SUBSYSTEM FACILITY
45      48          4          SUBSYSTEM NAME
49      56          8          SUBSYSTEM FACILITY
57      60          4          SUBSYSTEM NAME
61      68          8          SUBSYSTEM FACILITY
69      72          4          SUBSYSTEM NAME
73      80          8          SUBSYSTEM FACILITY
81      84          4          SUBSYSTEM NAME
85      91          8          SUBSYSTEM FACILITY
```

```
ID:     9541       "DUFPGM(XXXXX,XXXXX,...)"
33      40          8          *NONE*|PGM AUTHORIZED
41      48          8                 PGM AUTHORIZED
49      56          8                 PGM AUTHORIZED
57      64          8                 PGM AUTHORIZED
65      71          8                 PGM AUTHORIZED
```

```
ID:    9542        "IMS(XXXXXX,........)
33      40          8
41      48          8
49      56          8
57      64          8
65      72          8
73      80          8
81      88          8
89      96          8
97     104          8
105    112          8
113    120          8
121    128          8
129    136          8
137    144          8
145    152          8
153    160          8
```

```
ID:    9543        "TNG MONITOR(XXX)"
33      35          3           ON|OFF
```

```
ID:    9544        "TNG MONITOR DEST(NNN.NNN.N.NNN)"
33      47         15          NNN.NNN.NNN.NNN
```

```
ID:    9545       "PDSPROT(XXX)"
33      35         3           ON|OFF
```

```
ID:    9546       "PDSPROT(DSN(DATA.SET.NAME) VOL(VOLSER) CLASS(XXX)"
33      76         44           PDS DATA SET NAME
77      82         6            VOLUME PDS RESTRICTED TO
83      90         8            RESOURCE CLASS USED WITH THIS RESTRICTION
```

```
ID:    9547       "TIMELOCK(NNNN,NNNN,NNNN,NNNN)"
33      36         4            TIMER VALUE
37      40         4            LOCK RETRY VALUE
41      44         4            ENQUE RETRY VALUE
45      48         4            BACK RETRY VALUE
```

```
ID:    9548       "OMVSUSER(XXXXXXXX)"
33      40         8         ACID
```

```
ID:    9549       "OMVSGRP(XXXXXXXX)"
33      40         8            ACID
```

```
ID:    9550       "BYPASS(XXXXXX,XXXXXX,XXXXXX,XXXXXX,XXXXXX)"
33      40         8        EVERYJOB|JOBNAME
41      48         8                JOBNAME
49      56         8                JOBNAME
57      64         8                JOBNAME
65      72         8                JOBNAME
```

```
ID:    9551      INITPGM= CCCCCCCC  ID= CC  TYPE= XX
33     40           8               INITPGM
41     42           2               ID
43     44           2               TYPE
```

```
ID:    9552      ATTRIBUTES=  ATTRIBUTES SEPARATED BY COMMA
```

```
ID:    9553      MODE= CCCC  DOWN=CCCCCC  LOGGING=CCCC,CCCC, ....
33     36          4              MODE:   DORM|FAIL|IMPL|WARN
37     44          8              DOWN   (BW,SB,TW,OW)
45     50          6              LOGGING:   NONE|ALL
51     56          6                         ACCESS OR ACC
57     62          6                         INIT
63     68          6                         SMF
69     74          6                         SEC9
75     80          6                         MSG
```

```
ID:    9554     UIDACID= X   LOCTIME= XXX  DEFACID= *NONE*  KEY= X
33     33          1               UIDACID
34     36          3               LOCKTIME
37     44          8               DEFACID
45     45          1               KEY
```

```
ID:    9560     XFACMTRX= YES    EXTSEC= YES,READ
33     35          3               FACMATRX   YES|NO
36     38          3               EXTSEC     YES|NO
39     44          6                          READ|UPDATE
```

```
ID:    9561     XJCT=    XFCT=   XCMD=    XDCT=    XTRAN=
33     35          3               XJCT   YES|NO
36     38          3               XFCT   YES|NO
39     41          3               XCMD   YES|NO
42     44          3               XDCT   YES|NO
45     47          3               XTRAN  YES|NO
48     50          3               XTST   YES|NO
51     53          3               XPSB   YES|NO
54     56          3               XPCT   YES|NO
57     59          3               XPPT   YES|NO
60     62          3               XAPPC  YES|NO
```

```
ID:    9564     PCTEXTSEC=      PCTCMDSEC=
33     40          8               PCTEXTSEC   OVERRIDE|HONOR
41     48          8               PCTCMDSEC   OVERRIDE|HONOR
```

```
ID:    9565     DSNCHECK     LTLOGOFF=
33     35            3             DSNCHECK   YES|NO
36     38            3             LTLOGOFF   YES|NO
```

```
ID:    9566     MAXUSER= XXXXX  PRFT= XXX   MAXSIGN= NNN,RETRY
33     37            5             MAXUSER
38     40            3             PRFT
41     43            3             MAXSIGN:
44     48            5                    RETRY|KILL
```

```
ID:    9570     BYPASS: RESOURCE= XXXXXXXX   NAMES: XXXX  XXXX  XXXX
33     40            8             RESOURCE CLASS
41     48            8             RESOURCE NAME
49     56            8             RESOURCE NAME
57     64            8             RESOURCE NAME
```

```
ID:    9571     BYPASS: NNNN  NNNN  NNNN  NNNN  NNNN   NNNN
33     40            8             RESOURCE NAME
41     48            8             RESOURCE NAME
49     56            8             RESOURCE NAME
57     64            8             RESOURCE NAME
65     72            8             RESOURCE NAME
73     79            8             RESOURCE NAME
```

Output from MODIFY(STATS):

```
ID:    9590          "INIT(NNNNN) XREQ(NNNNNN) MVS(NNNNNN)"
33     39            9           INIT VALUE
40     48            9           XREQ VALUE
49     57            9           MVS VALUE
```

```
ID:    9591          "VIOL(NNNNN) EXEC(NNNNNN) SMF(NNNNNN)"
33     39          9           VIOL VALUE
40     48          9           EXEC VALUE
49     57          9           SMF VALUE
```

```
ID:    9592          "CHNG(NNNNN) RECV(NNNNNN) AUD(NNNNNN)"
33     39          9           CHNG VALUE
40     48          9           RECV VALUE
49     57          9           AUD VALUE
```

```
ID:    9593          "#REQ(NNNNN) LOCK(NNNNNN) LWT(NNNNNN)"
33     39          9           #REQ VALUE
40     48          9           LOCK VALUE
49     57          9           LWT VALUE
```

```
ID:   9594      #REQ(     )   LOCK(     )          LWAIT(      )
33    41            9             #REQ
42    50            9             LOCK
51    59            9             LWAIT
```

```
ID:   9660      CA-TOP SECRET VERSION
33    52           20             COMPLETE TSS VERSION AND GENLEVEL
```

Output from MODIFY(STATS):

```
ID:    9670          "MAXSIZE ( NNNNNNNNNK )  SIZE ( NNNNNNNNNK )"
33     39          9           MAXIMUM CACHE SIZE ALLOCATED
40     48          9           SIZE OF CURRENTLY USED CACHE
```

```
ID:    9671          "CALLS ( NNNNNNNNN )   SATISFIED ( NNNNNNNNN )"
33     39          9           NUMBER OF CACHE CALLS
40     48          9           NUMBER OF CACHE CALLS SATISFIED
```

```
ID:    9672          "CLEARD ( NNNNNNNNN ) "
33     39            9           NUMBER OF CACHE CLEARS SINCE IPL
```

```
ID:    9611          "TOTAL COMMANDS ISSUED = NNNNNNNNN"
33     42           10           TOTAL COMMANDS ISSUED
```

```
ID:    9612          "CMD NN = NNN.NN%       CMD NN = NNN.NN%"
33     34            2           COMMAND PROCESSOR NUMBER
35     40            6           NNN.NN    PERCENTAGE OF TOTAL COMMANDS
41     42            2           COMMAND PROCESSOR NUMBER
43     48            6           NNN.NN    PERCENTAGE OF TOTAL COMMANDS
```

Output from MODIFY(STATUS(CPF)):

```
ID:  9600            "CPF(XXX)"
33      35           3           ON|OFF
```

```
ID:  9601            "CPFWAIT(XXX)"
33       35          3           YES|NO
```

```
ID:  9602           "CPFTARGET(XXXXX)"
33       37          5           *|LOCAL
```

```
ID:  9603           "CPFRCVUND(XXX)"
33       35          3           YES|NO
```

```
ID:  9604           "CPFRECFL(NNN%)"
33        36         4           NNN%
```

```
ID:  9605          "CPFNODE(xxxxxx)   STATUS(XXX,XXX,XXX.....)"
33        40        8           CPFNODE name
41        49        9           ACTIVE|INACTIVE
50        58        9           SPOOL|NOSPOOL
59        67        9           ABEND
68        76        9           RETRY
77        85        9           SEND-ONLY|RECV-ONLY
```

Output from MODIFY(STATUS(FACMODE))

```
ID:  9640           "FACMODE(XXY,XXY,XXY.........)"
33          34        2           FACILITY ID    1
35          35        1           FACILITY MODE  1
36          37        2           FACILITY ID    2
38          38        1           FACILITY MODE  2
39          40        2           FACILITY ID    3
41          41        1           FACILITY MODE  3
42          43        2           FACILITY ID    4
44          44        1           FACILITY MODE  4
45          46        2           FACILITY ID    5
47          47        1           FACILITY MODE  5
48          49        2           FACILITY ID    6
50          50        1           FACILITY MODE  6
51          52        2           FACILITY ID    7
53          53        1           FACILITY MODE  7
54          55        2           FACILITY ID    8
56          56        1           FACILITY MODE  8
57          58        2           FACILITY ID    9
59          59        1           FACILITY MODE  9
60          61        2           FACILITY ID   10
62          62        1           FACILITY MODE 10
63          64        2           FACILITY ID   11
65          65        1           FACILITY MODE 11
66          67        2           FACILITY ID   12
68          68        1           FACILITY MODE 12
69          70        2           FACILITY ID   13
71          71        1           FACILITY MODE 13
72          73        2           FACILITY ID   14
74          74        1           FACILITY MODE 14
75          76        2           FACILITY ID   15
77          77        1           FACILITY MODE 15
```

Output from MODIFY(STATUS(JES))

```
ID:  9650          "JCT(INDEV=NNNN,ROUTE=NNN,NJHDR=NNN)"
33         36       4           INDEV VALUE
37         40       4           ROUTE VALUE
41         44       4           NJHDR VALUE
```

```
ID:  9651          "JES(SSID=XXXX,TYPE=JESN,LEVEL=???????? (NO)VERIFY)"
33         36       4           SSID value
37         37       1           JES type value
38         45       8           JES level
46         50       5           JMR|NOJMR
51         58       8           VERIFY|NOVERIFY
```

```
ID:  9652          "JESNODE(XXXXXXXX)"
33         40       8           *NONE*|XXXXXXXX
```

```
ID:  9653          "NJEUSR(XXXXXXXXX)"
33         40       8           *NONE*|XXXXXXXX
```

```
ID:  9654          "JOBACID(C,N,N)"
33         33       1           FIELD CODE
34         34       1           POSITION
35         35       1           START
```

```
ID:  9655          "SUBACID(C,N)"
33         33       1           FIELD CODE
34         34       1           NUMBER OF CHARACTERS
```

Output from MODIFY(STATUS(VERSION))

```
ID:  9660         "VERSION="
33         52       20          TSS version
```

Output from MODIFY(STATUS(PASSWORD))

```
ID:  9675          "NEWPW(MIN=N,WARN=NN,MINDAYS=Nn,MASK=CCCC,.....)"
33          33       1           MINIMUM PASSWARD LENGTH
34          35       2           WARNING DAYS ABOUT TO EXPIRE
36          37       2           MINDAYS VALUE
38          38       1           NO LETTER REPETITION
39          46       8           MASK CHARACTERS
47          48       2           PASSWORD OPTION
48          49       2           PASSWORD OPTION
50          51       2           PASSWORD OPTION
52          53       2           PASSWORD OPTION
54          55       2           PASSWORD OPTION
56          57       2           PASSWORD OPTION
58          59       2           PASSWORD OPTION
60          61       2           PASSWORD OPTION
```

```
ID:  9676            "HPBPW(NNN)"
33          35       3           VALUE
```

```
ID:  9677            "MSUSPEND(XXX)"
33          35       3           YES|NO
```

```
ID:  9678            "NPWTHRESH(N)"
33          33       1           VALUE
```

```
ID:  9679            "PWEXP(NNN)"
33          35       3           VALUE
```

```
ID:  9680            "PWHIST(NN)"
33          34       2           VALUE
```

```
ID:  9681            "PTHRESH(NNN)"
33         35      3           VALUE
```

```
ID:  9682            "PWVIEW(XXX)"
33   35              3           YES|NO
```

Output from MODIFY(RPW(LIST)

```
ID:  9690            RESTRICTED PASSWORD LIST
33   40              8           PASSWORD PREFIX
41   48              8           PASSWORD PREFIX
49   56              8           PASSWORD PREFIX
57   64              8           PASSWORD PREFIX
65   72              8           PASSWORD PREFIX
73   80              8           PASSWORD PREFIX
```

Output from MODIFY(FAC(ALL))

```
ID:  9695            MODIFY(FAC(ALL))
33   40              8           FACILITY NAME
41   42              2           FACILITY ID
43   43              1           FACILITY MODE
```

Output from MODIFY(FACILITY(XXXXXXXX))

```
ID:  9700            "FACILITY DISPLAY FOR XXXXXXXX"
33   40              8           FACILITY NAME
```

```
ID:  9701            "INITPGM=XXXXXXXX ID=XX TYPE=XX"
33   40              8           INITPGM VALUE
41   42              2           FACILITY ID
43   45              3           TYPE OF FACILITY
```

```
ID:  9702            "ATTRIBUTES= XXXXXXX,XXXXXX,XXXXXX"
33   41              9           UP TO 29 FACILITY ATTRIBUTES
```

```
ID:  9703            "MODE=XXXX DOWN=XXXX  LOGGING=XXX,XXX....."
33   36              4           RUNNING MODE
37   44              8           DOWN OPTION
45   50              6           NONE|ALL
51   55              6           ACCESS OR ACC
56   61              6           INIT
62   67              6           SMF
68   73              6           SEC9
74   79              6           MSG
```

```
ID:  9704            "UIDACID=X LOCKTIME=XXX DEFACID=XXXXX  KEY=X"
33   40              8           UIDACID
41   43              3           LOCKTIME VALUE
44   51              8           DEFACID
52   52              1           FACILITY KEY
```

```
ID:  9710            "XFACMTRX=XXX     EXTSEC=XXX,XXXXXX"
33   35              3           YES|NO
36   38              3           YES|NO
39   44              6           READ|UPDATE
```

```
ID:  9711            "XJCT=  XFCT=  XCMD= XDCT= XTRAN="
33   35              3           XJCT=  YES|NO
36   38              3           XFCT=  YES|NO
39   41              3           XCMD=  YES|NO
42   44              3           XDCT=  YES|NO
45   47              3           XTRAN= YES|NO
48   50              3           XTST=  YES|NO
51   54              3           XPSB=  YES|NO
54   56              3           XPCT=  YES|NO
57   59              3           XPPT=  YES|NO
60   62              3           XAPPC= YES|NO
63   65              3           XUSER= YES|NO
```

```
ID:  9714            "PCTEXTSEC= PCTCMDSEC= PCTRESSEC="
33   40              8           PCTEXTSEC= OVERRIDE|HONOR
41   48              8           PCTCMDSEC= OVERRIDE|HONOR
49   56              8           PCTRESSEC= OVERRIDE|HONOR
```

```
ID:  9715            "DSNCHECK= LTLOGOFF= RLP= SLP="
33   35            3           DSNCHECK= YES|NO
36   38            3           LTLOGOFF= YES|NO
39   41            3           RLP=      YES|NO
42   44            3           SLP=      YES|NO
```

```
ID:  9716            "MAXUSER=XXXX PRFT=XXX  MAXSIGN=XXX,CCCCC"
33   37            5           MAXUSER VALUE
38   40            3           PRFT VALUE
41   43            3           MAXSIGN VALUE
44   48            5           RETYR|KILL
```

Output from MODIFY(FAC(XXXXX=BYPLIST))

```
ID:  9720              "RESOURCE=TRANID   XXXXXX NAMES:  XXX XXX ..."
33   40            8           TRANID
41   48            8           BYPASS|PROTECT
49   53            5           RESOURCE
54   58            5           RESOURCE
59   63            5           RESOURCE
64   68            5           RESOURCE
69   73            5           RESOURCE
```

```
ID:  9721            TRANID LIST CONTINUED
33   37            5           ELEVEN RESOURCES SEPERATED BY BLANK
```

```
ID:  9722            "RESOURCE=XXXX   CCCCCC NAMES: XXXXXXXX XXXXX..."
33   40            8           RESOURCE CLASS NAME
41   48            8           BYPASS|PROTECT
49   57            9           RESOURCE
58   66            9           RESOURCE
67   75            9           RESOURCE
```

```
ID:  9723              RESOURCE CONTINUATION
33   41            9           RESOURCE
42   50            9           RESOURCE
51   59            9           RESOURCE
60   68            9           RESOURCE
69   77            9           RESOURCE
78   86            9           RESOURCE
```

Output from MODIFY(STATUS(TSSVAX))

```
ID:  9800              "VAX(XXX)"
33   35            3           ON|OFF
```

```
ID:  9801              "VAXID(XXXXXXX)"
33   39            7           *VAXID*|*TSSID*
```

```
ID:  9802              "VAXDEPT(XXXXXXXX)"
33   40            8           VAX department
```

```
ID:  9803              "VAXCMD(REJ|ACC)"
33   35            3           REJ|ACC
```

```
ID:  9804              "VAXPFX(XX)"
33   34            2           VAX PREFIX
```

```
ID:  9805              "VAXSRCH(XXXX)"
33   38            6           FAIL|VAXPRX
```

```
ID:  9806              "VAXWAIT(NNNNN)"
33   37            5           NNNNN
```

Output from MODIFY(STATUS(TSSPC))

```
ID:  9825              "PCADMIN(XXXXXXXX)"
33   40           8           VALUE
```

```
ID:  9826              "PCIDLE(NN)"
33   34           2           PCIDLE VALUE
```

```
ID:  9627              "PCDSDAYS(XXXXXX)"
33   38           6           NN|*NULL*
```

```
ID:  9628              "PCMINPWD(XXXXXX)"
33   38           6           NN|*NULL*
```

```
ID:  9629              "PCGLTYPE(XXXXXX)"
33   38           6           NN|*NULL*
```

```
ID:  9830              "PCOPTIONS(XXXXXX,XXXXX.......)"
33   39           9           CONNECT|NOCONNECT
40   49           10          PRIVPLUS|NOPRIVPLUS
50   60           11          SGNOFFMSG|NOSGNOFFMSG
```

5.5 Record Types Summary

The following summary lists the record ID number and description for each record type.

Table 5-1 (Page 1 of 17). CA-Top Secret Record Types

ID Number	Record Type	Description
0001	DATA DELIMITER:	TSS LIST COMMAND
0100	"NAME ="	NAME
0200	"TYPE ="	ACID TYPE
0300	"DEPT ACID ="	DEPT ACID,DEPT NAME
0400	"DIV ACID ="	DIVACID,DIVNAME
0450	"ZONE ACID ="	ZONEACID,ZONENAME
0500	"CREATED ="	DATE: CREATED, LAST MODIFIED
0501	"EXPIRES ="	EXPIRE
0502	"SUSPENDED ="	SUSPENDED
0600	"PROFILES ="	PROFILE ACIDS
0675	"GROUPS ="	GROUP NAME
0700	"ATTRIBUTES ="	ATTRIBUTES
0800	"BYPASSING ="	SECURITY BYPASS ATTRIBUTES
0900	"LAST USED ="	DATE/TIME LAST USED,CPU, FAC, COUNT
1000	"MASTER FAC ="	MASTER FACILITY
1100	"LOCK TIME ="	LOCK TIME (MINUTES)
1200	"LANGUAGE ="	LANGUAGE PREFERENCE CODE
1300	"TIME ZONE ="	TIME ZONE
1400	"DSN/PREFIX ="	DSN/PREFIX (OWNED)
1500	"VOLUMES ="	VOLSER (OWNED), ATTRIBUTES
1600	"VMMDISKS ="	MINIDISKS (OWNED)
1700	"RESOURCE ="	RESOURCE CLASS NAME, ENTITY
1900	"WHOOWNS ="	RESOURCES OWNED
1950	"WHOHAS ="	RESOURCE ACCESS
2001	"XA ACID ="	XAUTH OWNER NAME,
2002	"XA DATASET ="	XAUTH OWNER NAME,UNTIL DATE, DSN
2003	"XA VOLUME ="	XAUTH OWNER NAME,UNTIL DATE, VOLUME
2004	"XA MINIDISK="	XAUTH OWNER NAME,UNTIL DATE, MINIDISK
2005	"XA xxxxxx ="	XAUTH OWNER NAME,UNTIL DATE, RESOURCE

Table 5-1 (Page 2 of 17). CA-Top Secret Record Types

ID Number	Record Type	Description
2010	" VMNODE="	VM NODE (OWNED)
2011	" ACCESS ="	XAUTH ACCESS LEVELS
2012	" DAYS ="	XAUTH DAYS, TIMES
2013	" LIBRARY ="	XAUTH LIBRARY
2014	" PRIVPGM ="	XAUTH PRIVPGM
2015	" FAC ="	XAUTH FACILITIES
2016	" ACTION ="	XAUTH ACTION
2017	" VMUSER ="	XAUTH PRIVPGM
2021	"ACCESS ="	XAUTH ACCESS LEVELS
2022	"ADMIN BY ="	ADMINISTERING ACID DONE ON THIS AUDITID DATE ADMIN'D MM/DD/YYYY TIME ADMIN'D HH:MM:SS
2023	"DAY/TIME ="	CALENDAR NAME TIMEREC NAME
2024	"RESTRICT ="	MAPREC SELECT(IN) ,br SELECT(OUT)
2025	"RESTRICT ="	MASKREC SELECT(IN) ,br SELECT(OUT)
2026	"SYSID ="	SYSID RESTRCTION
2027	"APPLDATA ="	SYSTEMVIEW APPLDATA VALUE
2028	"SCRIPTIN ="	SYSTEMVIEW SCRIPTIN VALUE
2029	"SCRIPTIP ="	SYSTEMVIEW SCRIPTIP VALUE
2100	"FACILITY ="	FACILITY
2101	" AUTH CMDS ="	AUTHORIZED COMMANDS, FLAG
2102	" EXMP CMDS ="	EXEMPTED COMMANDS, FLAG
2200	"SOURCES ="	SOURCES
2300	"OPIDENT ="	OPIDENT, OPPRTY, SITRAN
2301	"SITRAN ="	SITRAN, FACILITY
2400	"OPCLASS ="	OPCLASS
2500	"SCTYKEY ="	SCTYKEY
2600	"INSTDATA ="	INSTDATA
2700	"USER ="	USER, USER TYPE
2800	"ACIDS ="	ACID, ACID TYPE
2801	"ACID ="	ACID, ACID TYPE, PROFILE,UNTIL DATE

Table 5-1 (Page 3 of 17). CA-Top Secret Record Types

ID Number	Record Type	Description
2901	"FACILITIES ="	ADMIN AUTHORITY
2902	"ACID ="	ADMIN AUTHORITY
2903	"LIST DATA ="	ADMIN AUTHORITY
2904	"MISC1 ="	ADMIN AUTHORITY
2905	"MISC9 ="	ADMIN AUTHORITY
2906	"RESOURCES ="	ADMIN AUTHORITY
2907	"xxxxxxxx ="	ADMIN AUTHORITY
2908	"MISC2 ="	ADMIN AUTHORITY
2909	"SCOPE ="	ACID'S SCOPE
2910	" MISC8="	ADMIN AUTHORITY
2911	" ACCESS ="	ADMIN AUTHORITY
2912	" MISC3="	ADMIN AUTHORITY
2921	"ACCESS ="	XAUTH ACCESS LEVELS
2930	"VMMACH="	VM MACHINE (OWNED)
2940	"VMRDR="	VM READER (OWNED)
2950	"CPCMD="	CP COMMAND (OWNED)
2960	"DIAGNOSE="	VM DIAGNOSE (OWNED)
2970	"DSPACE="	VM DATASPACE (OWNED)
2980	"IUCV="	VM IUCV (OWNED)
2990	"SFSCMD="	VM SFS COMMAND (OWNED)
3000	"PASSWORD ="	PASSWORD
3100	"STC ="	STC
3010	"DIRECTORY="	VM SFS DIRECTORY (OWNED)
3020	"XA IUCV="	VM IUCV XAUTH
3030	"XA DSPACE="	VM DATASPACE XAUTH
3040	"XA DIAGNOSE="	VM DIAGNOSE XAUTH
3050	"XA CPCMD="	VM CP COMMAND XAUTH
3060	"XA VMNODE="	VM NODE XAUTH
3070	"XA VMMACH="	VM MACHINE XAUTH
3080	"XA VMRDR="	VM READER XAUTH
3090	"XA VMMODE="	VM MODE XAUTH
3200	"PHYSKEY ="	PHYSKEY
3250	"CPFNODES ="	CPFNODE NAMES
3260	"XA PROGRAM="	PROGRAM XAUTH

Table 5-1 (Page 4 of 17). CA-Top Secret Record Types

ID Number	Record Type	Description
3301	"RESOURCE CLASS ="	RESOURCE ATTRIBUTES
3302	" ATTRIBUTE ="	RESOURCE ATTRIBUTES
3303	" ACCESS ="	ACCESS LEVELS
3304	" DEFACC ="	DEFAULT ACCESS LEVELS
3400	"xxxxxxxx ="	EXTENDED ADMINISTRATIVE AUTHORITY
3500	"TSOLPROC ="	TSOLPROC
3501	"TSOLACCT ="	TSOLACCT
3502	"TSOJCLASS ="	TSOJCLASS, TSOHCLASS
3503	"TSOMCLASS ="	TSOMCLASS, TSOSCLASS
3504	"TSOLSIZE ="	TSOLSIZE, TSOMSIZE
3505	"TSOUDATA ="	TSOUDATA, TSOUNIT
3506	"TSODEFPRFG ="	TSODEFPRFG, TSODEST
3507	"TSOOPTION ="	OPTIONS
3508	"TSOCOMMAND ="	TSOCOMMAND
3509	"TSODEST ="	TSODEST
3510	"TSOHCLASS ="	TSOHCLASS
3511	"TSOMSIZE ="	TSOMSIZE
3512	"TSOSCLASS ="	TSOSCLASS
3513	"TSOUNIT ="	TSOUNIT
3600	"SMSSTOR ="	SMSSTOR, SMSMGMT
3601	"SMSDATA ="	SMSDATA, SMSAPPL
3700	"FACILITY ="	FACILITY, ALL
3701	"DAY ="	FACILITY, DAY, TIME
3702	"ACTION ="	FACILITY, ACTION
3703	"ADMIN BY ="	ADMINISTERING ACID DONE ON THIS AUDITID DATE ADMIN'D MM/DD/YYYY TIME ADMIN'D HH:MM:SS
3704	"DAY/TIME ="	CALENDAR NAME TIMEREC NAME
3705	"SYSID ="	SYSID RESTRICTION
3800	"DLF ="	DLF RECORD RESOURCES
3810	"DLF JOBS ="	DLF JOBNAMES
4000	"ACCOUNT ="	WAACCNT
4001	"NAME ="	WANAME

Table 5-1 (Page 5 of 17). CA-Top Secret Record Types

ID Number	Record Type	Description
4002	"BUILDING ="	WABLDG
4003	"DEPARTMENT ="	WADEPT
4004	"ROOM NUMBER ="	WAROOM
4005	"ADDRESS1 ="	WAADDR1
4006	"ADDRESS2 ="	WAADDR2
4007	"ADDRESS3 ="	WAADDR3
4008	"ADDRESS4 ="	WAADDR4
4010	"SEGMENT"	UID SEGMENT NAME
4011	FDT DATA EITHER SYSTEM OR USER-DEFINED	FDTNAME FDT DISPLAY VALUE
Note: Records with the id number 4100 through 4105 are created as a result of the TSS WHOAMI command.		
4012	FDT CONTINUATION	CONTINUATION OF RECORD 4011 (IF NEEDED)
4100	"ACIDNAME ="	ACIDNAME TYPE MODE NOADSP
4101	"FACILITY ="	FACILITY NAME TERMINAL LOCKTIME TIMEZONE
4102	"SYSTEMID ="	SYSTEMID LOG
4103	"INSTDATA ="	INSTDATA
4104	"BYPASSING ="	SECURITY BYPASS ATTRIBUTES
4105	"STORAGE ="	STORAGE PROFILES
4110	"RESOURCE CLASS="	FDT RESOURCE CLASS
4112	"SEGMENT ="	FDT RESOURCE SEGMENT
4113	"MAXLEN ="	FDT RESOURCE MAXLEN
4114	"DISPLAY ="	FDT RESOURCE DISPLAY
4115	"ATTRIBUTES ="	FDT RESOURCE ATTRIBUTES
4200	"UAF NAME="	VAX UAF NAME
4210	"GROUP # ="	VAX GROUP NUMBER
4220	"GROUP NAME ="	VAX GROUP NAME
4230	"PRIM DAYS ="	VAX PRIMARY DAYS
4240	"SCNDY DAYS ="	VAX SECONDARY DAYS

Table 5-1 (Page 6 of 17). CA-Top Secret Record Types

ID Number	Record Type	Description
4250	"PRIMARY ="	VAX PRIMARY SHIFT
4260	"DAY HOURS ="	VAX DAY HOURS
4270	"NETWORK="	VAX NETWORK
4280	"BATCH ="	VAX BATCH NAME
4290	"LOCAL ="	VAX LOCAL NAME
4300	"DIALUP ="	VAX DIALUP RESOURCE
4310	"REMOTE ="	VAX REMOTE RESOURCE
4320	"PDISKQUOTA="	VAX PDISK
4330	"DEFDIR="	VAX DEFAULT DIRECTORY
4340	"VXINSTDATA="	VAX INST DATA
4350	"DFLT PRIVS="	VAX DEFAULT PRIVILEGES
4360	"AUTH PRIVS="	VAX AUTHORIZED PRIVILEGES
4361	"LOGIN FLAGS="	LOGIN FLAGS ALOGIN CAPTIVE CLIDEF DISCTLY DISPWCHG DISMAIL DISIMAGE DISNEWM DISRECON DISREPOR DISWELCO RESTRICT
4362	"LGICMD ="	LGICMD VALUE
4363	"TABLES ="	TABLES VALUE
4364	"LOGFAIL ="	LOGFAIL VALUES BATCH DETACHED DIALUP LOCAL NETWORK REMOTE SUBPROC
4365	"FMODE ="	FMODE VALUES WAIT IGNORE CRASH

Table 5-1 (Page 7 of 17). CA-Top Secret Record Types

ID Number	Record Type	Description
4366	"AUDIT ="	AUDIT VALUES ACL AUDIT AUTHORIZ INSTALL ,br MOUNT
4367	"BREAKIN ="	BREAKIN TIME OUT VALUE
4368	"CLI ="	CLI VALUE
4370	"XA VXFILE="	VAX FILE XAUTH
4401	"UID ="	OMVS UID
4402	"GID ="	OMVS GID
4403	"HOME ="	OMVS INITIAL PATHNAME
4404	"OMVSPGM ="	OMVS STARTUP PROGRAM
4405	"DFLTPGM ="	OMVS DEFAULT PROGRAM
4501	"MCSALTG ="	MCS ALTERNATE GROUP
4502	"MCSAUTH ="	MCS COMMAND AUTHORITY
4503	"MCSAUTO ="	MCS AUTO CMD ASSIGNMENT
4504	"MCSCMDS ="	MCS COMMAND DISTRIBUTION
4505	"MCSDOM ="	MCS DELETE OPERATOR MSGS
4506	"MCSKEY ="	MCS KEY
4507	"MCSLEVL ="	MCS MSG LEVEL
4508	"MCSLOGC ="	MCS LOG CMDS
4509	"MCAUDITRM ="	MCS MSG FORMAT
4510	"MCSMGID ="	MCS MIGRATION ID
4511	"MCSMON ="	MCS MONITOR
4512	"MCSROUT ="	MCS ROUTE CODES
4513	"MCSSTOR ="	MCS STORAGE
4514	"MCSUD ="	MCS UNDELIVERED MSGS

Note: The following record types are created as a result of a TSS LIST(SDT) command. Output records produced vary depending on the type of leyword listed.

Output from TSS LIST(SDT)

5000	TSS LIST(SDT) TIMEREC(XXXXXX)	TIMEREC NAME UNUSED ADMIN BY ACID NAME AUDIT ID WHERE ADMIN WAS DONE DATE OF LAST CHANGE MM/DD/YYYY TIME OF LAST CHANGE HH:MM:SS USER RECORD DESCRIPTION

Table 5-1 (Page 8 of 17). CA-Top Secret Record Types

ID Number	Record Type	Description
5001	TSS LIST(SDT) TIMEREC(XXXXXX)	STARTING HOUR FOR THIS RECORD ENDING HOUR FOR THIS RECORD 15 MINUTE TIME INTERVAL VALUES
5005	TSS LIST(SDT) CALENDAR(XXXXXX)	CALENDAR RECORD NAME UNUSED YEAR THIS RECORD APPLIES TO ADMIN BY ACID NAME AUDIT ID WHERE ADMIN WAS DONE DATE OF LAST CHANGE MM/DD/YYYY TIME OF LAST CHANGE HH:MM:SS
5006	TSS LIST(SDT) CALENDAR(XXXXXX)	MONTH THIS REQUEST APPLIES TO 31 VALUES FOR DAYS OF THE MONTH
5010	TSS LIST(SDT) MAPREC(XXXXXX)	MAPREC RECORD NAME UNUSED ADMIN BY ACID NAME AUDIT ID WHERE ADMIN WAS DONE DATE OF LAST CHANGE MM/DD/YYYY TIME OF LAST CHANGE HH:MM:SS USER RECORD DESCRIPTION
5011	TSS LIST(SDT) MAPREC(XXXXXX)	FIELD NUMBER BLANK FIELD NAME BLANK ROW NUMBER BLANK COLUMN NUMBER BLANK LENGTH VALUE CHAR|BIN|PACKED|ZONED|HEX
5015	TSS LIST(SDT) MASKPREC(XXXXXX)	MASKREC RECORD NAME UNUSED ADMIN BY ACID NAME AUDIT ID WHERE ADMIN WAS DONE DATE OF LAST CHANGE MM/DD/YYYY TIME OF LAST CHANGE HH:MM:SS USER RECORD DESCRIPTION
5016	TSS LIST(SDT) MASKPREC(XXXXXX)	MASK NUMBER MASK NUMBER BLANK MASK NAME BLANK OFFSET NUMBER BLANK LENGTH VALUE BLANK CHAR|BIN|PACKED|ZONED|HEX BLANK MASK VALUE

Table 5-1 (Page 9 of 17). CA-Top Secret Record Types

ID Number	Record Type	Description
5020	TSS LIST(SDT) SELECT(XXXXXX)	SELECT RECORD NAME UNUSED ADMIN BY ACID NAME AUDIT ID WHERE ADMIN WAS DONE DATE OF LAST CHANGE MM/DD/YYYY TIME OF LAST CHANGE HH:MM:SS USER RECORD DESCRIPTION
5021	TSS LIST(SDT) SELECT(XXXXXX)	SELDATA FIELD
5025	TSS LIST(SDT) RECORD(XXXXXX)	RLP RECORD NAME UNUSED ADMIN BY ACID NAME AUDIT ID WHERE ADMIN WAS DONE DATE OF LAST CHANGE MM/DD/YYYY TIME OF LAST CHANGE HH:MM:SS USER RECORD DESCRIPTION
5026	TSS LIST(SDT) RECORD(XXXXXX)	FIELD NUMBER FIELD NUMBER BLANK FIELD NAME BLANK OFFSET VALUE BLANK FIELD LENGTH BLANK CHAR|BIN|PACKED|ZONED|HEX

Note: The following records are created as a result of a TSS MODIFY command. Output records produced vary depending on the type of MODIFY executed.

9500	"AUTH(XXXXXXX,YYYYYYYY)"	MERGE|OVERRIDE ALLOVER|ALLMERGE FACILITY ID MODE
9501	"ADMINBY(XXX)"	ADMINISTERING ACID
9502	"CACHE(XXX)"	CACHE FEATURE
9503	"AUDIT FILE (NNN%)"	AUDIT FILE
9504	"RECOVERY FILE(NNN%)"	RECOVERY FILE SWAP
9505	"SECURITY FILE (NNN%)"	SECURITY FILE
9506	"ID=XXXXXX"	SECURITY FILE CREATE ID
9507	"SHRFILE(XXXXXXXX)"	SHRFILE
9508	"BACKUP(XXXXXX-HH:MM)"	BACKUP TIME ACTIVE INACTIVE

Table 5-1 (Page 10 of 17). CA-Top Secret Record Types

ID Number	Record Type	Description
9509	"LAST CHANGED ON MM/DD/YY AT HH:MM"	LAST DATE CHANGED LAST TIME CHANGED
9510	"AUTOERASE(XXX)"	AUTOERASE
9511	"CANCEL(XXX)"	CANCEL
9512	"DATE(XX/XX/XX)"	DATE FORMAT
9513	"DEBUG(XXX)"	DEBUG
9514	"DIAGTRAP(OFF|XXX,NAME,DRC)"	DIAGNOSTIC TRAP NAME DRC
9515	"SECTRACE(XXX,YYYY)"	SECURITY TRACE
9516	"IOTRACE(OFF|xxxx)"	IO TRACE
9517	"SFSDIAG(OFF|xxxx)"	SFS DIAGNOSTICS
9518	"GTRACE(XXX)"	GTRACE
9519	"DOWN(BX,SX,TX,OX)"	BATCH MODE
STC MODE	TSO MODE	OTHER MODE
9520	"DUFPGM ( )"	AUTHORIZED PROGRAMS
9521	"EXPDAYS (NN)"	EXPDAYS VALUE
9522	"LOG(AAA,BBB,CCC.....)"	LOG NONE|ALL ACC INIT AUDIT SEC9 MSG
9523	"LOGBUF (NNN)"	NUMBER OF LOG BUFFERS ALLOWED
9524	"CURRBUF(NNN)"	NUMBER OF CURRENTS LOG BUFFERS ALLOWED VAX DEPARTMENT
9525	"MODE(XXX)"	MODE RACF ZEOD DORM|WARN|IMPL|FAIL
9526	"SWAP(XXX)"	SWAP
9527	"SYSOUT(X,YYYYYYYY)"	SYSOUT CLASS SYSOUT DESTINATION
9528	"TAPE(XXX)"	TAPE
9529	"TEMPDS(XXX)"	TEMPORARY PARTITIONED DATA SET
9530	"TIMER(NNN)"	TIMER VALUE
9531	"CMDNUM(NND"	NUMBER OF COMMAND PROCESSORS

Table 5-1 (Page 11 of 17). CA-Top Secret Record Types

ID Number	Record Type	Description
9532	"MFACCESS(XXXX)"	MFACCESS MODE
9533	"VTHRESH(NNN,CCC,...,XXX)"	VTHRESH COUNT NOTIFY SUSPEND CANCEL WARN
9534	"STATUS(XXX,XXX,XXX...)"	STATUS VERSION BASE CPF JES PASSWORD FACMODE TSSPC TSSVAX
9535	"TEXTTSS(XXXXXXXXXXXXXXXXXXXXX)"	TEXTTSS VALUE
9536	"PRODUCT(XXXX,XXXX....)"	PRODUCTS TSO|TSO/E ACF/2 CA-TAPE RACF ADABASE
9537	"ADSP(XXX)"	ADSP VALUE
9538	"DLIB(XXX)"	DLIB VALUE
9539	"ADABASE(NNN,NNN,...)"	ADABASE ADABASE SVC #1 ADABASE SVC #2 ADABASE SVC #3 ADABASE SVC #4
9540	"DB2FAC(SSSS,CCCCCCCC,...)"	DB2 FACILITY SUBSYSTEM NAME SUBSYSTEM FACILITY
9541	"DUFPGM(XXXXX,XXXXX,...)"	DUFPGM PGM AUTHORIZED
9542	IMS(XXXXX,XXXXXX,...)"	IMS
9543	"TNG MONITOR(XXX)"	TNG MONITOR
9544	"TNG MONITOR DEST(NNN.NNN.N.NNN)"	TNG MONITOR DESTINATION
9545	"PDSPROT(XXX)"	PDS MEMBER LEVEL PROTECTION
9550	"BYPASS(XXXXXX,XXXXXXX,XXXXXX,XXXXXX)"	BYPASS EVERYJOB JOBNAME

Table 5-1 (Page 12 of 17). CA-Top Secret Record Types

ID Number	Record Type	Description
Note: The following record types are created as a result of a TSS MODIFY command. Output records produced vary depending on the type of MODIFY executed.		
Output from MODIFY(STATUS(BASE))		
9550	"FACILITY ( )"	FACILITY NAME
9551	"INITPGM ="	INIT. PROGRAM PROGRAM ID PROGRAM TYPE
9552	"ATTRIBUTES ="	ATTRIBUTE NAMES
9553	"MODE ="	MODE DOWN LOGGING
9554	"UIDACID ='	UIDACID LOCKTIME(MINUTES) DEFAULT ACID KEY
9560	"XFACMTRX ="	FACILITY MATRIX EXTSEC
9561	"XJCT ="	CICS SECURITY BYPASS OPTION
9564	"PCTEXTSEC ="	PCTEXTSEC PCTCMDSEC
9565	"CICS FACILITY SUBOPTION ="	DSNCHECK LTLOGOFF
9566	"CICS FACILITY SUBOPTION ="	MAXIMUM USERS PRFT MAXSIGN
9570	"BYPASS RESOURCE "	RESOURCE CLASS
9571	"BYPASS RES. LIST"	RESOURCE NAMES
Note: The folowing records created as a result of the TSS MODIFY(STATS) command and contain statistical information.		
Output from MODIFY(STATS)		
9590	"INIT(NNNNN) XREQ(NNNNNN) MVS(NNNNNN)"	INIT VALUE XREQ VALUE MVS VALUE
9591	"VIOL(NNNNNN) EXEC(NNNNNN) SNF(NNNNNN)"	VIOLATION VALUE EXEC VALUE AUDIT VALUE
9592	"CHNG (NNNNNN) RECV(NNNNN) AUD(NNNNNN)"	CHNG VALUE RECV VALUE AUD VALUE

Table 5-1 (Page 13 of 17). CA-Top Secret Record Types

ID Number	Record Type	Description
9593	"#REQ(NNNNN) LOCK(NNNNNN LWT(NNNNNN)"	#REQ VALUE LOCK VALUE LWT VALUE
9611	"TOTAL COMMANDS ISSUED = NNNNNNNNND"	TOTAL COMMANDS ISSUED
9612	"CMD NN = NNN.NN% CMD NN =NNN.NN%"	COMMAND PROCESSOR NUMBER
9670	"MAXSIZE(NNNNNNNNK) SIZE(NNNNNNNNNK)"	MAXIMUM CACHE SIZE ALLOCATED SIZE OF CURRENTLY USED CACHE
9671	"CALLS(NNNNNNNN) SATISFIED(NNNNNNNNN)"	NUMBER OF CACHE CALLS NUMBER OF CACHE CALLS SATISFIED
9672	"CLEARED(NNNNNNNN)"	NUMBER OF CACHE CLEARS SINCE ILP

Note: The folowing records created as a result of the TSS MODIFY(STATUS(CPF)) command and contain CPF-related information.

Output from MODIFY(STATUS(CPF))

9600	"CPF(XXX)"	CPF
9601	"CPFWAIT(XXX)"	CPFWAIT
9602	"CPFTARGET(XXX)"	CPFTARGET
9603	"CPFRCVUND(XXX)"	CPFRCVUND
9604	"CPFRECFL(NNN%)"	CPFRECFL
9605	"CPFNODE(XXXXXX) STATUS(XXX,XXX,XXX...)"	CPFNODE NAME ACTIVE|INACTIVE SPOOL|NOSPOOL ABEND RETRY SEND-ONLY|RECV-ONLY

Note: The folowing records created as a result of the TSS MODIFY(STATSUS(FACMODE)) command and contain facility and mode information.

Output from MODIFY(STATUS(FACMODE))

9640	"(FACMODE(XXY,XXY,XXY...)"	FACILITY ID FACILITY MODE

Note: The folowing records created as a result of the TSS MODIFY(STATSUS(JES)) command and contain JES-related information.

Output from MODIFY(STATUS(JES))

9650	"JCT(INDEV=NNNN,ROUTE=NNNN,NJHDR=NNNN)"	JCT INDEV VALUE ROUTE VALUE NJHDR VALUE
9651	"JES(SSID=XXXX,TYPE=JESN,LEVEL=???????? (NO)VERIFY)"	SSID VALUE JES TYPE VALUE JES LEVEL JMR|NOJMR VERIFY|NOVERIFY

Table 5-1 (Page 14 of 17). CA-Top Secret Record Types

ID Number	Record Type	Description
9652	"JESNODE(XXXXXXXX)"	JESNODE NONE
9653	"NJEUSR(XXXXXXXX)"	NJEUSR NONE
9654	"JOBACID(C,N,N)"	JOBACID FIELD CODE POSITION START
9655	"SUBACID(C,N)"	SUBACID FIELD CODE NUMBER OF CHARACTERS

Note: The folowing record created as a result of the TSS MODIFY(STATSUS(VERSION)) command and contains CA-Top Secret version-related nformation.

Output from MODIFY(STATUS(VERSION))

9660	" VERSION= "	TSS VERSION

Note: The folowing records created as a result of the TSS MODIFY(STATSUS(PASSWORD)) command and contain password-related information.

Output from MODIFY(STATUS(PASSWORD))

9675	" NEWPW(MIN=N,WARN=NN,MINDAYS=NN, MASK=CCCC,...) "	NEW PASSWORD MINIMUM PASSWORD LENGTH WARNING DAYS ABOUT TO EXPIRE MINDAYS VALUE NO LETTER REPETITION MASK CHARACTERS PASSWORD OPTION
9676	"HPBPW(NNN) "	HPBPW VALUE
9677	"MSUSPEND(XXX) "	MSUSPEND
9678	"NPWTHRESH(N) "	NPWTHRESH
9679	"PWEXP(NNN) "	PWEXP
9680	"PWHIST(NN) "	PWHIST
9681	"PTHRESH(NN) "	PTHRESH
9682	"PWVIEW(NNN) "	PWVIEW

Note: The folowing record is created as a result of the TSS MODIFY(RPW(LIST)) command and contain password-related information.

Output from MODIFY(RPW(LIST))

9690	RESTRICTED PASSWORD LIST	RESTRICTED PASSWORD LIST PASSWORD PREFIX

Table 5-1 (Page 15 of 17). CA-Top Secret Record Types

ID Number	Record Type	Description
Note: The folowing record is created as a result of the TSS MODIFY(FAC(ALL)) command and contains facility-related information.		
Output from MODIFY(FAC(ALL))		
9695	MODIFY (FAC(ALL))	FACILITY NAME FACILITY ID FACILITY MODE
Note: The folowing records are created as a result of the TSS MODIFY(FAC(ALL)) command and contain facility-related information.		
Output from MODIFY(FAC(XXXXXXXX))		
9700	"FACILITY DISPLAY FOR XXXXXXXX"	FACILITY NAME
9701	"INITPGM=XXXXXXXX ID-XX TYPE=XX"	INITPGM VALUE FACILITY ID TYPE OF FACILITY crow.
9702	"ATTRIBUTES=XXXXXXX, XXXXXX,XXXXX	UP YO 29 FACILITY ATTRIBUTES crow.
9703	"MODE=XXXX, DOWN=XXXX, LOGGING=XXX,XXX..."	RUNNING MODE DOWN OPTION NONE|ALL ACCESS OR ACC INIT AUDIT SEC9 MSG
9704	" UIDACID=X LOCKTIME=XXX DEFACID=XXXX KEY=X"	UIDACID LOCKTIME VALUE DEFACID FACILITY KEY
9710	"XFACMTRX=XXX EXTSEC=XXX,XXXXXX"	YES|NO READ|UPDATE
9711	"XJCT= XFCT= XCMD= XDCT= XTRAN=	XJCT= YES|NO XFCT= YES|NO XCMD= YES|NO XDCT= YES|NO XTRAN= YES|NO XTST= YES|NO XPSB= YES|NO XPCT= YES|NO XPPT= YES|NO XAPPC= YES|NO XUSER= YES|NO
9714	"PCTEXTSEC= PCTCMDSEC= PCTRESSEC=	PCTEXTSEC= OVERRIDE|HONOR PCTCMDSEC= OVERRIDE|HONOR PCTRESSEC= OVERRIDE|HONOR

Table 5-1 (Page 16 of 17). CA-Top Secret Record Types

ID Number	Record Type	Description
9715	"DSNCHECK= LSTLOGOFF= RLP= SLP=	DSNCHECK= YES|NO LTLOGOFF= YES|NO RLP= YES|NO SLP= YES|NO
9716	"MAXUSER=XXX PRFT=XXX MAXSIGN=XXX,CCCCC"	MAXUSER VALUE PRFT VALUE MAXSIGN VALUE RETRY|KILL

Note: The folowing records are created as a result of the TSS MODIFY(FAC(XXXXX=BYPLIST)) command and contain resource bypass information.

Output from MODIFY(FAC(XXXXX=BYPLIST))

9720	"RESOURCE=TRANID XXXXX NAMES: XXX XXX..."	TRANID BYPASS|PROTECT RESOURCE
9721	TRANID LIST CONTINUED	ELEVEN RESOURCES SEPARATED BY BLANKS
9722	"RESOURCE=XXXX CCCCCC NAMES: xxxxxxxx xxxxxx..."	RESOURCE CLASS NAME BYPASS|PROTECT RESOURCE

Note: The folowing records are created as a result of the TSS MODIFY(STATUS(TSSVAX)) command and contain CA-Top Secret VAX-related information.

Output from MODIFY(STATUS(TSSVAX)

9800	"VAX(XXX)"	VAX ON|OFF
9801	"VAXID(XXXXXXXX)"	*VAXID*|*TSSID*
9802	"VAXDEPT(XXXXXXXX)"	VAX DEPARTMENT
9803	"VAXCMD(REJ|ACC)	VAX COMMAND REJ|ACC
9804	"VAXPFX(XX)"	VAX PREFIX
9805	"VAXSRCH(XXXX)	VAXSRCH FAIL|VAXPRX
9806	"VAXWAIT(NNNNN)	VAXWAIT NNNNN

Note: The folowing records are created as a result of the TSS MODIFY(STATUS(TSSPC)) command and contain TSSPC-related information.

Output from MODIFY(STATUS(TSSPC)

9825	"PCADMIN(XXXXXXXX)"	PCADMIN VALUE
9826	"PCIDLE(NN)"	PCIDLE VALUE
9827	"PCDSDAYS(XXXXXX)"	PCDSDAYS NN|*NULL*

Table 5-1 (Page 17 of 17). CA-Top Secret Record Types

ID Number	Record Type	Description
9828	"PCDMINPWD(XXXXXX)"	PCDMINPWD NN|*NULL*
9829	"PCGLTYPE(XXXXXX)"	PCGLTYPE NN|*NULL*
9830	"PCOPTIONS(XXXXXX,XXXXX)"	PCOPTIONS CONNECT|NOCONNECT PRIVPLUS|NOPRIVPLUS SGNOFFMSG|NOSGNOFFMSG
9999	" = "	UNDEFINED RESOURCE

5.6 TSSCFILE Condition Codes

The TSSCFILE condition code issued is extracted from the TSS command processor. If more than one TSS LIST command function is input to TSSCFILE, the condition code issued is the highest (most severe) code returned from TSS LIST. Listed below, are exceptional conditions:

Condition Code	Description
998	CA-Top Secret is inactive.
999	PRINT DLBL statement is missing

There is only one specific abend code related to TSSCFILE.

1001 TSSCFILE	ERROR CHECKING USER AUTHORIZATION
Action	Contact Computer Associates and send the dump.

5.7 Sample TSSCFILE Output

The sample output is generated by using the following TSS LIST commands as input to the IN DLBL statement:

```
TSS LIST(ACIDS) DIV(TOPDIV) DATA(NAMES)
TSS LIST(RDT) RESCLASS(DATASET)
```

The following output gives a list of the TSS LIST command functions, and indicates whether each function was successful or not.

```
READY
   TSS LIST(ACIDS) DIV(TOPDIV) DATA(NAMES)
 ACCESSORID = TOPDIV    NAME       = TOP DIVISION
 ACCESSORID = TOPDEPT1  NAME       = TOPDEPT1
 ACCESSORID = TOPDCA1   NAME       = BAMBAM
 ACCESSORID = TOPUSR11  NAME       = TOPCAT
 ACCESSORID = TOPUSR12  NAME       = GARFIELD
 ACCESSORID = TOPVCA1   NAME       = BARNEY RUBBLE
 TSS300I  LIST     FUNCTION SUCCESSFUL

 READY
 END

 READY
    TSSLIST(RDT) RESCLASS(DATASET)

  RESOURCE CLASS = DATASET
   RESOURCE CODE = X'C4'
       ATTRIBUTE = MASK,ACCESS,LIB,PRIVPGM
          ACCESS = NONE(00),FETCH(80),UPDATE(60),READ(40),WRITE(20),CREATE(10)
          ACCESS = SCRATCH(08),CONTROL(04),ALL(FF)
          DEFACC = READ
 TSS0300I  LIST     FUNCTION SUCCESSFUL

 READY
 END
```

Figure 5-3. TSS List Command Functions

The following TSSCFILE output shows the layout of each record extracted from the Security File using the same commands.

```
        TSSCFILE     SECURITY FILE DATA

<.........HEADING...........><.....+....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...
<0001     TOPDIV            ><TSS LIST(ACIDS) DIV(TOPDIV) DATA(NAMES)
<0100     TOPDEPT1          ><TOP DIVISION        >
<0100     TOPDCA1           ><BAMBAM              >
<0100     TOPUSR11          ><TOPCAT              >
<0100     TOPUSR12          ><GARFIELD            >
<0100     TOPVCA1           ><BARNEY RUBBLE       >

        TSSCFILE     SECURITY FILE DATA

<.........HEADING...........><.....+....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...
<0001                       ><TSS LIST(RDT) RESCLASS(DATASET)
<3301C4                     ><DATASET  >
<3302C4                     ><ACCESS   LIB    PRIVPGM
<3303C4                     ><NONE     00FETCH   80UPDATE  60READ  40WRITE  20CREATE  10
                             <
<3303C4                     ><SCRATCH  08CONTROL 04ALL     FF
                             <
<3304C4                     ><READ     >
```

Figure 5-4. TSSCFILE Security File Data

Chapter 6. TSSCPR Utility

The TSSCPR utility is a batch utility that gives the user the ability to produce customized reports extracted from the CPF Recovery File

6.1 Authority and Scope

All scope and administrative authority restrictions are honored by this utility, thereby preventing unauthorized access to the CPF Recovery File.

TSSCPR can only be issued by the MSCA or by an SCA, otherwise the following message will be issued:

```
TSS8081E MUST BE MSCA OR SCA
```

In order to execute the TSSCPR utility, an SCA must have or be given the following administrative access:

```
TSS ADMIN(acid) ACID(REPORT) RESOURCE(REPORT) DATA(authority level(s))
```

6.2 JCL Requirements

In order to execute TSSCPR, use the following JCL

```
// JOB CPFFILE
// ID USER=MSCA,PWD=TORONTO
// DLBL CPFOUT,'CPF.OUTPUT.FILE',,0,SD
// EXTENT SYS0XX,XXXXXX,1,0,XX,XXXX
// EXEC TSSCPR
/*
```

The following is a description of the DLBL statements used with TSSCPR:

DLBL Statement Description

CPFOUT Contains formatted records of information extracted from the CPF Recovery File.

The following defaults are used with TSSCPR:

CPFOUT LRECL=844, BLKSIZE=8440, RECFM=FB

6.3 TSSCPR Record Layout

The record layout for TSSCPR is as follows:

Field Position	Description
1 to 8	Internal Flags
9 to 16	Command Destination
17 to 20	Internal Flags
21 to 24	Record ID 'TCI.'
25 to 43	Internal Control Fields.
44 to 51	ACID name.
52 to 346	Internal Control Fields.
347 to 348	Command Length.
349 to 350	Internal Flags.
351 to 844	Command Buffer.

Only the Command Destination, ACID Name and Command Buffer fields can be displayed.

For information on using the TSSREPORT3 facility to produce an EARL report from TSSCPR output, refer to Chapter 6.

Chapter 7. Using CA-Earl

There are three utilities that may be used as input for customized reports using CA-Earl: TSSREPORT, TSSREPORT2 and TSSREPORT3. TSSREPORT applies the capabilities of CA-Earl, an easy-to-use report language, to the output of the TSSCFILE utility to provide formatted summaries of CA-Top Secret data. This expanded reporting function gives you the capability to generate additional administrative summary reports.

Eleven sample reports are provided on the tape and described in this Chapter. The default parameters shown, enable you to run the samples as given. Optional parameters help you to tailor the reports exactly to fit your needs. These reports can also be customized through the use of TSSCFILE and CA-Earl statements. As an example,

```
TSS LIST(ACIDS) DEPT(PERSONNEL) TYPE(USER)
```

limits the report output to selected user ACIDs within the personnel department.

TSSREPORT2, on the other hand, takes the output from the TSSUTIL utility to produce flat file (straight sequential disk) output for use with CA-Earl, as long as the user includes the optional EARLOUT DLBL statement in the execution JCL.

TSSREPORT3, takes the output from the TSSCPR utility to produce a single report depicting the contents of the CPF Recovery File.

CA-Earl documentation is supplied along with your CA-Top Secret manuals. Refer to the appropriate guide for information on using CA-Earl.

See Chapter 5 of this manual for details on the use of TSSCFILE and Chapter 1 for details on the use of TSSUTIL. See Chapter 6 for details on the use of TSSCPR.

7.1 Authority and Scope

TSS administrative authority is required to execute these reports. In order to execute the TSSREPORT, TSSREPORT2 and TSSREPORT3 utilities you must have the following administrative authorities required for TSSCFILE, TSSUTIL and TSSCPR.

```
TSS ADMIN(acid) ACID(REPORT)
RESOURCE(REPORT) DATA(authority level(s))
```

Note: In addition, only the MSCA or an SCA can issue the TSSCPR utility.

7.2 TSSREPORT JCL

```
// JOB EARL
// ID USER=MSCA,PWD=TORONTO
// ASSGN SYS006,DISK,VOL=XXXXXX,SHR
// DLBL WORK1,'CAI.EARL.WORK1',0,SD
// DLBL SORTIN1,'CAI.EARL.SORTIN',0
// EXTENT SYS002,YYYYYY,1,0,Y,Y
// DLBL SORTOUT,'CAI.EARL.SORTOUT',0
// EXTENT SYS001,ZZZZZZ,1,0,Z,Z
// DLBL SORTWK1,'CAI.EARL.SORTWK1',0
// EXTENT SYS003,ZZZZZZ,1,0,Z,Z
// DLBL TSSCFIL,'TSS.CFILE.OUTPUT',0
// EXTENT SYS0XX,XXXX,1,0,X,X
// DLBL EARLOBJ,'CAI.EARLOBJ',0,SD
// EXTENT SYS006,XXXXXX,1,0,X,XX
// EXEC EARL,SIZE=256K ,PARM='Input parm'
CA_Earl Source program,
/*
```

DLBL Statement Description

EARLOBJ Defines the file on which the CA-Earl text file is stored.

SORTIN1 Defines the temporary hit file, which contains only the fields from the input records, which are needed to produce the final printed reports. If required to sort the hit file, SORTIN1 defines the input file to the stand-alone sort invoked by CA-Earl.

SORTOUT Defines the temporary output file from the stand-alone sort.

WORK1 Defines the SRAM (Sort Reentrant Access Method) file.

SORTWK1 Along with SORTWK2 and SORTWK3, defines the temporary work files for the stand-alone sort.

TSSCFILE The name of your TSSCFILE OUT file. You *must* run TSSCFILE before running TSSREPORT. See "TSSCFILE JCL," in Chapter 4, for the JCL needed to run that utility.

You can generate reports by putting the TSSCFILE output **(OUT DLBL)** in a permanent data set and using this data set to run multiple CA-Earl reports. This saves time by allowing you to run many reports from the same data.

You can also run TSSCFILE and write the output to a temporary data set. Use this temporary data set as input for your TSSREPORT JCL.

Note: **PARM=** in the JCL refers to the input parameters as defined in the following subsection, "Report Selection Criteria."

7.3 Report Selection Criteria

Reports 1 through 7 are described in the following pages. Input parameters, if any, appear in the boxes and are followed by definitions of both required and optional parameters. The headers that appear on each report output follow the respective report sample.

The DATE format for reports 1, 2, and 3 is MM/DD/YY. This can be modified with the CA-Earl installation options. See the CA-ACTIVATOR *Installation* Supplement.

7.4 Sample Reports Using TSSREPORT

7.4.1 Report 1 - Inactive ACIDs

Lists all ACIDs that are inactive. An ACID is considered "inactive" and will be denied access to the system after a specified amount of time which was pre-determined with the INACTIVE control option.

```
PARM='INACTIVE(nnn)'
```

nnn This number should be set to match the installation-selected CA-Top Secret "INACTIVE" control option parameter, which is any number from 0 to 255.

```
                                    CA-Top Secret VERSION 3.0 ADMINISTRATIVE REPORT UTILITY                    PAGE   1
JUL 23 97                                      REPORT 1:  REPORT OF INACTIVE ACIDS
PARAMETER SUPPLIED ON EXECUTE, INACTIVE(31)
-------------------------------------------------------------------------------------------------------------------------
                                                                                 DATE ON WHICH ACID
ACID                              NAME                                             BECAME INACTIVE
-------------------------------------------------------------------------------------------------------------------------


 1                                 2                                               3
1DAUSRB                           FROV1DA USER B                                   07/15/97
1DAUSRC                           FROV1DA USER C                                   07/15/97
1DAUSRD                           FROV1DA USER D                                   07/15/97
1DAUSRF                           FROV1DA USER F                                   07/15/97
1DAUSRG                           FROV1DA USER G                                   07/15/97
1DAUSRH                           FROV1DA USER H                                   07/15/97
1DAUSRI                           FROV1DA USER I                                   07/15/97

END OF REPORT
```

Figure 7-1. TSSREPORT #1 - Inactive ACIDs

1 **ACID -** Lists the resulting inactive ACIDs.

2 **NAME -** Lists the user's name associated with each ACID.

3 **DATE INACTIVE -** Lists the date CA-Top Secret denied the ACID access to the system.

Note: A 1980 date under this header means that the user's password had been assigned the EXP parameter (to expire immediately).

If your installation does not use the default date (mm/dd/yy) in CA-Top Secret, you will get a U3000 abend. You can use the following statements to change the TSSEARL1 job to use the alternate date format:

```
DEF S_EXP_MO = S_EXPO_ 3 - 4 N
DEF S_EXP_DA = S_EXPO_ 1 - 2 N
DEF EXP_MO = R3000XPD 1 - 2 N
DEF EXP_MO = R3000XPD 4 - 5 N
```

Refer to the comments in member TSSEARL1 contained in CAI.SAMPJCL.

The TSS command for TSSCFILE for this particular report is:

```
TSS LIST(acids) DATA(ALL,PASS)
```

7.4.2 Report 2 - Expired ACIDs

Lists all ACIDs that are expired.

```
PARM=
```

There are no input parameters for this report.

```
                                  CA-Top Secret VERSION 3.0 ADMINISTRATIVE REPORT UTILITY                    PAGE   1
JUL 23 97                                    REPORT 2:  REPORT OF EXPIRED ACIDS
-------------------------------------------------------------------------------------------------------------------
                                                                          DATE ON WHICH
ACID                              NAME                                    ACID EXPIRED
-------------------------------------------------------------------------------------------------------------------


  1                               2                                       3

1DAUSRI                           FROV1DA USER I                          07/13/97
1DAUSRC                           FROV1DA USER C                          07/13/97
1DBUSRD                           FROV1DA USER D                          07/13/97
1DBUSRE                           FROV1DA USER E                          07/13/97
1DBUSRF                           FROV1DA USER F                          07/13/97
1DBUSRI                           FROV1DA USER I                          07/13/97

END OF REPORT
```

Figure 7-2. TSSREPORT #2 - Expired ACIDs

1 **ACID -** Lists the expired ACIDs.

2 **NAME -** Lists the user's name associated with each ACID.

3 **DATE EXPIRED -** Lists the date each ACID expired.

7.4.3 Report 3 - Suspended ACIDs

Lists all ACIDs that are suspended.

```
PARM=
```

There are no input parameters for this report.

```
                                  CA-Top Secret VERSION 3.0 ADMINISTRATIVE REPORT UTILITY                    PAGE   1
JUL 23 97                                   REPORT 3:  REPORT OF SUSPENDED ACIDS
-------------------------------------------------------------------------------------------------------------------
                                PROFILE                                          DATE ON WHICH ACID WILL RESUME
ACID                            INDICATOR    NAME                                (IF TEMPORARILY SUSPENDED)
-------------------------------------------------------------------------------------------------------------------

  1                             2            3                                              4

STOJA01                                      HARRY HARPER
STRTE01P                        P            TEST PROFILE 1
STRTE03P                        P            TEST PROFILE 1

END OF REPORT
```

Figure 7-3. TSSREPORT #3 - Suspended ACIDs

1 **ACID -** Lists the suspended ACIDs.

2 **PROFILE INDICATOR -** A **P** in this column means that the listed ACID is a profile ACID.

3 **NAME -** Lists the name associated with each listed ACID.

4 **DATE RESUME -** Output appears here only if the ACID in question has been temporarily suspended. This is the date it will resume after the temporary suspension.

7.4.4 Report 4 - ACID Names

Lists ACIDs in alphabetical order by name. The following parameters may be used to specify the order in which the user wants the ACIDs sorted. One and only one of the first four parameters must be specified; the delimiter and A or D are optional.

```
PARM='FIRST|LAST|Pnn|Cnn[,delimiter][,A|,D]
```

FIRST This parameter sorts by first name, starting with the first nonblank character in the name field.

LAST This parameter sorts by last name, starting with the first character following the last delimiter found, or, if no delimiters are found, starts with column 1.

Pnn This parameter sorts by nnth positional subfield. The subfield to be sorted starts with the first character after the (nn-1)th delimiter and ends with the next delimiter or the last character in the name field, whichever occurs first. If a subfield specified is outside the range of fields found on a name being sorted, the following error message will be generated:

SUBFIELD nn WAS NOT FOUND IN THE NAME FIELD

Cnn This parameter sorts by the entire name field, beginning with column nn (with nn equalling a number 1 through 20), and ending with the last character in the name field.

delimiter This parameter is optional. It cannot be used if **Cnn** was used. The delimiter is the one-byte character indicating a separation between positional subfields within the ACID name (such as a comma, blank, or hyphen). Default is a blank.

A This parameter is a default. It sorts in ascending alphabetical order (EBCDIC collating sequence). If this parameter is selected, a report is also generated in *descending* order, with the note: "Descending order report not selected for this run." Conversely, a request for descending order will result in the additional ascending-order report and note.

D This parameter sorts in descending alphabetical order. If not specified, the default is **A.**

Note: Remember to enter your parameters exactly as shown above. For example, even if the delimiter you select is a comma, you must still use a comma before this delimiter, as in the following example:

```
PARM='P8,,,D'
```

The report title indicates which options were selected, and which delimiter, if any, is used.

```
                                        CA-Top Secret VERSION 3.0 ADMINISTRATIVE REPORT UTILITY                    PAGE   1
JUL 23 97                                          REPORT 4:  REPORT OF ACID NAMES
SORTED ON LAST NAME
IN ASCENDING ORDER, USING ' ' AS A DELIMITER
-------------------------------------------------------------------------------------------------------------------------------

NAME                                ACID
-------------------------------------------------------------------------------------------------------------------------------


  1                                 2

FROPH01 DIV #1                      FROPHV1
FROPH01 DIV #2                      FROPHV2
FROPH01 DIV #3                      FROPHV3
FROPH01 DEPT A                      FROV1DA
FROV1DA USER A                      1DAUSRA
FROV1DA USER A                      1DBUSRA
FROPH01 DEPT B                      FROV1DB
FROV1DA USER B                      1DBUSRB
FROV1DA USER B                      1DAUSRB
FROV1DA USER C                      1DBUSRC
FROV1DA USER C                      1DAUSRC
FROV1DA USER D                      1DAUSRD
FROV1DA USER D                      1DBUSRD
FROV1DA USER E                      1DAUSRE
FROV1DA USER E                      1DBUSRE
FROV1DA USER F                      1DAUSRF
FROV1DA USER F                      1DBUSRF
VCA FOR DIV FROPHV1                 FROVC11
VCA FOR DIV FROPHV2                 FROVC21
VCA FOR DIV FROPHV3                 FROVC31
VCA FOR DIV FROPHV3                 FROVC32
DCA FOR DEPT FROV1DA                FRODC1A1
DCA FOR DEPT FROV1DA                FRODC1A2
DCA FOR DEPT FROV1DB                FRODC1B1
FROV1DA USER G                      1DAUSRG
FROV1DA USER G                      1DBUSRG
FROV1DA USER H                      1DAUSRH
FROV1DA USER H                      1DBUSRH
FROV1DA USER I                      1DAUSRI
FROV1DA USER I                      1DBUSRI
FROV1DA USER J                      1DAUSRJ
FROV1DA USER J                      1DBUSRJ
DEPT FROV1DA PROF                   FRO1AP1
DEPT FROV1DB PROF                   FRO1BP1
DEPT FROV1DB PROF                   FRO1BP3
DEPT FROV1DB PROF                   FRO1BP2
DEPT FROV1DA PROF                   FRO1AP3
DEPT FROV1DA PROF                   FRO1AP2

END OF REPORT
```

Figure 7-4. TSSREPORT #4 - ACID Names

1 **NAME -** Lists the given names in the order specified.

2 **ACID -** Lists the ACID associated with each name.

7.4.5 Report 5 - List of ACIDs

Lists ACIDs in alphabetical order by selected positions within the ACID.

```
PARM='[Scc][,Ecc][,A|,D]
```

Scc This parameter sorts by starting column position within the ACID. Select column 1 through 8. This parameter is optional. Default is S1.

Ecc This optional parameter sorts by ending column position within the ACID. The default is E8. Select column 1 through 8, but the number must be greater than or equal to **Scc.** If an Ecc is specified that is less than Scc, the job will terminate execution and the following message will appear in place of the report:

```
INVALID PARAMETER-NO REPORT PRODUCED
```

A This is the default parameter. This parameter sorts in ascending alphabetical order (EBCDIC collating sequence). If this parameter is selected, a report is also generated in *descending* order, with the note: "Descending order report not selected for this run." Conversely, a request for descending order will result in the additional ascending-order report and note.

D This parameter sorts in descending alphabetical order. If not specified, the default is **A.**

The report title indicates whether ascending or descending order was selected, and which starting and ending column positions were selected for the sort.

```
                                  CA-Top Secret VERSION 3.0 ADMINISTRATIVE REPORT UTILITY
JUL 23 97                                      REPORT 5: REPORT OF ACIDS                                    PAGE   1
REPORT SORTED IN ASCENDING ORDER, STARTING WITH COLUMN 1 AND ENDING WITH COLUMN 8

ACID                            NAME
--------------------------------------------------------------------------------------------------------------------

  1                                 2

FRODC1A1                        DCA FOR DEPT FROV1DA
FRODC1A2                        DCA FOR DEPT FROV1DA
FRODC1B1                        DCA FOR DEPT FROV1DB
FROPHV1                         FROPH01 DIV #1
FROPHV2                         FROPH01 DIV #2
FROPHV3                         FROPH01 DIV #3
FROVC11                         VCA FOR DIV FROPHV1
FROVC21                         VCA FOR DIV FROPHV2
FROVC31                         VCA FOR DIV FROPHV3
FROVC32                         VCA FOR DIV FROPHV3
FROV1DA                         FROPH01 DEPT A
FROV1DB                         FROPH01 DEPT B
FR01AP1                         DEPT FROV1DA PROF
FR01AP2                         DEPT FROV1DA PROF
FR01AP3                         DEPT FROV1DA PROF
FR01BP1                         DEPT FROV1DB PROF
FR01BP2                         DEPT FROV1DB PROF
FR01BP3                         DEPT FROV1DB PROF
1DAUSRA                         FROV1DA USER A
1DAUSRB                         FROV1DA USER B
1DAUSRC                         FROV1DA USER C
1DAUSRD                         FROV1DA USER D
1DAUSRE                         FROV1DA USER E
1DAUSRF                         FROV1DA USER F
1DAUSRG                         FROV1DA USER G
1DAUSRH                         FROV1DA USER H
1DAUSRI                         FROV1DA USER I
1DAUSRJ                         FROV1DA USER J
1DBUSRA                         FROV1DA USER A
1DBUSRB                         FROV1DA USER B
1DBUSRC                         FROV1DA USER C
1DBUSRD                         FROV1DA USER D
1DBUSRE                         FROV1DA USER E
1DBUSRF                         FROV1DA USER F
1DBUSRG                         FROV1DA USER G
1DBUSRH                         FROV1DA USER H
1DBUSRI                         FROV1DA USER I
1DBUSRJ                         FROV1DA USER J

END OF REPORT
```

Figure 7-5. TSSREPORT #5 - List of ACIDs

1 **ACID -** Lists the ACIDs in the order specified.

2 **NAME -** Lists the given name for the ACIDs being listed.

7.4.6 Report 6 - Who Has Attributes

Lists ACIDs that have the attribute specified.

```
PARM='[attribute]'
```

attribute The attribute is any TSS attribute that may be assigned to a user or profile ACID.

```
                                  CA-Top Secret VERSION 3.0 ADMINISTRATIVE REPORT UTILITY
JUL 23 97                                          REPORT #6                                                    PAGE   1
REPORT OF ALL ACIDS THAT HAVE AN ATTRIBUTE
_____________P_____________________________________________________________________________________________________________________
ACID         I   NAME
-------------------------------------------------------------------------------------------------------------------------------


 1       2 3                    4

FRO1BP1      P   DEPT  FROV1DB  PROF      NOADSP     AUDIT     NOPWCHG     TRACE      MRO       CONSOLE      GAP
                                           DUFXTR     DUFUPD    TSOMPW      NOATS
                                          *NODSNCHK  *NOVOLCHK *NOLCFCHK   *NOSUBCHK  *NORESCHK
1DAUSRB          FROV1DA USER B            NOADSP     AUDIT     NOATS
1DAUSRC          FROV1DA USER C            NOPWCHG    TRACE     MRO         CONSOLE
1DAUSRD          FROV1DA USER D            NOADSP     AUDIT     CONSOLE
1DAUSRG          FROV1DA USER G            DUFXTR     DUFUPD
1DAUSRH          FROV1DA USER H            DUFXTR     DUFUPD
1DAUSRI          FROV1DA USER I            TSOMPW
                                          *NODSNCHK  *NOVOLCHK

1DAUSRJ          FROV1DA USER J            MULTIPW    NOADSP    AUDIT       NOPWCHG    TRACE     MRO          CONSOLE
                                           GAP        DUFXTR    DUFUPD      TSOMPW     NOATS

                                          *NODSNCHK  *NOVOLCHK *NOLCFCHK   *NOSUBCHK  *NORESCHK

1DBUSRB          FROV1DA USER B            NOADSP     AUDIT     NOATS
1DBUSRC          FROV1DA USER C            NOPWCHG    TRACE     MRO         CONSOLE
1DBUSRD          FROV1DA USER D            NOADSP     AUDIT     CONSOLE
1DBUSRG          FROV1DA USER G            SUSPEND    DUFXTR    DUFUPD
1DBUSRH          FROV1DA USER H            SUSPEND    DUFXTR    DUFUPD
1DBUSRI          FROV1DA USER I            TSOMPW
                                          *NODSNCHK  *NOVOLCHK

1DBUSRJ          FROV1DA USER J            NOADSP     AUDIT     NOPWCHG     TRACE      MRO       CONSOLE      GAP
                                           DUFXTR     DUFUPD    TSOMPW      NOATS

                                          *NODSNCHK  *NOVOLCHK *NOLCFCHK   *NOSUBCHK  *NORESCHK


END OF REPORT




PI (PROFILE INDICATOR) = INDICATES A PROFILE ACID
* = INDICATES A "BYPASS" ATTRIBUTE
```

Figure 7-6. TSSREPORT #6 - Who Has Attributes

1 **ACID -** Lists the ACIDs that have the attribute.

2 **PI -** A **P** under this header indicates that the ACID is a profile ACID.

3 **NAME -** Lists the given name for the ACIDs being listed.

4 **ATTRIBUTES -** Refers to the attribute specified.

An asterisk appears before each BYPASS attribute: NODSNCHK, NOVOLCHK, NOLCFCHK, NOSUBCHK, NORESCHK.

When an ACID having the attribute requested is found, all of that ACID's attributes (either BYPASS or non-BYPASS) will be shown. If no PARM was specified, all ACIDs having *any* attribute will be shown.

7.4.7 Report 7 - Who Has Administrative Authorities

Lists ACIDs that have administrative authorities, and their scope of authority.

```
PARM=
```

There are no input parameters for this report.

ACID, TYPE, and SCOPE OF AUTHORITY listings appear on the first line of this report; AUTHORITY TYPE and AUTHORITY LEVEL appear on the second line, and ACCESS levels, if any, are on the third line.

```
                                CA-Top Secret VERSION 3.0 ADMINISTRATIVE REPORT UTILITY

JUL 23 97                          REPORT 7: REPORT OF ADMINISTRATIVE AUTHORITIES                          PAGE   1

ACID             TYPE              SCOPE OF AUTHORITY
      AUTHORITY  TYPE:    AUTHORITY LEVEL
-------------------------------------------------------------------------------------------------------------------


    1               2                   3

FROVC11          DIV  C/A          FROPHV1  (DIVISION)

         4

     RESOURCE,          *ALL*

            5

         ACCESS:      ALL
     ACID:              *ALL*
     FACILITY:          ALL
     LISTDATA:          *ALL*, PROFILES, PASSWORD, PWVIEW
     MISC1:             *ALL*
     MISC9:             *ALL*

FROVC21          DIV  C/A           FROPHV2 (DIVISION)
     DATASET:             OWN,  XAUTH
         ACCESS:      UPDATE,  CREATE
     TERMINAL:          XAUTH, AUDIT, REPORT, INFO
     FCT:               *ALL*
         ACCESS:      ALL
     MISC1:             LCF, INSTDATA, USER
     MISC9:             TRACE

FROVC31          DIV C/A          FROPHV3  (DIVISION)
     ACID:              AUDIT, REPORT, INFO, MAINTAIN
     LISTDATA:          BASIC, SOURCE, ACIDS, PROFILES
     MISC1:             LCF, INSTDATA, USER, LTIME, SUSPEND, TSSIM
     MISC9:             *ALL*

END OF REPORT
```

Figure 7-7. TSSREPORT #7 - Who Has Administrative Authorities

1 **ACID -** Lists the ACIDs.

2 **TYPE -** Lists each ACID type: MASTER, CENTRAL, LSCA, ZONE C/A, DIV C/A, DEPT C/A, PROFILE or USER.

3 **SCOPE OF AUTHORITY -** Lists scope of authority with the format

```
ACIDNAME(scope)
```

If the TYPE is MASTER or CENTRAL, the scope is ALL.

4 **AUTHORITY -** Authority type will be one of the following: FACILITY, ACID, LIST DATA, MISC1, MISC9, RESOURCE, or a predetermined specific resource class name, such as DATASET.

The ACID's authority levels are listed after Authority Type. See the *Command Functions* guide, Chapter 3, for information about authority levels.

5 **ACCESS -** After [authority level]:XAUTH, "access" indicates the access levels the ACID may use to cross-authorize (PERMIT) users to the corresponding resource after [authority type]. The TSS command for TSSCFILE for this particular report is:

```
TSS LIST(acids) DATA(ALL)
```

7.5 TSSREPORT2 JCL

The JCL is found in the CAI.SAMPJCL file on the distribution tape.

```
// JOB EARL
// ID USER=MSCA,PWD=TORONTO
// ASSGN SYS006,DISK,VOL=XXXXXX,SHR
// DLBL WORK1,'CAI.EARL.WORK1',0,SD
// DLBL SORTIN1,'CAI.EARL.SORTIN',0
// EXTENT SYS002,YYYYYY,1,0,Y,Y
// DLBL SORTOUT,'CAI.EARL.SORTOUT',0
// EXTENT SYS001,ZZZZZZ,1,0,Z,Z
// DLBL SORTWK1,'CAI.EARL.SORTWK1',0
// EXTENT SYS003,ZZZZZZ,1,0,Z,Z
// DLBL TSSUTI,'TSS.UTIL.OUTPUT',0
// EXTENT SYS0XX,XXXX,1,0,X,X
// DLBL EARLOBJ,'CAI.EARLOBJ',0,SD
//  EXTENT SYS006,XXXXXX,1,0,X,XX
// EXEC EARL,SIZE=256K ,PARM='Input parm'
CA_Earl Source program,
/*
```

DLBL Statement Description

EARLOBJ Defines the file on which the CA-Earl text file is stored.

SORTIN Defines the temporary hit file, which contains only the fields from the input records, which are needed to produce the final printed reports. If required to sort the hit file, SORTIN defines the input file to the stand-alone sort invoked by CA-Earl.

SORTOUT Defines the temporary output file from the stand-alone sort.

WORK1 Defines the SRAM (Sort Reentrant Access Method) file.

SORTWK1 Along with SORTWK2 and SORTWK3, defines the temporary work files for the stand-alone sort.

TSSUTI The name of your TSSUTIL OUT file. You *must* run TSSUTIL before running TSSREPORT2. See "TSSUTIL JCL," in Chapter 1, for the JCL needed to run that utility.

You can generate reports by putting the TSSUTIL output **(UTILOUT DLBL)** in a permanent data set and using this data set to run multiple CA-Earl reports. This saves time by allowing you to run many reports from the same data.

You can also run TSSUTIL and write the output to a temporary data set. Use this temporary data set as input for your TSSREPORT2 JCL.

SYSIN The input control statement. Put the name of the report you wish to run after the name of your source library: TSSEARLA, TSSEARLB, TSSEARLC or TSSEARLD for whichever report you select.

Note: **PARM=** in the JCL refers to the input parameters as defined in the following subsection, "TSSREPORT2 Selection Criteria."

7.6 TSSREPORT2 Selection Criteria

Reports A through D are described in the following pages. Input parameters, if any, appear in the boxes and are followed by definitions of both required and optional parameters. The headers that appear on each report output follow the respective report sample.

The DATE format for each report is MM/DD/YY. This can be modified with the CA-Earl installation options. See the CA-ACTIVATOR *Installation* Supplement.

7.7 Sample Reports Using TSSREPORT2

7.7.1 Report A - Data Set Violations

Generates a list of all violations against data sets. This list is sorted by ACID and indicates the number of violations per data set.

```
PARM=
```

There are no input parameters for this report.

```
                        CA-Top Secret VERSION 3.0 ADMINISTRATION REPORT UTILITY2
12/07/97                    REPORT A: REPORT OF DATASET and NUMBER OF VIOLATIONS                    PAGE 1

          ACID          DATASET NAME                                  NO. OF VIOLATION

           1            2                                             3

          USER001       AUDT001.CLIST                                   4
          USER001       SYS1.BRODCAST                                   1
          USER001       SYS1.MACLIB                                     1
                                                                      ------
          USER001                                                       6
                                                                      ------
          USER002       AUDT001.CLIST                                   1
                                                                      ------
          USER002                                                       1
                                                                      ------
                                                                      ------
                                                                        7
GRAND TOTAL                                                           ------
```

Figure 7-8. Report A - Data Set Violations

1 **ACID -** Lists the ACID responsible for the data set violation.

2 **DATASET NAME -** Lists the name of the data set the user attempted to access.

3 **NO. OF VIOLATIONS -** Lists the number of violations against each data set.

For TSSUTIL report selection criteria you would select: EVENT(VIOL).

7.7.2 Report B - Requested vs. Allowed Access

Lists all access violations against each data set and indicates which ACID requested access, what type of access was requested and what access level was allowed for that ACID. This list is sorted according to data set name.

```
PARM=
```

There are no input parameters for this report.

```
                          CA-Top Secret VERSION 3.0 ADMINISTRATION REPORT UTILITY2
23/07/97                      REPORT B: REPORT OF DATASET VIOLATIONS                                    PAGE 1

DATE   TIME        DATASET NAME                              ACID        REQ ACCESS      ALLOWED ACCESS
_____________________________________________________________________________________________________

 1     2           3                                         4       5           6                  .

94163  10:59:22    AUDT001.CLIST                             USER002     READ            NONE
94163  10:59:27    AUDT001.CLIST                             USER001     READ            NONE
94163  11:01:07    AUDT001.CLIST                             USER001     READ            NONE
94163  15:20:59    AUDT001.CLIST                             USER001     READ            NONE
94163  15:21:34    AUDT001.CLIST                             USER002     READ            NONE
94163  16:08:15    SYS1.BRODCAST                             USER001     UPDATE          NONE
94163  16:14:15    SYS1.MACLIB                               USER001     READ            NONE

END OF REPORT
```

Figure 7-9. Report B - Requested vs. Allowed Access

1 **DATE -** Indicates the date when the ACID attempted to access the data set.

2 **TIME -** Indicates the time at which access was attempted.

3 **DATASET NAME -** Indicates which data set the ACID attempted to access.

4 **ACID -** Indicates the ACID which incurred the violation.

5 **REQ ACCESS -** Indicates what access level the ACID requested to the data set.

6 **ALLOWED ACCESS -** Indicates the actual level at which the ACID is allowed to access the data set.

For TSSUTIL report selection criteria you would specify: EVENT(VIOL).

7.7.3 Report C - Password Violations

Lists all ACIDs that have received password violations.

```
PARM=
```

There are no input parameters for this report.

```
                        CA-Top Secret VERSION 3.0 ADMINISTRATION REPORT UTILITY2
23/07/97                    REPORT C: REPORT OF PASSWORD VIOLATIONS                                    PAGE 1
_____________________________________________________________________________________________________________
                DATE          TIME          ACID         TSSTEXT
_____________________________________________________________________________________________________________

                [1]           [2]           [3]          [4]

                94162         15:17:47      USER001      PASSWORD INCORRECT
                94162         15:17:33      USER001      PASSWORD INCORRECT
                94162         15:17:03      USER001      PASSWORD INCORRECT
                94162         15:16:49      USER001      PASSWORD INCORRECT
                94162         15:19:23      USER002      PASSWORD INCORRECT
                94162         15:19:12      USER002      PASSWORD INCORRECT


END OF REPORT
```

Figure 7-10. Report C - Password Violations

1 **DATE -** Lists the date that the violation occurred.

2 **TIME -** Lists the time that the violation occurred.

3 **ACID -** Indicates which ACID incurred the violation.

4 **TSSTEXT -** Details, in plain language rather than in DRC code numbers, the type of password violation which occurred.

For TSSUTIL report selection criteria you would specify: EVENT(VIOL).

7.7.4 Report D - Terminal Violations

Generates a list of all terminal violations. The type of violation will be explained in text, not by DRC code.

```
PARM=
```

There are no input parameters for this report.

```
                        CA-Top Secret VERSION 3.0 ADMINISTRATION REPORT UTILITY2
23/07/97                    REPORT D: REPORT OF TERMINAL VIOLATIONS                                    PAGE 1

               DATE        TIME             TERM ID              TSSTEXT

               1           2                3                    4

               94162       15:17:47         K18L4258             PASSWORD INCORRECT
               94162       15:17:33         K18L4258             PASSWORD INCORRECT
               94162       15:17:03         K18L4258             PASSWORD INCORRECT
               94162       15:16:49         K18L4258             PASSWORD INCORRECT
               94162       15:19:23         A29LP021             PASSWORD INCORRECT
               94162       15:19:32         A29LP021             PASSWORD INCORRECT
               94164       12:58:29         INTRDR               SYSTEM FACILITY NOT AUTHORIZED
               94164       12:58:49         INTRDR               ACID NOT DEFINED

END OF REPORT
```

Figure 7-11. Report D = Terminal Violations

1 **DATE -** Indicates the date on which the violation occurred.

2 **TIME -** Indicates the time that the violation occurred.

3 **TERM ID -** Indicates the terminal at which the violation occurred.

4 **TSSTEXT -** Details the type of violation that occurred.

For TSSUTIL report selection criteria you would specify:

```
EVENT(VIOL)RES(TERM)
```

7.8 TSSREPORT3 JCL

The JCL is found in CAI.SAMPJCL on the distribution tape.

```
// JOB EARL
// ID USER=MSCA,PWD=TORONTO
// ASSGN SYS006,DISK,VOL=XXXXXX,SHR
// DLBL WORK1,'CAI.EARL.WORK1',0,SD
// DLBL SORTIN1,'CAI.EARL.SORTIN',0
// EXTENT SYS002,YYYYYY,1,0,Y,Y
// DLBL SORTOUT,'CAI.EARL.SORTOUT',0
// EXTENT SYS001,ZZZZZZ,1,0,Z,Z
// DLBL SORTWK1,'CAI.EARL.SORTWK1',0
// EXTENT SYS003,ZZZZZZ,1,0,Z,Z
// DLBL TSSCPFR,'TSS.CPFR.OUTPUT',0
// EXTENT SYS0XX,XXXX,1,0,X,X
// DLBL EARLOBJ,'CAI.EARLOBJ',0,SD
// EXTENT SYS006,XXXXXX,1,0,X,XX
// EXEC EARL,SIZE=256K ,PARM='Input parm'
CA_Earl Source program,
```

DD Statement	Description
EARLLIB	Defines the CA-Earl macro library. This source statement library is referenced by the COPY statement within the user's CA-Earl source program.
EARLOBJ	Defines the file on which the CA-Earl text file is stored.
SORTIN	Defines the temporary hit file, which contains only the fields from the input records, which are needed to produce the final printed reports. If required to sort the hit file, SORTIN defines the input file to the stand-alone sort invoked by CA-Earl.
SORTOUT	Defines the temporary output file from the stand-alone sort.
WORK1	Defines the SRAM (Sort Reentrant Access Method) file.
SORTWK01	Along with SORTWK02 and SORTWK03, defines the temporary work files for the stand-alone sort.
TSSCPFR	The name of your CPFOUT file. You *must* run TSSCPR before running TSSREPORT3. See "TSSCPR JCL," in Chapter 5, for the JCL needed to run that utility. You can generate reports by putting the TSSCPR output **(OUT DD)** in a permanent data set and using this data set to run multiple CA-Earl reports. This saves time by allowing you to run many reports from the same data.

You can also run TSSCPR and write the output to a temporary data set. Use this temporary data set as input for your TSSREPORT3 JCL.

SYSIN The input control statement. Put the name of the report you wish to run (in this case TSSEARLE) after the name of your source library.

Note: TSSREPORT3 produces a preformatted report depicting the entire contents of the CPF Recovery File. There are no additional parameters or selection criteria that can be specified.

7.9 Sample Report Using TSSREPORT3

7.9.1 Report E - CPF Recovery File

Produces a list of the contents of the CPF Recovery File.

```
PARM=
```

There are no input parameters for this report.

```
07/07/97                              Sample CA-Top Secret/MVS Report 3                    PAGE       1
                                             CPF Recovery File
_____________________________________________________________________________________________________
CMD          ACID           Cmd buffer in 80 byte segments                                  Count
Dest
_____________________________________________________________________________________________________

 1           2                         3                                                    4

XE56         USER01         TSS LIST(USER01) DATA(NAMES) TARGET(*) WAIT(N)

XE56         MASTER         TSS REP(TWFRED) PASS(?)

XE56         MASTER         TSS REP(USERJM) PASS(?)

XE56         MASTER         TSS ADD(RJDEV1) PASS(?)

XE56         MASTER         TSS LIST(RJDEV1) DATA(ALL) TARGET(*)

XE56         MASTER         TSS REP(KELDEV) PASS(?)

XE56         AUDVAC         TSS CREATE(AUDIT01) TYPE(USER) NAME('John Smith') DEPT(AUDEPT) PASSWORD(?)

XE56         AUDVAC         TSS CREATE(AUDIT02) TYPE(USER) NAME('Charles Browne') DEPT(AUDEPT) PASSWORD(?)
                            VXAUFGROUP(GROUP1) VXACCOUNT(ACCT1) VXGNAME(GROUP1)

XE56         RDBRRN         TSS LIST(RDT) RESCLASS(JOBNAME)
```

Note: You should note that passwords will be printed as question marks (?) and not revealed.

1 **CMD Dest -** Indicates the node to which the command was propagated.

2 **ACID -** Indicates the ACID issuing the command.

3 **Cmd buffer -** Displays the syntax of the command that was issued, in 80 character segments

4 **Count -** Indicates both the total number of commands issued to each node and, at the end of the report, the total number of commands issued.

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One Computer Associates Plaza
Islandia, NY 11749

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- product release announcements
- information about User Groups
- information about CA conferences
- client questionnaires

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_____

_____

_____

Site ID: _____
(Enter UNKNOWN if you do not know your Site ID.)

Name: _____

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Company or organization: _____

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Address: _____

Phone No.: _____

Date: _____

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Position: _____

Company or organization: _____

Address: _____

Address: _____

Phone No.: _____

Date: _____

Is DAR from a User Group? (Yes/No) ___ User Group ID: _____

Priority: _____

Description of Requested Item:

_____

_____

_____

_____

_____

_____

_____

_____

_____

CA Account Manager:	CA Office:
Input by:	Date:

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CA-Top Secret Report and Tracking Guide

Release 3.0 VSE

Document Number: R101TS30RTE

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