CA Top Secret® for z/VM

Reporting Guide

r12

Second Edition

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Documentation Changes

The following documentation updates have been made since the last release of this documentation:

- Formatted Record Types—Added a note after ID 9708 to explain how options appear in the cfile and changed ID 9715 options from ACTIVE|INACTIVE to ON|OFF.

Contents

Chapter 1: Introduction

This guide is designed for system administrators and auditors who wish to obtain different types and levels of reports for security information. This guide provides descriptions for the CA Top Secret for z/VM utility programs: TSSUTIL, TSSAUDIT, TSSCHART TSSCFILE, TSSREPT, and TSSCPR.

- TSSUTIL is a batch utility that generates formatted reports and extracts records from security events found in the Audit/Tracking File.
- TSSCHART is a batch utility that builds a tree structure of the full CA Top Secret File. This tree structure represents zones, divisions, departments, profiles, and users.
- TSSAUDIT is a batch utility that allows the auditor to monitor changes to the CA Top Secret File.
- TSSCFILE is a batch utility that produces formatted records containing Security File data.
- TSSREPT applies the capabilities of CA-Earl to TSSCFILE and TSSUTIL output to produce customized reports.
- TSSCPR is used to verify which TSS commands are still pending in the CPF Recovery File.

Chapter 2: TSSUTIL Utility

This section contains the following topics:

About TSSUTIL

TSSUTIL provides the CA Top Secret administrator with batch reports and with the ability to extract audit information recorded in the Audit/Tracking File. This information contains detailed security-related activity; the batch reports can be customized by choosing specific selection criteria.

The following considerations affect TSSUTIL:

- TSSUTIL can report on an AUDIT file detached from any Security File by using the HISTORY parameter.
- The Audit/Tracking File supports 256 byte resource names.
- TSSUTIL accommodates resource names up to 256 bytes in length
- Alternating between two Audit/Tracking files is now available. This allows you to backup one AUDIT file while working on another.
- Reports are produced with events in chronological order as found in the Audit/Tracking File. No sorting is performed.
- Reporting 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 made.

The following logging options are required to obtain security information:

```
LOG(INIT,...)  requests logging of all job/session initiations
and terminations.

LOG(ACCESS,...) requests logging of all resource access.
```

Each facility can be separately monitored.

Violations are always logged by default.

All security events would need to be logged via the TSS LOG option in order to use the full range of options available with TSSUTIL. Selection, therefore, is limited to data available as a result of the TSS LOG option. Multiple and different reports may be generated using the same Audit/Tracking File input data and one use of TSSUTIL.

Authority and Scope

To use TSSUTIL you must have or be given 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 report on 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 all divisions within the zone

VCA

Entire division or all departments within the division

DCA

Entire department or all ACIDs within the department

USER

The user

Note: When using EVENT(VIOL) or EVENT(AUDIT), LSCAs, ZCAs, VCAs and DCAs can report on 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) or EVENT(AUDIT) and specifying a department get resources within that department's scope. For more details on EVENT, see TSSUTIL Report Selection Criteria.

TSSUTIL Exec Parameters

Reports can also be run against a release 1.1 format Audit File using the //DD control statement. For detailed information on EXEC parameters and the //DD control statement, see the *Implementation Guide*.

TSSUTIL Verbs

The verbs are as follows:

REPORT option,option,...

Produces a formatted report of security incidents selected according to the selection criteria options. The report can be either one line per event or two lines if the LONG selection criterion is selected.

END

Separates multiple reports. Indicates the end of a selection request. Additional REPORT requests may follow.

TSSUTIL JCL

You may use the active or alterate Audit/tracking File as input for generating your TSSUTIL reports. The following JCL uses the active Audit/Tracking File as input:

```
//TSSJOB ACID=SCA0001,PASSWORD =SOCK /* DELETE PASSWORD */
//DD AUDFILE /* THIS IS THE DD STATEMENT FOR THE ACTIVE ATF */
//EXEC PGM=TSSUTIL
EVENT(ALL) DATE(TODAY) END
```

The following JCL uses the alternate Audit/Tracking File as input:

```
//TSSJOB ACID=SCA0001,PASSWORD =SOCK /* DELETE PASSWORD */
//DD AUDIT02 CUU=0301 DSN=TSS.SECOND.AUDIT.FILE
//EXEC PGM=TSSUTIL
EVENT(ALL) DATE(TODAY) END
```

TSSUTIL Report Selection Criteria

The selection criteria options select the types of incidents to be processed. You may specify any option but each option may only be specified once. For example, DEPT(ABC,XYZ) is valid but DEPT(ABC) DEPT(XYZ) is not. To be eligible for processing, all selection criteria must be met within each Audit/Tracking File record. The list of selection criteria is as follows:

- ACCESS
- ACCESSOR
- CLASS
- DATASET
- DATE
- DEPT
- DIVISION
- DRC
- EARLOUT
- EVENT
- FACILITY
- HISTORY
- JOBNAME
- LINECNT
- LONG
- MODE
- NOLEGEND
- RESCLASS
- RESOURCE
- SYSID
- TERMINAL
- TIME
- TITLE
- UNDEF

- VOLUME
- ZONE

Each selection criterion uses the following syntax conventions:

- UPPERCASE characters must be entered as shown.
- Lowercase italicized characters represent user-specified variables.
- The ellipses characters (…) denote that additional options can be supplied.
- Optional parameters appear in brackets [ ].
- The | character denotes an OR condition (only one of the options can be supplied).

Note: Abbreviated forms, if any, appear under the full names of the selection criteria in the boxed areas.

ACCESS

Selects a type of access to data set, volume, CICS, UR1, UR2, and FIELD requests. Only those incidents whose access matches the requested access level are selected.

```
ACCESS(READ|UPDATE|ALTER)
```

READ

Selects input-only events.

UPDATE

Selects update requests.

ALTER

Selects CREATE, SCRATCH, CONTROL, ALL access.

ACCESSOR

Selects records produced by jobs or sessions running under a specific ACID(s). This statement cannot be used by a VCA. A maximum of eight ACIDs can be specified.

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

acid

Is an ACID name. If you specify more than one, separate them with commas.

*****

If ACID(*) is used, all jobs/sessions with undefined ACIDs are selected including *MISSING *UNDEF* *BYPASS*.

Note: This request is only valid for an SCA.

acid*

Is an ACID prefix. All ACIDs that begin with the given prefix will be selected.

CLASS

Selects records that refer to a specific resource class.

CLASS(*type*)

The *type* can be only one of the following:

a	CA-IDMS SUBSCHEMA	b	CA-IDMS AREA
c	Data base	d	IMS DBD
f	3090 Vector Facility	g	TSO acct
h	TSO auth	i	TSO proc
j	TSO performance group		
m	VM VMCF		
n	VM IUCV	o	VM TSAF (APPC/VM)
A	Application	B	Audited job submission
C	Security File change	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	VMMDISK	8	VM CPCMD
9	VM DIAG	0	VMNODE
*	Reserved	#	VMRDR
%	Logging DB2 resources	$	VM DCSS
@	VMDIAL	+	Logging installation exit call
=	CACMD	-	CA-SCHEDULER schedule
?	Extract	<	Operation commands
>	Owned transactions	.	Data set
/	DASDvolt	"	Tapevolt
!	CA-SCHEDULER/DISPATCH Station	&	CA-DISPATCH Recipid
:	Reserved	›	VMANAPPL
º	UNVEDIT	\	UNVRPRT
-	UNVPGM	,	CPU
|	SDSF user class	-	VMMACHine
-	IBMGROUP RACF group	¬	PROPCNTL
_	RV4	;	RV5
^	RV6	(	SMS mgmt class
)	SMS storage class	'	RVA

Note: If no type is specified, all resource class records are selected except CLASS(O). These records display only when specifically requested.

DATASET

Selects records that refer to any of the specified data set prefixes.

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.

DATE

Selects records based on a date or range of dates.

DATE(*date1*[,*date2*]|TODAY|-*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.

Note: 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 a report is produced including records from the selected date to the current date. For example, DATE(-01) means yesterday and today; DATE(-00) is today. DATE(-02,-01) is the day before yesterday thru yesterday.

DEPT

Selects one or more departments for which security records are selected. This statement is not valid for a DCA; the DCA's department is used by default. A maximum of eight departments can be selected.

DEPT(*dept*,...)

dept

Specifies the department name.

DIVISION

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

`DIVISION(`*`div`*`)`

division

Specifies the division name.

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. A maximum of 32 total DRCs may be specified.

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)

EARLOUT

Extracts AUDIT file information for later processing by CA-EARL or another report generator or you choice. In addition to the normal listing file, a separate punch file is returned to the submitter as well. This file can be processed immediately by using option 2 of the TSSREPT utility or can be placed on a minidisk for later use by executing the TSSUTILA utility as follows:

TSSUTILA *jobid* <*filename* <*filetype* <*filemode*>>> <(REPlace>

jobid

The TSSUTIL job number that was assigned to the job by the server during execution. You can obtain the jobid by entering a QUERY READER * ALL command and examining the NAME field which will be in the form, TSSJnnnn. The value for nnnn should be used as the jobid. This parameter is required.

filename

The filename of the CMS file that is to contain the external-format TSSUTIL records. The default: TSSJnnnn where nnnn is the value specified for jobid.

filetype

The filetype of the CMS file that is to contain the external-format TSSUTIL records. The default is TSSUTIL.

filemode

The filemode of the CMS file that is to contain the external-format TSSUTIL records. The default is A.

REPlace

Indicates that if the CMS file already exists, it should be replaced.

Return Code Definitions

0

Successful completion

24

Invalid command specification

28

No reader file of type PUN found for this jobidor the CMS file already exists

32

Invalid reader file format or error in reader file data

1xx

Return code from CMS file system error

EVENT

Selects one or more of the incidents to be chosen.

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

ALL

(Default) Selects all events.

ACCESS

Selects resource and facility accesses.

AUDTA

Selects all records except those with 'OK+B'.

HISTORY

Produces a report using an archived Audit/Tracking File. Since there is no scope checking, only an SCA can run the report.

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.

FACILITY

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

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

ALL

(Default) Includes all facilities.

fac

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

HISTORY

When used 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.

JOBNAME

Selects records produced by specific jobs or online sessions.

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

jobname

Specifies a specific jobname or online userid.

job*

Specifies a VM userid, jobname or TSO userid PREFIX. All jobnames that start with the supplied prefix are selected.

LINECNT

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.

LONG

Requests the long format of a report which produces two lines per event.

```
LONG
```

MODE

Selects all events that are recorded while the user is in the specified mode.

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

NOLEGEND

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

```
NOLEGEND
```

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.

RESOURCE

Selects records that refer to a resource prefix other than a data set or volume. You may use the RESOURCE and CLASS options together to select a specific type of resource.

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

resprx

Is a prefix 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.

SYSID

Selects records produced on a specific system or CPU. Use SYSID to select records for a specific system which uses a shared Audit/Tracking File.

SYSID(*logid*)

logid

The four-character VMLOGID or SMF-id of the required system.

TERMINAL

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

TERMINAL(*termprx*)
TERM
T

termpr

Is a prefix for an online terminal or RJE reader.

TIME

Selects records based on a time or time range. You can only use the TIME option if you previously specified the DATE option.

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.

TITLE

Provides up to 40 characters to replace the characters “CA Top Secret” on the report title line.

TITLE(*text...*)

UNDEF

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

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

INC

(Default) Includes undefined or missing ACID events.

EXC

Excludes undefined or missing ACID events.

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.

ZONE

Selects the zone for which Security Records will be selected. Only one zone can be specified.

```
ZONE(zone)
```

zone

Identifies the zone by name.

Sample TSSUTIL Selection Criteria

Produce two reports: the first, a total violation report; the second, audit entries:

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

Select all TSO data violations that occurred yesterday:

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

Select all events logged on April 26, 1991 for jobs FINBUD01 and FINBUD02:

```
J(FINBUD01,FINBUD02)  DATE(91116,91116)  EVENT(ALL)
```

Select all violations by all 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)  CLASS(T)  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 unowned transactions with violations, and the report generates two lines for every security incident:

```
CLASS(X)  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 signon password violations:

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

Select all jobs that are undefined:

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

Select all operator authentication failures:

```
CLASS(G)  EVENT(VIOL)
```

Select all production jobs:

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

Select CICS production and test violations against payroll files:

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

Select all minidisks:

```
RESCLASS(VMMDISK)
```

Select specific audited terminals:

```
EVENT(AUDIT)  TERM(GRAF001,GRAF002,GRAF003)
```

Select all uses of selected system utilities:

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

TSSUTIL Report Description

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 is used which generates two report lines. A final summary shows retrieval statistics, and two legends are produced at the end of each report to guide you through the various areas and codes. (See Sample TSSUTIL Reports for information on the reports 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 header line for the report's data areas are explained below, along with the appropriate selection criteria:

DATE

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

TIME

The time of day when the incident was recorded. Selection criterion is TIME.

SYSI

The VMLOGID or SMF identification of the CPU that logged the event. Selection criterion is SYSID.

ACCESSOR

The ACID that was in effect for the user. For VM users the ACID is generally the userid defined in the directory. ACIDs that begin with an asterisk "*" are special to CA Top Secret. *UNDEF* indicates an undefined user. *BYPASS* indicates that the user is bypassing security. Selection criterion is ACID.

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 VM user. The jobname for the online region appears with that of an online user ACID. Selection criterion is JOBNAME.

FFM

Represents two data items: FACILITY and MODE. The facility being used is represented by a single character. The most common facility codes are:

```
T=TSO       B=BATCH      C=CICSPROD
R=ROSCOE    V=VM
```

FACILITY

Codes for other facilities may be obtained by entering:

```
TSS MODIFY(FAC(facname))
```

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

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

- For example, VW shows a VM user in WARN mode.
- Selection criteria are FACILITY and MODE.

Note: When using the LONG selection criterion, a second report line generates up to an eight-character facility name taken from the Facility Matrix, and a four-character mode of the user:

```
DORM    WARN    IMPL    FAIL
```

VC

Represents a consecutive accumulation of violations for life of the session or job. It is displayed only with violation entries.

PROGRAM

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

- ISPTASK-SPF
- IEFIIC-Batch initiator
- IKJEFLC-TSO LOGON
- IMASPZAP-Superzap

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

For CP commands, this field contains the name of the virtual machine that was the target of the command.

R-ACCESS

Shows the requested access level as defined in the RDT for the current resource (usually minidisk, 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.

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 or 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.

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. OK indicates the request was successful OK+A indicates a successful audited incident OK+B indicates a successful bypassed 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. Return codes are documented in the legend produced at the end of the report.

For example, *30*-0F indicates a terminal or reader violation during initiation; *08*-65 indicates a data set is not accessible.

Selection criteria are as follows. To get violations and audit entries, use EVENT(VIOL,AUDIT). To get only the specific violations as explained by the detailed error reason codes, use DRC.

SEC

For MVS violations, this shows the vendor or customer security driver requesting security validation. This is represented by a three-character mnemonic or by a hexadecimal value for the SVC in control. The legend at the end of the report shows all driver codes.

The common driver codes are:

- OPN-Open
- OPJ-Open-j
- INI-Initiation
- CAT-Catalog management
- SUB-Submit
- CRE-Data set creation

RESOURCE

Shows the class and name of the resource being accessed. This value varies greatly and does not always appear. For initiations, the name of the user usually appears via the NAME= keyword. The most common classes are:

- 7-Minidisks
- 8-CP commands
- D-Data sets
- V-Volume-only
- The selection criteria are as follows:
- DATASET for data sets
- VOLUME for volumes
- RESOURCE for other resources
- RESCLASS for specific class

Note: When using the LONG selection criterion, a second report line generates up to an eight-character resource type and up to a 44-character resource name. Initiations still show NAME= followed by the user's name.

JOBID

Shows the job number.

TERMINAL

Shows the terminal for an online user: AUTOLOG for autologged initiations and DISC for disconnected virtual machines. Selection criterion is TERMINAL.

Note: When using the LONG selection criterion, a second report line generates the VOLSER number in this column.

ORIGINAL RESOURCE CLASS

Displays the original eight-character resource class before it was translated during the security check to the resource class displayed in the prior line. This line is displayed only:

- On a type=LONG audit report
- If a resource class translation has been performed

Chapter 3: TSSCHART UTILITY

This section contains the following topics:

About TSSCHART

TSSCHART builds a tree structure of the full Security File in memory consisting of control blocks representing zones, divisions, departments, profiles, and users. This tree structure is then filtered, depending on user parameters. The tree structure is 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.

TSSCHART Required JCL

The following JCL is required to run the TSSCHART utility in a z/VM environment.

```
//TSSJOB ACID=xxxxxxxx,PASSWORD=xxxx
//EXEC PGM=TSSCHART
(control cards)
```

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, below, using the following syntax conventions:

- UPPERCASE characters must be entered as shown.
- Lowercase italicized characters represent user-specified variables that must be supplied.
- The ellipses characters (…) denote that additional options can be supplied.
- Optional parameters appear in brackets [ ].
- The | character denotes an OR condition (only one of the options can be supplied).

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:

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

This rule is applicable for all keywords with multiple optional parameters that might exceed the length of the line.

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

(Default) Includes the zone, division, department, profile and user names in the chart.

RESOURCE

Includes resource ownership elements on the chart, that is, resources owned by the SCA, LSCA, zone, division, department 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).

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 IDMS subschemas and areas.

IMS

Includes IMS PSB and DBD resources.

PROGRAM

Includes program resources.

SMS

Includes SMS resources.

TERMINAL

Includes terminal resources.

TSO

Includes TSO resources.

VM

Includes 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).

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 is 66.

DEPT or XDEPT

Specifies those departments to be included (DEPT) or excluded (XDEPT) from the chart.

```
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*)

DIV or XDIV

Specifies those divisions to be included or excluded from the chart.

```
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.

ZONE

Includes or excludes only those divisions belonging to zones.

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

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

ZONE or XZONE

Specifies those zones to be included or excluded from the chart.

```
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*)

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*)

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*)

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

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. He also would 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, along with a description of the specific blocks on the tree structure.

```
  | +--------------+
  | | DEVLDIV (DIV)|
  +-| DEVELOPMENT  |-+
1   |              | |
    | RUSS)        | |
    |              | |
    |    SIZE: 260 | |
    +--------------+ |
                     |
                     |
                     +-- <<< DEVLDIV  OWNS NO RESOURCES REQUESTED >>>
                 2   |
                     |
                     +--(DATASET)  RUSS
                     |
                     | +-----------------+
                     | | ADMNDEVD (DEPT) |
                     +-| ADMIN DEVL DEPT |-+
                 3     |                 | |
                       | RECORD SIZE 260 | |
                       +-----------------+ |
                                           |
                                           |
                                           +- <<< ADMNDEVD OWNS NO RESOURCES REQUESTED >>>
                                           4 |                                            |
                                             +- (PROF) ADMNDEVP - ADMIN DEVL PROF    <SIZE = 260>
                                           5 |                                            |
                                             +- (USER) ADMNBAT  - GENERIC ADMIN ID#2 <SIZE = 260>
                                             +- (USER) CHAU     - NGUYEN,CHAU        <SIZE = 260>
                                             +- (USER) KURHA01  - KURPIT,HALE        <SIZE = 260>
                                             +- (USER) NEWADMN  - GENERIC ADMIN ID#1 <SIZE = 260>
                                           6 +- (USER) RANVI01  - RANDAZZO,VINCENT   <SIZE = 260>
                                             +- (USER) VIC      - FETTER,VICTOR      <SIZE = 516>
                                             +- (USER) ZARIR01  - ZAR,IRA            <SIZE = 260>
```

Notes:

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 4: TSSAUDIT Utility

This section contains the following topics:

About TSSAUDIT

The Batch utility program TSSAUDIT allows the auditor to monitor changes to the Security File. 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:

- Run against a Recovery File that is not active.
- List changes made to the Security File. A change by 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 all ACIDs including attributes and privileges.
- Report on old format (pre-release 1.2) Audit files.

Note: Due to the large storage requirements of this job, which varies depending on the size of your recovery file, it is strongly recommended that the CA Top Secret service machine be a minimum of 24 meg in size and that only one request per run be used.

TSSAUDIT JCL

JCL for using TSSAUDIT in Batch is outlined below:

```
//TSSJOB        ACID=xxxxxx,PASSWORD=xxxxxxxx
//EXEC          PGM=TSSAUDIT[,PARM='control statement']
  TSSAUDIT control statement(s)
```

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

Control Statements

CHANGES

Lists changes made to the Security File. Requires ACID(REPORT) and RESOURCE(REPORT) authorities to run this function.

PRIVILEGES

Lists Security File information about all of the ACIDs. Requires ACID(REPORT,AUDIT) and RESOURCE(REPORT,AUDIT) authorities to run this function.

Control statements can be entered in the PARM field of the EXEC statement or as input control cards.

Each control statement is described below using the following syntax conventions:

- UPPERCASE characters must be entered as shown.
- Lowercase italicized characters represent user-specified variables that must be supplied.
- Optional parameters appear in brackets [ ].
- The | character denotes an OR condition (only one of the options can be supplied).

CHANGES Control Statement

Lists changes made to the 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 server's virtual storage size may need to be increased when the CHANGES control statement is specified. Insufficient storage is indicated by a 2719 abend.

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

- 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.)
- Was the change made by the ACID indicated in the CA operand? (This check is bypassed if the CA operand was omitted.)
- 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.
- Does the change contain the string specified in the STRING operand? (This check is bypassed if the STRING operand was omitted.)

The following describes the information header line for CHANGES listing:

Header	Explanation
CHANGER	Lists the ACID name of the user that made the change.
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.)
TIME	Lists the time at which the change was made.
SYSID	Lists the VMLOGID or SMF identifier of the CPU on which the change was made.
TYPE	Indicates the type of change: ■ CMND-TSS command ■ PW-Password change ■ AVO-Automatic Volume Ownership DUF-DUFU PD
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, and you are not the MSCA, you must have the following administrative authority:

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

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:

- 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
- PSUS-Password SUSPEND
- SUSP-SUSPEND ACID
- TMPW-TSOMPW attribute
- TRA-TRACE attribute
- VSUS-Violation SUSPEND
- XSUS-Installation Exit SUSPEND

The listing produced by the PRIVILEGES control statement contains the following information:

Header	Explanation
ACIDNAME	Lists security information for the specified ACID.
TYPE	Lists the type of ACID record.
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.

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)
INCOMING PARAMETER ===>      PRIVILEGES SHORT
```

Sample Control Statements

All Security File changes made in the past 30 days by the ACID named SCA01 are listed:

```
//TSSJOB ACID=SCA01,PASSWORD=XXXXX
//EXEC PGM=TSSAUDIT
  CHANGES DATE(-30)
```

All Security File privileges that included the string “operator” are listed. Note that the PRIVILEGES control statement is specified in the PARM field.

```
//TSSJOB  ACID=SCA01,PASSWORD=xxxxxxxx
//EXEC  TSSAUDIT,PARM='PRIVILEGES STRING(OPERATOR)'
```

Chapter 5: TSSCFILE Utility

This section contains the following topics:

Scope and Authority

All scope and administrative authority restrictions are honored by this utility, thereby preventing unauthorized access to the 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) DATA(authority level(s))
```

or

```
TSS ADMIN(acid) RESOURCE(REPORT) DATA(authority level(s))
```

About TSSCFILE

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

The utility parses the output of the particular TSS informational retrieval commands (LIST, 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.

JCL Requirements

When creating a TSSCFILE job, you may specify one or more TSS LIST commands that are needed to extract the data required for your application. The following is a sample TSSCFILE job:

```
//TSSJOB ACID=SECADMIN,PASSWORD=ILUVTSS
//EXEC   PGM=TSSCFILE
  TSS LIST(ACIDS) DEPT(PAYROLL) DATA(PROFILE,XAUTH)
  TSS LIST(APPLMGR) DATA(ADMIN)
      .
      .
      .
```

When the TSSCFILE job completes, print (PRT) and punch (PUN) files are returned to your virtual reader:

- The PRT file contains the TSSCFILE job log which should be checked for errors.
- The PUN file contains the requested data in TSSCFILE internal-format.

Note: CA does not recommend the use of these internal-format records by your application programs. The format of these records are subject to change without notice.

If a program other than TSSREPT will be used to process the records, a second step is required to convert records to external-format TSSCFILE records in a CMS file once the PUN file has been returned to your reader. To perform this step, use the TSSCFILA command as follows:

```
TSSCFILA jobid <filename <filetype <filemode>>> <(REPlace>
```

jobid

The TSSCFILE job number that was assigned to the job by the server during execution. You can obtain the jobid by entering a “QUERY READER * ALL” command and examining the NAME field which will be in the form, TSSJnnnn. The value for nnnn should be used as the jobid. This parameter is required.

filename

The filename of the CMS file that is to contain the external-format TSSCFILE records. The default is TSSJnnnn where nnnn is the value specified for jobid.

filetype

The filetype of the CMS file that is to contain the external-format TSSCFILE records. The default is TSSCFILE.

filemode

The filemode of the CMS file that is to contain the external-format TSSCFILE records. The default is A.

REPlace

Indicates that if the CMS file already exists, it should be replaced.

Return Code Definitions

0

Successful completion

24

Invalid command specification

28

No reader file of type PUN found for this jobidor the CMS file already exists

32

Invalid reader file format or error in reader file data

1xxx

Return code from CMS file system error

Samples of 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 section using the following format: start column, end column, field length, and description.

For example:

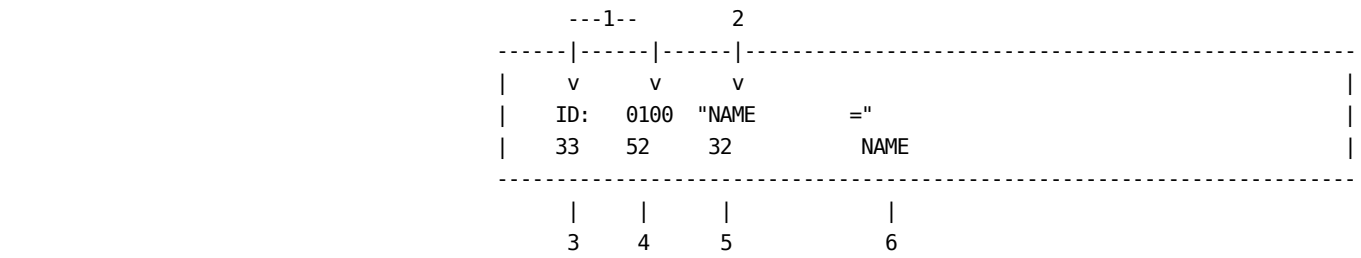
```
FIELD       FIELD       FIELD        DESCRIPTION
START       END         LENGTH
COL         COL

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:



Note the following items:

- 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.
- 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 =").
- 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.
- Indicates the ending column of the field--column 52 in this example.
- Indicates the length of the field--32 characters in this example.
- 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 example.)

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

See Formatted Record Types for descriptions of all formatted records.

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    = mm/dd/yy  LAST MOD   = mm/dd/yy  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
              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 DEPT>
     <0500   2  USER02           ><01/30/9502/02/9512:48>
     <170087    USER02           ><TSOACCT 11111111>
     <170088    USER02           ><TSOAUTH CONSOLE>
     <170088    USER02           ><TSOAUTH JCL>
4    <170089    USER02           ><TSOPROC TSOPROC>
     <2600      USER02           ><021INSTDATA=739-4001
                                  <
                                  <>
     <4010      USER02           >Unicenter TSreorg for Oracle
     <3508      USER02           ><ISPF>
     <3506      USER02           ><255>
     <3509      USER02           ><LOCALC>
     <3510      USER02           ><X>
     <3502      USER02           >Action:
     <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
```

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

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.

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

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.)

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

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.

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.

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
54    58        5         TIME CREATED

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:   0650      "GROUPS     ="
33    40        8         GROUP ACID
```

```
41    48        8           GROUP 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"
161   168       8          "VSUSPEND"
169   176       8          "XSUSPEND"
177   184       8          "PSUSPEND"
```

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 DIRECTRY="
33    40        8          "DIRECTRY"
41    48        8          XAUTH OWNER ACID
49    56        8          XAUTH UNTIL DATE
57    225       169        XAUTH'D DIRECTORY ENTRY

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 RESOURCE OWNER
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:   2009      "XAUTH SFSCMD="
33    40        8          "SFSCMD"
41    48        8          XAUTH OWNER ACID
49    56        8          XAUTH UNTIL DATE
57    73        17         XAUTH'd SFSCMD entry

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  "
105   112       8          "XAUTO-ON"
```

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
33    40        8           Access Level
41    48        8           Access Level
49    56        8           Access Level
57    64        8           Access Level
65    72        8           Access Level
```

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:   2030     "ATTRIB    ="
33    39       7          NONMASK

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 eight-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   ="  3
 3    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:   2930     "VMMACH    ="
33    43        11         VMMACH ENTRY
44    54        11         VMMACH ENTRY
55    65        11         VMMACH ENTRY
66    76        11         VMMACH ENTRY
77    87        11         VMMACH ENTRY

ID:   2960     "DIAGNOSE ="
33    36        4          DIAGNOSE CODE
41    44        4          DIAGNOSE CODE
49    52        4          DIAGNOSE CODE
57    60        4          DIAGNOSE CODE

ID:   2990      "SFSCMD   ="
33    40        8          SFSCMD
41    48        8          SFSCMD
49    56        8          SFSCMD
```

```
57    64        8          SFSCMD

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:   3001    “PHRASE     =“
33    40                EXPIRES DATE
41    43        3         INTERVAL

ID:   3040     "XAUTH DIAGNOSE="
33    40        8         "DIAGNOSE"
41    48        8         XAUTH OWNER ACID
49    56        8         XAUTH UNTIL DATE
57    64        4         XAUTH'D DIAGNOSE CODE

ID:   3050     "XAUTH CPCMD   ="
33    40        8         "CPCMD"
41    48        8         XAUTH OWNER ACID
49    56        8         XAUTH UNTIL DATE
57    120       64        XAUTH'D CPCMD

ID:   3070      "XAUTH VMMACH  ="
33    40        8          "VMMACH"
41    48        8          XAUTH OWNER ACID
49    56        8          XAUTH UNTIL DATE
57    64        8          XAUTH'D VMMACH

ID:   3090      "MODE      ="
33    40        8          XAUTH MODE
41    48        8          XAUTH OWNER ACID
49    56        8          XAUTH UNTIL DATE

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          XAUTH RESOURCE CLASS NAME
41    48        8          XAUTH OWNER ACID
49    56        8          XAUTH UNTIL DATE
57    64        8          XAUTH 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: Record types 4020 through 4023 are created as a result of the TSS LIST(APPCLU) command.

```
ID:   4020      "LINK ID    ="
33    67        35                LINK ID

ID:   4021      "TOT VIOS =  MAX VIOS   =      LINK STATUS=    "
33    37        5              TOTAL VIOLATIONS
38    42        5              MAX VIOLATIONS
43    51        9              LINK STATUS

ID:   4022      "CONVSEC  =     VIOLATIONS =       "
33    40        8              CONVSEC
41    45        5              VIOLATIONS

ID:   4023      "SESS KEY =   "
33    48        16             SESSION KEY
49    58        10             EXPIRE DATE
59    66        8              INTERVAL
```

Note: Records types 4100 through 4105 are createdas 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

ID :  4210      GROUP #
33    37        5

ID:   4220      GROUP NAME
33    35        3

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

ID:   4260      DAY HOURS =
33    57        24

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

ID:   4280      BATCH =
33    56        24

ID:   4290      LOCAL =
33    56        24

ID:   4300      DIALUP =
33    56        24

ID:   4310      REMOTE =
33    56        24

ID:   4320      PDISKQUOTA=
33    56        24
```

```
ID:   4330      DEFDIR =
33    56        22

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

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

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                  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:   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

ID:   4520     "NAME      ="   DIGITAL CERTIFICATE NAME
33    40       8          CERTIFICATE NAME
41    45       5          TRUST OR BLANK

ID:   4521     "STARTS    ="   DIGITAL CERTIFICATE START DATE
33    40       8              xx/xx/xx

ID:   4522     "EXPIRES   ="   DIGITAL CERTIFICATE EXPIRATION DATE
33    40       8              xx/xx/xx

ID:   4523     "CERTID    ="   DIGITAL CERTIFICATE VALUE
33    34       2              SIZE OF CERTIFICATE IN BINARY
35                            START OF CERTIFICATE

ID:   4524     "USERINFO  ="   DIGITAL CERTIFICATE USER INFO
33    34       2              SIZE OF USER INFO IN BINARY
35                            START OF USER INFO

ID:   4525     "ACID(aaaaaaaa)  KEYRING(kkkkkkkk) ="CERTIFICATE
33    40       8          ACID NAME
41    48       8          KEYRING RECORD ID

ID:   4526     "SERIAL # =" DIGITAL CERTIFICATE SERIAL NUMBER
33    40       8            CERTIFICATE SERIAL NUMBER

ID:   4527     "ISSUER DISTINQUISHED NAME:" INDFILTER VALUE
33    35       3            SIZE OF USER INFO IN EBCDIC
36    290      255          CERTIFICATE ISSUER NAME

ID:   4528     "SUBJECT DISTINQUISHED NAME:" SDNFILTER VALUE
33    35       3            SIZE OF USER INFO IN EBCDIC
36    290      255          CERTIFICATE SUBJECT NAME
```

```
ID:   4529      "NOT BEFORE(xx/xx/xx)"
33    40        8          DATE FIELD

ID:   4530      "NOT AFTER(xx/xx/xx)"

ID:   4531      "PRIVATE KEY SIZE=nnnn"
33    36        4          SIZE OF PRIVATE KEY

ID:   4532      "PRIVATE KEY TYPE=tttttttt"
33    40        8          ICSF or NON-ICSF

ID:   4540      "KEYRING=kkkkkkkk ACCESSORID=aaaaaaaa"
33    40        8          RECORD ID
41    48        8          ACID NAME

ID:   4541      "KEYRING LABEL="
33    35        3          SIZE OF USER INFO IN EBCDIC
36    272       237        LABEL NAME

ID:   4542      "ACID(a) DIGICERT(d) DEFAULT(f) USAGE(u)"
33    40        8          ACID NAME
41    48        8          CERTIFICATE RECORD ID
49    51        3          DEFAULT
52    59        8          USAGE
60    91        31         CERTIFICATE LABEL NAME

ID:   4550      "CERTMAP=mmmmmmmm ACCESSORID=aaaaaaaa"
33    40        8          RECORD ID
41    48        8          ACID NAME

ID:   4551      "LABEL:"
33    64        31         LABEL

ID:   4552      "STATUS"
33    40        8          TRUST OR NOTRUST

ID:   4553      "SUBJECT NAME FILTER"
33    35        3          SIZE OF USER INFO IN EBCDIC
36    270       234        SUBJECT NAME

ID:   4554      "ISSUER NAME FILTER:"
33    35        3          SIZE OF USER INFO IN EBCDIC
36    270       234        ISSUER NAME

ID:   4555      "CRITERIA:"
33    35        3          SIZE OF USER INFO IN EBCDIC
36    270       234        CRITERIA DATA

ID    4560      "CRITMAP=cccccccc ACCESSORID=aaaaaaaa"
33    40        8          RECORD ID
41    48        8          ACID NAME

ID:   4561      "SYSTEM ID:"
```

```
33    40        8          SYSTEM ID

ID:   4562      "APPLICATION:"
33    40        8          APPLID

ID:   4563      "USER DEFINED VARIABLES:,"
33    35        3          SIZE OF USER INFO IN EBCDIC
36    270       235        USER VARIABLES
```

Note: The following record types are created as a result of a TSSLIST(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)
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

ID:   5030      TSS LIST(SDT) DIGICERT(ALL)
33    40        8          CERTIFICATE NAME
41    48        8          ASSOCIATED ACID
49    56        7          ADMIN BY ACID NAME
57    60        4          SMFID WHERE ADMIN WAS DONE
61    70        10         DATE OF LAST CHANGE MM/DD/YYYY
71    78        8          TIME OF LAST CHANGE HH:MM:SS

ID:   5035      TSS LIST(SDT) RINGDATA(ALL)
33    40        8          KEYRING RECORD ID
41    48        8          ASSOCIATED ACID

ID:   5040      TSS LIST(SDT) CERTMAP(ALL)
33    40        8          CERTIFICATE RECORD ID
41    48        8          ASSOCIATED ACID

ID:   5045      TSS LIST(SDT) CRITMAP(ALL)
33    40        8          CRITERIA MAP RECORD ID
41    48        8          ASSOCIATED ACID
```

Note: The following record types are created as a result of TSS MODIFY commands.

```
ID:   9701    TSS0029I MESSAGE
33    35       3          RELEASE LEVEL
36    39       4          GENLEVEL
40    47       8          GENERATION DATE
48    55       8          GENERATION TIME

ID:   9702    TSS0028I MESSAGE
33    35       3          RELEASE LEVEL
36    39       4          GENLEVEL
40    47       8          GENERATION DATE
48    55       8          GENERATION TIME

ID:   9703    AUTH(n,n) DOWN(nn) INACTIVE(nnn)
33    40       8          OVERRIDE
41    48       8          ALLOVER
49    50       2          DOWN OPTION
51    53       3          INACTIVE VALUE

ID:   9704    LOG(nnnn,nnn)  MODE(nn)   MSUSPEND(nnn)
33    38       6          ALL|NONE
39    44       6          LOG OPTION
45    50       6          LOG OPTION
51    56       6          LOG OPTION
57    62       6          LOG OPTION
63    66       4          RUN MODE
67    69       3          MSUSPEND (YES|NO)

ID:   9705    UPCASE(nnn) VMFAC(nnnnnnnn) VTHRESH(n,nnnnnnnn)
33    35       3          YES|NO
36    43       8          FACILITY NAME
44    46       3          NUMBER
47    53       7          SUSPEND

ID:   9706    PRODUCTS(none)     POSIXMGRP(nnn)
33    40       8          NONE
41    43       3          MAXIMUM NUMBER OF POSIX GROUPS

ID:   9707    OPTIONALS(00n,00n,..)
33    35       3          ACTIVE OPTION NUMBER
36    36       1          BLANK
```

Note: The two records above are repeated for the total number of OPTIONALS set.

```
ID:    9708      NEWPW(MIN=n,WARN=nnn,MINDAYS=...)
33     34        2          VALUE FOR MIN
35     37        3          VALUE FOR MAX
38     39        2          VALUE FOR WARN
40     41        2          VALUE FOR MINDAYS
42     42        1          NUMBER OF LETTER REPEATS ALLOWED
43     50        8          MASK
51     52        2          ID
53     54        2          NM
55     56        2          NO
57     58        2          NU
59     60        2          NV
61     62        2          RN
63     64        2          RS
65     66        2          SW
67     68        2          TS
69     70        2          FN
71     72        2          FA
73     80        8          MASK= VALUE
```

Note: Options display on the cfile output record in the same sequence as the appear on the input listing.

```
ID:   9709     PTHRESH(nnn)   PWEXP(nnn)   NPWRTHR(nnn)
33    35       3          PTHRESH VALUE
36    38       3          PWEXP VALUE
39    41       3          NPWRTHR VALUE

ID:   9710     PWHIST(nn)
33    34       2          PWHIST VALUE
35    37       3          PWVERIFY

ID:   9711     AUDITING(xxxxxx)  BACKUP(nnnn)  CCIVM(xxxxxxxx)
33    40       8          INACTIVE|ACTIVE
41    44       3          OFF|hhmm
45    51       8          USERID of CCI MACHINE

ID:   9712     DATE(mm/dd/yy)   DUMP(n)     EXIT(off)
33    40       8          DATE
41    41       1          0-9
42    44       3          OFF|ON

ID:   9713     ID(PRIMARY|BACKUP) INI(hh:mm:ss,mm/dd/yy) RECOVERY(xxx)
33    40       8          SECFILE ID
41    48       8          TIME
49    56       8          DATE
57    59       3          RECOVERY FILE STATE

ID:   9714     RESTART(n)   SHRFILE(YES|NO)    SYSOUT(xxxxx)
33    33       1          NUMBER OF ALLOWED RESTARTS
34    45       12         SHARING FILE?
46    53       8          WHO GETS THE OUTPUT

ID:   9715     TIMER(nnn)   VMLOGID(xxxxxxx)  DISPMASK(xxxxxxxx)
33    35       3          TIMER TICKS ALLOWED
36    43       8          NAME APPEARING IN UTIL REPORTS
44    51       8          ON|OFF

ID:   9716     BATCH(INACTIVE)
33    40       8          BATCH MACHINE CURRENTLY INACTIVE

ID:   9717     BATCHJ=nnnn,P=xxxxxxx,A=xxxxxxxx,U=xxxxxx,S=xxxxx,D=xxx
33    36       4          BATCH JOB NUMBER RUNNING NOW
37    42       8          BATCH JOB RUNNING THIS PROGRAM
43    50       8          BATCH JOB RUNNING UNDER THIS ACID
51    58       8          BATCH JOB FOR THIS USER
59    66       8          BATCH JOB USING THIS MUCH STORAGE
67    72       8          BATCH JOB

ID:   9718     STORAGE(NUC=xxxx,sys=xxxx,..)
33    37       5          NUCLEUS USING THIS MUCH MEMORY
38    42       5          THIS MUCH USED BY SYSTEM
```

```
43    47        5          THIS MUCH TOTAL FREE STORAGE
48    52        5          THIS MUCH FREE STORAGE IN USE
53    57        5          THIS MUCH FREE STORAGE AVAILABLE

ID:   9719      DEBUG(xxx)    IOTRACE(xxx)
33    35        3          DEBUG setting
36    38        3          IOTRACE SETTING

ID:   9721      SECTRACE(xxx)
33    35        3          SECTRACE SETTING

ID:   9722      SECFILE(nn,xxxxxxx.xxxxxxx.xxxxxxx)
      9723      AUDFILE(nn,xxxxxxx.xxxxxxx.xxxxxxx)
      9724      RECFILE(nn,xxxxxxx.xxxxxxx.xxxxxxx)
      9725      BKPFILE(nn,xxxxxxx.xxxxxxx.xxxxxxx)
      9726      AUDFIL2(nn,xxxxxxx.xxxxxxx.xxxxxxx)
      9727      CPFFILE(nn,xxxxxxx.xxxxxxx.xxxxxxx)
33    34        2          00-99     PERCENTAGE FILE IS FULL
35    78        44         MVS-STYLE DSN OF GIVEN FILE

ID:   9728      CPF(xxx)     CPFWAIT(xxx)   CPFTARGET(xxxxxxx)
33    35        3          CPF VALUE
36    38        3          CPFWAIT VALUE
39    46        8          CPFTARGET VALUE

ID:   9729      CPFOUT(xxxx)  CPFLOCAL(xxxxx(xx,x)) CPFRCVUND(xxx)
33    40        8          CPFOUT VALUE
41    48        8          CPFLOCAL USERID
49    51        3          VIRTUAL PRINTER CUU
52    52        1          OUTPUT CLASS
53    55        3          CPFRCVUND VALUE

ID:   9730      CPFTRACE(xxxxxxxx)
33    40        8          CPFTRACE VALUE

ID:   9731      CPFNODE(xxxxxx) STATUS(xxxxxx,xxxx,xxxxx) JOURNAL(cuu,x)
33    40        8          NODE WE'RE TALKING ABOUT
41    48        8          STATUS ACTIVE|INACTIVE
49    56        8          SPOOL
57    64        8          RETRY
65    72        8          PRE50
73    75        3          JOURNAL NUMBER
76    76        1          OUTPUT CLASS

ID:   9732      AUD(nnnn)  BAT(nnnn)   CFC(nnnnn)    CHG(nnnnn)
      9733      HVC(nnnn)  INI(nnnn)   IOR(nnnnn)    IOW(nnnnn)
      9734      IUR(nnnn)  IUP(nnnn)   REC(nnnnn)    SEC(nnnnn)
      9735      SRI(nnnn)  VIO(nnnn)
      9736      LOK(nnnn)  LWT(nnnn)
33    40        8          VALUE OF FIRST FIELD
41    48        8          VALUE OF SECOND FIELD
```

```
49    56        8          VALUE OF THIRD FIELD
57    62        8          VALUE OF FOURTH FIELD

ID:   9740      ADMINBY(xxx)      EXPDAYS(nn)
33    35        3          ADMINBY SETTING
36    37        2          EXPDAYS SETTING

ID:   9741      DFLTRNGU(xxxx,xxxx)
33    43                   DFLTRNGU lower limit
44    54                   DFLTRNGU upper limit

ID    9742      DFLTRNGG(xxxx,xxxx)
33    43                   DFLTRNGG lower limit
44    54                   DFLTRNGG upper limit

ID:   9743      “NEWPHRASE(MIN=XX,MAX=XXX,WARN=XX,MINDAYS=XX,
NR=X,ID,NU,SC=X,MA=X,MN=X)”
33    34        2    MIN
35    37        3    MAX
38    39        2    WARN
40    41        2    MINDAYS
42    43        1    NR
43    44        2    SC
45    46        2    PASSPHRASE OPTION
47    48        2    MA
49    50        2    MN
51    52        2    PASSPHRASE OPTION
53    54        2    PASSPHRASE OPTION
55    56        2    PASSPHRASE OPTION
57    58        2    PASSPHRASE OPTION
59    60        2    PASSPHRASE OPTION
61    62        2    PASSPHRASE OPTION
63    64        2    PASSPHRASE OPTION
65    66        2    PASSPHRASE OPTION
67    68        2    PASSPHRASE OPTION
69    70        2    PASSPHRASE OPTION
70    72        2    PASSPHRASE OPTION
73    74        2    PASSPHRASE OPTION
75    76        2    PASSPHRASE OPTION
77    78        2    PASSPHRASE OPTION
79    80        2    PASSPHRASE OPTION
81    82        2    PASSPHRASE OPTION
83    84        2    PASSPHRASE OPTION
85    86        2    PASSPHRASE OPTION
87    88        2    PASSPHRASE OPTION
89    90        2    PASSPHRASE OPTION

ID    9746      PPHRASE
33    35        3    ON[OFF

ID    9747      MAX_ACID_SIZE(NNNN)
```

```
33    37        5    MAX_ AID_SIZE VALUE
38    45        8    NEW_PASSWORD VALUE

9748 “TSSCMDOPTION =”
33    40        8    First option
41    48        8    Second option (if present)
49    56        8    Third option (if present)
57    64        8    Fourth option (if present)
65    72        8    Fifth option (if present)
73    80        8    Sixth option (if present)
81    88        8    Seventh option (if present)
89    96        8    Eighth option (if present)
97    104       8    Ninth option (if present)
105   112       8    Tenth option (if present)

ID    9749      PASSCHAR(XXXX)
33    48        16   PASSWORD SPECIAL CHAR

ID:   9750      "TSS9582I  oldclass : newclass  "
33    40        8    Old resource class
41    48        8    New resource class
49    56        8    Old resource class
57    64        8    New resource class
65    72        8    Old resource class
73    80        8    New resource class
```

Record Types Summary

The following summary lists the record ID number and description for each record type.

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

ID Number	Record Type	Description
0650	"GROUPS ="	GROUP NAME
0675	"FAC ="	FACILITY 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
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

ID Number	Record Type	Description
2017	" VMUSER ="	XAUTH PRIVPGM
2021	"ACCESS ="	XAUTH ACCESS LEVELS
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
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
2921	"ACCESS ="	XAUTH ACCESS LEVELS
2930	"VMMACH="	VM MACHINE (OWNED)
2940	"VMRDR="	VM READER (OWNED)
2950	"CPCMD="	CP COMMAND (OWNED)

ID Number	Record Type	Description
2960	"DIAGNOSE="	VM DIAGNOSE (OWNED)
2970	"DSPACE="	VM DATASPACE (OWNED)
2980	"IUCV="	VM IUCV (OWNED)
2990	"SFSCMD="	VM SFS COMMAND (OWNED)
3000	"PASSWORD ="	PASSWORD
3001	"PASSWORD PHRASE"	PASSWORD PHRASE
3090	"MODE ="	MODE XAUTH
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
3100	"STC ="	STC
3200	"PHYSKEY ="	PHYSKEY
3250	"CPFNODES ="	CPFNODE NAMES
3260	"XA PROGRAM="	PROGRAM XAUTH
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

ID Number	Record Type	Description
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
3800	"DLF ="	DLF RECORD RESOURCES
3810	"DLF JOBS ="	DLF JOBNAMES
4000	"ACCOUNT ="	WAACCNT
4001	"NAME ="	WANAME
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	"SEGMENT SUBSET"	UID SEGMENT SUBFIELDS

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

ID Number	Record Type	Description
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
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

ID Number	Record Type	Description
4506	"MCSKEY ="	MCS KEY
4507	"MCSLEVL ="	MCS MSG LEVEL
4508	"MCSLOGC ="	MCS LOG CMDS
4509	"MCSMFRM ="	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 records are created as a result of TSS MODIFY commands.

ID Number	Record Type	Description
9701	"TSS0029I ="	MESSAGE RELEASE/GENLEVEL GENERATION DATE/TIME
9702	"TSS0028I ="	MESSAGE RELEASE/GENLEVEL GENERATION DATE/TIME
9703	"AUTH ( )" DOWN INACTIVE	OVERRIDE ALLOVER
9704	"LOG ( )" MODE MSUSPEND	ALL/NONE MSUSPEND
9705	"UPCASE ( )" VMFAC VTHRESH	YES/NO FACILITY NAME NUMBER SUSPEND
9706	"PRODUCTS ( )" POSIXMGRP	NONE MAXIMUM NUMBER OF POSIX GROUPS

ID Number	Record Type	Description
9707	"OPTIONALS ( )"	ACTIVE OPTION NUMBER
		BLANK
9708	"NEWPW ( )"	NEW PASSWORD
		MIN
		WARN
		MINDAYS
		LETTER REPEATS ALLOWED
9709	"PTHRESH ( )"	VALUE
	PWEXP	
	PWVIEW	
9710	"PWHIST ( )"	VALUE
9711	"AUDITING ( )"	INACTIVE/ACTIVE
	BACKUP	OFF
	CCIVM	USERID OF CCI MACHINE
9712	"DATE ( )"	DATE
	DUMP	0-9
	EXIT	OFF/ON
9713	"ID ( )"	SECFILE ID
	INI	TIME
	RECOVERY	DATE
		RECOVERY FILE STATE
9714	"RESTART ( )"	NUMBER ALLOWED
	SHRFILE	FILE SHARING?
	SYSOUT	DIRECT OUTPUT TO?
9715	"TIMER ( )"	TIMER TICKS ALLOWED
	VMLOGID	NAME IN UTIL REPORT
	RDT2BYTE ( )	2 BYTE RESCODE SUPPORT
9716	"BATCH ( )"	BATCH MACHINE NOW INACTIVE
9717	"BATCHJ ="	JOB NUMBER NOW RUNNING
		JOB RUNNING THIS PROGRAM
		JOB RUNNING UNDER THIS ACID
		JOB FOR THIS USER
		JOB USING THIS MUCH STORAGE
		BATCH JOB

ID Number	Record Type	Description
9718	"STORAGE ( )"	NUCLEUS USING THIS MUCH MEMORY
		THIS MUCH USED BY SYSTEM
		THIS MUCH TOTAL FREE STORAGE
		FREE STORAGE IN USE
		FREE STORAGE AVAILABLE
9719	"DEBUG ( )"	DEBUG SETTING
	IOTRACE	IOTRACE SETTING
9721	"SECTRACE ( )"	SECTRACE SETTING
9722	"SECFILE ( )"	PERCENTAGE FILE IS FULL
9723	"AUDFILE ( )"	MVS DSN
9724	"RECFILE ( )"	
9725	"BKPFILE ( )"	
9726	"AUDFILE ( )"	
9727	"CPFFILE ( )"	
9728	"CPF ( )"	CPF VALUE
	CPFWAIT	CPFWAIT VALUE
	CPFTARGET	CPFTARGET VALUE
9729	"CPFOUT ( )"	CPFOUT VALUE
	CPFLOCAL	CPFLOCAL USERID
	CPFRCVUND	VIRTUAL PRINTER CUU
		OUTPUT CLASS
		CPFRCVUND VALUE
9730	"CPFTRACE ( )"	CPFTRACE VALUE
9731	"CPFNODE ( )"	SPECIFIC NODE
	STATUS	ACTIVE/INACTIVE
	JOURNAL	SPOOL
		RETRY
		PRE50
		JOURNAL NUMBER
		OUTPUT CLASS

ID Number	Record Type	Description
9732 9733 9734 9735 9736	"AUD ( ) BAT ( ) CFC ( ) CHG ( )" "HVC ( ) INI ( ) IOR ( ) IOW ( )" "IUR ( ) IUP ( ) REC ( ) SEC ( )" "SRI ( ) VIO ( )" "LOK ( ) LWT ( )"	VALUE OF FIRST FIELD VALUE OF SECOND FIELD VALUE OF THIRD FIELD VALUE OF FOURTH FIELD
9740	"ADMINBY ( )" EXPDAYS	ADMINBY SETTING EXPDAYS SETTING
9741	“DFLTRNGU”	Default UID range
9742	“DFLTRNGG”	Default GID range
9999	" = "	UNDEFINED RESOURCE

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:

- 998-CA Top Secret is inactive.
- 999-PRINT DD 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.

Chapter 6: TSSREPT Utility

This section contains the following topics:

About TSSREPT

TSSREPT applies the capabilities of CA-EARL, an easy-to-use report language, to Security File information using the output of TSSCFILE or audit information using the EARLOUT option of TSSUTIL, to provide formatted summaries of CA Top Secret data. This expanded reporting function gives you the capability to generate additional administrative and audit summary reports.

Eleven sample reports are described in this section. 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, TSSUTIL and CA-EARL statements. As an example, the following command limits the report output to selected user ACIDs within the Personnel Department:

```
TSS LIST(ACIDS) DEPT(PERSONEL) TYPE(USER)
```

The following command limits the report output to password violations by users in the Payroll Department:

```
REPORT EARLOUT DRC(PW) DEPT(PAYDEPT)
```

TSSREPT Selection Screen

Interactive screens are available to create, save, and view reports generated by TSSREPT. Defaults are defined at installation. Enter TSSREPT and the report selection screen appears.

TSSREPT Option 1

Reports 1 through 7 are described on the following pages. Input parameters, if any, appear in the boxes and are followed by definitions of both required and optional parameters. The following OUTPUT FIELDS define the headers that appear on the report output.

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.

```
 CAKV-R001                Top Secret Report Facility                  TSSREPT

===>
Select the type of CFILE request:  (2)        (3)                   (4)
  _ dynamic, from TSS server: TSSVM___ node: ________ with password:
(1)    TSS LIST command(s) or _ command file TSSREPT_ TSSLIST_ A_ to execute:
                              (6)                      (7)
       ____________________________________________________________________
       ____(5)_____________________________________________________________
       ____________________________________________________________________
 (8)                                                                    (9)
  _ static, CFILE in virtual reader, enter the jobid of its TSSCFILE JOB: ____
(10)   _ Check here to save CFILE as: TSSCFILE SAVED___ A_ (11)
  _ static, CFILE on minidisk, enter its CMS fileid: TSSCFILE SAVED___ A_
(12)                                                                 (13)
                                                          (14)
Select the TSS report ( v - view, s - create and save as TSSREPTn LISTING_ A_ )
  _ Report 1: inactive ACIDs            _ Report 2: expired ACIDs
  _ Report 3: suspended ACIDs  (15)     _ Report 4: ACID names
  _ Report 5: all ACIDs                 _ Report 6: ACIDs with given attributes
  _ Report 7: ACIDs w/ ADMIN authority  _ Report produced by EARL pgm: __(16)__
    Input parameter for EARL (if any): _____________(17)_____________________

PF1=Help       2=           3=End         4=Return     5=Execute    6=
PF7=SaveCurr   8=GetSaved   9=Refresh    10=          11=          12=Cursor
```

The following information is presented in the display:

- (1)-If dynamic is checked, see (2) - (7)
- (2)-The VM server machine ID
- (3)-The node if different from where you are
- (4)-A password (up to eight characters)
- (5)-Supply TSS LIST commands if appropriate
- (6)-If the command file is checked, see (7)
- (7)-You may accept the default name for the command file or supply another
- (8)-If static (for virtual reader) is checked, see (9) - (10)
- (9)-Supply the server's job id
- (10)-Check here to save CFILE
- (11)-You may accept the default name for the CFILE or supply another
- (12)-If static (for file) is checked, see (13)

- (13)-You may accept the default name for the CMS fileid or supply another
- (14)-You may either accept the default name for the TSSREPT report or supply another
- (15)-Enter either v for viewing or s for creating the specified reports 1 through 7
- (16)-If an EARL program is used, supply the name

Note: This screen is a two-step process: The upper part of the screen about the CFILE request must be filled in first. Interactive messages will guide you through the process. When the PUN and PRT files are returned, you can then fill in the lower portion of the screen about the CA Top Secret report selection.

Report #1 INACTIVE ACIDS

PF Key	Assignments:
PF1=Help	Invokes the Help Facility
PF2	Not applicable for TSSREPT
PF3=End	Exits TSSREPT
PF4=Return	Exits TSSREPT
PF5=Execute	Performs the selected action
PF6	Not applicable for TSSREPT
PF7=SaveCurr	Saves the current entered values
PF8=GetSaved	Re-displays the saved values
PF9=Refresh	Re-displays screen, no previous entries are saved
PF10	Not applicable for TSSREPT
PF11	Not applicable for TSSREPT
PF12	Moves cursor between command line and previous screen position

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 that was pre-determined with the INACTIVE control option.

```
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.

Output Fields

ACID

Lists the resulting inactive ACIDs.

NAME

Lists the user's name associated with each ACID.

DATE ON WHICH ACID BECAME INACTIVE

Lists the date CA Top Secret denied the ACID access to the system.

A 1980 date under this header means that the user's password had been assigned the EXP parameter (to expire immediately).

The TSS command for TSSCFILE for this particular report is:

```
TSS LIST(acids) DATA(ALL,PASS)
```

REPORT #2: EXPIRED ACIDS

Lists all ACIDs that are expired.

PARM=

There are no input parameters for this report.

Output Fields

ACID

Lists the expired ACIDs.

NAME

Lists the user's name associated with each ACID.

DATE ON WHICH ACID EXPIRED

Lists the date each ACID expired.

REPORT #3: SUSPENDED ACIDS

Lists all ACIDs that are suspended.

PARM=

There are no input parameters for this report.

Output Fields

ACID

Lists the suspended ACIDs.

PROFILE INDICATOR

A P in this column means that the listed ACID is a profile ACID.

NAME

Lists the name associated with each listed ACID.

DATE ON WHICH ACID WILL 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.

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.

```
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

(Default) 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. A.

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'
```

Output Fields

The report title indicates which options were selected, and which delimiter, if any, is used.

NAME

Lists the given names in the order specified.

ACID

Lists the ACID associated with each name.

REPORT #5: LIST OF ACIDs

Lists ACIDs in alphabetical order by selected positions within the ACID.

```
[Scc][,Ecc][,A|,D]
```

Scc

This parameter sorts by starting column position within the ACID. Select column one through eight. 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

(Default) 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.

Output Fields

The report title indicates whether ascending or descending order was selected, and which starting and ending column positions were selected for the sort.

ACID

Lists the ACIDs in the order specified.

NAME

Lists the given name for the ACIDs being listed.

REPORT #6: WHO HAS ATTRIBUTES

Lists ACIDs that have the attribute specified.

```
[attribute]
```

attribute

The attribute is any CA Top Secret attribute that may be assigned to a user or profile ACID.

Output Fields

ACID

Lists the ACIDs that have the attribute.

PROFILE INDICATOR

A P under this header indicates that the ACID is a profile ACID.

NAME

Lists the given name for the ACIDs being listed.

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.

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.

Output Fields

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.

ACID

Lists the ACIDs.

TYPE

Lists each ACID type: MASTER, CENTRAL, DIV C/A, DEPT C/A, PROFILE or USER.

SCOPE OF AUTHORITY

Lists scope of authority, with the format:

```
ACIDNAME(scope)
```

If the TYPE is MASTER or CENTRAL, the scope is ALL.

AUTHORITY TYPE

Authority type will be one of the following: FACILITY, ACID, LIST DATA, MISC1, MISC9, RESOURCE, or a predetermined specific resource class name, such as DATA SET.

AUTHORITY LEVEL

The ACID's authority levels are listed after Authority Type.

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)
```

TSSREPT Option 2

Reports A through D are described on the following pages. Input parameters, if any, appear in the boxes and are followed by definitions of both required and optional parameters. The following OUTPUT FIELDS define the headers that appear on the report output.

The DATE format for each report is MM/DD/YY. This can be modified with the CA-EARL installation options.

```
 CAKV-R002              CA Top Secret Report Facility                   TSSREPT
===>

Select the type of UTILX request:  (2)        (3)                     (4)
  _ dynamic, from TSS server: TSSVM___ node: ________ with password:
(1)    TSSUTIL command(s) or _ command file TSSREPT_ TSSLIST_ A_ to execute:
                             (6)                      (7)
    REPORT EARLOUT_____________________________________________________________
    _______(5)_________________________________________________________________
    _____________________________________________________________________________
 (8)                                                                        (9)
  _ static, UTILX in virtual reader, enter the jobid of its TSSUTIL  JOB: ____
(10)   _ Check here to save UTILX as: TSSUTILX SAVED___ A_ (11)
  _ static, UTILX on minidisk, enter its CMS fileid: TSSUTILX SAVED___ A_
(12)                                                                 (13)

                                                                (14)
Select the TSS report ( v - view, s - create and save as TSSREPTn LISTING_ A_ )
  _ Report A: # violations by VMMD/DSN  _ Report B: VMMD/DSN violations
  _ Report C: Password violations       _ Report D: Terminal violations
(15)                                    _ Report produced by EARL pgm: __(16)__
    Input parameter for EARL (if any): _____________________________________
PF1=Help       2=           3=End         4=Return     5=Execute    6=
PF7=SaveCurr   8=GetSaved   9=Refresh    10=          11=          12=Cursor
```

The following information is presented in the display:

- (1)-If dynamic is checked, see (2) - (7)
- (2)-The VM server machine ID
- (3)-The node if different from where you are
- (4)-A password (up to eight characters)
- (5)-Supply TSSUTIL commands if appropriate
- (6)-If the command file is checked, see (7)
- (7)-You may accept the default name for the command file or supply another
- (8)-If static (for virtual reader) is checked, see (9) - (10)
- (9)-Supply the server's job id
- (10)-Check here to save UTILX
- (11)-You may accept the default name for the UTILX or supply another
- (12)-If static (for file) is checked, see (13)
- (13)-You may accept the default name for the CMS fileid or supply another
- (14)-You may either accept the default name for the TSSREPT report or supply another
- (15)-Enter either v for viewing or s for creating the specified reports A through D
- (16)-If an EARL program is used, supply the name

Note: This screen is a two-step process: The upper part of the screen about the UTILX request must be filled in first. Interactive messages will guide you through the process. When the PUN and PRT files are returned, you can then fill in the lower portion of the screen about the CA Top Secret report selection.

PF Key	Assignment
PF1=Help	Invokes the Help Facility
PF2	Not applicable for TSSREPT
PF3=End	Exits TSSREPT
PF4=Return	Exits TSSREPT
PF5=Execute	Performs the selected action
PF6	Not applicable for TSSREPT
PF7=SaveCurr	Saves the current entered values
PF8=GetSaved	Re-displays the saved values

PF Key	Assignment
PF9=Refresh	Re-displays screen, no previous entries are saved
PF10	Not applicable for TSSREPT
PF11	Not applicable for TSSREPT
PF12=Cursor	Moves cursor between command line and previous screen position

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.

Output Fields

ACID

Lists the ACID responsible for the data set violation.

DATASET NAME

Lists the name of the data set the user attempted to access.

VIOLATIONS

Lists the number of violations against each data set.

For TSSUTIL report selection criteria you would select:

```
EVENT(VIOL).
```

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.

Output Fields

DATE

Indicates the date when the ACID attempted to access the data set.

TIME

Indicates the time at which access was attempted.

DATASET NAME

Indicates which data set the ACID attempted to access.

ACID

Indicates the ACID which incurred the violation.

REQ ACCESS

Indicates what access level the ACID requested to the data set.

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).

mm/dd/yy                          ADMI
```

REPORT C - PASSWORD VIOLATIONS

Lists all ACIDs that have received password violations.

PARM=

There are no input parameters for this report.

Output Fields

DATE

Lists the date that the violation occurred.

TIME

Lists the time that the violation occurred.

ACID

Indicates which ACID incurred the violation.

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).
```

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.

Output Fields

DATE

Indicates the date on which the violation occurred.

TIME

Indicates the time that the violation occurred.

TERM ID

Indicates the terminal at which the violation occurred.

TSSTEXT

Details the type of violation that occurred.

For TSSUTIL report selection criteria you would specify:

```
EVENT(VIOL) RES(TERM)
```

Chapter 7: TSSCPR Utility

This section contains the following topics:

About TSSCPR

TSSCPR is a utility program designed to show the submitting administrator what CA Top Secret commands are still pending in the optional CPF Recovery File. This report identifies the origin of the command, the targeted node, a transaction identification number, and the command itself. Passwords are always replaced by a "?".

Note: This utility can only be run by an SCA type acid.

TSSCPR Required JCL

The following JCL is required to run the TSSCPR utility in a z/VM environment:

```
//TSSJOB ACID=acid,PASSWORD=password
//EXEC PGM=TSSCPREC
PRINT CPF RECOVERY
```

TSSCPR Sample Output

A sample TSSCPR output file is provided below:

If originating ACID is "*MASTER*" then the command is system generated. Also passwords will always be replaced by a "?".