CICS® Transaction Server for VSE/ESA™

System Programming Reference

Release 1

SC33-1659-00

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Note!

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 227.

First Edition (June 1999)

This edition applies to Release 1 of CICS Transaction Server for VSE/ESA, program number 5648-054, and to all subsequent versions, releases, and modifications until otherwise indicated in new editions. Make sure you are using the correct edition for the level of the product.

The CICS for VSE/ESA Version 2.3 edition remains applicable and current for users of CICS for VSE/ESA Version 2.3.

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At the back of this publication is a page entitled “Sending your comments to IBM”. If you want to make any comments, please use one of the methods described there.

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Preface

What this book is about

This book describes the CICS/VSE® system programming interface; it contains **reference** information needed to prepare COBOL, C, PL/I, and assembler-language application programs, using CICS® commands, to be executed under CICS. **Guidance** information is in the *CICS Application Programming Guide*. For information about debugging CICS applications, see the *CICS Problem Determination Guide*.

Who should read this book

This book is for system programmers who are writing applications to be invoked as transactions for administering the running CICS system.

What you need to know to understand this book

It is assumed that you are an experienced system programmer and that you are familiar with the effects of the CICS-supplied transactions. You must be able to write application programs, and understand the contents of the CICS application programming books (that is, the *CICS Application Programming Reference* manual and the *CICS Application Programming Guide*). Anything that is already documented in those two books is not duplicated here, so you need to refer to them from time to time.

How to use this book

This book contains two major sections. The first section is an introduction that describes the common features and the overall purpose of the system programming interface commands. The second section is a description of each of the commands, in alphabetic order.

Notes on terminology

The terms listed in Table 1 are commonly used in the CICS Transaction Server for VSE/ESA Release 1 library. See the *CICS Glossary* for a comprehensive definition of terminology.

Table 1 (Page 1 of 2). Commonly used words and abbreviations in CICS Transaction Server for VSE/ESA Release 1

Term	Definition (and abbreviation if appropriate)
$(the dollar symbol)	In the character sets and programming examples given in this book, the dollar symbol ($) is used as a national currency symbol and is assumed to be assigned the EBCDIC code point X'5B'. In some countries a different currency symbol, for example the pound symbol (£), or the yen symbol (¥), is assigned the same EBCDIC code point. In these countries, the appropriate currency symbol should be used instead of the dollar symbol.
BSM	BSM is used to indicate the basic security management supplied as part of the VSE/ESA product. It is RACROUTE-compliant, and provides the following functions: • Signon security • Transaction attach security
C	The C programming language
CICSplex	A CICSplex consists of two or more regions that are linked using CICS intercommunication facilities. Typically, a CICSplex has at least one terminal-owning region (TOR), more than one application-owning region (AOR), and may have one or more regions that own the resources accessed by the AORs
CICS Data Management Facility	The new CICS Transaction Server for VSE/ESA Release 1 facility to which all statistics and monitoring data is written, generally referred to as “DMF”
CICS/VSE	The CICS product running under the VSE/ESA operating system, frequently referred to as simply “CICS”

Table 1 (Page 1 of 2). Commonly used words and abbreviations in CICS Transaction Server for VSE/ESA Release 1

Term	Definition (and abbreviation if appropriate)
COBOL	The COBOL programming language
DB2 for VSE/ESA	Database 2 for VSE/ESA which was previously known as “SQL/DS”.
ESM	ESM is used to indicate a RACROUTE-compliant external security manager that supports some or all of the following functions: • Signon security • Transaction attach security • Resource security • Command security • Non-terminal security • Surrogate user security • MRO/ISC security (MRO, LU6.1 or LU6.2) • FEPI security.
FOR (file-owning region)—also known as a DOR (data-owning region)	A CICS region whose primary purpose is to manage VSAM and DAM files, and VSAM data tables, through function provided by the CICS file control program.
IBM C for VSE/ESA	The Language Environment version of the C programming language compiler. Generally referred to as “C/VSE”.
IBM COBOL for VSE/ESA	The Language Environment version of the COBOL programming language compiler. Generally referred to as “COBOL/VSE”.
IBM PL/I for VSE/ESA	The Language Environment version of the PL/I programming language compiler. Generally referred to as “PL/I VSE”.
IBM Language Environment for VSE/ESA	The common runtime interface for all LE-conforming languages. Generally referred to as “LE/VSE”.
PL/I	The PL/I programming language
VSE/POWER	Priority Output Writers Execution processors and input Readers. The VSE/ESA spooling subsystem which is exploited by the report controller.

Table 1 (Page 2 of 2). Commonly used words and abbreviations in CICS Transaction Server for VSE/ESA Release 1

Term	**Definition (and abbreviation if appropriate)**
VSE/ESA System Authorization Facility	The new VSE facility which enables the new security mechanisms in CICS TS for VSE/ESA R1, generally referred to as “SAF”
VSE/ESA Central Functions component	The new name for the VSE Advanced Function (AF) component
VSE/VTAM	“VTAM”

Part 1. Introduction

Chapter 1. System programming commands

This book describes the CICS system programming interface (SPI) commands. These commands are for managing CICS system resources, rather than for accessing user resources. The commands that form this interface are:

- ACQUIRE
- COLLECT
- CREATE
- DISABLE
- DISCARD
- ENABLE
- EXTRACT EXIT
- INQUIRE
- PERFORM
- RESYNC
- SET

Together, the system programming commands provide you with a command-level equivalent to the function of the master terminal transaction (CEMT)[1] and of the trace control transaction (CETR). This means that you can write your own command level applications and invoke them as transactions for administering the running CICS system. You could, for example, provide functions of the master terminal command for a particular person or group of people.

The system programming commands have all of the advantages of the other EXEC CICS commands. In particular, they are supported by the command interpreter (CECI), the execution diagnostic facility (CEDF), and the CICS translator. The SPI commands can be used in application programs written in all supported languages.

However, there are some differences between the system programming commands and basic application programming commands:

- None of the system programming commands can be function shipped.
- Application programs that contain any system programming commands must have the translator option “SP” defined to enable the translator to load the SPI language table, DFHEITBS.

  If your program contains any SPI commands and you do not specify the SP option, DFHEITBS is not loaded and the translator job step fails with message DFH7262, return code 12.
- The execution of any system programming commands can be made subject to **command security checking** (as described on page 15), provided the external security manager (ESM) in use supports command level security.

[1] Users of earlier releases of CICS may be familiar with the old programmable interface to the master terminal program (DFHEMTA). Its use is still supported, though the documentation is available only in the CICS libraries for releases prior to CICS Transaction Server for VSE/ESA Release 1.

Part 2 of this book shows the syntax of each system programming command, describes the format and purpose of each command and its options, and gives a list of the conditions that can arise during the execution of a command.

For information about translating the commands, see the *CICS Application Programming Guide*.

Command format

The general format of a CICS command is EXECUTE CICS (or EXEC CICS) followed by the name of the required **command**, and possibly by one or more **options**, as follows:

```
EXEC CICS command option(arg)....
```

where:

command describes the operation required (for example, INQUIRE).

option describes any of the many optional keywords available with each function. Some options are followed by an argument in parentheses. You can write options (including those that require arguments) in any order.

arg **(short for argument)** is an input or output value such as “data-value” or “data-area” or “cvda”. The following rules distinguish between input and output values:

- A variable described as a **data-value** is an input value to CICS, a “sender.”
- A variable described as a **data-area** is normally an output field from CICS, a “receiver,” but there are some exceptions that use a data-area as a sender.
- CICS-value data areas (CVDAs), pointer references, and strings on EXEC CICS INQUIRE commands are receivers.
- CVDAs, pointer references, and strings on EXEC CICS SET commands are senders.

An example of a CICS command is as follows:

```
EXEC CICS SET
          FILE('FILEA')
          EMPTYSTATUS(EMPTY)
          OPENSTATUS(CLOSED)
```

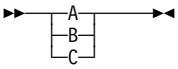
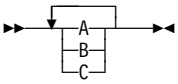
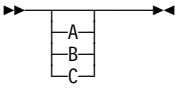
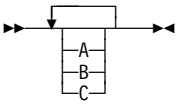
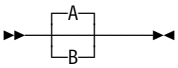
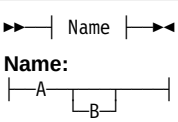
You must add the appropriate end-of-command delimiter; see “CICS syntax notation used in this book.”

CICS syntax notation used in this book

Throughout this book, CICS commands are presented in a standard way.

The “EXEC CICS” that always precedes each command’s keyword is not included; nor is the “END_EXEC” statement used in COBOL or the semicolon (;) used in PL/I and C which you must code at the end of each CICS command. In the C language, a null character can be used as an end-of-string marker, but CICS does not recognize this; you must never, therefore, have a comma or period followed by a space (X'40') in the middle of a coding line.

You interpret the syntax by following the arrows from left to right. The conventions are:

Symbol	Action
	A set of alternatives—one of which you ***must*** code.
	A set of alternatives—one of which you ***must*** code. You ***may*** code more than one of them, in any sequence.
	A set of alternatives—one of which you ***may*** code.
	A set of alternatives — any number (including none) of which you may code once, in any sequence.
	Alternatives where **A** is the default.
	Use with the named section in place of its name.
Punctuation and uppercase characters	Code exactly as shown.
Lowercase characters	Code your own text, as appropriate (for example, `name`).

For example, with `SET FILE(data-value)`, you must code `SET FILE` and `()` unchanged, but you are free to code any valid text string to replace ‘data-value’ to indicate the name of the file.

Argument values

The values in parentheses that follow certain options in a CICS command are specified as follows:

- data-value
- data-area
- filename
- cvda (CICS-value data area)
- ptr-value
- ptr-ref

COBOL argument values

The argument values can be replaced as follows:

- "data-value" can be replaced by any COBOL data name of the correct data type for the argument, or by a constant that can be converted to the correct type for the argument. The data type can be specified as one of the following:
  - Halfword binary — PIC S9(4) COMP
  - Fullword binary — PIC S9(8) COMP
  - Character string — PIC X(n) where "n" is the number of bytes
- "data-area" can be replaced by any COBOL data name of the correct data type for the argument. The data type can be specified as one of the following:
  - Halfword binary — PIC S9(4) COMP
  - Fullword binary — PIC S9(8) COMP
  - Character string — PIC X(n) where "n" is the number of bytes

  Where the data type is unspecified, "data-area" can refer to an elementary or group item.
- "filename", as used in FILE (filename), specifies the name of the file. It consists of 1–7 characters from the following list (lowercase characters are converted to upper case):

  A–Z
  0–9
  $
  @
  #

  If you replace "filename" by a COBOL data-area, its length must be eight characters, and names of less than eight characters must be padded with blanks.
- "cvda" is described in "CICS-value data areas (CVDAs)" on page 7.
- "ptr-ref" can be replaced with a pointer variable or an ADDRESS special register.
- "hhmmss" can be replaced by a decimal constant or by a data name of the form PIC S9(7) COMP-3. The value must be of the form 0HHMMSS+ where:

  HH represents hours from 00 through 99
  MM represents minutes from 00 through 59
  SS represents seconds from 00 through 59

C argument values

The argument values can be replaced as follows:

- "data-value" can be replaced by any C expression that can be converted to the correct data type for the argument. The data type can be specified as one of the following:
  - Halfword binary — short int
  - Fullword binary — long int
  - Character string — char[n] where "n" is the number of bytes

  "data-value" includes "data-area" as a subset.
- "data-area" can be replaced by any C data reference that has the correct data type for the argument. The data type can be specified as one of the following:
  - Halfword binary — short int
  - Fullword binary — long int
  - Character string — char[n] where "n" is the number of bytes

  If the data type is unspecified, "data-area" can refer to a scalar data type, array, or structure. The reference must be to contiguous storage.
- "filename", as used in FILE (filename), specifies the name of the file. It consists of 1–7 characters from the following list (lowercase characters are converted to upper case):

  A–Z
  0–9
  $
  @
  #

  If you replace "filename" by a C expression or reference, its length must be eight characters, and names of less than eight characters must be padded with blanks.
- "cvda" is described in "CICS-value data areas (CVDAs)" on page 7.
- "ptr-value" (which includes "ptr-ref" as a subset) can be replaced by any C expression that can be converted to an address.
- "ptr-ref" can be replaced by any C pointer type reference.
- "hhmmss" is not supported in the C language.

PL/I argument values

The argument values can be replaced as follows:

- "data-value" can be replaced by any PL/I expression that can be converted to the correct data type for the argument. The data type can be specified as one of the following:
  - Halfword binary — FIXED BIN(15)
  - Fullword binary — FIXED BIN(31)
  - Character string — CHAR(n) where "n" is the number of bytes

  "data-value" includes "data-area" as a subset.
- "data-area" can be replaced by any PL/I data reference that has the correct data type for the argument. The data type can be specified as one of the following:
  - Halfword binary — FIXED BIN(15)

- Fullword binary — FIXED BIN(31)
- Character string — CHAR(n) where “n” is the number of bytes

If the data type is unspecified, “data-area” can refer to an element, array, or structure; for example, FROM(P–>STRUCTURE) LENGTH(LNG). The reference must be to connected storage.

The data area must also have the correct PL/I alignment attribute: ALIGNED for binary items, and UNALIGNED for strings.

If you use a varying data string without an explicit length, the data passed begins with two length bytes, and its length is the maximum length declared for the string. If you explicitly specify a length in the command, the data passed has this length; that is, the two length bytes followed by data up to the length you specified.

- “filename”, as used in FILE (filename), specifies the name of the file. It consists of 1–7 characters from the following list (lowercase characters are converted to upper case):

  A–Z
  0–9
  $
  @
  #

  If you replace “filename” by a PL/I expression or reference, its length must be eight characters, and names of less than eight characters must be padded with blanks.
- “cvda” is described in “CICS-value data areas (CVDAs)” on page 7.
- “ptr-value” (which includes “ptr-ref” as a subset) can be replaced by any PL/I expression that can be converted to POINTER.
- “ptr-ref” can be replaced by any PL/I reference of type POINTER ALIGNED.
- “hhmmss” can be replaced by a decimal constant or an expression that can be converted to a FIXED DECIMAL(7,0). The value must be of the form 0HHMMSS+ where:

  HH represents hours from 00 through 99
  MM represents minutes from 00 through 59
  SS represents seconds from 00 through 59

If the UNALIGNED attribute is added to the ENTRY declarations generated by the CICS translator by a DEFAULT DESCRIPTORS statement, data-area or pointer-reference arguments to CICS commands must also be UNALIGNED. Similarly for the ALIGNED attribute, data-area or pointer-reference arguments must be ALIGNED.

Assembler-language argument values

In general, an argument may be either the address of the data or the data itself (in assembler-language terms, either a relocatable expression or an absolute expression).

A relocatable expression must not contain unmatched brackets (outside quotation marks) or unmatched quotation marks (apart from length-attribute references). If this rule is obeyed, any expression can be used, including literal constants, such as =AL2(100), forms such as 20(0,R11), and forms that use the macro-replacement facilities.

An absolute expression must be a single term that is either a length-attribute reference, or a self-defining constant.

Care must be taken with equated symbols, which should be used only when referring to registers (pointer references). If an equated symbol is used for a length, for example, it is treated as the address of the length and an unpredictable error occurs.

The argument values can be replaced as follows:

- “data-value” can be replaced by a relocatable expression that is an assembler-language reference to data of the correct type for the argument, or by a constant of the correct type for the argument.
- “data-area” can be replaced by a relocatable expression that is an assembler-language reference to data of the correct type for the argument.
- “filename”, as used in FILE (filename), specifies the name of the file. It consists of 1–7 characters from the following list (lowercase characters are converted to upper case):

  A–Z
  0–9
  $
  @
  #

  If you replace “filename” by an assembler language relocatable expression, its length must be eight characters, and names of less than eight characters must be padded with blanks.
- “cvda” is described in “CICS-value data areas (CVDAs)” on page 7.
- “ptr-value” can be replaced by an absolute expression that is an assembler-language reference to a register.
- “ptr-ref” can be replaced by an absolute expression that is an assembler-language language reference to a register.
- “hhmmss” can be replaced by a self-defining decimal constant, or an assembler-language reference to a field defined as PL4. The value must be of the form 0HHMMSS+ where:

  HH represents hours from 00 through 99
  MM represents minutes from 00 through 59

SS represents seconds from 00 through 59.

CICS-value data areas (CVDAs)

Each INQUIRE and SET command has a number of variables that describe or define a resource. For some of these variables, you define your own value. For example, resource names are generally user-defined.

Other variables, specifically those that refer to resource status or definition, have values that are CICS-supplied. These variables are known as **CICS-value data areas**, and are shown in the syntax of the INQUIRE and SET commands with the term “cvda” in parentheses. They are fullword binary.

The variable lists that follow the INQUIRE and SET syntax boxes tell you the valid settings for each variable that is defined as a CVDA. As an example, here is the syntax of the EXEC CICS SET JOURNALNUM command, which is described in “SET JOURNALNUM” on page 159.

```
EXEC CICS SET JOURNALNUM (halfword binary data-value)
             OPENSTATUS (cvda)
```

The value of the JOURNALNUM variable is user-defined. OPENSTATUS is a CVDA, and it can contain a value equivalent to one of the values CLOSED, CLOSELEAVE, OPENOUTPUT, and ADVANCE. No other value is valid for this variable.

A complete list of all CVDAs and their decimal values is supplied in Appendix A, “CICS-value data areas used by all commands” on page 195.

CVDAs on INQUIRE commands

On an INQUIRE command, you define a fullword binary data area to receive the current value of each variable defined as a CVDA. You then test the returned value using the translator routine DFHVALUE. For example, the command:

```
EXEC CICS INQUIRE FILE(file_name)
                  OPENSTATUS(symbol_name)
```

could return the decimal number 18—the equivalent of the OPENSTATUS value ‘OPEN’ into your fullword binary data area **symbol_name**, and you would test the value as follows:

```
IF symbol_name = DFHVALUE(OPEN). . .
```

The CVDA value NOTAPPLIC is returned if a variable on an INQUIRE command is not applicable to the named resource; see “Null values” on page 10.

CVDAs on SET commands

On SET commands you can supply a CVDA value in one of two ways, as follows:

1. You can assign a CVDA value using the translator routine DFHVALUE and the CVDA name, as in the following example:

   ```
   symbol_name = DFHVALUE(OPEN)
   EXEC CICS SET FILE(file_name)
                 OPENSTATUS(symbol_name)
   ```

   This allows you to change a CVDA value in your program as the result of other run-time factors.

   Optional attributes can be left unchanged by specifying the CVDA value IGNORE. See “Null values” on page 10.

2. If the required action is always the same for a particular code section, you can declare the action directly using the following form:

   ```
   EXEC CICS SET FILE(file_name)
                 OPEN
   ```

CVDA sample code

Here are four examples in assembler-language, PL/I, COBOL, and C which show an INQUIRE command and a SET command and which use the DFHVALUE routine.

Assembler-language version

```
         DFHEISTG
         .
         .             *USER-DEFINED VARIABLES FOR:
UOPST    DS    F       *OPEN STATUS
UENST    DS    F       *ENABLE STATUS
UREAD    DS    F       *READ STATUS
UUPD     DS    F       *UPDATE STATUS
INFILE   DS    CL8     *FILE NAME
         .
         .
SYNTAXD  CSECT
   .
   .
         MVC INFILE(8),=C'PAYROLLb'
         EXEC CICS INQUIRE FILE(INFILE)
                   OPENSTATUS(UOPST)
                   ENABLESTATUS(UENST)
*
*
         CLC   UOPST,DFHVALUE(OPEN)     *IS FILE
                                            OPEN?
         BE    OPENLAB                  *YES, BYPASS
                                            SETTING
                                            SERVREQS
*
         MVC   UREAD,DFHVALUE(READABLE)
         MVC   UUPD,DFHVALUE(NOTUPDATABLE)
*
*
         EXEC CICS SET FILE(INFILE)
                   READ(UREAD)
                   UPDATE(UUPD)
                   NOTADDABLE
                   NOTDELETABLE
         EXEC CICS RETURN
*
OPENLAB  DS    0H
*
```

PL/I version

```
 DCL
 .
 .                  /*USER-DEFINED VARIABLES FOR: */
 (UOPST,            /*OPEN STATUS                */
 UENST,             /*ENABLE STATUS              */
 UREAD,             /*READ STATUS                */
 UUPD)FIXED BIN(31), /*UPDATE STATUS             */
 INFILE CHAR(8);    /*FILE NAME                  */
 .
 .
        INFILE='PAYROLLb';
        EXEC CICS INQUIRE FILE(INFILE)
                  OPENSTATUS(UOPST)
                  ENABLESTATUS(UENST);
 /**/
 /**/
      IF UOPST = DFHVALUE(CLOSED) THEN
      DO;
        UREAD= DFHVALUE(READABLE);
        UUPD = DFHVALUE(NOTUPDATABLE);
 /**/
 /**/
        EXEC CICS SET FILE(INFILE)
                  READ(UREAD)
                  UPDATE(UUPD)
                  NOTADDABLE
                  NOTDELETABLE;
        EXEC CICS RETURN;
 /**/
      END;
```

COBOL version

```
 DATA DIVISION.
 WORKING-STORAGE SECTION.
 01  MESSAGES.
 .
 .
 *                      USER-DEFINED VARIABLES FOR
 *                      OPEN STATUS, ENABLE STATUS,
 *                      READ STATUS, UPDATE STATUS,
 *                      AND FILE NAME
 01  UOPST              PIC S9(8) COMP.
 01  UENST              PIC S9(8) COMP.
 01  UREAD              PIC S9(8) COMP.
 01  UUPD               PIC S9(8) COMP.
 01  INFILE             PIC X(8).
 .
 .
 CICS-REQUESTS.
 MOVE 'PAYROLLb' TO INFILE.
 EXEC CICS INQUIRE FILE(INFILE)
           OPENSTATUS(UOPST)
           ENABLESTATUS(UENST)
           END-EXEC.
*
*
 IF UOPST NOT = DFHVALUE(CLOSED)
    THEN GOBACK.
*
 MOVE DFHVALUE(READABLE)     TO UREAD.
 MOVE DFHVALUE(NOTUPDATABLE) TO UUPD.
*
*
 EXEC CICS SET FILE(INFILE)
           READ(UREAD)
           UPDATE(UUPD)
           NOTADDABLE
           NOTDELETABLE
           END-EXEC.
 EXEC CICS RETURN.
*
```

C version

```
#define INFILE    "PAYROLL"
main()
 {
  long   uopst,     /* OPENSTATUS value   */
         uenst,     /* ENABLESTATUS value */
         uread,     /* READ vale          */
         uupd;      /* UPDATE value       */
  EXEC CICS ADDRESS EIB(dfheiptr);
  EXEC CICS INQUIRE FILE(INFILE)
                    OPENSTATUS(uopst)
                    ENABLESTATUS(uenst);
  if( uopst == DFHVALUE(CLOSED) )
   {
    uread = DFHVALUE(READABLE);
    uupd  = DFHVALUE(NOTUPDATABLE);
    EXEC CICS SET FILE(INFILE)
                  READ(uread)
                  UPDATE(uupd)
                  NOTADDABLE
                  NOTDELETABLE;
   }
  EXEC CICS RETURN;
 }
```

Argument lengths

Arguments in character form can be variable in length; the USERDATA option in the ACQUIRE TERMINAL command is an example. Where this occurs, CICS provides an option with which you can specify the length of the data, and you must do so if you are coding in C. In COBOL, PL/I and assembler, however, you do not ordinarily need to specify this option because, if you omit it, the translator generates the length option and supplies the correct value using the language facilities. In COBOL, for example, if you write:

```
EXEC CICS ACQUIRE TERMINAL('ABCD')
          USERDATA(LOGONMSG) END-EXEC
```

the translator adds the USERDATALEN option, as if you had written:

```
EXEC CICS ACQUIRE TERMINAL('ABCD')
          USERDATALEN(LENGTH OF LOGONMSG)
          USERDATA(LOGONMSG) END-EXEC
```

Note that the translator gets the length directly from the variable name, so you must use a name with the correct length associated if you omit the length option. In COBOL, VS COBOL II, PL/I and assembler language, if the translator option NOLENGTH is used, the translator will not default the length options.

Null values

If you issue an INQUIRE command to find out the value of an attribute that is not applicable to the named resource, a "null value" is returned in the data area that you have defined.

For example, if you issue the command:

```
EXEC CICS INQUIRE TDQUEUE(queue_name)
                  BLOCKFORMAT(cvda)
```

for an intrapartition transient data queue, a null value is returned in the BLOCKFORMAT CVDA because BLOCKFORMAT is a valid option for extrapartition queues only.

Null values depend on the format of the user-defined data area, and are defined as follows:

- Character fields are set to blanks.
- Binary fields are set to –1.
- Pointer fields are set to X'FF000000'.
- CVDA fields contain the value NOTAPPLIC.

If you issue a SET command that includes "null" attribute values, the corresponding attributes are ignored. You are most likely to want to do this when the field is defined as a CVDA. However, in all cases, if you simply omit an optional attribute from a SET command, its value remains unchanged.

CVDAs on SET commands can have the value IGNORE. This is the same value as NOTAPPLIC on an INQUIRE command. The SET command is coded in the following way:

```
symbol_name = DFHVALUE(IGNORE)
EXEC CICS SET FILE(file_name) READABLE
          DELETE(symbol_name)
ADDABLE END-EXEC
```

You can then read from and add to the file, and the delete status stays the same as it was before the SET command was issued.

NOHANDLE option

You can use the NOHANDLE option with any command to specify that you want no action to be taken for any condition resulting from the execution of that command.

For further information on this option, see the *CICS Application Programming Guide*.

RESP and RESP2 options

You can use the RESP option with any command to test whether a condition was raised during its execution. With some commands, when a condition can be raised for more than one reason, you can use the RESP2 option to determine more precisely why a condition occurred.

After the execution of an EXEC CICS command, the RESP field contains a decimal value that indicates whether the command executed successfully (RESP value 0, symbolic name NORMAL), or whether a CICS condition was raised. RESP values for the conditions that can be raised by the SP commands are listed in Appendix B, "EXEC interface block (EIB) response and function codes" on page 205.

The RESP value can be tested using the CICS built-in function DFHRESP, as shown in the following example of the EXEC CICS SET FILE command:

```
EXEC CICS SET FILE ENABLED RESP(RC)
IF RC = DFHRESP(NORMAL) THEN ...
IF RC = DFHRESP(INVREQ) THEN ...
IF RC = DFHRESP(NOTAUTH) THEN ...
```

The RESP2 value further qualifies conditions raised by the SP commands, and can therefore be coded only with the RESP option. RESP2 is particularly important because the RESP value can often have more than one meaning. For example, the 'INVREQ' condition that can be raised by a SET FILE command can have over twenty different meanings, and it is only by examining the RESP2 value that you can find out exactly what is wrong.

RESP and RESP2 are fullword binary values, and their formats are as follows:

```
ASM    F
COBOL  PIC S9(8)COMP
PL/I   FIXED BIN(31)
C      LONG INT;
```

RESP2 values are unique within a command. Because of this, you can test either the RESP or the RESP2 value. However, unlike the RESP value, RESP2 has no associated symbolic values, so you must test the fullword binary value itself. Possible values of the RESP2 option are given with the description of each of the commands.

For information about condition handling in general, see the *CICS Application Programming Guide*.

INQUIRE and SET commands

The INQUIRE and SET commands give access to the definitions of the following CICS resources:

- Autoinstall
- Connection
- Dump data sets (DUMPDS)
- External data set (DSNAME)
- File
- Interregion communication (IRC)
- Journal (JOURNALNUM)
- Modename
- Monitor
- Partner
- Profile
- Program
- Request identifiers (REQID)

- Statistics
- Storage
- System
- System dump code (SYSDUMPCODE)
- Task
- Task class (TCLASS)
- Task list (TASK)
- Temporary storage queues (TSQUEUE)
- Terminal or netname
- Terminal model for autoinstall (AUTINSTMODEL)
- Trace flags (TRACEFLAG)
- Trace levels (TRACETYPE)
- Tracing (TRACEDEST)
- Transaction
- Transaction class (TRANCLASS)
- Transaction dump code (TRANDUMPCODE)
- Transient data queues (TDQUEUE)
- User exit (EXITPROGRAM)
- VTAM®

The following information applies to all of the INQUIRE and SET commands:

- Normally the order of the options on INQUIRE and SET commands does not matter, but there are some exceptions. If two or more of the options specified are valid resource types, the first is treated as a search attribute. All the others are treated as input data values for a SET command and are treated as output data areas for an INQUIRE command.
- CICS does not gain exclusive control of the information that is returned by an INQUIRE command. This means that it can be changed at any time for example by the issue of a SET command.
- If any condition occurs as a result of an INQUIRE command, no values are returned.
- If a condition occurs as a result of a SET command, as few as possible of the requested changes will have been made on return. To establish which, if any, changes have been made, you can issue an INQUIRE command.
- In almost all cases, the values that can be changed by a SET command are a subset of those that can be retrieved by an INQUIRE command.
- If a resource is defined as REMOTE, its definition may be retrieved but, in general, not updated. Any attempt to update the remote definition will result in INVREQ being returned to the application. For the few exceptions to this, see the individual SET commands.
- There is no remote (that is, function shipping) support for INQUIRE and SET commands, nor is there a SYSID option on them. Transactions using these commands must therefore be routed to the CICS regions that own the resources they refer to. In general, such transactions cannot be dynamically routed to any AOR and, therefore, transactions that use INQUIRE and SET commands should be statically routed.

  For further information, see the *CICS Application Programming Guide*.

  All of the resources for which you can use the INQUIRE command must have been defined to CICS. For information about the attributes of these resources, read one of the books that describe the resource definition process. These are the *CICS Resource Definition Guide* and, for the definition of dump codes, the *CICS Problem Determination Guide*.
- Any changes that you make using the SET command are in effect until they are next changed, or until the resource is reinstalled, or until the next CICS cold start, unless otherwise stated.
- You do not have to issue an INQUIRE command before issuing a SET command.

Browsing resource definitions

The INQUIRE commands that apply to resources ordinarily retrieve information about a **single** resource that you name when you issue the command, and the individual command syntax discussions in the next section describe them in this form.

However, there is another form that enables you to browse through some or all of the definitions of a given type. The resource types that you are allowed to browse are the following:

- Connection
- External data set (DSNAME)
- File
- Journal (JOURNALNUM)
- Partner
- Profile
- Request identifiers (REQID)
- Session group (MODENAME)
- System dump code (SYSDUMPCODE)
- Temporary storage queue (TSQUEUE)
- Terminal
- Terminal model for autoinstall (AUTINSTMODEL)
- Transaction
- Transaction class (TRANCLASS)
- Transaction dump code (TRANDUMPCODE)
- Transient data queue (TDQUEUE)
- User exit (EXITPROGRAM)

Starting a browse

A browse involves three steps. First, you issue the INQUIRE command with an additional option, START, to set up the browse. This command does not produce any information; it just tells CICS what you are going to do. The general form of the command is:

Browse START

```
INQUIRE resource-type START
```

In addition to the START option, there are several differences in the way you issue this set-up command from the normal syntax:

- You identify the resource type only, without providing a resource name. That is, the resource-type appears without its customary data value.
- You omit all of the options in which CICS returns information to you.
- For some resource types where there are options that **send** information to CICS, in addition to resource name, you sometimes can provide a value that limits the scope of the browse. The only case where you do this on the START command is INQUIRE EXITPROGRAM. The details are included in the description of that command.

Generally, CICS returns resource definitions to you in the order it keeps them internally. You cannot control this order, and you should not depend on it always being the same. For a few resource types, however, CICS returns definitions in alphabetic order of resource name. These are:

- Programs
- Temporary storage queues
- Transactions
- Transaction classes

For these resources only, you can specify a starting point for the browse with the AT option on the INQUIRE START:

START browse AT

```
INQUIRE resource_type START AT(data-value)
```

The AT data value is the name at which you want to start. It must be in the correct format for a name of the resource type being browsed, but it does not have to correspond to an installed resource; it is used only to start the browse at the proper point in the resource list. CICS will restrict the definitions that it returns on your INQUIRE NEXT commands to resources with names equal to or greater (in the collating sequence) than the value you provide.

Retrieving the next resource

In the second step, you issue the INQUIRE command repetitively with another new option, NEXT. CICS returns one resource definition for each INQUIRE NEXT, and you continue until you have seen all the definitions you want, or you run out of definitions. The general format is:

Browse NEXT

```
INQUIRE resource_type(data-area) NEXT option...option
```

Apart from the addition of NEXT, the options are almost the same on an INQUIRE NEXT as on a single INQUIRE for the same type of resource. Again, however, there are some differences:

- Instead of specifying the name of the resource (a data value), you provide a **data area** of the same length for CICS to return the name of the next resource to you.
- Options by which CICS returns data to you are used in the same way as on the single-resource form.
- Mandatory options that send information in a single-resource INQUIRE generally are ignored (the data-value you provide is unchanged). However, in some cases, such as the CONNECTION option on INQUIRE MODENAME, their roles change in a browse. These differences are also noted in the commands to which they apply.

You repeat the INQUIRE NEXT command until you have seen the resource definitions you want. After you have retrieved all of them, CICS raises the END condition on subsequent INQUIRE NEXTs (and leaves the data areas you provide unchanged). However, you do not have to retrieve all the definitions; you can stop the browse at any time.

Ending the browse

Stopping the browse is the final step. To do so you issue an INQUIRE for the resource type with just the END option, thus:

Browse END

```
INQUIRE resource_type END
```

Browse example

Here is an example of a typical browse sequence. This code retrieves the names of all the files installed in the system and calls a subroutine to process information about the recovery characteristics if the file is open.

Browse example

```
EXEC CICS INQUIRE FILE START END-EXEC.
PERFORM UNTIL RESPCODE = DFHRESP(END)
    EXEC CICS INQUIRE FILE(FILENAME) NEXT
        OPENSTATUS(OPENSTAT)
        RECOVSTAT(RCVRSTAT)
        FWDRECSTATUS(FWDSTAT)
        RESP(RESPCODE) END-EXEC
    IF OPENSTAT = DFHVALUE(OPEN)
        CALL RCVY-RTN USING RCVRSTAT, FWDSTAT
END-PERFORM.
EXEC CICS INQUIRE FILE END END-EXEC.
```

Rules for browsing

In addition to the syntax changes described above, there are some rules you should note about browsing resource definitions:

1. Your position in a browse is associated with your task, so that it is preserved across LINK and XCTL commands.

   Note: Programs that run as part of a program list table (PLT) during CICS initialization or termination run under a single task. Consequently, they should terminate explicitly any browse they begin, in order not to conflict with other programs in the same PLT.

2. A SYNCPOINT command does not end a browse or affect your position in it either.
3. Resource definitions are not locked during a browse, and another task may change the definitions while you are inquiring on them.
4. Nonetheless, you should always end a resource browse explicitly, rather than allowing end-of-task processing to do so implicitly, because a browse holds control blocks that other tasks may require for browsing.
5. The resource currently being inquired on should not be deleted since the current resource is used to position to the next resource on a subsequent GETNEXT command. Only after the subsequent GETNEXT command can the resource be deleted, since it is no longer required for positioning within this browse request.
6. INQUIRE NEXT commands usually do not cause a task switch. Therefore, a task browsing a long list of resources may exceed the runaway task interval without ceding control, causing CICS to abend it with an AICA code. If this occurs, you need to intersperse a SUSPEND command periodically among your INQUIRE NEXTs.
7. During a browse, CICS returns only those definitions that you are authorized to see. The others are skipped without any indication to you.
8. You can browse more than one type of resource at the same time, but you can have only one browse in progress for a particular resource type.

Exception conditions

Two conditions can occur on the browse forms of an INQUIRE command, in addition to those that apply to the single-resource form of the command:

Condition	RESP2	Meaning
END	2	INQUIRE NEXT has been issued, but there are no more resource definitions of the type being browsed.
ILLOGIC	1	A START has been given when a browse of the same resource type is already in progress, or a NEXT or an END has been given without a preceding START.

Creating resource definitions

CREATE commands allow you to add resource definitions to the local CICS region by program, so that you can write applications to administer a running CICS system. These definitions are equivalent to those produced by CEDA transactions. They are recorded in the CICS global catalog and persist over a warm or emergency restart.

However, CREATE commands neither refer to nor record in the CICS system definition (CSD) file. Consequently, the resulting definitions are lost on a cold start, and you cannot modify them in a CEDA transaction.

You can create definitions for the following types of resources:

- Connections
- Files
- LSR pools
- Map sets
- Partition sets
- Partners
- Profiles
- Programs
- Sessions
- Terminals
- Terminal types (TYPETERMs)
- Transaction classes
- Transactions

A CREATE command corresponds to a combined CEDA DEFINE and INSTALL, except for not updating the CSD file. If there is no resource of the same name and type already installed, the new definition is added to the resources of your CICS region. (Definitions always apply to the local CICS region, even if they describe resources located on a remote system.) If the resource is already installed, the new definition replaces the old one, (an implicit discard of the old resource occurs). In this situation, most restrictions that would apply to a DISCARD command naming this resource, apply to the CREATE.

During the processing, CICS syncpoints your task, as if a SYNCPOINT command had been issued along with the CREATE. Changes made to recoverable resources between the CREATE and task start (or the most recent syncpoint) are committed if processing is successful, and rolled back if not. (For TERMINAL definitions and CONNECTION-SESSIONS definitions that require more than one CREATE command to complete, the syncpoint takes place on the final CREATE of the sequence.)

If an error is detected before installation processing begins, installation is not attempted. CICS raises an exception condition and returns control to the issuing task without syncpointing. However, some errors are detected later in the process and cause rollback, and all successful CREATEs cause a commit. Tasks using these commands need to be written with these commit effects in mind.

In addition, the implied syncpoint means that CREATE commands cannot be issued in a program invoked by a distributed program link unless the LINK command specifies SYNCONRETURN, in a program with an EXECUTIONSET value of DPLSUBSET, or in any other situation where syncpoint is not allowed.

CREATE commands can be executed at any time after the start of the third phase of CICS initialization. This means they can be used in programs specified in the second section of the program load table for postinitialization (PLTPI) as well as during normal CICS execution.

ATTRIBUTES option

The specifics of the resource definition that a CREATE command installs are conveyed through the ATTRIBUTES option value, which is a character string listing the attributes of the resource. You specify attributes and attribute values in text form, in the same way that you do on a CEDA DEFINE screen. This character string is analyzed at the time the CREATE command is executed, and consequently must consist entirely of text, rather than variable names, in a single string. The syntax within the string is provided for each CREATE command, using the same conventions as command syntax, except for the attribute values, as noted below. However, the contents are *not* parsed by the translator, which checks only the command syntax, shown in the main diagram.

Attribute values appear essentially as they do on CEDA DEFINE screens. However, since DEFINE screens are pre-formatted and ATTRIBUTES strings are not, you need to know the following rules:

- Attributes may appear in any order (you do not have to follow the order in the syntax diagram or in the CEDA command).
- The name of an attribute must be that shown in the syntax diagram or the abbreviation permitted in the corresponding CEDA DEFINE entry (see the discussion of DEFINE in the *CICS Resource Definition Guide*). You do not have to use the upper case shown in the diagram, however; lower or mixed case is accepted.

  Note: Abbreviations can change from release to release, and thus full spellings are recommended.
- The argument value, if any, must follow the rules for the same attribute in a CEDA DEFINE panel. Where there are a limited number of possible values, they are listed in the attributes diagram in upper case. Otherwise the diagram indicates only the form of the value, using the following conventions:

  char*n* A character string of length *n* or, where the argument can be of variable length, of maximum length *n*. Note that unlike CEDA and DFHCSDUP, argument values are not converted to uppercase.

  hex*n* A string of hexadecimal characters of length *n* or, where the argument can be of variable length, of maximum length *n*.

  n1-n2 A number in the range *n1* to *n2*.

  Note: You can omit trailing blanks in character arguments, trailing X'00's in hexadecimal arguments, and leading zeros in numeric arguments. In all cases, you should refer to the *CICS Resource Definition Guide* for specific rules about the argument values.
- For readability, you can use one or more blanks to separate attributes, but a blank is actually required only between an attribute that has no argument and the next attribute. Commas and other separators are not allowed. Blanks may also appear between an attribute name and the parentheses that surround its argument, and between the parentheses and the argument value, but they are not necessary. Thus both of these, and obvious combinations, are correct:

```
ATTRIBUTES ( 'UCTRAN (NO)RTIMEOUT (10 )')
ATTRIBUTES(' UCTRAN(NO)   RTIMEOUT( 10) ' )
```

- No quote marks are required within the attribute string (you need them around the whole string if you use a literal, of course, as in the example above). If you want quotes within your text–in the DESCRIPTION attribute, for example–use two quote characters for each one that you want to appear in the text, as you do in literal constants that contain quotes.
- Very few attributes require specification, and omitting one is equivalent to leaving its value blank on a CEDA screen. Where the default value is always the same, it is shown in the diagram in the same way as in syntax diagrams. However, some defaults depend on the values of other attributes, and these are not shown. (You cannot define your own defaults, because CREATEs do not use the CSD file.)
- For some resource types, you can default all attributes. If you wish to do this, set the length of the string to zero in the ATTRLEN option. You must still specify the ATTRIBUTES option in this case, even though the data-value you provide is not examined.
- The ATTRLEN option can be omitted when it is not zero if it is the length of the variable specified in ATTRIBUTES and you are not coding in C, as explained in "Argument lengths" on page 9.

If you make an error in the ATTRIBUTES string, CICS raises the INVREQ condition with an appropriate RESP2 value. Appendix C, "EXEC CICS CREATE RESP2 values" on page 211 lists the RESP2 values that apply.

Discarding resource definitions

The DISCARD command deletes the definition of a resource installed in an executing CICS system, so that the system no longer has access to the resource. It reverses the effect of the installation of the resource, which occurs either at system startup or through a subsequent CEDA transaction.

Each DISCARD command removes the definition of one resource. You can remove definitions for the following types of resources:

- Files
- Map sets
- Partition sets
- Partners
- Profiles
- Programs
- Terminal models for autoinstall (AUTINSTMODEL)
- Transaction classes (TRANCLASS)
- Transactions

You cannot discard a resource that is currently in use. For example, you cannot discard a profile definition if some transaction definition still installed points to it, or a file that is open, or a transaction that is scheduled for execution.

In addition, some resources are not eligible for discard at all. These include resources whose names begin with the letters DFH, reserved for CICS-supplied definitions, and transactions whose names begin with C (also reserved for CICS).

Discards are recorded in the CICS catalog, so that their effects persist over a warm or emergency restart, but they do not modify the CSD file, and so are lost on a cold or initial start.

Enabling and disabling user exits

EXEC CICS ENABLE and DISABLE commands are used for enabling and disabling global and task-related user exits. For programming information about global and task-related user exits, see the *CICS Customization Guide*.

For CICS resource definition purposes, a load module that contains one or more user exits is treated as a single *program*. Each such load module must be defined to CICS as a program, and the definition must be available on the running CICS system.

For the purposes of the EXEC CICS commands described in this section, a user exit is identified by an ENTRYNAME, and the load module that contains it is identified by a PROGRAM name. A user exit is thus uniquely identified by a combination of its PROGRAM name and its ENTRYNAME. Because the ENTRYNAME operand is optional, and defaults to the value of the PROGRAM operand, these two names can be the same. This is appropriate for load modules that contain only a single user exit.

General points about the ENABLE and DISABLE commands

The following information applies generally to the ENABLE, DISABLE, and other commands described in the preceding section:

- The commands can be issued from applications written in COBOL, C, PL/I, or assembler language.
- The enabling and disabling of an exit program overrides, but does not alter, the enable or disable status of the program in the installed program definition of the load module.
- Enable and disable activity is not backed out by the dynamic transaction backout program if the application program terminates abnormally.
- Enable and disable activity is not included in system-activity keypointing or warm keypointing. *Thus, exit program status is not restored by CICS during an emergency restart or warm start.*
- When a CICS system is being used in several regions, exit activity is independent for each region, even if (for global user exits) the management module or domain is shared. This means that exit programs must be enabled and disabled in each of the regions in which they are to be used.

In the descriptions of the commands, options that are applicable only to task-related user exits, or only to global user exits, are identified in the syntax displays and in the option descriptions.

Examples of the ENABLE command are given on page 59, and the DISABLE command on page 52.

Security checking of the system programming commands

In addition to normal transaction security and resource security, transactions that issue system programming commands can be made subject to **command security**, provided the external security manager (ESM) in use supports it.

Command security applies to the following commands:

- ACQUIRE
- COLLECT
- DISABLE
- DISCARD
- ENABLE
- EXTRACT EXIT
- INQUIRE
- PERFORM
- RESYNC
- SET

CICS uses an external security manager (ESM) to perform command security checking for these commands.

Resource security for system programming commands

Command security checks the authority of the user to issue a system programming command. If a system programming command acts upon a specific resource, the authority of the user to access or change that resource is subject to normal resource security checking, provided the external security manager (ESM) in use supports **resource level security**.

The following are the resources accessed by system programming commands to which resource security checking can also be applied:

- Files (INQUIRE|SET FILE)
- Journals (INQUIRE|SET JOURNALNUM)
- Programs (INQUIRE|SET PROGRAM)
- Temporary storage queues (INQUIRE TSQUEUE)
- Transactions (INQUIRE|SET TRANSACTION and INQUIRE REQID)
- Transient data queues (INQUIRE|SET TDQUEUE)
- User exit programs (INQUIRE EXITPROGRAM)

COLLECT STATISTICS will also do resource checks depending on the options.

Users of transactions that issue INQUIRE or SET commands for these resource types must have authority not only to issue the command, but also to access the resource itself. Resource security for a transaction that issues system programming commands is specified in the normal way, by means of RESSEC=NO|YES.

As an example, consider a transaction defined with CMDSEC=YES and RESSEC=YES that issues the command:

```
EXEC CICS SET FILE('FILEA') OPENSTATUS(DFHVALUE(OPEN))
```

Two calls are required to the ESM to check the authority of the user to change the file status, as follows:

	Resource class	**Resource name**
1st call	CCICSCMD	FILE
2nd call	FCICSFCT	FILEA

(This assumes that the XCMD=YES and XFCT=YES system initialization parameters have been coded.)

Command security checking is done before resource security checking, and the resource security check is not made if the command security check fails.

Security check failures (NOTAUTH condition)

If a command security check or a resource security check fails, the NOTAUTH condition (RESP value 70) is returned by the issuing transaction.

You can use the RESP2 value to distinguish between a command security check failure (RESP2 value 100) and a resource security check failure (RESP2 value 101). Note that a RESP2 value of 101 cannot be returned by an INQUIRE NEXT command. INQUIRE NEXT returns the next resource that the user has authority to access.

You should code for both RESP and RESP2 on those commands where both responses are possible.

The QUERY SECURITY command

You can find out whether you are authorized to access a resource or to issue a system programming command by issuing the EXEC CICS QUERY SECURITY command. This is not a system programming command, so you do not need authority to issue it.

The issue of the QUERY SECURITY command does not constitute an attempt to access a resource, and it cannot prevent resource access.

The significance of the response returned by this command depends on whether the ESM in use supports resource level or command level security checking.

For programming information about the QUERY SECURITY command, see the *CICS Application Programming Reference* manual; for background information, see the *CICS Security Guide*.

The programmable interface to master terminal functions

This section describes the programmable interface to the master terminal transaction, CEMT. The functions provided by the master terminal transaction can be invoked from application programs, by a command such as:

```
EXEC CICS LINK PROGRAM('DFHEMTA')
              COMMAREA(CEMTPARM)
```

where DFHEMTA is the name of the entry point in the master terminal program, and CEMTPARM is a user-defined name of a parameter list consisting of five 24-bit addresses (each contained in a fullword) as follows:

1. Address of a field containing the master terminal command in source form.
2. Address of a halfword binary field specifying the length of the command. The maximum length of the input command is 1022 bytes.
3. Address of a 1-byte indicator field defined as follows:

- X'80'-display output at terminal, and wait for further CEMT terminal commands. Control returns to the terminal when you press PF3.
- X'00'-return output, and control to application program.

4. Address of a field in which output is to be placed by CEMT.
5. Address of a halfword binary field specifying the maximum length of output that the application can handle.

When the output is returned, it is in one, or two concatenated, structured fields. Each field has the format:

- Binary halfword containing inclusive length of field.
- Binary halfword containing:
  - For the translation stage - number of messages produced.
  - For execution stage - number of resources (that is, lines of text).
- Binary halfword containing:
  - For the translation stage - highest message-severity, 0, 4, and 8 continue to execution, 12 do not continue to execution.
  - For the execution stage - code for last response that was not normal, see EIERM001 and so on in DFHEIMDS for the meaning of each code.
- Variable-length data containing:
  - For the translation stage - diagnostic messages if there are any.
  - For the execution stage - one line of data for each resource, each line beginning with a new line (NL) character and consisting of blanks and uppercase alphanumerics.

The format of this data is not guaranteed from release to release, but is the same as displayed by CEMT. (Analysis of this data should not normally be necessary if commands referring to more than one resource are avoided.)

The output from a single request comprises one field for the translation stage and one or none for the execution stage. If the total output is longer than the maximum length specified by the user, it is truncated.

Notes:

1. An attempt to start CEMT from an application program by an EXEC CICS START command fails. This is because CEMT's first action is to request input from its associated terminal, whereas an automatically initiated transaction must first send data to the terminal.

   An attempt to start CEMT under CECI by an EXEC CICS START command fails for similar reasons.
2. The programmable interface to CEMT, using entry point DFHEMTP, is still supported for compatibility reasons.

Invoking the report controller CEOS and CEMS transactions

This section explains how to invoke the report controller CEOS and CEMS transactions using EXEC CICS START. You can do this only on a system in which the report controller is installed.

You can invoke CEMS, for example, as follows:

```
EXEC CICS START TRANSID('CEMS')
                RTRANSID('xxxx')
                TERMID('tttt')
```

On completion of the CEMS transaction in this example, transaction 'xxxx' is started at terminal 'tttt'.

If you omit the RTRANSID keyword, or if an error occurs when the transaction 'xxxx' is started, CEOS or CEMS returns to CICS. CEOS and CEMS cannot be invoked using LINK or XCTL. If you attempt this, CICS terminates the transaction with code APS8.

Part 2. System commands

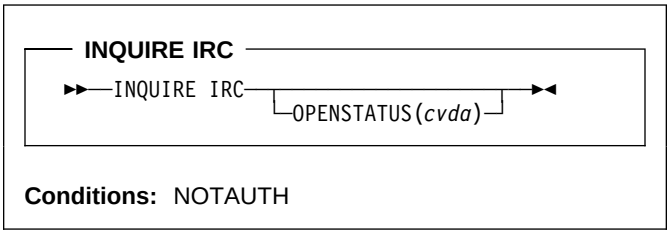
Command information layout

The CICS commands are described using a standard layout as follows:

Function
Briefly describes the purpose of the command.

Syntax
Shows the command options and the exceptional conditions that can be raised.

For example, the syntax and exceptional conditions for the INQUIRE IRC command are shown as:



Conditions: NOTAUTH

Description
Provides an expanded description of the command.

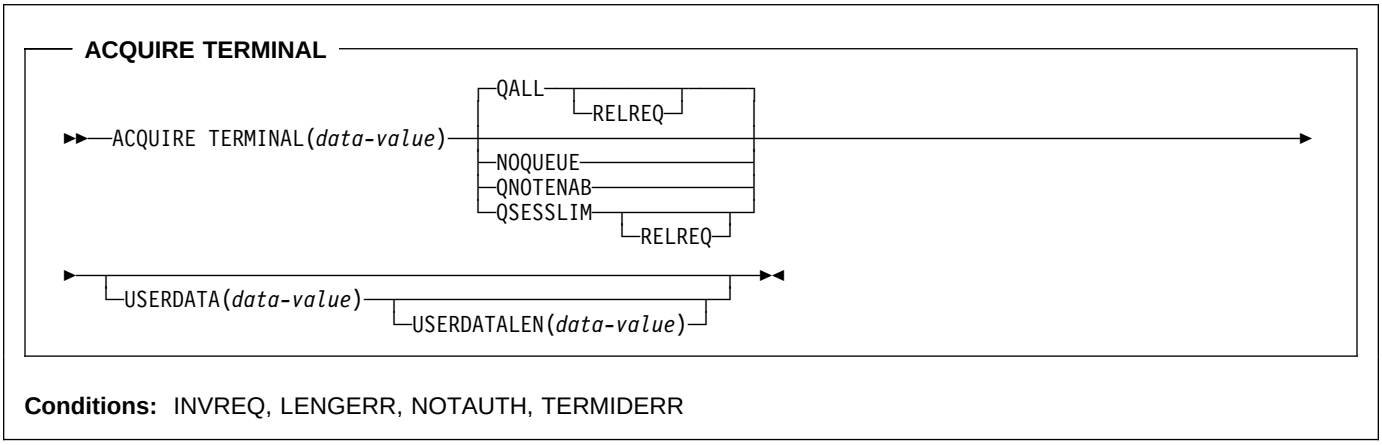
Options
Describes the semantics of the command.

Conditions
Describes the circumstances under which each condition can be raised.

Examples
Gives one or more examples of how the command can be used.

ACQUIRE TERMINAL

Acquire a session with a terminal.



Conditions: INVREQ, LENGERR, NOTAUTH, TERMIDERR

Context

The ACQUIRE TERMINAL command enables you to tell CICS to acquire a session with a particular terminal.

The terminal you specify must be a VTAM terminal, and it cannot be an APPC, LU6.1, or IRC session. It must already be defined to CICS, either in an installed TERMINAL definition or by the autoinstall process, and it must be local to the system on which the ACQUIRE TERMINAL is issued, not remote.

This means that, if the terminal was autoinstalled, you must issue the ACQUIRE command before CICS deletes the terminal definition.

CICS normally deletes an autoinstalled terminal definition if the session ends and is not re-established within the interval specified in the AILDELAY value in the system initialization table. The terminal does not have to be reacquired within this interval, however; after you issue the command, CICS suspends its time-out and does not delete the definition while waiting for the session to be re-established.

CICS processes an ACQUIRE command by sending a SIMLOGON request to VTAM (the queueing options on the command are for VTAM use and correspond to those on a SIMLOGON request). The task that issued the command is dispatchable as soon as this occurs. It is not notified of the eventual result of the VTAM request, nor when the terminal is actually acquired, and the terminal does not become associated with the task.

The request is sent straight to VTAM unless the terminal is already in session with the requesting CICS system. If it is, and NOQUEUE or QNOTENAB are present, CICS rejects the request as invalid (because a SIMLOGON would fail under these circumstances). Otherwise, CICS stores the request until the terminal's current session ends and then sends it to VTAM. For this reason, requests may be queued by VTAM in a different order from the order in which they were originally issued.

After it has been issued, an ACQUIRE TERMINAL request cannot be canceled, and you cannot ordinarily determine whether an ACQUIRE TERMINAL has been issued for a particular terminal.

Options

NOQUEUE
specifies that VTAM should not queue the request. Consequently, the ACQUIRE succeeds only if the terminal is immediately available.

QALL
specifies that VTAM should queue the request if the terminal is not enabled for sessions or is at its session limit (that is, in session with another VTAM application).

QNOTENAB
specifies that VTAM should queue the request only if the terminal is not enabled for sessions.

QSESSLIM
specifies that VTAM should queue the request only if the terminal is at its session limit (that is, in session with another VTAM application).

RELREQ
is meaningful only if the QALL or QSESSLIM option is set. The RELREQ option specifies that, if the requested terminal is already in session with another VTAM application, that application is notified of your request via its RELREQ exit routine. If RELREQ is not specified, the other application is not notified.

If the other application is a CICS system, the RELREQ value of the terminal definition in that system determines whether the request to release the terminal will be honored. RELREQ is specified on the RDO TYPETERM resource definition associated with the terminal.

TERMINAL(*data-value***)**
is the 4-character identifier of the terminal with which CICS is to acquire a session.

USERDATA(*data-value***)**
specifies the data area containing the logon user data, if any. VTAM simulates a logon when CICS asks to acquire a terminal. This data corresponds to user data that sometimes accompanies a real logon. VTAM passes it to the application (in this case, the requesting CICS system) when the terminal has been acquired successfully. See the description of the EXTRACT LOGON command in the *CICS Application Programming Reference* manual for programming information.

USERDATALEN(*data-value***)**
specifies the length, as a halfword binary value, of the user data. Because of a VTAM limitation, the maximum length of the user data is restricted to 255 bytes.

Conditions

INVREQ
RESP2 values:

2 The terminal is a remote terminal.
3 The terminal is LU6.1, APPC, IRC or a non-VTAM device.
4 The terminal is not in service; that is, it is not available for use.
5 VTAM is not open.
7 CICS is already in the process of acquiring this session.
8 NOQUEUE and QNOTENAB options are invalid for a logged-on device.

LENGERR
RESP2 value:

6 Out-of-range value supplied in the USERDATALEN option.

NOTAUTH
RESP2 value:

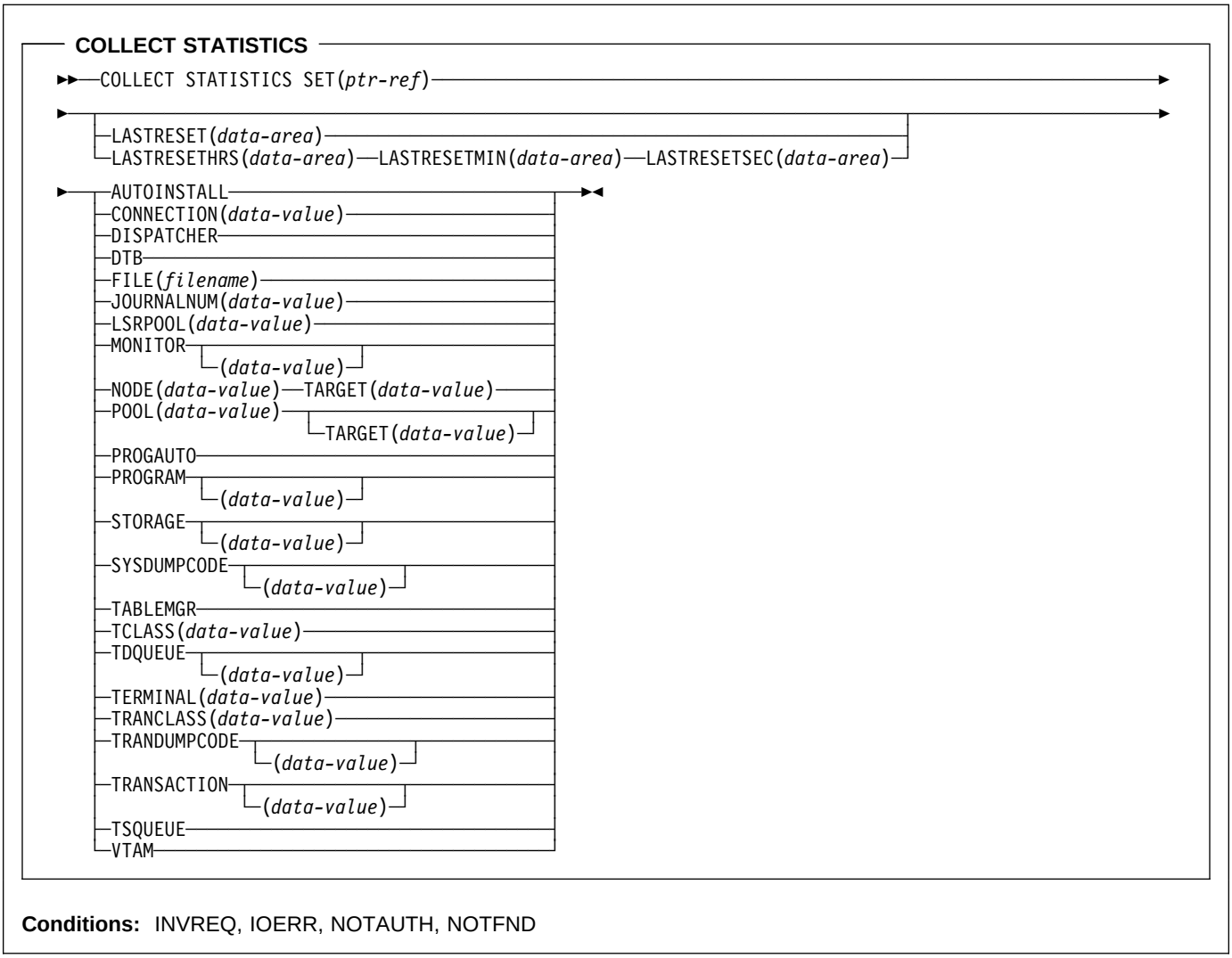
100 The user associated with the issuing task is not authorized to use this command.

TERMIDERR
RESP2 value:

1 The terminal cannot be found.

COLLECT STATISTICS

Retrieve the current statistics for a single resource or global statistics for a class of resources.



Conditions: INVREQ, IOERR, NOTAUTH, NOTFND

Context

The COLLECT STATISTICS command returns to the invoking application the current statistics for a particular resource, or overall statistics for the resources of a given type. For example, you can get the statistics for global transaction activity in your CICS system (such as the total number of transactions attached), or you can specify a single transaction that you are interested in (such as CEMT).

The statistics that CICS gives you are those that have been accumulated after the expiry of the last statistics collection interval, end-of-day expiry, or requested reset. (Statistics already written to the DMF data set cannot be accessed.) The COLLECT STATISTICS command does not cause the statistics counters to be reset.

CICS obtains enough storage below 16MB for the data returned from this command, and returns a pointer to this area. The first two bytes of the area contain its length. This storage can be reused by subsequent COLLECT STATISTICS commands, so you should store elsewhere any data that is required beyond the next issue of the command. CICS releases this storage at task termination.

This section contains Product-sensitive Programming Interface information.

Not all resource types provide both global and specific statistics. Table 2 on page 24 tells you which statistics are available for each resource type, and gives the copybook name for each set of available statistics. The copybooks define the format of the returned statistics. Where no copybook name is given in the global statistics column, global statistics are not available for the resource type; similarly, where there is no entry in the specific statistics column, you cannot get statistics for an individual resource.

Table 2. Statistics and resource types

Resource type	Global statistics	Specific statistics
AUTOINSTALL	DFHA04DS	-
CONNECTION	-	DFHA14DS
DISPATCHER	DFHDSGDS	-
DTB	DFHA05DS	-
FEPI CONNECTION	-	DFHA23DS
FEPI POOL	-	DFHA22DS
FEPI TARGET	-	DFHA24DS
FILE	-	DFHA17DS
JOURNALNUM	-	DFHA13DS
LSRPOOL	-	DFHA08DS
MONITOR	DFHMNGDS	DFHMNTDS
PROGAUTO	DFHPGGDS	-
PROGRAM	DFHLDGDS	DFHLDRDS
STORAGE	DFHSMSDS	DFHSMDDS
SYSDUMPCODE	DFHSDGDS	DFHSDRDS
TABLEMGR	DFHA16DS	-
TCLASS	-	DFHXMCDS
TDQUEUE	DFHA11DS	DFHA10DS
TERMINAL	-	DFHA06DS
TRANCLASS	-	DFHXMCDS
TRANDUMPCODE	DFHTDGDS	DFHTDRDS
TRANSACTION	DFHXMGDS	DFHXMRDS
TSQUEUE	DFHA12DS	
VTAM	DFHA03DS	-

Copybooks are provided in ASSEMBLER, COBOL, and PL/I. (There is no copybook for C.) The names of the copybooks are the same in each language. You can find them in the VSE/ESA™ sublibrary PRD1.BASE.

Note: Some of the copybooks contain packed fields. Before these fields are used, they should be checked for hexadecimal zeros. The COBOL versions of the fields have been redefined as numeric with a suffix of -R for this purpose.

For further information about these copybooks, see the *CICS Performance Guide*.

Options

AUTOINSTALL
requests global statistics on autoinstall.

CONNECTION(*data-value***)**
requests statistics for a connection to a remote system or region; data-value is the 4-character identifier (from its CONNECTION definition) of the system or region.

DISPATCHER
requests global statistics on the dispatcher domain.

DTB
requests global statistics on the dynamic transaction backout function.

FILE(*filename***)**
requests statistics for a file; filename is the 7-character identifier of the file (from its FILE definition). See “Argument values” on page 4 for more information about coding *filename*.

JOURNALNUM(*data-value***)**
requests statistics for a journal; data-value is the number of the journal, in half-word binary format. Journal numbers range from 1 to 99. ‘1’ identifies the system log.

LASTRESET(*data-area***)**
returns a 4-byte packed decimal field in the format 0hhmmss+, giving the time at which the counters for the requested statistics were last reset. This is usually the time of the expiry of the last interval. The last reset time is always returned in local time.

There are two formats for the reset time:

- A composite (packed decimal format 0hhmmss+), which you obtain by using the LASTRESET option.
- Separate hours, minutes, and seconds, which you obtain by specifying the LASTRESETHRS, LASTRESETMIN, and LASTRESETSEC options respectively.

LASTRESETHRS(*data-area***)**
returns a fullword binary field giving the hours component of the time at which the counters for the requested statistics were last reset (see the LASTRESET option).

LASTRESETMIN(*data-area***)**
returns a fullword binary field giving the minutes component of the time at which the counters for the requested statistics were last reset (see the LASTRESET option).

LASTRESETSEC(*data-area***)**
returns a fullword binary field giving the seconds component of the time at which the counters for the requested statistics were last reset (see the LASTRESET option).

LSRPOOL(*data-value***)**
requests statistics on a VSAM LSR pool; data-value is the pool number, in the range 1–15, in fullword binary form.

MONITOR(*data-value***)**
requests performance class statistics for a task when a data-value is supplied. The data-value is the task number, in 4-byte packed decimal format. (For programming information, see EIBTASKN in Appendix A of the *CICS Application Programming Reference*.) Without a data-value, MONITOR requests global performance class statistics.

The monitoring performance class must be active for any statistics to be returned. If performance class is not active, the NOTFND condition is returned. For background information on monitoring, see the *CICS Performance Guide*.

NODE(*data-value***) TARGET (***data-value***)**
requests statistics for a FEPI connection. The NODE data-value is the 8-character name of the terminal which FEPI simulates, and the TARGET data-value is the 8-character name of the system to which FEPI appears as a secondary logical unit.

POOL(*data-value***)**
requests statistics for a FEPI pool; data-value is the 8-character name of the pool.

POOL(*data-value***) TARGET(***data-value***)**
requests statistics for a FEPI target within a FEPI pool. The POOL data-value identifies the pool, and the TARGET data-value identifies the system within the pool for which statistics are requested.

PROGAUTO
requests global statistics on the autoinstalled program definitions.

PROGRAM(*data-value***)**
requests statistics for a program when a data-value is supplied. The data-value is the 8-character name of the program PROGRAM definition. Without a data-value, PROGRAM requests the global program statistics.

SET(*ptr-ref***)**
specifies a pointer reference to be set to the address of the data area containing the returned statistics. The first 2 bytes of the data area contain the length of the data area in halfword binary form.

STORAGE(*data-value***)**
requests statistics for a storage domain subpool when a data-value is present. The data-value is the 8-character name of a storage domain subpool. A complete list of the possible subpool names is documented in the *CICS Performance Guide*. Without a data-value, this option requests the global statistics for the CICS dynamic storage areas.

SYSDUMPCODE(*data-value***)**
requests statistics for a system dump code when a data-value is supplied. The data-value is the 8-character dump code. Without a data-value, SYSDUMPCODE requests global statistics on system dumps.

TABLEMGR
requests global statistics on the table manager.

TCLASS(*data-value***)**
requests statistics for a transaction class; data-value is the class number, in the range 1–10, in fullword binary form. Transaction classes are no longer identified by number, but instead by an 8-character identifier.

When you use the TCLASS option to request statistics for a class (as opposed to TRANCLASS), a conversion from fullword binary number to 8-character value is made on your behalf (for example, TCLASS(01) becomes the equivalent of TRANCLASS('DFHTCL01')).

TDQUEUE(*data-value***)**
requests statistics for a transient data queue when data-value is supplied. The data-value is the 4-character name of the queue (from the destination control table (DCT) definition). Without a data-value, TDQUEUE requests the global statistics for transient data.

TERMINAL(*data-value***)**
requests statistics for a terminal; data-value is the 4-character terminal identifier (from the RDO TERMINAL resource definition).

TRANCLASS(*data-value***)**
requests statistics for a transaction class; data-value is the 8-character name of the class from the RDO TRANCLASS resource definition.

TRANDUMPCODE(*data-value***)**
requests statistics for a transaction dump code when a data-value is supplied. The data-value is the 4-character dump code. Without a data-value, TRANDUMPCODE requests global statistics on transaction dumps.

TRANSACTION(*data-value***)**
requests statistics for a transaction when a data-value is supplied. The data-value is the 4-character transaction identifier (from the TRANSACTION definition). Without a data-value, TRANSACTION requests global statistics on transactions.

TSQUEUE
requests global statistics on temporary storage.

VTAM
requests global statistics on VTAM.

Conditions

INVREQ
RESP2 value:

4 The TCLASS value was not in the range 1–10, or the LSRPOOL value was not in the range 1–15.

IOERR
RESP2 value:

3 The requested statistics area was not functioning. This will happen if, for instance, statistics control blocks are overwritten.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.

NOTFND
RESP2 values:

1 The requested resource cannot be found (for example, if the PROGRAM name you specify does not exist in the system).
2 The type of resource is not defined in the CICS system (for example, FEPI statistics are requested with POOL or NODE when the system initialization table specifies FEPI=NO).

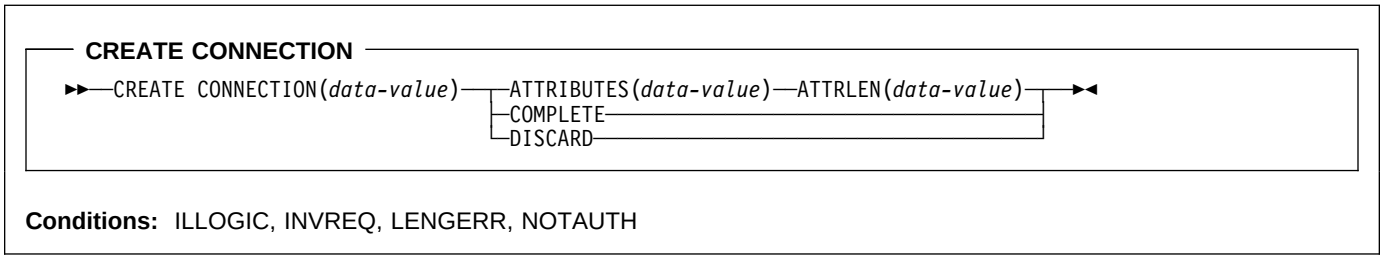
Examples

CICS provides a sample COLLECT STATISTICS application (DFH0STAT) that makes use of virtually all the options described in this section. This set of programs illustrates ways of using the COLLECT STATISTICS and INQUIRE commands of CICS Transaction Server for VSE/ESA Release 1 to produce information about a CICS system. The reports include a CICS and VSE storage analysis that can be used as an aid to specifying the DSA limit system initialization parameters (DSALIM and EDSALIM).

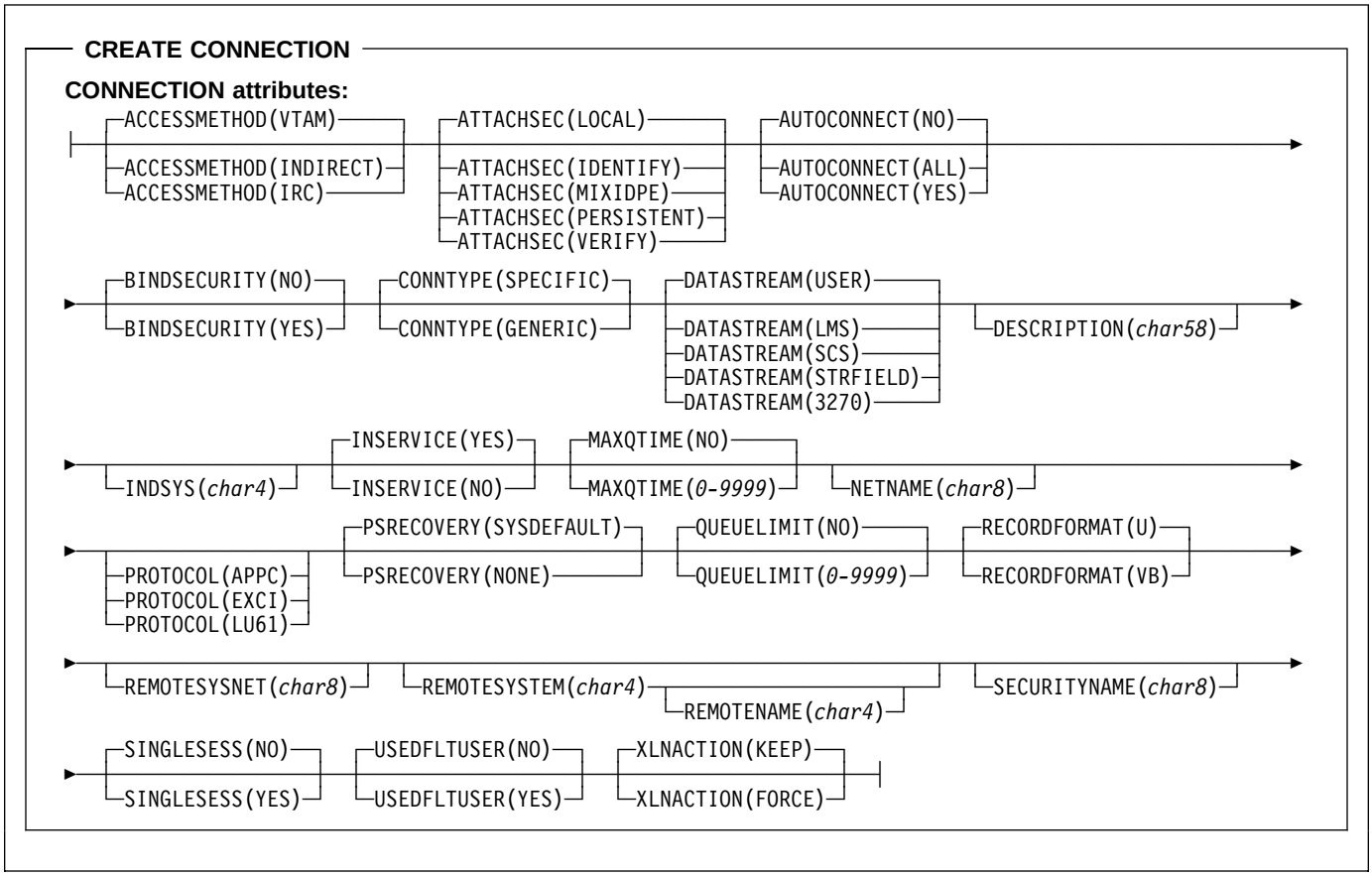
See the *CICS Performance Guide* for information on installing and operating the DFH0STAT application. The source code for the application can be found in the VSE/ESA sublibrary PRD1.BASE.

CREATE CONNECTION

Define a CONNECTION in the local CICS region.



Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH



Note to COBOL programmers: In the syntax above, you must use --- ATTRIBUTES (data-area)--- instead of --- ATTRIBUTES (data-value)--- .

Description

CREATE CONNECTION commands, in combination with CREATE SESSIONS commands, add the definition of a CONNECTION and its SESSIONS to the local CICS region. The definitions are built without reference to data stored on the CSD file. See “Creating resource definitions” on page 13 for other general rules about CREATE commands.

To create a new CONNECTION, you issue a series of commands in this order:

- CREATE CONNECTION with the ATTRIBUTES and ATTRLEN options
- CREATE SESSIONS
- Additional CREATE SESSIONS if desired (only one group of sessions is required, but you can define additional groups)
- CREATE CONNECTION with the COMPLETE option.

The CONNECTION is not added until all of these steps take place. During the time the definition is being built (that is, between the initial and final CREATE CONNECTIONs), you may not:

- Define other resources of any type, including other connections
- Issue a SYNCPOINT (or any command that implies one)
- Terminate your task (normally)

However, if you encounter an error or problem during the course of building a CONNECTION definition, you can terminate the process at any point by issuing a CREATE CONNECTION DISCARD command. If you do this, CICS will discard the partial CONNECTION definition and any SESSIONS created for it.

Otherwise, when the final CREATE CONNECTION COMPLETE command is issued, CICS adds the CONNECTION and its SESSIONS to its resource definitions, replacing a CONNECTION definition of the same name if one exists.

CICS also performs an implicit SYNCPOINT command during the processing of the final CREATE for a connection, unless it contains an error that can be detected early in the processing. The syncpoint commits uncommitted changes to recoverable resources made up to that point in the task if the definition is successful, and rolls back changes, as if SYNCPOINT ROLLBACK had been issued, if the definition fails or ends in a DISCARD.

Options

ATTRIBUTES*(data-value)*
specifies the attributes of the CONNECTION being added. The list of attributes must be coded as a single character string using the syntax shown in **CONNECTION attributes**. See "ATTRIBUTES option" on page 14 for general rules for specifying attributes, and the CONNECTION chapter in the *CICS Resource Definition Guide* for details about specific attributes.

Note: You can assign default values for all attributes of a CONNECTION definition by specifying an ATTRLEN value of 0. You still need to specify the ATTRIBUTES option, however, even though its value is not used.

ATTRLEN*(data-value)*
specifies the length in bytes of the character string supplied in the ATTRIBUTES option, as a halfword binary value. The length can be from 0 to 32767.

COMPLETE
specifies that the set of definitions for this CONNECTION is complete and should be added to the CICS system.

CONNECTION*(data-value)*
specifies the 4-character name of the CONNECTION definition to be added.

DISCARD
specifies that the CONNECTION definition under construction will not be completed and that it and any SESSIONS created for it are to be discarded and *not* added.

Conditions

ILLOGIC
RESP2 values:

2 The command cannot be executed because an earlier CONNECTION or TERMINAL pool definition has not yet been completed, or COMPLETE or DISCARD was specified but no earlier CREATE CONNECTION command is in progress.

INVREQ
RESP2 values:

n There is a syntactical error in the ATTRIBUTES string, or an error occurred during either the discard or resource definition phase of the processing. See Appendix C, "EXEC CICS CREATE RESP2 values" on page 211 for information on RESP2 values.
200 The command was executed in a program defined with an EXECUTIONSET value of DPLSUBSET or a program invoked from a remote system by a distributed program link without the SYNCONRETURN option.

LENGERR
RESP2 values:

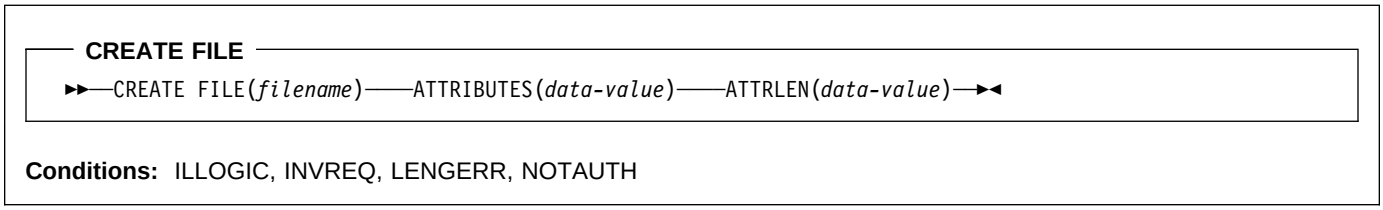
1 The length specified in ATTRLEN is negative.

NOTAUTH
RESP2 values:

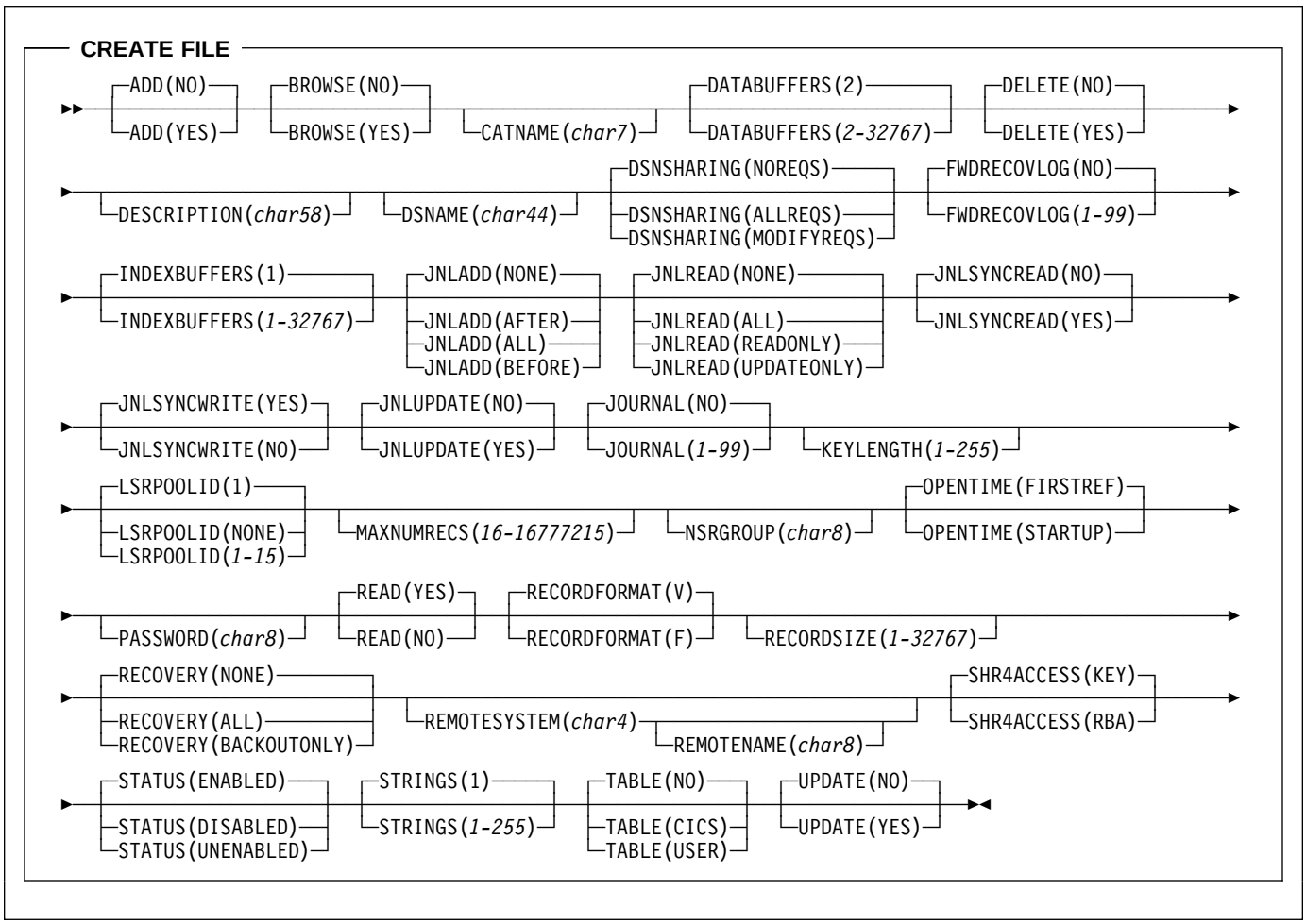
100 The user associated with the issuing task is not authorized to use this command.
102 The user associated with the task issuing the CREATE CONNECTION command is not an authorized surrogate of the user specified in SECURITYNAME.

CREATE FILE

Define a FILE in the local CICS region.



Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH



Note to COBOL programmers: In the syntax above, you must use --- ATTRIBUTES (data-area)--- instead of --- ATTRIBUTES (data-value)--- .

Description

The CREATE FILE command builds a FILE definition, without reference to data stored on the CSD file. If there is already a file by the name you specify in the local CICS region, the new definition replaces the old one; if not, the new definition is added.

A syncpoint is implicit in CREATE FILE processing, except when an exception condition is detected early in processing the command. Uncommitted changes to recoverable resources made up to that point in the task are committed if the CREATE executes successfully and rolled back if not. See “Creating resource definitions” on page 13 for other general rules governing CREATE commands.

Options

ATTRIBUTES*(data-value)*

specifies the attributes of the FILE being added. The list of attributes must be coded as a single character string using the syntax shown in **FILE attributes**. See “ATTRIBUTES option” on page 14 for general rules for specifying attributes, and the FILE chapter in the *CICS*

Resource Definition Guide for details about specific attributes.

Note: You can assign default values for all attributes of a FILE definition by specifying an ATTRLEN value of 0. You still need to specify the ATTRIBUTES option, however, even though its value is not used.

ATTRLEN*(data-value)*
specifies the length in bytes of the character string supplied in the ATTRIBUTES option, as a halfword binary value. The length can be from 0 to 32767.

FILE*(filename)*
specifies the 7-character name of the FILE definition to be added to the CICS region. See “Argument values” on page 4 for more information about coding *filename*.

Conditions

ILLOGIC
RESP2 values:

2 The command cannot be executed because an earlier CONNECTION or TERMINAL pool definition has not yet been completed.

INVREQ
RESP2 values:

n There is a syntactical error in the ATTRIBUTES string, or an error occurred during either the discard or resource definition phase of the processing. See Appendix C, “EXEC CICS CREATE RESP2 values” on page 211 for information on RESP2 values.

200 The command was executed in a program defined with an EXECUTIONSET value of DPLSUBSET or a program invoked from a remote system by a distributed program link without the SYNCONRETURN option.

LENGERR
RESP2 values:

1 The length you have specified in ATTRLEN is negative.

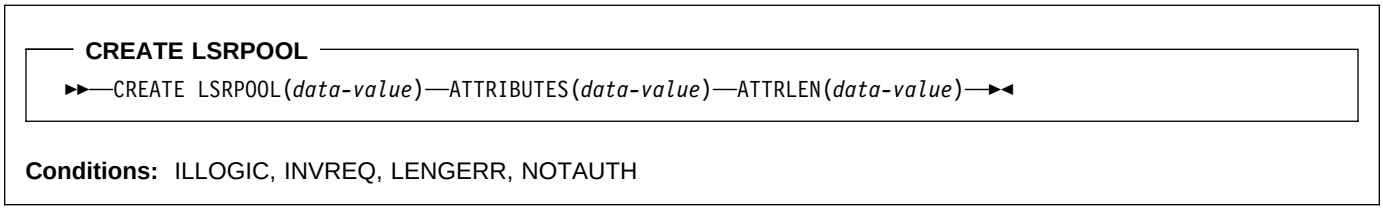
NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

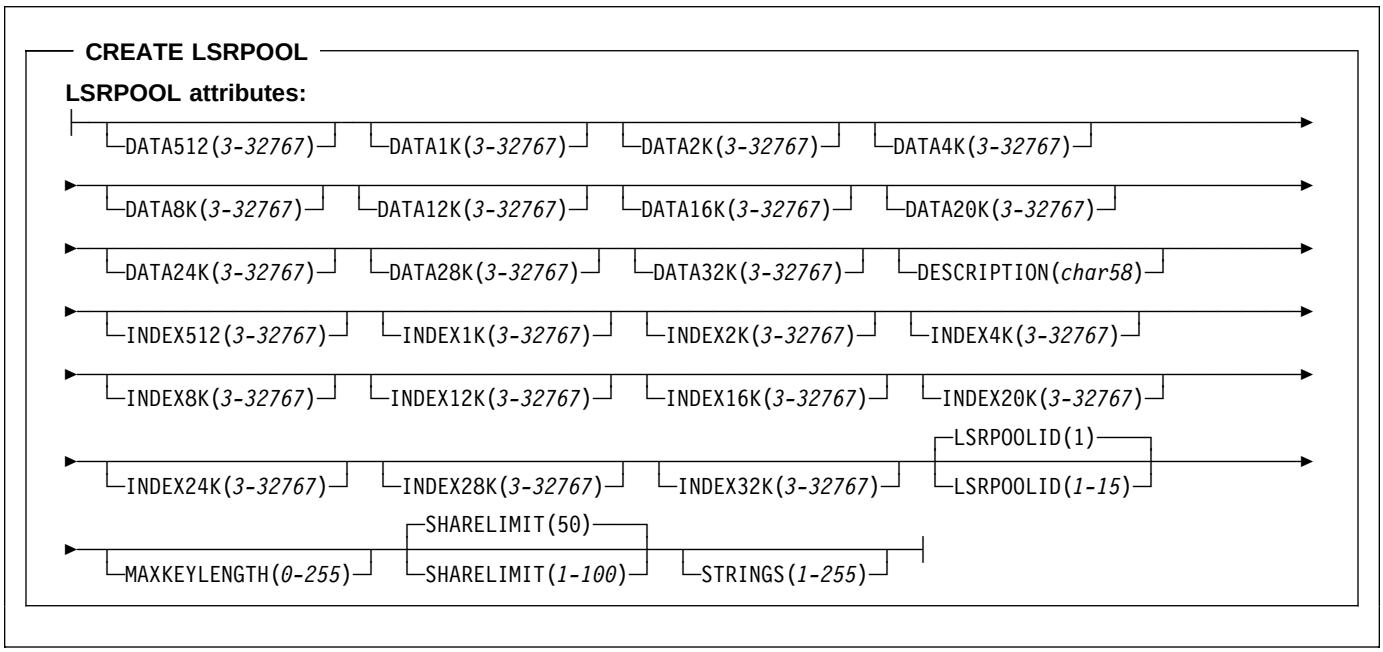
101 The user associated with the issuing task is not authorized to create a FILE definition with this name.

CREATE LSRPOOL

Define an LSR pool in the local CICS region.



Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH



Note to COBOL programmers: In the syntax above, you must use --- ATTRIBUTES (data-area)--- instead of --- ATTRIBUTES (data-value)--- .

Description

The CREATE LSRPOOL command builds the definition of a VSAM local shared resources (LSR) pool, without reference to data stored on the CSD file. LSR pools must have unique LSRPOOLID values within a CICS region. If the local region already contains a definition with the same LSRPOOLID value, the new definition replaces the old one; if not, the new definition is added. (Unlike most resource definitions, the name you specify in the LSRPOOL option does not determine replacement; instead it's the LSRPOOLID value that governs replacement.)

Note: When you replace the definition of a pool that is currently open, the new definition does not take effect until the next time the pool is built. The pool is not rebuilt until all of the files using it are closed and one is reopened subsequently.

A syncpoint is implicit in CREATE LSRPOOL processing, except when an exception condition is detected early in processing the command. Uncommitted changes to recoverable resources made up to that point in the task are committed if the CREATE executes successfully and rolled back if not. See “Creating resource definitions” on page 13 for other general rules governing CREATE commands.

Options

ATTRIBUTES*(data-value)*
specifies the attributes of the LSR pool being added. The list of attributes must be coded as a single character string using the syntax shown in **LSRPOOL attributes**. See “ATTRIBUTES option” on page 14 for general rules for specifying attributes, and the LSRPOOL chapter in the *CICS Resource Definition Guide* for details about specific attributes.

Note: You can assign default values for all attributes of a LSRPOOL definition by specifying an ATTRLEN value of 0. You still need to specify the ATTRIBUTES option, however, even though its value is not used.

ATTRLEN*(data-value)*
specifies the length in bytes of the character string supplied in the ATTRIBUTES option, as a halfword binary value. The length can be from 0 to 32767.

LSRPOOL*(data-value)*
specifies the 8-character name of the LSRPOOL definition to be added to the CICS region.

Conditions

ILLOGIC
RESP2 values:

2 The command cannot be executed because an earlier CONNECTION or TERMINAL pool definition has not yet been completed.

INVREQ
RESP2 values:

n There is a syntactical error in the ATTRIBUTES string, or an error occurred during either the discard or resource definition phase of the processing. See Appendix C, “EXEC CICS CREATE RESP2 values” on page 211 for information on RESP2 values.

200 The command was executed in a program defined with an EXECUTIONSET value of DPLSUBSET or a program invoked from a remote system by a distributed program link without the SYNCONRETURN option.

LENGERR
RESP2 values:

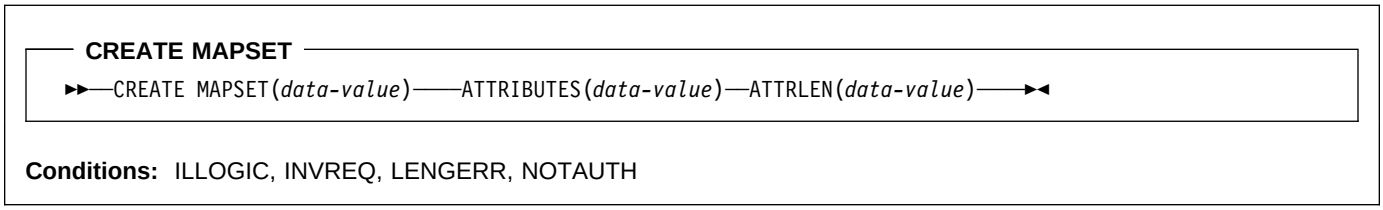
1 The length you have specified in ATTRLEN is negative.

NOTAUTH
RESP2 values:

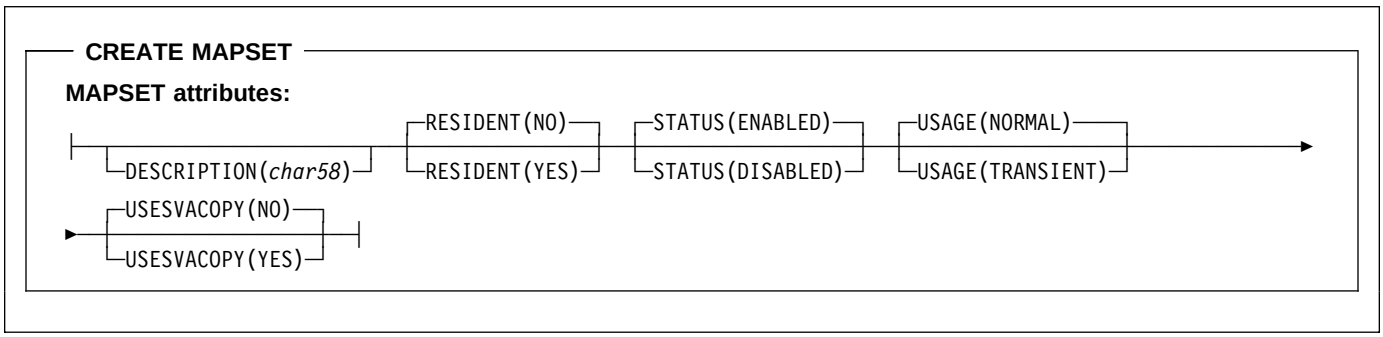
100 The user associated with the issuing task is not authorized to use this command.

CREATE MAPSET

Define a map set in the local CICS region.



Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH



Note to COBOL programmers: In the syntax above, you must use --- ATTRIBUTES (data-area)--- instead of --- ATTRIBUTES (data-value)--- .

Description

The CREATE MAPSET command builds a MAPSET definition, without reference to data stored on the CSD file. Map set names must be unique among map set, program, and partition set names within a CICS region. If the local region already has one of these resources by the name you specify, the new definition replaces the old one; if not, the new definition is added.

A syncpoint is implicit in CREATE MAPSET processing, except when an exception condition is detected early in processing the command. Uncommitted changes to recoverable resources made up to that point in the task are committed if the CREATE executes successfully and rolled back if not. See “Creating resource definitions” on page 13 for other general rules governing CREATE commands.

Options

ATTRIBUTES*(data-value)*
specifies the attributes of the MAPSET being added. The list of attributes must be coded as a single character string using the syntax shown in **MAPSET attributes**. See “ATTRIBUTES option” on page 14 for general rules for specifying attributes, and the MAPSET chapter in the *CICS Resource Definition Guide* for details about specific attributes.

Note: You can assign default values for all attributes of a MAPSET definition by specifying an ATTRLEN value of 0. You still need to specify the ATTRIBUTES option, however, even though its value is not used.

ATTRLEN*(data-value)*
specifies the length in bytes of the character string supplied in the ATTRIBUTES option, as a halfword binary value. The length can be from 0 to 32767.

MAPSET*(data-value)*
specifies the 8-character name of the MAPSET definition to be added to the CICS region.

Conditions

ILLOGIC
RESP2 values:

2 The command cannot be executed because an earlier CONNECTION or TERMINAL pool definition has not yet been completed.

INVREQ
RESP2 values:

n There is a syntactical error in the ATTRIBUTES string, or an error occurred during either the discard or resource definition phase of the processing. See Appendix C, “EXEC CICS CREATE RESP2 values” on page 211 for information on RESP2 values.

200 The command was executed in a program defined with an EXECUTIONSET value of DPLSUBSET or a program invoked from a remote system by a distributed program link without the SYNCONRETURN option.

LENGERR
RESP2 values:

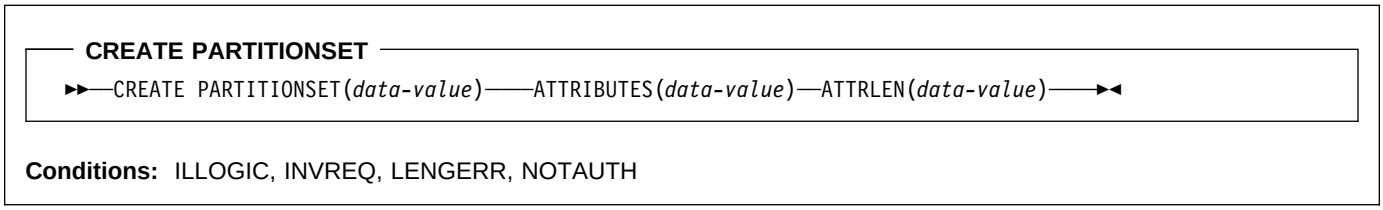
1 The length you have specified in ATTRLEN is negative.

NOTAUTH
RESP2 values:

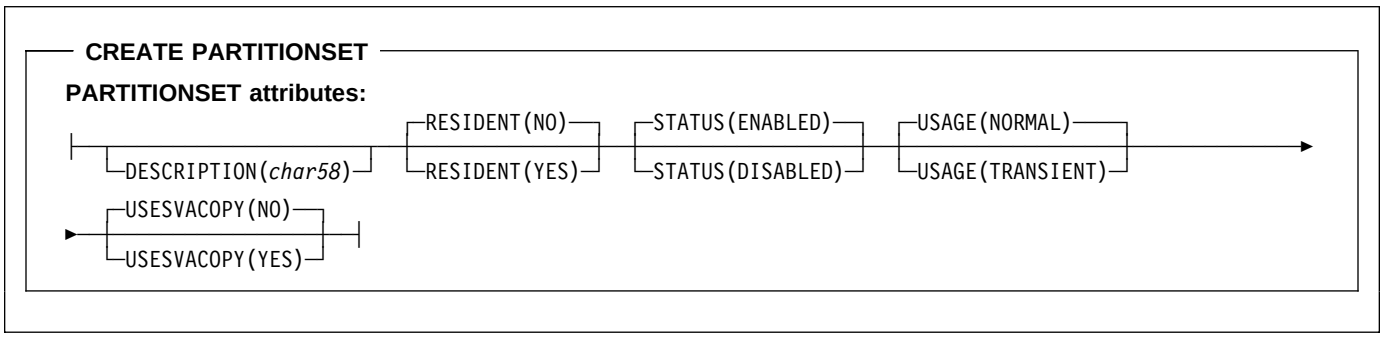
100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to create a MAPSET definition with this name.

CREATE PARTITIONSET

Define a partition set in the local CICS region.



Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH



Note to COBOL programmers: In the syntax above, you must use --- ATTRIBUTES (data-area)--- instead of --- ATTRIBUTES (data-value)--- .

Description

The CREATE PARTITIONSET command builds a PARTITIONSET definition, without reference to data stored on the CSD file. Partition set names must be unique among partition set, map set and program names within a CICS region. If the local region already has one of these resources by the name you specify, the new definition replaces the old one; if not, the new definition is added.

A syncpoint is implicit in CREATE PARTITIONSET processing, except when an exception condition is detected early in processing the command. Uncommitted changes to recoverable resources made up to that point in the task are committed if the CREATE executes successfully and rolled back if not. See “Creating resource definitions” on page 13 for other general rules governing CREATE commands.

Options

ATTRIBUTES*(data-value)*
specifies the attributes of the PARTITIONSET being added. The list of attributes must be coded as a single character string using the syntax shown in **PARTITIONSET attributes**. See “ATTRIBUTES option” on page 14 for general rules for specifying attributes, and the PARTITIONSET chapter in the *CICS Resource Definition Guide* for details about specific attributes.

Note: You can assign default values for all attributes of a PARTITIONSET definition by specifying an ATTRLEN value of 0. You still need to specify the ATTRIBUTES option, however, even though its value is not used.

ATTRLEN*(data-value)*
specifies the length in bytes of the character string supplied in the ATTRIBUTES option, as a halfword binary value. The length can be from 0 to 32767.

PARTITIONSET*(data-value)*
specifies the 8-character name of the PARTITIONSET definition to be added to the CICS region.

Conditions

ILLOGIC
RESP2 values:

2 The command cannot be executed because an earlier CONNECTION or TERMINAL pool definition has not yet been completed.

INVREQ
RESP2 values:

n There is a syntactical error in the ATTRIBUTES string, or an error occurred during either the discard or resource definition phase of the processing. See Appendix C, “EXEC CICS CREATE RESP2 values” on page 211 for information on RESP2 values.

200 The command was executed in a program defined with an EXECUTIONSET value of DPLSUBSET or a program invoked from a remote system by a distributed program link without the SYNCONRETURN option.

LENGERR
RESP2 values:

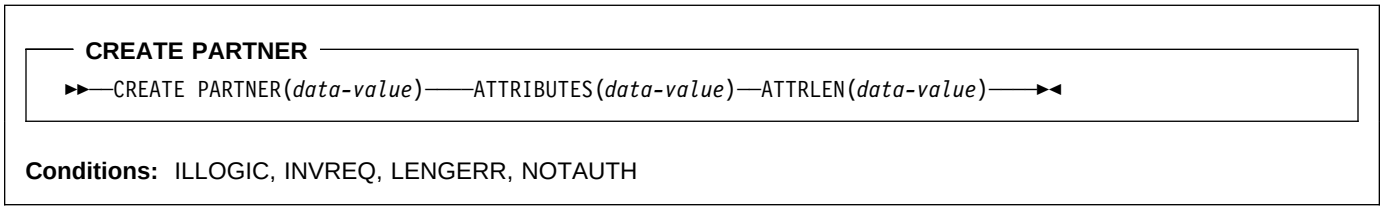
1 The length you have specified in ATTRLEN is negative.

NOTAUTH
RESP2 values:

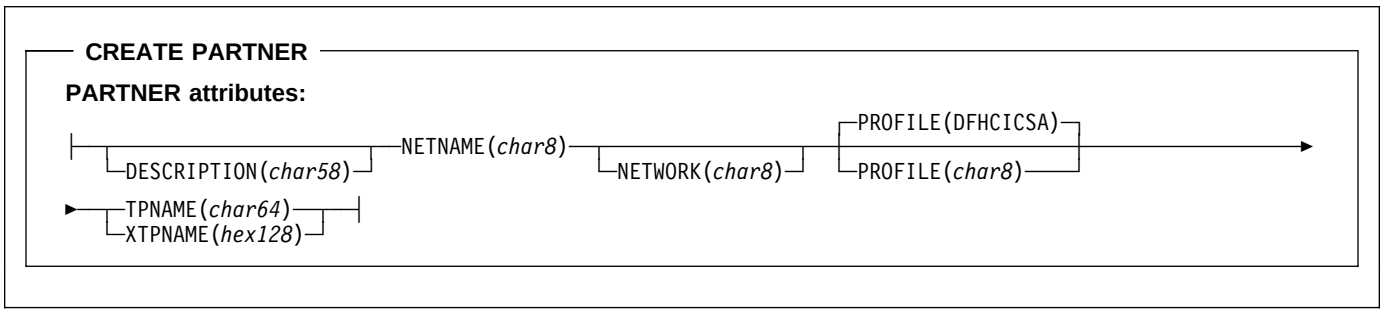
100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to create a PARTITIONSET definition with this name.

CREATE PARTNER

Define a PARTNER in the local CICS region.



Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH



Note to COBOL programmers: In the syntax above, you must use --- ATTRIBUTES (data-area)--- instead of --- ATTRIBUTES (data-value)--- .

Description

The CREATE PARTNER command builds a PARTNER definition, without reference to data stored on the CSD file. If there is already a partner by the name you specify in the local CICS region, the new definition replaces the old one; if not, the new definition is added.

A syncpoint is implicit in CREATE PARTNER processing, except when an exception condition is detected early in processing the command. Uncommitted changes to recoverable resources made up to that point in the task are committed if the CREATE executes successfully and rolled back if not. See “Creating resource definitions” on page 13 for other general rules governing CREATE commands.

Options

ATTRIBUTES*(data-value)*
specifies the attributes of the PARTNER being added. The list of attributes must be coded as a single character string using the syntax shown in **PARTNER attributes**. See “ATTRIBUTES option” on page 14 for general rules for specifying attributes, and the PARTNER chapter in the *CICS Resource Definition Guide* for details about specific attributes.

ATTRLEN*(data-value)*
specifies the length in bytes of the character string supplied in the ATTRIBUTES option, as a halfword binary value. The length may not exceed 32767 bytes.

PARTNER*(data-value)*
specifies the 8-character name of the PARTNER definition to be added to the CICS region.

Conditions

ILLOGIC
RESP2 values:

2 The command cannot be executed because an earlier CONNECTION or TERMINAL pool definition has not yet been completed.

INVREQ
RESP2 values:

n There is a syntactical error in the ATTRIBUTES string, or an error occurred during either the discard or resource definition phase of the processing. See Appendix C, “EXEC CICS CREATE RESP2 values” on page 211 for information on RESP2 values.

200 The command was executed in a program defined with an EXECUTIONSET value of DPLSUBSET or a program invoked from a remote system by a distributed program link without the SYNCONRETURN option.

LENGERR
RESP2 values:

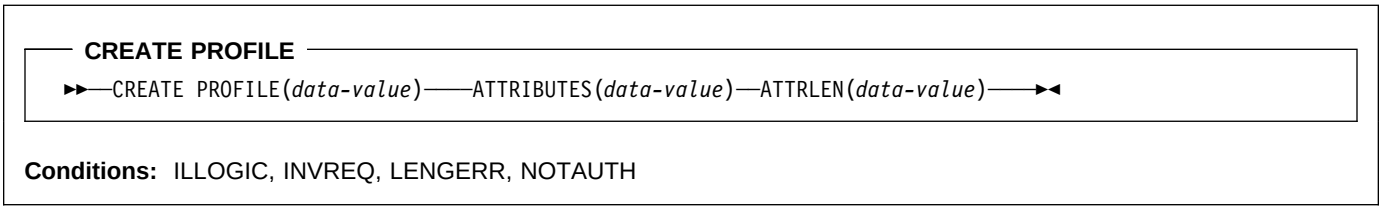
1 The length you have specified in ATTRLEN is negative.

NOTAUTH
RESP2 values:

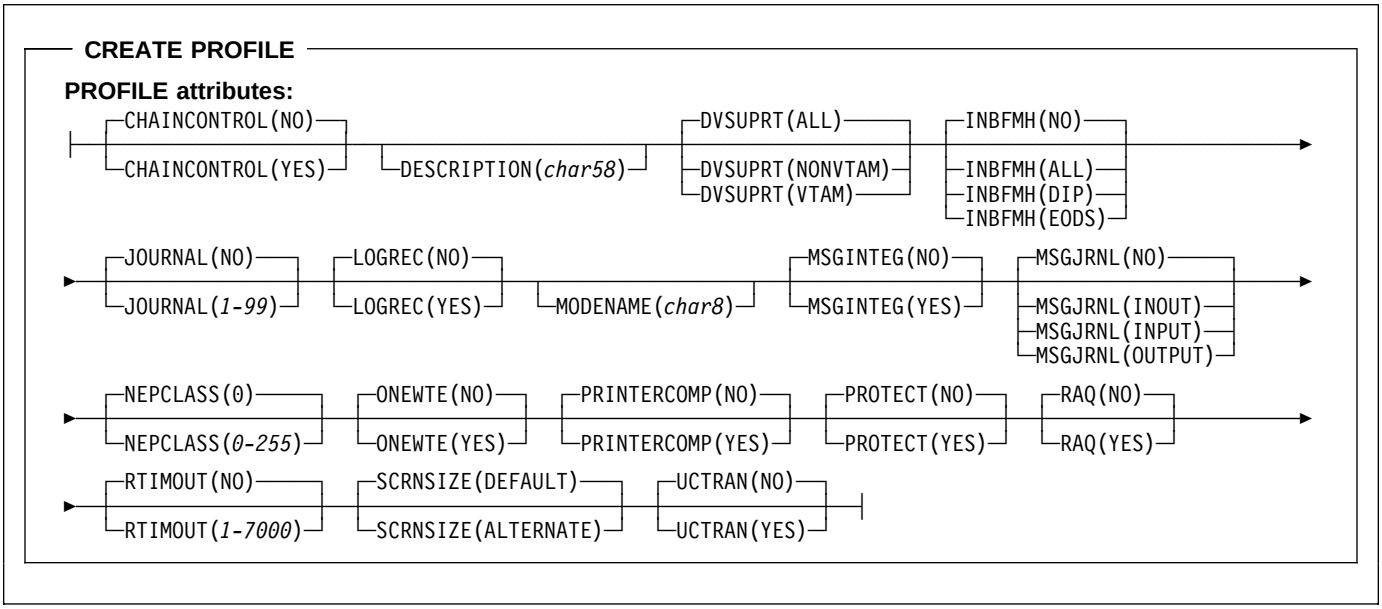
100 The user associated with the issuing task is not authorized to use this command.

CREATE PROFILE

Define a transaction PROFILE in the local CICS region.



Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH



Note to COBOL programmers: In the syntax above, you must use --- ATTRIBUTES (data-area)--- instead of --- ATTRIBUTES (data-value)--- .

Description

The CREATE PROFILE command builds a PROFILE definition, without reference to data stored on the CSD file. If there is already a profile by the name you specify in the local CICS region, the new definition replaces the old one; if not, the new definition is added.

A syncpoint is implicit in CREATE PROFILE processing, except when an exception condition is detected early in processing the command. Uncommitted changes to recoverable resources made up to that point in the task are committed if the CREATE executes successfully and rolled back if not. See “Creating resource definitions” on page 13 for other general rules governing CREATE commands.

Options

ATTRIBUTES*(data-value)*
specifies the attributes of the PROFILE being added. The list of attributes must be coded as a single character string using the syntax shown in **PROFILE attributes**.

See “ATTRIBUTES option” on page 14 for general rules for specifying attributes, and the PROFILE chapter in the *CICS Resource Definition Guide* for details about specific attributes.

Note: You can assign default values for all attributes of a PROFILE definition by specifying an ATTRLEN value of 0. You still need to specify the ATTRIBUTES option, however, even though its value is not used.

ATTRLEN*(data-value)*
specifies the length in bytes of the character string supplied in the ATTRIBUTES option, as a halfword binary value. The length can be from 0 to 32767.

PROFILE*(data-value)*
specifies the 8-character name of the PROFILE definition to be added to the CICS region.

Conditions

ILLOGIC
RESP2 values:

2 The command cannot be executed because an earlier CONNECTION or TERMINAL pool definition has not yet been completed.

INVREQ

RESP2 values:

n There is a syntactical error in the ATTRIBUTES string, or an error occurred during either the discard or resource definition phase of the processing. See Appendix C, “EXEC CICS CREATE RESP2 values” on page 211 for information on RESP2 values.

200 The command was executed in a program defined with an EXECUTIONSET value of DPLSUBSET or a program invoked from a remote system by a distributed program link without the SYNCONRETURN option.

LENGERR

RESP2 values:

1 The length you have specified in ATTRLEN is negative.

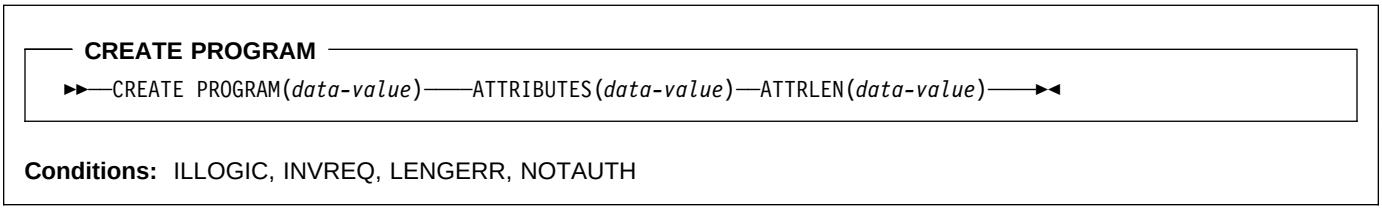
NOTAUTH

RESP2 values:

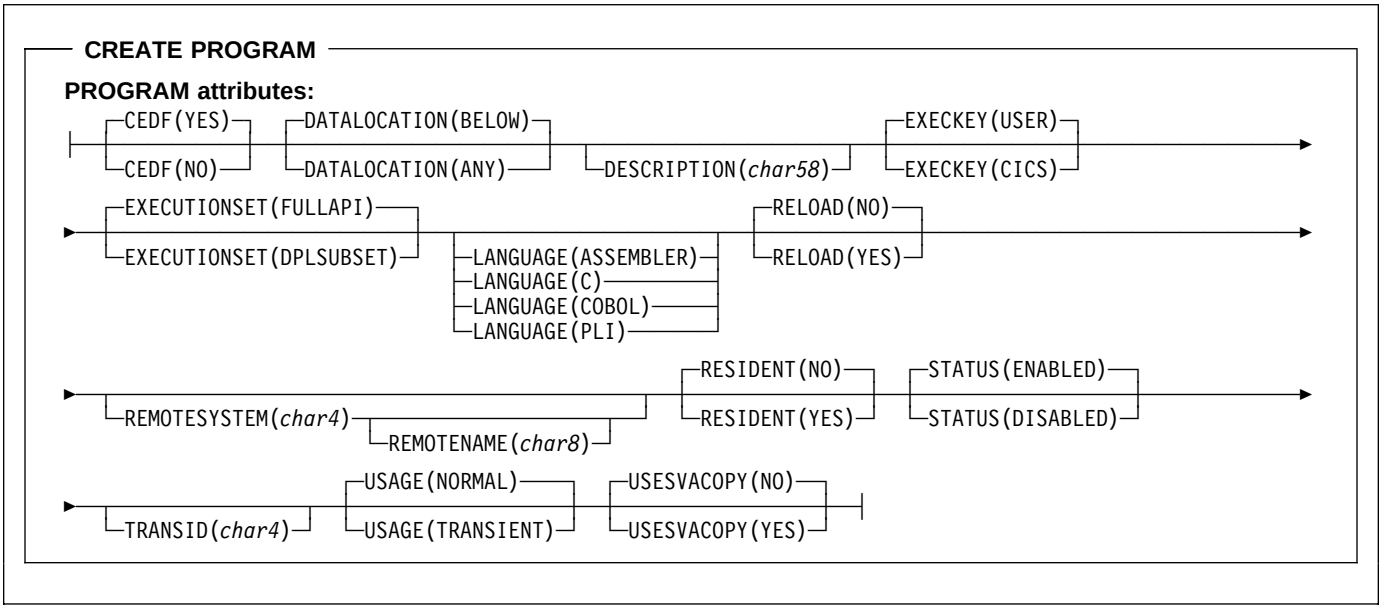
100 The user associated with the issuing task is not authorized to use this command.

CREATE PROGRAM

Define a PROGRAM in the local CICS region.



Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH



Note to COBOL programmers: In the syntax above, you must use --- ATTRIBUTES (data-area)--- instead of --- ATTRIBUTES (data-value)--- .

Description

The CREATE PROGRAM command builds a PROGRAM definition, without reference to data stored on the CSD file. Program names must be unique among program, map set, and partition set names within a CICS region. If the local region already has one of these resources by the name you specify, the new definition replaces the old one; if not, the new definition is added.

A syncpoint is implicit in CREATE PROGRAM processing, except when an exception condition is detected early in processing the command. Uncommitted changes to recoverable resources made up to that point in the task are committed if the CREATE executes successfully and rolled back if not. See “Creating resource definitions” on page 13 for other general rules governing CREATE commands.

Options

ATTRIBUTES*(data-value)*
specifies the attributes of the PROGRAM being added. The list of attributes must be coded as a single character string using the syntax shown in **PROGRAM attributes**. See “ATTRIBUTES option” on page 14 for general rules for specifying attributes, and the PROGRAM chapter in the *CICS Resource Definition Guide* for details about specific attributes.

Note: You can assign default values for all attributes of a PROGRAM definition by specifying an ATTRLEN value of 0. You still need to specify the ATTRIBUTES option, however, even though its value is not used.

ATTRLEN*(data-value)*
specifies the length in bytes of the character string supplied in the ATTRIBUTES option, as a halfword binary value. The length can be from 0 to 32767.

PROGRAM*(data-value)*
specifies the 8-character name of the PROGRAM definition to be added to the CICS region.

Conditions

ILLOGIC
RESP2 values:

2 The command cannot be executed because an earlier CONNECTION or TERMINAL pool definition has not yet been completed.

INVREQ

RESP2 values:

n There is a syntactical error in the ATTRIBUTES string, or an error occurred during either the discard or resource definition phase of the processing. See Appendix C, “EXEC CICS CREATE RESP2 values” on page 211 for information on RESP2 values.

200 The command was executed in a program defined with an EXECUTIONSET value of DPLSUBSET or a program invoked from a remote system by a distributed program link without the SYNCONRETURN option.

LENGERR

RESP2 values:

1 The length you have specified in ATTRLEN is negative.

NOTAUTH

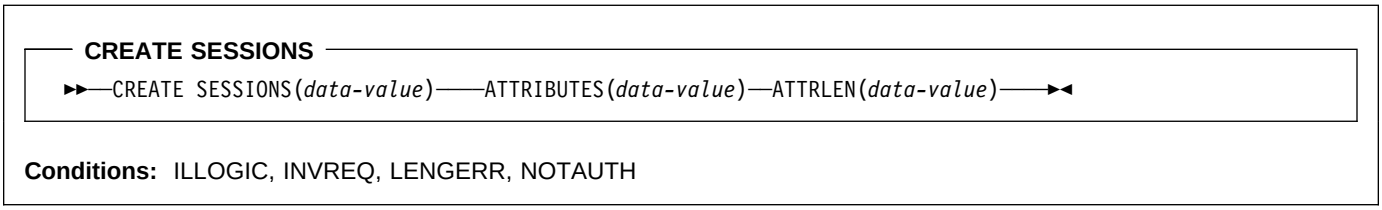
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

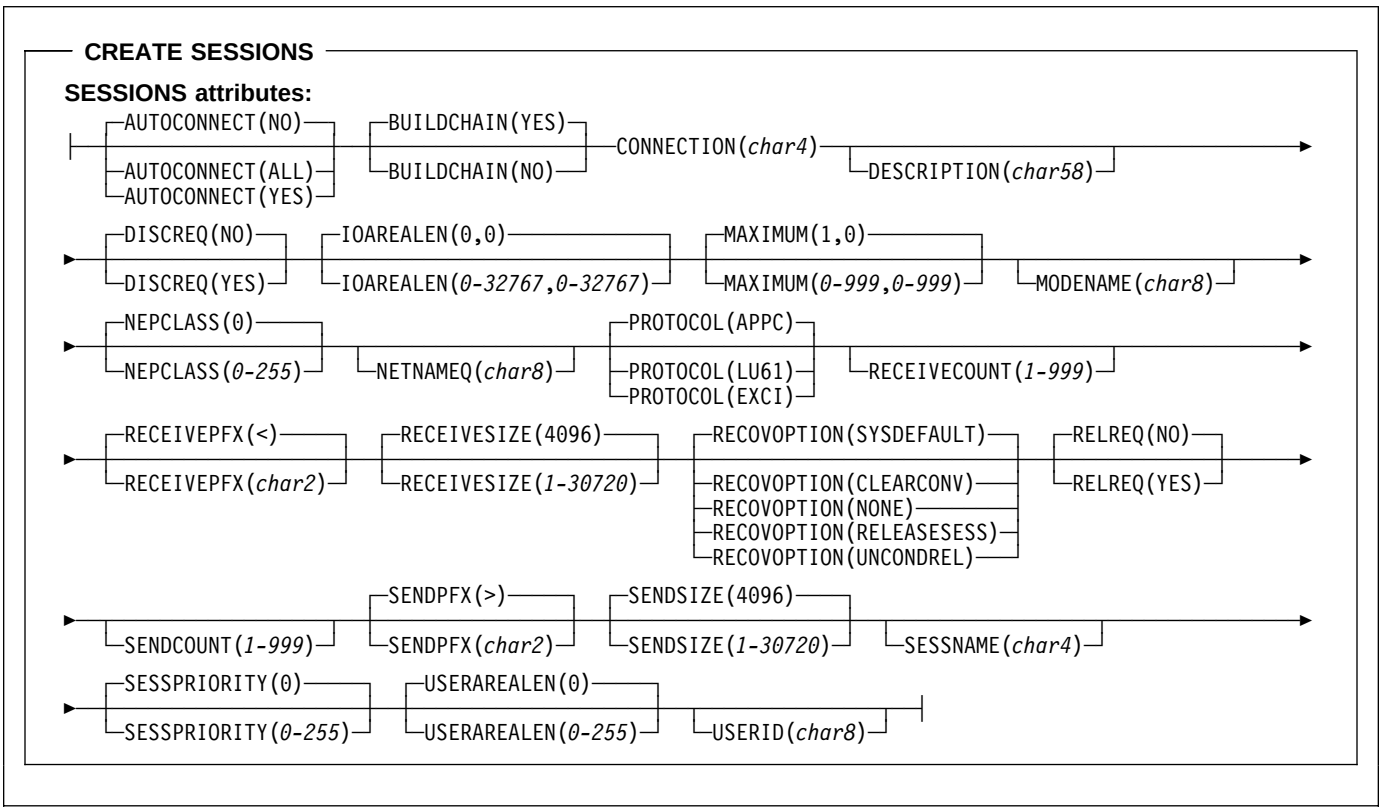
101 The user associated with the issuing task is not authorized to create a PROGRAM definition with this name.

CREATE SESSIONS

Add a session group to the CONNECTION definition being created.



Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH



Note to COBOL programmers: In the syntax above, you must use --- ATTRIBUTES (data-area)--- instead of --- ATTRIBUTES (data-value)--- .

Description

The CREATE SESSIONS command defines a group of sessions within a CONNECTION definition under construction, without reference to data stored on the CSD file. You can use it only after issuing the initial CREATE CONNECTION command that defines the attributes of a connection and before the final CREATE CONNECTION COMPLETE (or DISCARD) command that ends the process.

The sessions you define always belong to the current connection, and the name that you specify in the CONNECTION option within your ATTRIBUTES string must match the name of the connection specified in the preceding CREATE CONNECTION command. See the discussion of the CREATE CONNECTION command on page 27 for rules about the order of the commands that build a connection, and “Creating resource definitions” on page 13 for general rules governing CREATE commands.

Options

ATTRIBUTES*(data-value)*
specifies the attributes of the group of sessions being added. The list of attributes must be coded as a single character string using the syntax shown in **SESSIONS attributes**. See “ATTRIBUTES option” on page 14 for general rules for specifying attributes, and the SESSIONS chapter in the *CICS Resource Definition Guide* for details about specific attributes.

ATTRLEN*(data-value)*
specifies the length in bytes of the character string supplied in the ATTRIBUTES option, as a halfword binary value. The length may not exceed 32767 bytes.

SESSIONS*(data-value)*
specifies the 8-character name of the SESSIONS definition to be added to CONNECTION definition under construction. The name of a sessions group needs to be unique only within the current CONNECTION definition, and the group is always added unless you repeat a session name within a connection. In this case, the last successful SESSIONS definition of the same name is the one that is used.

Conditions

ILLOGIC
RESP2 values:

2 The command cannot be executed because no CREATE CONNECTION ATTRIBUTES command has been issued, or the CONNECTION name specified in the ATTRIBUTES argument of this command does not match the name of the connection assigned in the CREATE CONNECTION command.

INVREQ
RESP2 values:

n There is a syntactical error in the ATTRIBUTES string, or an error occurred during either the discard or resource definition phase of the processing. See Appendix C, “EXEC CICS CREATE RESP2 values” on page 211 for information on RESP2 values.
200 The command was executed in a program defined with an EXECUTIONSET value of DPLSUBSET or a program invoked from a remote system by a distributed program link without the SYNCONRETURN option.

LENGERR
RESP2 values:

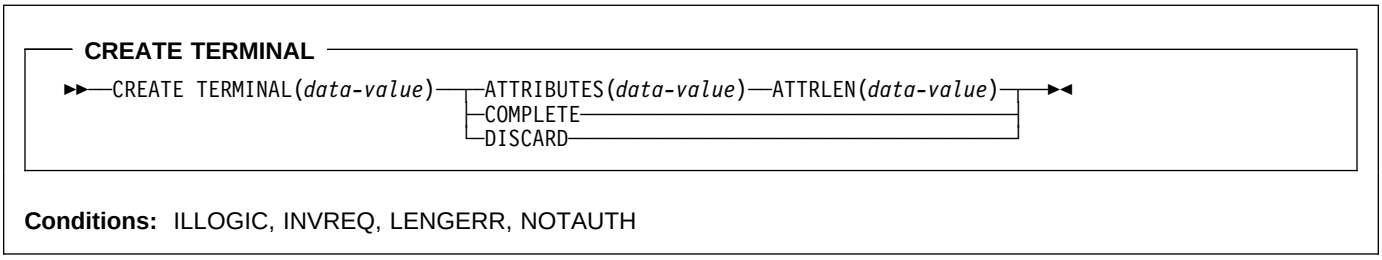
1 The length you have specified in ATTRLEN is negative.

NOTAUTH
RESP2 values:

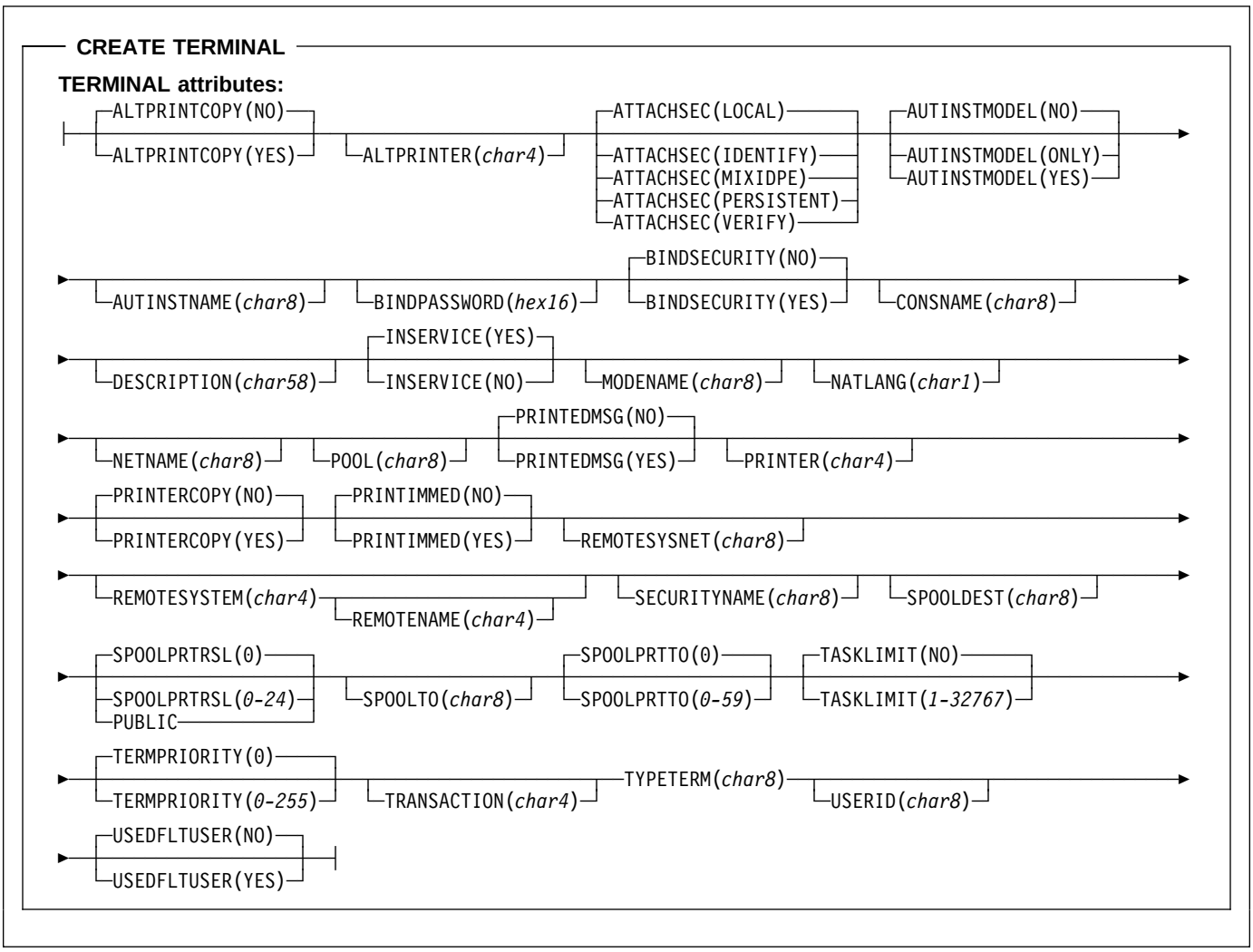
100 The user associated with the issuing task is not authorized to use this command.
102 The user of the transaction issuing the CREATE SESSIONS command is not an authorized surrogate of the user specified in USERID.

CREATE TERMINAL

Define a TERMINAL in the local CICS region.



Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH



Note to COBOL programmers: In the syntax above, you must use --- ATTRIBUTES (data-area)--- instead of --- ATTRIBUTES (data-value)--- .

Description

CREATE TERMINAL commands build TERMINAL definitions, without reference to data stored on the CSD file. You can use them either to define individual terminals or a pool of terminals.

The POOL attribute determines which mode you are using. Without it, each command defines a single, independent terminal. If there is already a terminal by the name you

specify in the local CICS region, the new definition replaces the old one; if not, the new definition is added.

To define a pool, you issue one CREATE TERMINAL ATTRIBUTES command for each terminal in the pool, specifying the same POOL value in the ATTRIBUTES string. After all of the terminals are defined, you issue CREATE TERMINAL COMPLETE; CICS collects but does not install the TERMINAL definitions until the COMPLETE command. At this point, if there was a pool of the same name in the local CICS region, CICS deletes all of its terminals and installs the new definitions; if not, it adds the new definitions. Consequently, pool terminals must be defined all at once; you cannot add terminals to an existing pool or include a terminal with the same name as an existing non-pool terminal.

During the time the pool is being built, you may not:

- Change or omit the pool name
- Define other resources of any type, including terminals outside the current pool
- Issue a SYNCPOINT (or any command that implies one)
- Terminate your task (normally)

However, if you encounter an error or problem during the course of building a pool, you can terminate the process at any point by issuing a CREATE TERMINAL DISCARD command. If you do this, CICS will discard the partial pool definition, including all of its terminals.

A syncpoint is implicit in CREATE TERMINAL processing, as in other CREATE commands, except when an exception condition is detected early in the processing. Uncommitted changes to recoverable resources are committed when definitions are processed successfully and rolled back if not or if you specify DISCARD. For non-pool terminals, the syncpoint occurs on each CREATE command. When you are building a pool, however, it occurs only on the command that ends the pool definition, whether you specify COMPLETE or DISCARD. See “Creating resource definitions” on page 13 for other general rules governing CREATE commands.

Options

ATTRIBUTES*(data-value)*
specifies the attributes of the TERMINAL being added. The list of attributes must be coded as a single character string using the syntax shown in **TERMINAL attributes**. See “ATTRIBUTES option” on page 14 for general rules for specifying attributes, and the TERMINAL chapter in the *CICS Resource Definition Guide* for details about specific attributes.

ATTRLEN*(data-value)*
specifies the length in bytes of the character string supplied in the ATTRIBUTES option, as a halfword binary value. The length may not exceed 32767 bytes.

COMPLETE
specifies that the terminal pool definition under construction is complete. It can be used only after the last terminal of a pool has been defined.

TERMINAL*(data-value)*
specifies the 4-character name of the TERMINAL definition to be added.

DISCARD
specifies that the terminal pool definition under construction will not be completed and all of the TERMINAL definitions issued since the pool was started are to be discarded and *not* added.

Conditions

ILLOGIC
RESP2 values:

2 The command cannot be executed because an earlier CONNECTION or TERMINAL pool definition has not yet been completed, or COMPLETE or DISCARD was specified when no terminal pool build is in progress.

INVREQ
RESP2 values:

n There is a syntactical error in the ATTRIBUTES string, or an error occurred during either the discard or resource definition phase of the processing. See Appendix C, “EXEC CICS CREATE RESP2 values” on page 211 for information on RESP2 values.

200 The command was executed in a program defined with an EXECUTIONSET value of DPLSUBSET or a program invoked from a remote system by a distributed program link without the SYNCONRETURN option.

LENGERR
RESP2 values:

1 The length specified in ATTRLEN is negative.

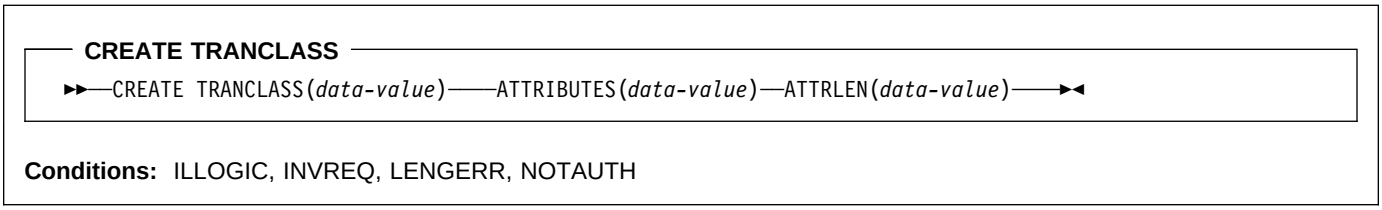
NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

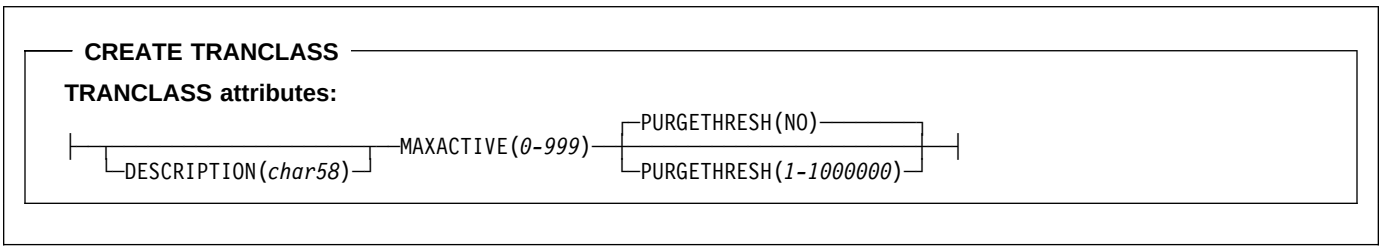
102 The user associated with the task issuing the CREATE TERMINAL command is not an authorized surrogate of the user specified in USERID.

CREATE TRANCLASS

Define a transaction class in the local CICS region.



Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH



Note to COBOL programmers: In the syntax above, you must use --- ATTRIBUTES (data-area)--- instead of --- ATTRIBUTES (data-value)--- .

Description

The CREATE TRANCLASS command builds a TRANCLASS definition, without reference to data stored on the CSD file. If there is already a transaction class by the name you specify in the local CICS region, the new definition replaces the old one; if not, the new definition is added.

A syncpoint is implicit in CREATE TRANCLASS processing, except when an exception condition is detected early in processing the command. Uncommitted changes to recoverable resources made up to that point in the task are committed if the CREATE executes successfully and rolled back if not. See “Creating resource definitions” on page 13 for other general rules governing CREATE commands.

Options

ATTRIBUTES*(data-value)*
specifies the attributes of the TRANCLASS being added. The list of attributes must be coded as a single character string using the syntax shown in **TRANCLASS attributes**. See “ATTRIBUTES option” on page 14 for general rules for specifying attributes, and the TRANCLASS chapter in the *CICS Resource Definition Guide* for details about specific attributes.

ATTRLEN*(data-value)*
specifies the length in bytes of the character string supplied in the ATTRIBUTES option, as a halfword binary value. The length may not exceed 32767 bytes.

TRANCLASS*(data-value)*
specifies the 8-character name of the TRANCLASS definition to be added to the CICS region.

Conditions

ILLOGIC
RESP2 values:

2 The command cannot be executed because an earlier CONNECTION or TERMINAL pool definition has not yet been completed.

INVREQ
RESP2 values:

n There is a syntactical error in the ATTRIBUTES string, or an error occurred during either the discard or resource definition phase of the processing. See Appendix C, “EXEC CICS CREATE RESP2 values” on page 211 for information on RESP2 values.

200 The command was executed in a program defined with an EXECUTIONSET value of DPLSUBSET or a program invoked from a remote system by a distributed program link without the SYNCONRETURN option.

LENGERR
RESP2 values:

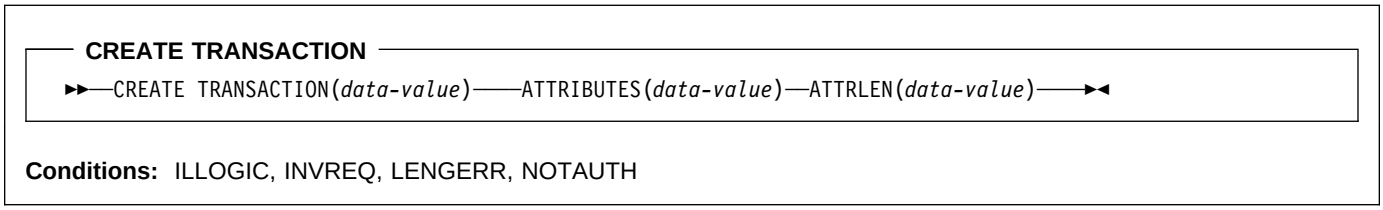
1 The length you have specified in ATTRLEN is negative.

NOTAUTH
RESP2 values:

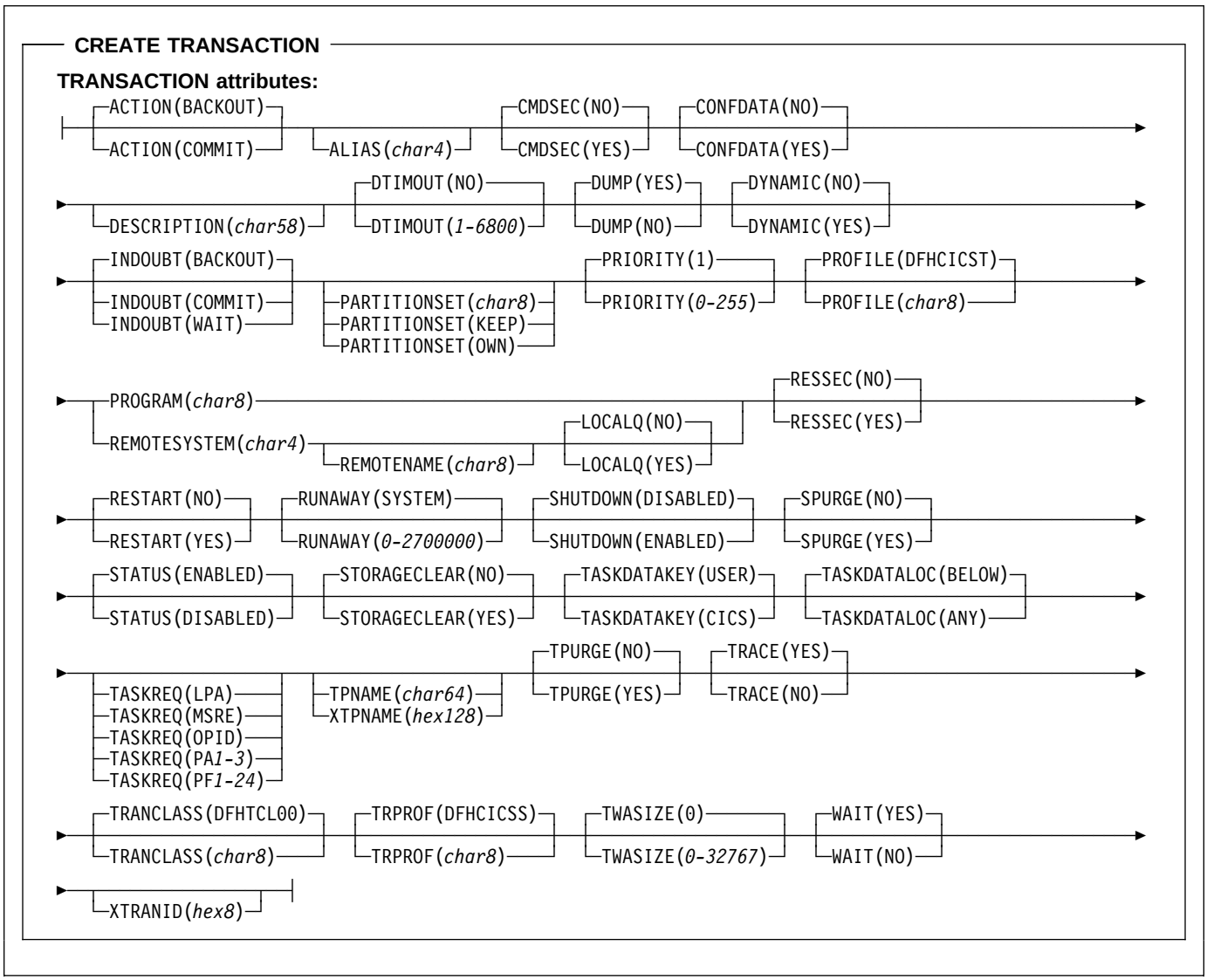
100 The user associated with the issuing task is not authorized to use this command.

CREATE TRANSACTION

Define a TRANSACTION in the local CICS region.



Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH



Note to COBOL programmers: In the syntax above, you must use --- ATTRIBUTES (data-area)--- instead of --- ATTRIBUTES (data-value)--- .

Description

The CREATE TRANSACTION command builds a TRANSACTION definition, without reference to data stored on the CSD file. If there is no transaction by the name you specify in the local CICS region, the new definition is added. If there is, the new definition replaces the old one. However, it does not apply to tasks already in flight, which continue to use the definition under which they were initiated.

A syncpoint is implicit in CREATE TRANSACTION processing, except when an exception condition is detected early in processing the command. Uncommitted changes to recoverable resources made up to that point in the task are committed if the CREATE executes successfully and rolled back if not. See “Creating resource definitions” on page 13 for other general rules governing CREATE commands.

Options

ATTRIBUTES*(data-value)*
specifies the attributes of the TRANSACTION being added. The list of attributes must be coded as a single character string using the syntax shown in **TRANSACTION attributes**. See “ATTRIBUTES option” on page 14 for general rules for specifying attributes, and the TRANSACTION chapter in the *CICS Resource Definition Guide* for details about specific attributes.

ATTRLEN*(data-value)*
specifies the length in bytes of the character string supplied in the ATTRIBUTES option, as a halfword binary value. The length may not exceed 32767 bytes.

TRANSACTION*(data-value)*
specifies the 4-character name of the TRANSACTION definition to be added to the CICS region.

Conditions

ILLOGIC
RESP2 values:

2 The command cannot be executed because an earlier CONNECTION or TERMINAL pool definition has not yet been completed.

INVREQ
RESP2 values:

n There is a syntactical error in the ATTRIBUTES string, or an error occurred during either the discard or resource definition phase of the processing. See Appendix C, “EXEC CICS CREATE RESP2 values” on page 211 for information on RESP2 values.

200 The command was executed in a program defined with an EXECUTIONSET value of DPLSUBSET or a program invoked from a remote system by a distributed program link without the SYNCONRETURN option.

LENGERR
RESP2 values:

1 The length you have specified in ATTRLEN is negative.

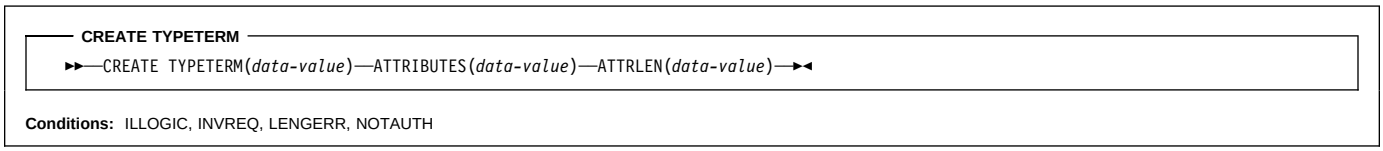
NOTAUTH
RESP2 values:

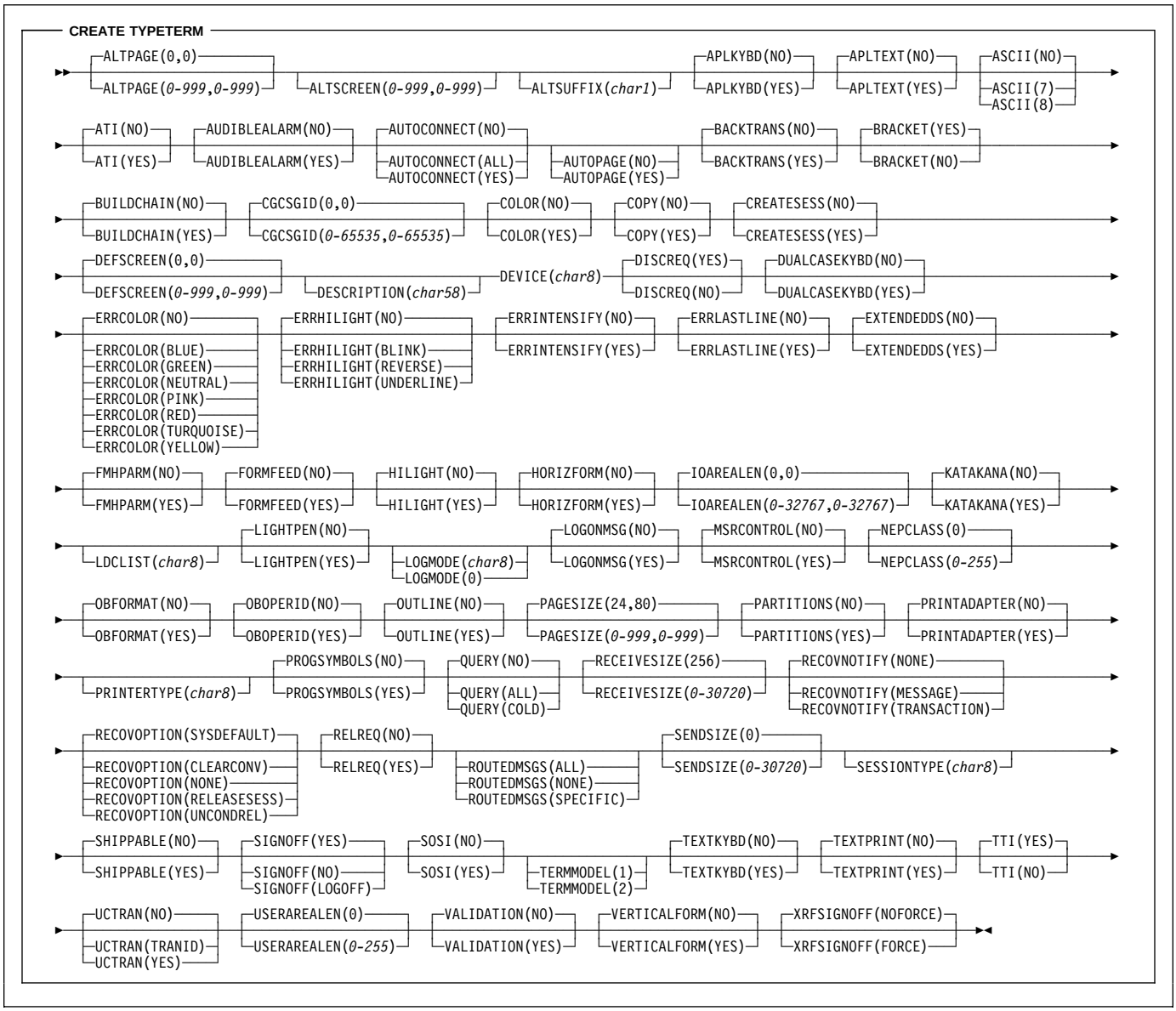
100 The user associated with the issuing task is not authorized to use this command.

101 The user associated with the issuing task is not authorized to create a TRANSACTION definition with this name.

CREATE TYPETERM

Define a terminal type in the local CICS region.





Note to COBOL programmers: In the syntax above, you must use --- ATTRIBUTES (data-area)--- instead of --- ATTRIBUTES (data-value)--- .

Description

The CREATE TYPETERM command builds a terminal type (TYPETERM) definition, without reference to data stored on the CSD file. If there is already a terminal type definition by the name you specify in the local CICS region, the new definition replaces the old one; if not, the new definition is added.

A syncpoint is implicit in CREATE TYPETERM processing, except when an exception condition is detected early in processing the command. Uncommitted changes to recoverable resources made up to that point in the task are committed if the CREATE executes successfully and rolled back if not. See “Creating resource definitions” on page 13 for other general rules governing CREATE commands.

Options

ATTRIBUTES*(data-value)*
specifies the attributes of the TYPETERM being added. The list of attributes must be coded as a single character string using the syntax shown in **TYPETERM attributes**. See “ATTRIBUTES option” on page 14 for general rules for specifying attributes, and the TYPETERM chapter in the *CICS Resource Definition Guide* for details about specific attributes.

ATTRLEN*(data-value)*
specifies the length in bytes of the character string supplied in the ATTRIBUTES option, as a halfword binary value. The length may not exceed 32767 bytes.

TYPETERM*(data-value)*
specifies the 8-character name of the TYPETERM definition to be added to the CICS region.

Conditions

ILLOGIC
RESP2 values:

2 The command cannot be executed because an earlier CONNECTION or TERMINAL pool definition has not yet been completed.

INVREQ
RESP2 values:

n There is a syntactical error in the ATTRIBUTES string, or an error occurred during either the discard or resource definition phase of the processing. See Appendix C, “EXEC CICS CREATE RESP2 values” on page 211 for information on RESP2 values.

200 The command was executed in a program defined with an EXECUTIONSET value of DPLSUBSET or a program invoked from a remote system by a distributed program link without the SYNCONRETURN option.

LENGERR
RESP2 values:

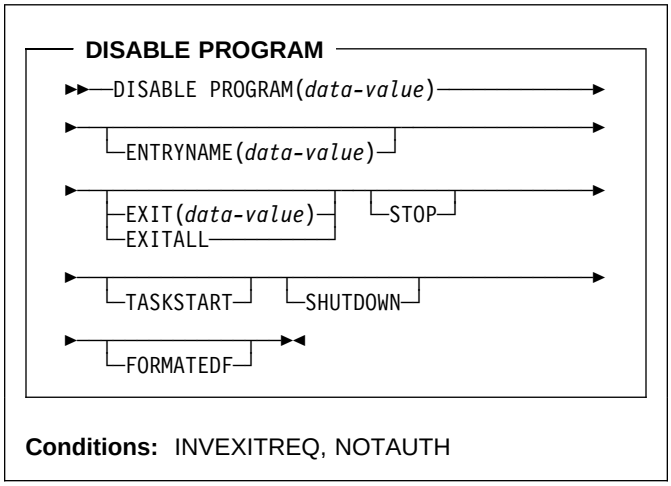
1 The length you have specified in ATTRLEN is negative.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

DISABLE PROGRAM

Terminate or otherwise modify the invocation of a CICS global or task-related user exit program.



Conditions: INVEXITREQ, NOTAUTH

Context

The DISABLE PROGRAM command changes the status of a CICS global or task-related user exit program, reversing the effects of corresponding options in an ENABLE PROGRAM command.

You use it to:

- Remove points at which a particular exit program is invoked
- Make the exit program unavailable for execution (without removing its status as an exit program)
- Release work areas
- Delete its definition as an exit program entirely.

Options on the DISABLE PROGRAM command correspond to those on the ENABLE command:

- ENTRYNAME and PROGRAM identify the exit program to be disabled, and you must use exactly the same combination of values that you did in the ENABLE command that defined the exit program.
- EXIT, FORMATEDF, SHUTDOWN, and TASKSTART reverse the effect of the same-named options on ENABLE PROGRAM; that is, they turn off invocation of the exit program at the points specified.
- STOP reverses the effect of START, making the exit program unavailable for execution.
- EXITALL deletes the definition entirely, reversing the effect of the ENABLE PROGRAM that defined the exit program. Work areas and the load module associated with the exit program may be deleted as well.

For programming information about CICS global or task-related user exit programs, see the *CICS Customization Guide*; you should also see the general discussion of commands that modify exits in “Enabling and disabling user exits” on page 15.

Note: One or more of STOP and (EXIT or EXITALL) is required for a global user exit, and one or more of STOP, EXITALL, TASKSTART, SHUTDOWN, and FORMATEDF is required for a task-related user exit.

Options

ENTRYNAME(*data-value***)**
specifies the name of the global or task-related user exit program whose status is to be changed. If you omit ENTRYNAME, CICS assumes that the name of the exit program is the same as the load module name given in the PROGRAM option. Therefore, you must use the same combination of ENTRYNAME and PROGRAM values on DISABLE commands as was specified on the initial ENABLE command that defined the exit program.

EXIT(*data-value***) (global user exits only)**
specifies the name of the global user exit point from which this exit program is to be dissociated. It causes CICS to stop invoking the exit program at this point but does not, of itself, cause CICS to delete the associated load module from virtual storage, even if it is no longer being used at any exit points. Exit point names are 8 characters long; for programming information, including a list of exit points, see the *CICS Customization Guide*.

EXITALL
causes CICS to discard the definition of the exit program. For a global user exit, EXITALL dissociates the exit program from **all** of the exit points from which it currently is invoked. If possible, the associated load module is deleted from virtual storage.

For a task-related user exit, the associated load module is deleted from virtual storage if it is not in use by another exit point and if the ENTRY option was not specified in the ENABLE command that defined the exit program. If the exit program owns a global work area, the work area is released as soon as no other exit programs are sharing it.

EXITALL implies STOP, so the exit program becomes unavailable for execution. For a task-related user exit, you must avoid requesting this function until all tasks that have used the exit program have ended; the results of EXITALL before that point are unpredictable.

FORMATEDF (task-related user exits only)
indicates that the exit program should not be invoked to format EDF screens. You can reinstate invocation at EDF points with an ENABLE command specifying FORMATEDF.

PROGRAM(*data-value***)**
specifies the 8-character name of the **load module** that contains the entry point for the exit. This name is also

used as the name of the exit program when ENTRYNAME is not specified; see the ENTRYNAME option.

SHUTDOWN (task-related user exits only)
indicates that the exit program should not be invoked at CICS shutdown. You can reinstate invocation at shutdown with an ENABLE command specifying SHUTDOWN.

STOP
specifies that the exit program is to be made unavailable for execution, but is to remain enabled (defined as an exit program). You can make the exit program available for execution again with an ENABLE command specifying START.

When a STOPped task-related user exit program gets invoked, the invoking code gets an AEY9 abend code. There is no corresponding error for global user exits, however, because CICS invokes only those exit programs associated with an exit point which are also available for execution (not stopped).

TASKSTART (task-related user exits only)
indicates that the exit program should not be invoked at the start and end of each task. You can reinstate these invocations with an ENABLE command specifying TASKSTART.

Conditions

INVEXITREQ
The INVEXITREQ condition of the DISABLE command is indicated by X'80' in the first byte of EIBRCODE. The exact cause of the error can be determined by examining the second and third bytes of EIBRCODE, which can have the values shown in the following list.

X'808000' The load module named on the PROGRAM parameter has not been defined to CICS, or the load module is not in the load library, or the load module has been disabled.
X'804000' The value of EXIT is not a valid exit point.
X'800200' The exit point identified by the EXIT value is not defined as an exit point.
X'800100' The exit identified by ENTRYNAME is not defined as an exit.
X'800080' The exit is currently invoked by another task (see note).

Note: The INVEXITREQ condition with X'0080' in the second and third bytes can occur:

- If you issue the DISABLE request while a task using the exit program has been suspended temporarily because of a request for a CICS service within the exit program. The normal action for this condition is to retry the DISABLE request.
- When a DISABLE request with EXITALL or EXIT has been specified, but the exit program has already terminated abnormally. In this case, the use count of the associated load module remains greater than zero. The exit program cannot be dissociated from any exit point, and the load module cannot be deleted from virtual storage. The exit program can, however, be made unavailable for execution by issuing a DISABLE STOP command.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.

Examples

Example 1

```
EXEC CICS DISABLE PROGRAM('EP2') STOP
```

Example 1 makes exit program EP2 non-executable. It does not dissociate it from the exit points with which it is associated, however, or delete its definition as an exit program. It can be made available again by issuing an ENABLE PROGRAM('EP2') START command.

Example 2

```
EXEC CICS DISABLE ENTRYNAME ('ZX') PROGRAM('EP3')
EXIT('XTDREQ')
```

Example 2 stops global user exit ZX from being invoked at exit point XTDREQ. ZX is still defined, however, and if it is associated with other exit points, it will still be invoked at them.

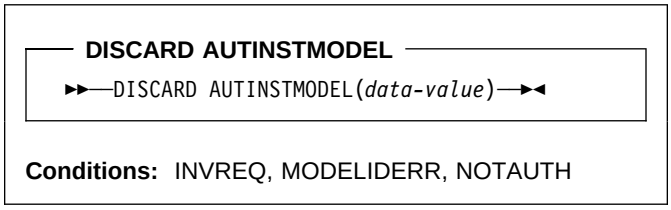
Example 3

```
EXEC CICS DISABLE PROGRAM('EP3') EXITALL
```

Example 3 dissociates EP3 from all points at which invocation was requested (exit points, in the case of a global user exit; task start, shutdown, and so on, in the case of a task-related user exit), and discards the definition of the exit program. If the load module EP3 is not in use, it will be deleted.

DISCARD AUTINSTMODEL

Remove a terminal autoinstall model definition from the executing CICS system.



Conditions: INVREQ, MODELIDERR, NOTAUTH

Context

The DISCARD AUTINSTMODEL command removes the definition of an autoinstall model from the executing CICS system, so that the system cannot use it as a model for automatic installation of terminals.

See “Creating resource definitions” on page 13 for general information about discards.

Options

AUTINSTMODEL(*data-value***)**
specifies the 8-character name of the autoinstall model that is to be removed. This is the name specified in the AUTINSTNAME option of the TERMINAL definition that defines the model. Note that the TERMINAL definition may be installed as a terminal as well as a model. In this case, only the model is discarded.

Models whose names begin with the letters DFH are assumed to be CICS-supplied models and cannot be discarded.

Conditions

INVREQ
RESP2 values:

2 The model you requested is currently in use.
3 The model cannot be discarded because its name begins with DFH.

MODELIDERR
RESP2 values:

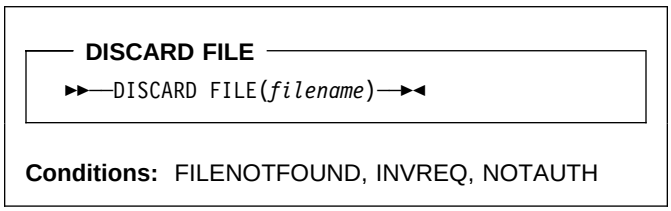
1 The model cannot be found.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

DISCARD FILE

Remove a file definition from the executing CICS system.



Conditions: FILENOTFOUND, INVREQ, NOTAUTH

Context

The DISCARD FILE command removes the definition of a VSAM OR DAM file from the executing CICS system, so that the system no longer has access to the file. That is, it revokes the earlier installation (via RDO INSTALL, EXEC CICS CREATE or DFHFCT macro) of a FILE resource definition of the same name. A file must be closed, disabled, and not currently in use for its definition to be discarded.

See “Creating resource definitions” on page 13 for general information about discards.

Options

FILE(*filename***)**
specifies the 7-character name of the file that is to be removed. You cannot remove the definition of a file whose name begins with the letters DFH, because such files are reserved for CICS. See “Argument values” on page 4 for more information about coding *filename*.

Conditions

FILENOTFOUND
RESP2 values:

18 The file cannot be found.

INVREQ
RESP2 values:

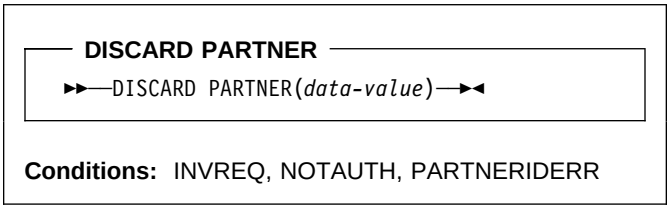
2 The file is not closed.
3 The file is not disabled.
25 The file definition is currently in use.
26 The file cannot be discarded because its name begins with DFH.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.

DISCARD PARTNER

Remove a partner definition from the executing CICS system.



Conditions: INVREQ, NOTAUTH, PARTNERIDERR

Context

The DISCARD PARTNER command removes the definition of a partner from the executing CICS system, so that the system no longer has access to the partner. That is, it revokes the earlier installation (via RDO INSTALL or EXEC CICS CREATE) of a PARTNER resource definition of the same name.

See “Creating resource definitions” on page 13 for general information about discards.

Options

PARTNER(*data-value***)**
specifies the 8-character name of the partner that is to be removed. It must not begin with the letters DFH, because such partners are CICS-defined and may not be deleted.

Conditions

INVREQ
RESP2 values:

2 The partner definition is currently in use.
3 The partner cannot be discarded because its name begins with DFH.

NOTAUTH
RESP2 values:

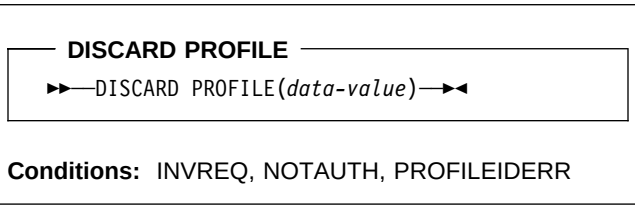
100 The user associated with the issuing task is not authorized to use this command.

PARTNERIDERR
RESP2 values:

1 The partner cannot be found.
5 The Partner Resource Manager (PRM) is not active, because it failed to initialize during CICS initialization.

DISCARD PROFILE

Remove a profile definition from the executing CICS system.



Conditions: INVREQ, NOTAUTH, PROFILEIDERR

Context

The DISCARD PROFILE command removes the definition of a profile from the executing CICS system, so that the system no longer has access to the profile. That is, it revokes the earlier installation of a PROFILE (via RDO INSTALL or EXEC CICS CREATE) resource definition of the same name. You cannot discard a profile while any installed TRANSACTION definitions point to it.

See “Creating resource definitions” on page 13 for general information about discards.

Options

PROFILE(*data-value***)**
specifies the 8-character name of the profile that is to be removed. It must not begin with the letters DFH, because such profiles are CICS-defined and cannot be discarded.

Conditions

INVREQ
RESP2 values:

2 The profile definition is currently in use.
3 A transaction definition points to the profile.
4 The profile cannot be discarded because its name begins with DFH.

NOTAUTH
RESP2 values:

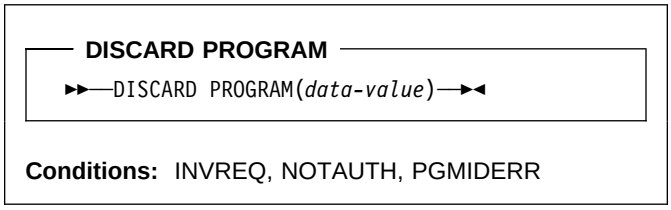
100 The user associated with the issuing task is not authorized to use this command.

PROFILEIDERR
RESP2 values:

1 The profile cannot be found.

DISCARD PROGRAM

Remove a program, map set, or partition set definition from the executing CICS system.



Conditions: INVREQ, NOTAUTH, PGMIDERR

Context

The DISCARD PROGRAM command removes the definition of a program, map set, or partition set (a load module resource) from the executing CICS system, so that the system no longer has access to the resource. That is, it revokes the earlier installation (via RDO install or EXEC CICS CREATE) of a PROGRAM, MAPSET, or PARTITIONSET definition of the same name.

You cannot discard a module that is being executed or otherwise used by a task. Definitions supplied by CICS (modules whose name begin with DFH) and modules defined as user-replaceable (such as autoinstall programs) also are ineligible.

See “Creating resource definitions” on page 13 for general information about discards.

Options

PROGRAM(*data-value***)**
specifies the 8-character name of the program, map set, or partition set that is to be removed.

Conditions

INVREQ
RESP2 values:

1 The resource cannot be discarded because its name begins with DFH.
11 The resource definition is currently in use.
15 The resource cannot be discarded because it is a user-replaceable module.

NOTAUTH
RESP2 values:

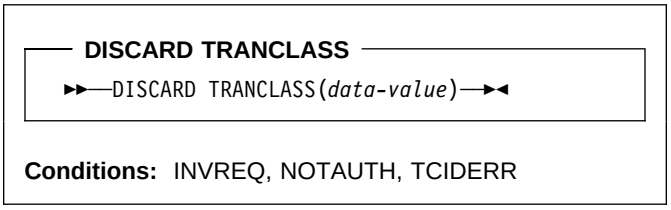
100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.

PGMIDERR
RESP2 values:

7 The resource definition cannot be found.

DISCARD TRANCLASS

Remove a transaction class definition from the executing CICS system.



Conditions: INVREQ, NOTAUTH, TCIDERR

Context

The DISCARD TRANCLASS command removes the definition of a transaction class from the executing CICS system. That is, it revokes the earlier installation (via RDO INSTALL or EXEC CICS CREATE) of a TRANCLASS resource definition of the same name.

A transaction class cannot be removed while it contains any transactions.

See “Creating resource definitions” on page 13 for general information about discards.

Options

TRANCLASS(*data-value***)**
specifies the 8-character name of the transaction class that is to be removed.

In earlier releases of CICS, transaction classes were numbered from 1 through 10 rather than named, as they are now. For compatibility, CICS supplies ten definitions that are named ‘DFHTCL’ followed by the 2-digit class number (DFHTCL01 for class 1, and so on). These definitions can be discarded like any other transaction class, even though they begin with DFH.

Conditions

INVREQ
RESP2 values:

2 The TRANCLASS definition is in use.
12 The transaction class cannot be discarded because installed transactions belong to it.

NOTAUTH
RESP2 values:

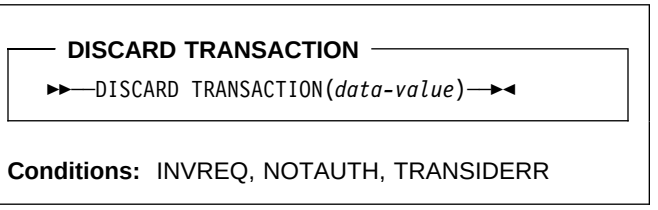
100 The user associated with the issuing task is not authorized to use this command.

TCIDERR
RESP2 values:

1 The transaction class cannot be found.

DISCARD TRANSACTION

Remove a transaction definition from the executing CICS system.



Conditions: INVREQ, NOTAUTH, TRANSIDERR

Context

The DISCARD TRANSACTION command removes the definition of a transaction from the executing CICS system. That is, it revokes the earlier installation (via RDO INSTALL or EXEC CICS CREATE) of a TRANSACTION resource definition of the same name.

You cannot delete transactions supplied by CICS (names beginning with the letter *C*), transactions defined by the CICS system initialization table (paging transactions, for example), or transactions that are scheduled to execute at a future time or when required resources are available.

See “Creating resource definitions” on page 13 for general information about discards.

Options

TRANSACTION(*data-value***)**
specifies the 4-character name of the transaction that is to be removed.

Conditions

INVREQ
RESP2 values:

4 The transaction cannot be discarded because its name begins with C.
12 The transaction definition is currently in use.
13 The transaction is specified on a system initialization parameter.
14 The transaction is scheduled to run at a future time (in use by an interval control element).
15 The transaction is scheduled to run when required resources are available (in use by an automatic initiate descriptor).

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

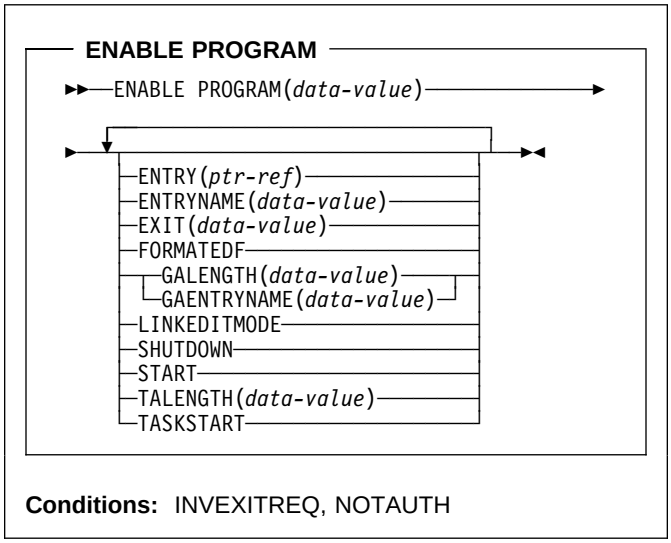
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.

TRANSIDERR
RESP2 values:

1 The transaction cannot be found.

ENABLE PROGRAM

Enable a CICS global or task-related user exit program to allow it to be invoked.



Conditions: INVEXITREQ, NOTAUTH

Context

The initial ENABLE PROGRAM command for an exit:

- Loads the exit program into virtual storage
- For permanently-resident or previously-loaded load modules, specifies the entry address of the exit program to CICS
- Obtains a work area for the exit program
- For global user exits, associates the exit program with an exit point in a CICS module
- For task-related user exits, specifies that the exit program is to be invoked at the start of each task
- Makes the exit program available for execution

After the initial ENABLE command that defines the exit, you can add or remove points at which the exit is executed or change its availability dynamically with ENABLE and DISABLE commands, until you DISABLE with the EXITALL option, which deletes the definition of the exit. See the description of that command on page 51 for the correspondence between options on the two commands.

For programming information about exits in CICS, see the *CICS Customization Guide*; you should also see the general discussion of commands that modify exits in “Enabling and disabling user exits” on page 15.

Options

ENTRY(*ptr-ref***)**
specifies a pointer reference that contains the entry point address of the global or task-related user exit. The

address you specify must be within the virtual storage range occupied by the load module named in the PROGRAM option.

The use of the ENTRY option means that the module named in the PROGRAM option has already been loaded or is permanently resident. CICS does not attempt to load the module, and also does not delete it when the user exit is disabled with EXITALL. If you omit ENTRY, CICS uses the first entry point in the load module and manages loading and deletion for you.

ENTRY is valid only on the initial ENABLE command that defines the exit.

If you specify LINKEDITMODE for a task-related user exit, the top bit of the entry address must contain the addressing mode (AMODE) indicator. The top bit is set if the exit is AMODE=31 and is zero if AMODE=24.

ENTRYNAME(*data-value***)**
specifies the 8-character name of the global or task-related user exit that is to be enabled. This name must be different from the name of any exit already established. It does not have to be defined to CICS other than by means of this command, and it need not be the name of a load module or an entry point to a load module.

If you omit ENTRYNAME, the name of the exit defaults to the name of the load module specified in the PROGRAM option.

After the initial ENABLE command that defines the exit, you must use the same combination of ENTRYNAME and PROGRAM values to identify the exit on subsequent ENABLE, DISABLE, and EXTRACT EXIT commands.

EXIT(*data-value***) (global user exits only)**
specifies the 8-character name of a global user exit point with which this user exit program is to be associated. When an exit is "associated" with an exit point, it is invoked when CICS reaches that particular point in its management code, provided the exit has been "started" (made available for execution). Exit points are defined and named by CICS. For programming information about exits, and a list of exit points, see the *CICS Customization Guide*.

You can name only one exit point on each ENABLE command. If the same exit is to be invoked from multiple exit points, you need a separate ENABLE command for each point.

FORMATEDF (task-related user exits only)
specifies that the exit is to be invoked at additional points (within EDF), when the exit is invoked by a task running under EDF. The additional invocations allow the exit to format EDF displays and interpret changes made by the user to fields on the EDF screen. You can turn off EDF invocations with a DISABLE command specifying FORMATEDF.

GAENTRYNAME(*data-value***)**
specifies the 8-character name of a currently enabled global or task-related user exit whose global work area is to be shared by the exit being enabled. This is the name assigned to that exit when it was defined (its ENTRYNAME if one was used or its load module name from the PROGRAM option if not).

It must own the work area (that is, GALENGTH must have been specified when it was originally enabled). CICS will not release a work area until all of the exits using it are disabled with EXITALL (no longer defined), but the owning exit must still be enabled for a new exit to share its work area.

GALENGTH and GAENTRYNAME are mutually exclusive and must be specified on the initial ENABLE command that defines the exit. If neither option is supplied, no global work area is provided.

GALENGTH(*data-value***)**
specifies, as a halfword binary value, the length in bytes of the global work area that is to be provided by CICS for this exit. Valid lengths are 1 through 32767. The work area is initialized to binary zeros.

GALENGTH is valid only on the initial ENABLE command that defines the exit.

CICS does not return the address of the work area on the ENABLE command; you can use an EXTRACT EXIT command to determine it.

LINKEDITMODE (task-related user exits only)
specifies that the exit should be invoked in the addressing mode in which it was link-edited. If you do not specify LINKEDITMODE, it is invoked in the addressing mode of the caller. LINKEDITMODE is valid only on the initial ENABLE command that defines the exit.

You should avoid using LINKEDITMODE to force a task-related user exit to run in AMODE(24) because:

- An exit link-edited in AMODE(24) cannot be invoked from a task running with TASKDATALOC(ANY). If you attempt to do this, the task abends with CICS abend code AEZB.
- Enabling an exit for TASKSTART and LINKEDITMODE causes CICS to force all transactions to run with TASKDATALOC(BELOW) if the associated load module is link edited for AMODE(24).
- For a CICS shutdown call, CICS ignores the LINKEDITMODE attribute and invokes the exit in the addressing mode of the task that performs this shutdown function. For some types of shutdown, the addressing mode of this task is not predefined.

PROGRAM(*data-value***)**
specifies the 8-character name of the **load module** containing the entry point of the exit. CICS uses the PROGRAM resource definition of this name to load the

program, if necessary, and to verify that it is enabled and resides on the same CICS system as the exit. If no such definition exists, CICS will attempt to build one dynamically if the system is defined to allow autoinstall of programs.

If you omit the ENTRYNAME option, CICS assumes that the name of the exit is the same as that of the load module.

SHUTDOWN (task-related user exits only)
specifies that the exit is to be invoked during CICS shutdown processing. You can turn off the invocation with a DISABLE command specifying SHUTDOWN.

START
indicates that the exit is available for execution. You can turn availability on and off with ENABLE commands (specifying START) and DISABLE commands (specifying STOP), but the exit starts out in stopped mode and is not available until the first ENABLE with START.

When a STOPped task-related user exit gets invoked, the invoking code gets an AEY9 abend code. There is no corresponding error for global user exits, however, because CICS invokes only those exits associated with an exit point which are also available for execution (not stopped).

When a single global user exit is to be associated with several exit points, the START option allows you to delay execution of the exit until all the required ENABLE commands have been issued. You can, however, associate more exit points with the exit **after** it has been started.

TALENGTH(*data-value*) (task-related user exits only)
specifies, as a halfword binary value, the length in bytes of the work area that CICS provides for each task that uses the exit. Valid lengths are 1 through 32767. CICS allocates the work area and initializes it to binary zeros before the first use of the exit by the task, and releases it at task end. If you do not specify TALENGTH, CICS does not create task work areas.

TASKSTART (task-related user exits only)
specifies that the exit is to be invoked at the start of every task. The exit will also be invoked at end of task, but you can turn off this invocation within the exit if you wish. (The task that logs off an autoinstalled terminal in an MRO environment is an exception; it does not invoke the exit.)

The TASKSTART option is independent of the START option, but you should turn on START before or at the same time as TASKSTART, to avoid invoking the exit when it is not available for execution. In addition, you must not code the TASKSTART option on any ENABLE command that can be executed before the recovery part of CICS initialization.

You can turn off these invocations with a DISABLE command specifying TASKSTART.

Conditions

INVEXITREQ
The INVEXITREQ condition of the ENABLE command is indicated by X'80' in the first byte of EIBRCODE. The exact cause of the error can be determined by examining the second and third bytes of EIBRCODE.

X'808000'
- The load module named in the PROGRAM option has not been defined to CICS and could not be autoinstalled, or
- it is not in the load library, or
- it has been disabled, or
- it is defined as remote, or
- it does not contain the address specified in the ENTRY option.

X'804000' The name specified in the EXIT option is not a valid global user exit point.
X'802000' The exit is already enabled. ENTRY, LINKEDITMODE, TALENGTH, GALENGTH and GAENTRY are valid only on the initial ENABLE command that defines the exit.
X'801000' The exit is already associated with the exit point specified in the EXIT option.
X'800800' The exit specified in the GAENTRYNAME option is not enabled.
X'800400' The exit specified in the GAENTRYNAME option does not own a work area.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.

Examples

Enabling global user exits

Example 1

```
EXEC CICS ENABLE PROGRAM('EP') ENTRYNAME('EP1')
     EXIT('XFCREQ') START
```

Example 1 defines exit EP1, tells CICS that EP1 is to be invoked from exit point XFCREQ, and makes EP1 available for execution. No global work area is obtained. CICS loads the EP module if necessary.

Example 2

```
EXEC CICS ENABLE PROGRAM('EP2') EXIT('XMNOUT')
     START ENTRY(EADDR) GALENGTH(500)
```

Example 2 defines an exit named EP2 (named by default from its load module). This module is already loaded, and the entry point for the exit is in EADDR. The exit is to be

executed at exit point XMNOUT, and it is available for execution. A global work area of 500 bytes, which is to be owned by EP2, is obtained.

Example 3

```
EXEC CICS ENABLE PROGRAM('EP3') EXIT('XTDOUT')
     GAENTRYNAME('EP2')
EXEC CICS ENABLE PROGRAM('EP3') EXIT('XTDIN')
EXEC CICS ENABLE PROGRAM('EP3') EXIT('XTDREQ') START
```

The first command of example 3 defines exit EP3; it is associated with exit point XTDOUT. CICS will load module EP3 if necessary. EP3 is to use the work area that is owned by exit EP2. (This assumes that the ENABLE command in example 2 has already been issued.)

The second command says that EP3 is also associated with exit point XTDIN. The third command says that EP3 is associated with exit point XTDREQ, and makes the exit available for execution. EP3 is now invoked from all of these exit points, and it can use EP2's work area on any of those invocations.

Enabling task-related user exits

Example 1

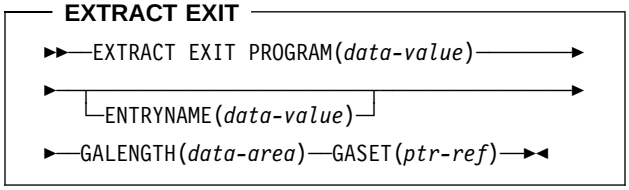
```
EXEC CICS ENABLE PROGRAM('EP9')
     TALENGTH(750) ENTRYNAME('RM1') GALENGTH(200)

EXEC CICS ENABLE PROGRAM('EP9')
     ENTRYNAME('RM1') START
```

The first command defines the task-related user exit RM1, loads EP9 (the load module executed initially) if it is not already resident, and allocates a 200-byte global work area to the exit. It also schedules the allocation of a further 750-byte work area for each task that invokes RM1. The second command makes the exit available for execution.

EXTRACT EXIT

Obtain the address and length of a user exit's global work area.

EXTRACT EXIT



Conditions: INVEXITREQ, NOTAUTH

Context

The EXTRACT EXIT command obtains the address and the length of the global work area that is owned by, or shared by, a user exit.

Options

ENTRYNAME(*data-value***)**
specifies the 8-character name of the global or task-related user exit for which you want global work area information. If you omit ENTRYNAME, CICS assumes that the name of the exit is the same as the name of the load module given in the PROGRAM option. Therefore, you must use the same combination of ENTRYNAME and PROGRAM values as was specified on the ENABLE command that defined the exit.

GALENGTH(*data-area***)**
returns the length in bytes of the global work area, in halfword binary form.

GASET(*ptr-ref***)**
returns the address of the global work area.

PROGRAM(*data-value***)**
specifies the name of the **load module** containing the entry point of the exit. This name is also used as the name of the exit when ENTRYNAME is not specified; see the ENTRYNAME option.

Conditions

INVEXITREQ
The INVEXITREQ condition of the EXTRACT EXIT command is indicated by X'80' in the first byte of EIBRCODE. The exact cause of the error can be determined by examining the second and third bytes of EIBRCODE. For further information on EIBRCODE, see Appendix B, "EXEC interface block (EIB) response and function codes" on page 205.

X'800200' The exit is not enabled.

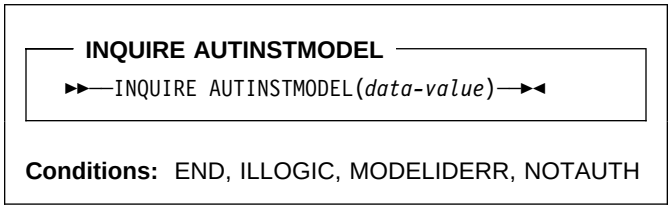
X'800400' The exit has no global work area.
X'808000' The load module named in the PROGRAM option is not the same as the one used when the exit specified in the ENTRYNAME option was enabled.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.

INQUIRE AUTINSTMODEL

Find out whether a terminal autoinstall model is installed.



Conditions: END, ILLOGIC, MODELIDERR, NOTAUTH

Context

The INQUIRE AUTINSTMODEL command allows you to determine whether a particular terminal autoinstall model is installed (defined in the current execution of your CICS system).

Browsing

You can also browse through all of the terminal autoinstall models installed in your system by using the browse options (START, NEXT, and END) on INQUIRE AUTOINSTALL commands. See “Browsing resource definitions” on page 11 for general information about browsing, syntax, exception conditions, and examples.

Options

AUTINSTMODEL(*data-value***)**
specifies the 8-character identifier of the terminal autoinstall model about which you are inquiring.

Conditions

END
RESP2 values:

2 There are no more resource definitions of this type.

ILLOGIC
RESP2 values:

1 You have issued a START command when a browse of this resource type is already in progress, or you have issued a NEXT or an END command when a browse of this resource type is not in progress.

MODELIDERR
RESP2 values:

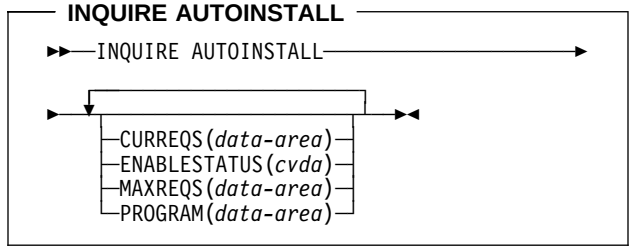
1 The model specified cannot be found.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

INQUIRE AUTOINSTALL

Retrieve terminal autoinstall values.



Conditions: INVREQ, NOTAUTH

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The INQUIRE AUTOINSTALL command lets you look at some of the values that control the automatic installation of VTAM terminals (autoinstall) in your CICS system.

Options

CURREQS(*data-area***)**
returns a fullword binary field indicating the number of terminal autoinstall requests that are currently being processed. This count does not include terminals already installed in this manner.

ENABLESTATUS(*cvda***)**
returns a CVDA value indicating the overall status of autoinstall for terminals. CVDA values are:

DISABLED
Terminals cannot be automatically installed.

ENABLED
Terminals can be automatically installed.

MAXREQS(*data-area***)**
returns a fullword binary field indicating the largest number of terminal autoinstall requests that can be processed concurrently. Note that this value has no effect on the total number of terminals that can be installed automatically.

PROGRAM(*data-area***)**
returns the 8-character name of the installation-supplied program used in the terminal autoinstall process. This is either the CICS-supplied default autoinstall program DFHZATDX, the VSE/ESA-supplied program IESZATDX, or a user-written program.

Conditions

INVREQ
RESP2 values:

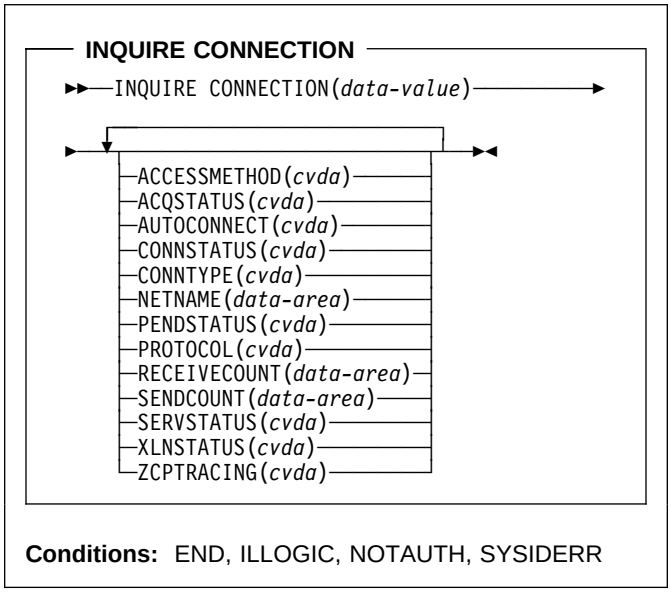
1 VTAM is not in use in this system.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

INQUIRE CONNECTION

Retrieve information about a system connection.



Conditions: END, ILLOGIC, NOTAUTH, SYSIDERR

For more information about the use of CVDAs, see “CICS-value data areas (CVDAs)” on page 7.

Context

The INQUIRE CONNECTION command retrieves information about a connection from your local CICS region to another CICS region or another system. A CONNECTION definition is sometimes known as a “system entry.”

There are two main types of system connection:

- Multiregion operation (MRO), which uses the CICS interregion communication program (DFHIRP) to establish a connection between two MRO partners. An MRO connection can exist only between two CICS regions on the same VSE image.

  A special form of MRO connection, used by the external CICS interface (EXCI) can exist between a CICS region and a non-CICS client program running in VSE, for example a VSE batch program. An EXCI connection connects the client program to a CICS region running in the same VSE image.
- Intersystem communication (ISC) connections, between CICS and any other system which supports VTAM APPC or LUTYPE6.1 communications. For example, ISC connections can exist between CICS regions running in different VSE/ESA images or on different operating system platforms, between CICS and any APPC device, and between CICS and IMS™.

Browsing

You can also browse through all of the RDO CONNECTION resource definitions installed in your system by using the browse options (START, NEXT and END) on INQUIRE CONNECTION commands. See “Browsing resource definitions” on page 11 for general information about browsing, syntax, exception conditions, and examples.

Options

ACCESSMETHOD(*cvda*)
returns a CVDA value indicating the type of connection between the local system and the one you are inquiring about. CVDA values are:

INDIRECT
Communication between the local CICS system and the system defined by this connection is through the system named in the INDSYS operand of the RDO CONNECTION resource definition.

IRC The connection is used for multiregion operation (MRO), and has been defined to use DFHIRP for communication.

VTAM
The connection is used for intersystem communication (ISC).

ACQSTATUS(*cvda*) (APPC only)
returns the same value as the CONNSTATUS option and is retained only for compatibility purposes. You should use CONNSTATUS in new applications.

AUTOCONNECT(*cvda*) (VTAM only)
returns a CVDA value identifying which AUTOCONNECT option has been specified in the RDO CONNECTION resource definition. For parallel APPC connections (those with SINGLESESS(NO) specified), the AUTOCONNECT operand controls the binding of the LU services manager sessions whenever communication with VTAM is started. For single-session APPC connections and for LUTYPE6.1 connections, the AUTOCONNECT operand on the RDO CONNECTION resource definition is ignored and the value returned is not meaningful. CVDA values are:

ALLCONN
AUTOCONNECT(ALL) has been specified on the CONNECTION definition. This is the same as specifying AUTOCONNECT(YES), but it can be used for consistency with the associated RDO SESSIONS definition, which allows AUTOCONNECT(ALL).

AUTOCONN
AUTOCONNECT(YES) has been specified on the RDO CONNECTION resource definition. CICS is to try to bind the LU services manager sessions.

NONAUTOCONN
AUTOCONNECT(NO) has been specified for the RDO CONNECTION resource definition. CICS does not bind LU services manager sessions.

CONNECTION(*data-value*)
specifies the 4-character identifier of the remote system or region about which you are inquiring (that is, the name assigned to its RDO CONNECTION resource definition).

CONNSTATUS(*cvda*) (APPC and MRO only)
returns a CVDA value identifying the state of the connection between CICS and the remote system. The remote system can be an APPC partner or a CICS MRO partner; CONNSTATUS is not applicable to EXCI or LU6.1 connections. The ACQUIRED and RELEASED CVDA values are common to both APPC and MRO; the others are unique to APPC. CVDA values are:

ACQUIRED
The connection is acquired. The criteria for ACQUIRED for VTAM links are:

- The partner LU has been contacted.
- The initial CHANGE-NUMBER-OF-SESSIONS (CNOS) exchange has been done.

The criteria for ACQUIRED for MRO links are:

- Both sides of the link are in service.
- Both sides of the link are successfully logged on to DFHIRP.
- A connection request by each side has been successful for at least one session, and therefore each side can send and receive data.

AVAILABLE
The connection is acquired but there are currently no bound sessions because they were unbound for limited resource reasons.

FREEING
The connection is being released.

OBTAINING
The connection is being acquired. The connection remains in the OBTAINING state until all the criteria for ACQUIRED have been met.

RELEASED
The connection is RELEASED. Although it may also be in INSERVICE status, it is not usable.

The RELEASED status can be caused by any one of a number of general conditions:

- The remote system has not yet initialized.
- No CONNECTION definition exists on the remote system.
- The connection on the remote system has been set out of service.

In the case of a CICS-to-CICS MRO connection, the RELEASED status may also be because:

- The remote CICS region has not yet logged on to DFHIRP.
- The remote CICS region has closed interregion communication.

In the case of an APPC ISC connection, the RELEASED status may also be because:

- The remote CICS region has not yet opened its VTAM ACB.
- AUTOCONNECT(NO) has been specified on the RDO CONNECTION or SESSIONS definition.

NOTAPPLIC
: The connection is not a CICS-to-CICS MRO connection or an APPC connection.

CONNTYPE(*cvda*) (EXCI only)
returns a CVDA value identifying the type of external CICS interface (EXCI) sessions, or pipes, defined for this connection. This option applies only to EXCI connections. CVDA values are:

GENERIC
: The connection is generic. A GENERIC connection is an MRO link with many sessions to be shared by multiple users.

SPECIFIC
: The connection is specific. A SPECIFIC connection is an MRO link with one or more sessions dedicated to a single user.

NOTAPPLIC
: The connection is not an EXCI connection.

See the *CICS External CICS Interface* manual for more information about EXCI connections.

NETNAME(*data-area*)
returns the 8-character name by which the remote system is known to the network (from the NETNAME value specified in the RDO CONNECTION definition).

For an ISC connection, the NETNAME corresponds to the VTAM APPLID of the remote system.

For a CICS-to-CICS MRO connection, the NETNAME is the name the remote system uses to log on to DFHIRP (from the APPLID system initialization parameter).

For a SPECIFIC EXCI connection, NETNAME is the name of the client program that is passed on the EXCI INITIALIZE_USER command; for a GENERIC EXCI connection, NETNAME is always blanks.

For an indirect connection, NETNAME corresponds to the APPLID (from the APPLID system initialization parameter) of the terminal owning region.

PENDSTATUS(*cvda*) (APPC only)
returns a CVDA value identifying whether there are any pending units of work. CVDA values are:

NOTPENDING
: There are no pending units of work.

PENDING
: The local system has units of work that require resynchronization with the remote system. The resynchronization process results in CLS2 transactions being initiated when a new session is bound between the systems.

NOTAPPLIC
: This is not an APPC connection.

For information on pending units of work, see the *CICS Intercommunication Guide*.

PROTOCOL(*cvda*) (VTAM and EXCI only)
returns a CVDA value identifying the protocol in use if this is a VTAM or EXCI connection. CVDA values are:

APPC
: The connection uses the VTAM LUTYPE6.2 protocol for intersystem communication.

EXCI
: The connection uses the external CICS interface for communication between CICS and a non-CICS client program.

LU61
: The connection uses the VTAM LUTYPE6.1 protocol.

NOTAPPLIC
: The connection is used for CICS-to-CICS MRO communication or it is INDIRECT.

RECEIVECOUNT(*data-area*) (MRO only)
returns a fullword binary value giving the number of RECEIVE sessions defined for this connection. This option applies only to MRO connections; for others the value returned is -1.

SENDCOUNT(*data-area*) (MRO only)
returns a fullword binary value giving the number of SEND sessions defined for this connection. For EXCI connections, the SENDCOUNT is always zero. This option applies only to MRO connections; for others the value returned is -1.

SERVSTATUS(*cvda*)
returns a CVDA value indicating whether data can be sent and received on the connection. CVDA values are:

GOINGOUT
: OUTSERVICE has been requested on a SET CONNECTION command, and the request cannot be acted on until some current work has completed.

INSERVICE
: Data can be sent and received.

OUTSERVICE
: Data cannot be sent and received.

XLNSTATUS(*cvda*) (APPC only)
returns a CVDA value identifying the status of the exchange log names (XLN) process. CVDA values are:

NOTAPPLIC
The XLN process is not applicable. This can be because the link:

- Is released
- Is MRO, LUTYPE6.1, or single-session APPC
- Does not support synchronization level 2 conversations

For information about the APPC exchange log names process, see the *CICS Intercommunication Guide*.

XNOTDONE
The XLN flow for the APPC connection has not completed successfully. The CSMT log can contain information relating to this state. Synchronization level 2 conversations are not allowed on the connection, but synchronization levels 0 and 1 are still allowed.

XOK The XLN process for the APPC connection has completed successfully.

ZCPTRACING(*cvda*) (VTAM only)
returns a CVDA value indicating whether the VTAM control component of CICS is tracing activity on the sessions associated with this connection. CVDA values are:

NOTAPPLIC
The connection is not LUTYPE6.1 or APPC.

NOZCPTRACE
ZCP tracing is not active.

ZCPTRACE
ZCP tracing is active.

Conditions

END
RESP2 values:

2 There are no more resource definitions of this type.

ILLOGIC
RESP2 values:

1 You have issued a START command when a browse of this resource type is already in progress, or you have issued a NEXT or an END command when a browse of this resource type is not in progress.

NOTAUTH
RESP2 values:

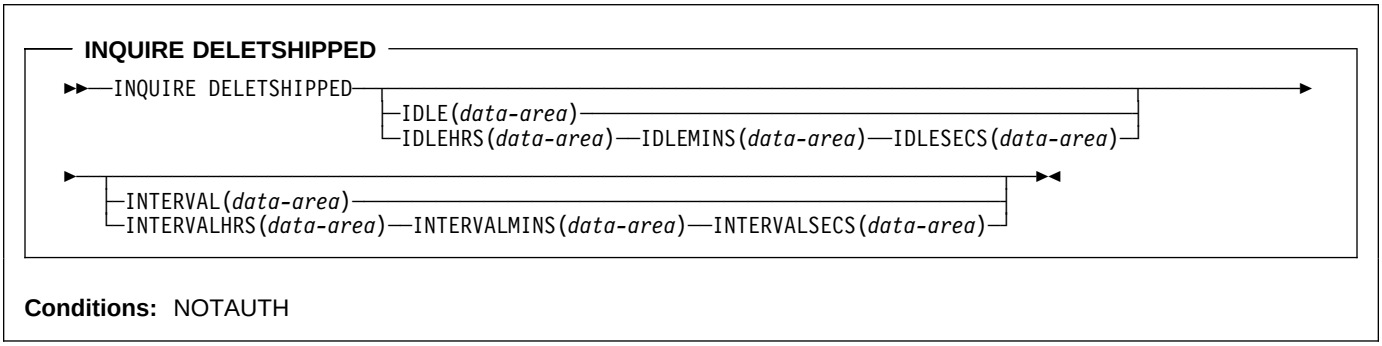
100 The user associated with the issuing task is not authorized to use this command.

SYSIDERR
RESP2 values:

1 The connection cannot be found.

INQUIRE DELETSHIPPED

Retrieve information about system settings that control the CICS timeout delete mechanism.



Conditions: NOTAUTH

Context

CICS provides a mechanism for deleting shipped terminal definitions after they have been idle for a period of time. The installation specifies how long a terminal must have been inactive to be eligible for deletion (the IDLE time), and how often the check should be made (the INTERVAL). The INQUIRE DELETSHIPPED command displays the current settings of these two control options.

There are two formats for each of the time values that you can retrieve with this command (the idle time and the interval checking period):

- A 4-byte packed decimal composite (0hhmmss+), which you obtain by using the IDLE and INTERVAL options.
- Separate hours, minutes, and seconds, which you obtain by specifying the IDLEHRS, IDLEMINS, and IDLESECS options (instead of IDLE), and INTERVALHRS, INTERVALMINS, and INTERVALSECS (instead of INTERVAL).

Options

IDLE(*data-area***)**
returns the idle time, as a 4-byte packed decimal field in the format 0hhmmss+. Idle time is the minimum time that a terminal must be inactive to be eligible for deletion.

IDLEHRS(*data-area***)**
returns the hours component of the idle time, in fullword binary form.

IDLEMINS(*data-area***)**
returns the minutes component of the idle time, in fullword binary form.

IDLESECS(*data-area***)**
returns the seconds component of the idle time, in fullword binary form.

INTERVAL(*data-area***)**
returns a 4-byte packed decimal field, in the format 0hhmmss+, giving the interval at which the check for idle terminals is made.

INTERVALHRS(*data-area***)**
returns the hours component of the interval, in fullword binary form.

INTERVALMINS(*data-area***)**
returns the minutes component of the interval, in fullword binary form.

INTERVALSECS(*data-area***)**
returns the seconds component of the interval, in fullword binary form.

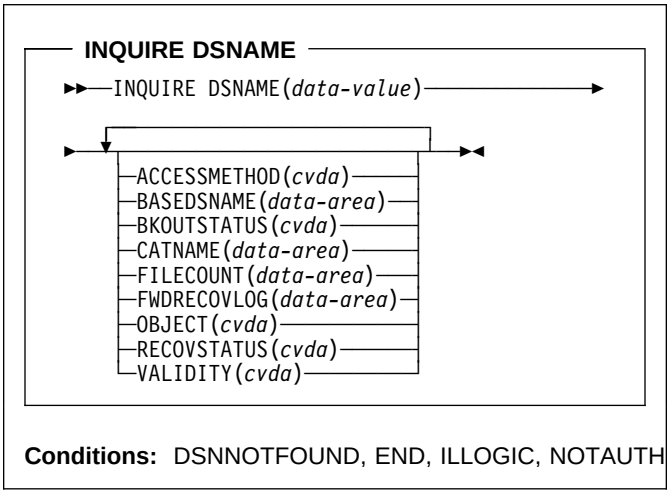
Conditions

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

INQUIRE DSNAME

Retrieve information about an external data set.



Conditions: DSNNOTFOUND, END, ILLOGIC, NOTAUTH

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The INQUIRE DSNAME command returns information about the object associated with a FILE resource definition, which can be a DAM data set, a VSAM data set or a VSAM path to a data set through an alternate index.

Data sets are associated with files either dynamically, through the DSNAME option in the FILE definition, or statically, through the file-id option on the associated JCL DLBL statement. Some attributes of a data set cannot be determined until a file that references the data set has been opened. If this has not happened, UNDETERMINED values are returned for these attributes.

Browsing

You can also browse through all the objects associated with files installed in your system, by using the browse options (START, NEXT, and END) on INQUIRE DSNAME commands. See "Browsing resource definitions" on page 11 for general information about browsing, syntax, exception conditions, and examples.

Options

ACCESSMETHOD(*cvda***)**
returns a CVDA value identifying the access method used with this data set. CVDA values are:

DAM The access method is DAM.

VSAM
The access method is VSAM.

BASEDSNAME(*data-area***) (VSAM only)**
returns the 44-character name of the base cluster associated with a VSAM path, when the object of the inquiry is a path. If the object is other than a path, this option returns the same value as the DSNAME option.

If the access method is DAM, blanks are returned.

BKOUTSTATUS(*cvda***) (VSAM only)**
returns a CVDA value identifying the backout status of the data set. Backout occurs when one of the files associated with the data set is defined as recoverable and a transaction that has updated the file fails. CVDA values are:

FAILEDBKOUT
An attempt to back out has failed, and file integrity may have been lost. For further information on this topic, see the *CICS Recovery and Restart Guide*.

FAILINGBKOUT
An attempt to back out has failed, and not all associated files have completed closing.

NORMALBKOUT
All backouts have been successful, or backout has not been necessary.

NOTAPPLIC
This is a DAM data set or a VSAM path. For a VSAM path, see the BKOUTSTATUS value for the associated base.

CATNAME(*data-area***) (VSAM only)**
returns the 7-character name of the VSAM catalog in which the data set is defined.

DSNAME(*data-value***)**
specifies the 44-character identifier of the object about which you are inquiring. It must be associated with a FILE definition installed in CICS, named either in the DSNAME option of that definition or the JCL DLBL statement specified in the file-id option.

FILECOUNT(*data-area***)**
returns a fullword binary field indicating the number of installed file definitions that refer to this data set.

FWDRECOVLOG(*data-area***) (VSAM only)**
returns the number of the journal that is used to record the information required for forward recovery, in halfword binary form. If RECOVSTATUS does not have a value of FWDRECOVABLE, -1 is returned.

OBJECT(*cvda***) (VSAM only)**
returns a CVDA value indicating whether the object of the inquiry is a real data set containing records (a VSAM KSDS, ESDS, or RRDS, or an alternate index used directly) or a VSAM path definition that links an alternate index to its base cluster. CVDA values are:

BASE
This is a data set containing records.

PATH
This is a path.

RECOVSTATUS(*cvda***)**
returns a CVDA value identifying the recovery characteristics of the data set. CVDA values are:

FWDRECOVABLE
All updates to the data set are logged for both backout and forward recovery.

NOTAPPLIC
This is a DAM data set or a VSAM path.

NOTRECOVABLE
Updates to the data set are not logged.

This response may also be returned as the result of use of the XFCNREC global user exit. A program enabled at XFCNREC may indicate that file opens should proceed even if there is a mismatch in the backout recovery requirements for different files associated with same data set. In these circumstances, the data set is marked as NOTRECOVABLE to indicate that its data integrity can no longer be guaranteed. For more information about XFCNREC, see *CICS Customization Guide*.

The condition remains until cleared by a CEMT SET DSNAME REMOVE, EXEC CICS SET DSNAME REMOVE or a cold start (if the associated data set is not in backout-failed state). While the data set is in this state, backout logging is performed for a particular request based on the specification in the file definition. Therefore backout logging may occur for requests via one file and not via another.

RECOVERABLE
All updates to the data set are logged for backout.

UNDETERMINED
The recovery status is unknown, because no file associated with this data set has been opened.

VALIDITY(*cvda***)**
returns a CVDA value identifying whether the data set name has been validated against the VSAM catalog by opening a file associated with the data set. CVDA values are:

INVALID
The data set name has not been validated (validation has not yet occurred or has failed).

VALID
The data set name has been validated.

You cannot find out what the RECOVSTATUS of a data set is unless VALIDITY has a setting of VALID.

Conditions

DSNNOTFOUND
RESP2 values:

1 The data set cannot be found.

END
RESP2 values:

2 There are no more resource definitions of this type.

ILLOGIC
RESP2 values:

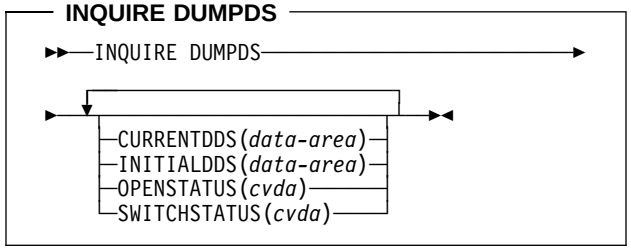
1 You have issued a START command when a browse of this resource type is already in progress, or you have issued a NEXT or an END command when a browse of this resource type is not in progress.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

INQUIRE DUMPDS

Retrieve information about the CICS transaction dump data sets.



Conditions: NOTAUTH

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The INQUIRE DUMPDS command allows you to retrieve information about CICS transaction dump data sets. There can either be one of these, known as the 'A' data set, or two: 'A' and 'B'. One is "active" (receiving dumps) and the other, if there are two, is "inactive" (standby).

Options

CURRENTDDS(*data-area***)**
returns the 1-character designator of the active dump data set (A or B). The active dump data set is not necessarily open.

INITIALDDS(*data-area***)**
returns a 1-character value indicating which dump data set CICS designates as active at startup.

A Dump data set A is active initially.

B Dump data set B is active initially.

X The dump data set that was not active when CICS last terminated (normally or abnormally) is active initially.

OPENSTATUS(*cvda***)**
returns a CVDA value identifying the status of the active CICS dump data set. CVDA values are:

CLOSED
The active CICS dump data set is closed.

OPEN
The active CICS dump data set is open.

SWITCHSTATUS(*cvda***)**
returns a CVDA value indicating whether CICS should switch active data sets when the current one fills. CVDA values are:

NOSWITCH
No automatic switching occurs.

SWITCHNEXT
When the data set designated as active at startup fills, CICS closes it, opens the other, and makes that one active. This automatic switch occurs only once, when the first active data set fills; thereafter, switching is under manual or program control.

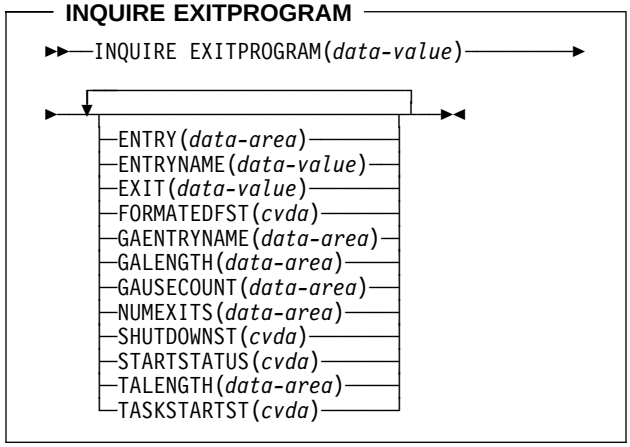
Conditions

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

INQUIRE EXITPROGRAM

Retrieve information about a user exit.



Conditions: END, ILLOGIC, INVREQ, NOTAUTH, PGMIDERR

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The INQUIRE EXITPROGRAM command returns information about a global or task-related user exit. You identify the exit about which you are inquiring with the ENTRYNAME and EXITPROGRAM options.

Browsing

You can also browse through the exit definitions in two different ways. To look at all of the global user exits defined at a particular exit point, you specify the exit point on the command that starts the browse, thus:

Browse EXITPROGRAM

```
INQUIRE EXITPROGRAM EXIT(data-value) START
```

To look at all user exits, both global and task-related, you omit the EXIT option on the command that starts the browse. You can distinguish between the two types by looking at the NUMEXITS value, which will be zero for a task-related exit and positive for a global exit.

On either type of browse, the sequence in which the exits are retrieved is the time order in which they were enabled.

Options

ENTRY(*data-area***)**
returns a fullword binary field indicating the entry address of the user exit.

ENTRYNAME(*data-value***)**
specifies the 8-character name of the exit about which you are inquiring. If you omit ENTRYNAME, CICS assumes that the name of the exit is the same as the name of the load module specified in the EXITPROGRAM option. Consequently, you must specify the same values for ENTRYNAME and EXITPROGRAM as were specified in the ENTRYNAME and PROGRAM options on the ENABLE command that created the exit. (EXITPROGRAM in this command corresponds to PROGRAM in an ENABLE command.)

EXIT(*data-value***) (global user exits only)**
specifies the 8-character identifier of an exit point with which the exit about which you are inquiring is associated. You must specify an exit point when you inquire about a global user exit. Exit points do not apply to task-related user exits, however, and you must not specify this option when you inquire about such an exit.

EXITPROGRAM(*data-value***)**
specifies the 8-character name of the load module associated with the exit about which you want information. This is the value that was specified in the PROGRAM option of the ENABLE command that defined the exit.

FORMATEDFST(*cvda***) (task-related user exits only)**
returns a CVDA value indicating that the FORMATEDF option is enabled for the exit. FORMATEDF causes extra invocations of the exit for tasks executed under EDF, to format output screens and interpret input, and applies only to task-related user exits. CVDA values are:

FORMATEDF
FORMATEDF is turned on.

NOFORMATEDF
FORMATEDF processing is turned off.

NOTAPPLIC
This is a global user exit.

GAENTRYNAME(*data-area***)**
returns the 8-character name of the user exit that owns the global work area used by the exit about which you are inquiring.

This value is returned only when the exit uses a global work area owned by another exit. Blanks are returned if it has allocated its own work area.

GALENGTH(*data-area***)**
returns a halfword binary field indicating the length of the global work area for the exit.

GAUSECOUNT(*data-area***)**
returns a halfword binary field indicating the total number of global or task-related user exits that are using the global work area owned by this exit. This count includes the owning exit program. A zero is returned if the exit is not the owner.

NUMEXITS(*data-area***) (global user exits only)**
returns a halfword binary field indicating the number of global user exit points at which the exit is enabled. A zero is returned if this is a task-related user exit.

SHUTDOWNST(*cvda***) (task-related user exits only)**
returns a CVDA value indicating whether the SHUTDOWN option is enabled for the exit. SHUTDOWN causes invocation during CICS shutdown, and applies only to task-related user exits. CVDA values are:

NOSHUTDOWN
The exit is not invoked when a CICS shutdown occurs.

NOTAPPLIC
This is a global user exit.

SHUTDOWN
The exit is invoked when a CICS shutdown occurs.

STARTSTATUS(*cvda***)**
returns a CVDA value identifying whether the exit is available for execution. CVDA values are:

STARTED
The exit program is available for execution; that is, the START option on an EXEC CICS ENABLE command is still in force.

STOPPED
The exit program is not available for execution; that is, the START option has not been issued, or has been revoked by the STOP option on an EXEC CICS DISABLE command.

TALENGTH(*data-area***) (task-related user exits only)**
returns a halfword binary field indicating the length of the local (task-related) work area for the exit. Local work areas apply only to task-related user exits. A zero is returned if this is a global user exit.

TASKSTARTST(*cvda***) (task-related user exits only)**
returns a CVDA value indicating whether the TASKSTART option is enabled for the exit. TASKSTART causes CICS to invoke the exit at the start and end of every task; it applies only to task-related user exits. CVDA values are:

NOTAPPLIC
This is a global user exit.

NOTASKSTART
The exit is not set for invocation at the start and end of every task.

TASKSTART
The exit is set for invocation at the start and end of every task.

Conditions

END
RESP2 values:

2 There are no more resource definitions of this type.

ILLOGIC
RESP2 values:

1 You have issued a START command when a browse of this resource type is already in progress, or you have issued a NEXT or an END command when a browse of this resource type is not in progress.

INVREQ
RESP2 values:

3 The exit point identified by EXIT does not exist.

NOTAUTH
RESP2 values:

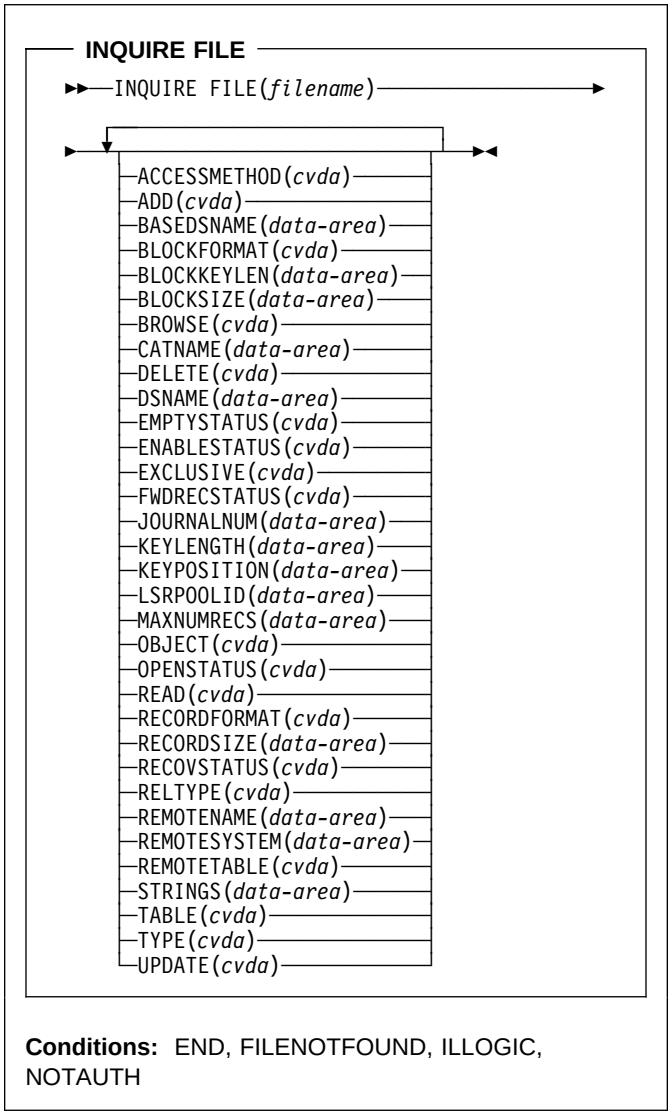
100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.

PGMIDERR
RESP2 values:

1 The exit identified by EXITPROGRAM and ENTRYNAME is not enabled, or the EXIT parameter is missing on an inquiry on a global user exit, or is present on a task-related user exit.

INQUIRE FILE

Retrieve information about a file.



Conditions: END, FILENOTFOUND, ILLOGIC, NOTAUTH

For more information about the use of CVDAs, see “CICS-value data areas (CVDAs)” on page 7.

Context

The INQUIRE FILE command returns information about a FILE resource definition. When the file is associated with a VSAM or DAM object, INQUIRE FILE returns information about the associated object as well. For VSAM, the object may be a base cluster (a KSDS, ESDS, or RRDS), an alternate index, or a path to a base cluster through an alternate index; for DAM, the object is a single VSE DAM data set. (You cannot use INQUIRE FILE to get information about DL/I data sets or data sets associated with other CICS resources or functions. However, see the INQUIRE DUMPDS, JOURNALNUM, and TDQUEUE commands if you need such information.)

The values returned depend on whether the file is open or closed and, if it is closed, whether it ever has been open during the current execution of CICS. If the file is not open, you get default or null values, or values describing the most recent object associated with the file, as noted in the option descriptions that follow.

The values returned also depend on whether the file is local (defined on the same CICS system as the task making the inquiry) or remote (defined on another CICS system). Less information is available for remote files, and so defaults or nulls are returned for some options.

For further information about null values, see “Null values” on page 10.

Also, if a file is empty (in VSAM load mode), after the first write or MASSINSERT has completed the file is closed and left enabled. It remains so until the next access (write or read) when it is implicitly opened. If an INQUIRE is done on the file before this next access occurs, the file shows CLOSED,ENABLED. This can be a temporary state for a file that has just come out of load mode status.

Note: INQUIRE FILE replaces the INQUIRE DATASET command of earlier CICS releases. The translator still accepts DATASET as a synonym for FILE in this command, along with option names that have changed, but you should use FILE and the new option names in new applications.

Browsing

You can also browse through all of the files installed in your system by using the browse options (START, NEXT, and END) on INQUIRE FILE commands. See “Browsing resource definitions” on page 11 for general information about browsing, syntax, exception conditions, and examples.

Options

ACCESSMETHOD(*cvda*)
returns a CVDA value identifying the access method for this file. CVDA values are:

DAM
The access method is DAM.

REMOTE
The file is defined as remote, and therefore the access method is not known to the local CICS system.

VSAM
The access method is VSAM.

ADD(*cvda*)
returns a CVDA value identifying whether new records can be added to the file. CVDA values are:

ADDABLE
New records can be added to the file.

NOTADDABLE
New records cannot be added to the file.

BASEDSNAME(*data-area***) (VSAM only)**
returns the 44-character name of the base cluster associated with a VSAM path, if the object associated with the file is a path. If the object is other than a path, this option returns the same value as the DSNAME option.

Note: The translator still accepts BASENAME for this option, but you should use BASEDSNAME in new code.

BLOCKFORMAT(*cvda***) (DAM only)**
returns a CVDA value identifying whether records on the file are blocked or unblocked. CVDA values are:

BLOCKED
The records on the file are blocked, or this is a VSAM file.

UNBLOCKED
The records on the file are unblocked.

BLOCKKEYLEN(*data-area***) (DAM only)**
returns a fullword binary field indicating the physical block key length for the file.

BLOCKSIZE(*data-area***) (DAM only)**
returns a fullword binary field indicating the length in bytes of a block. If the blocks are of variable length or are undefined, the value returned is the maximum.

BROWSE(*cvda***)**
returns a CVDA value identifying whether you can browse the file. CVDA values are:

BROWSABLE
You can browse the file.

NOTBROWSABLE
You cannot browse the file.

CATNAME(*data-area***) (VSAM only)**
returns the 7-character name of the VSAM catalog in which the data set is defined.

DELETE(*cvda***) (VSAM only)**
returns a CVDA value identifying whether you can delete records from the file. CVDA values are:

DELETABLE
You can delete records from the file.

NOTDELETABLE
You cannot delete records from the file.

DSNAME(*data-area***)**
returns the 44-character name of the DAM data set or VSAM object associated with the FILE definition.

EMPTYSTATUS(*cvda***) (VSAM only)**
returns a CVDA value indicating whether the FILE definition specifies the EMPTYREQ option. EMPTYREQ causes the object associated with this file to be set to empty, if eligible, when the file is opened. VSAM data sets defined as reusable are the only ones that you can make empty in this way; EMPTYREQ has no effect on other objects. CVDA values are:

EMPTYREQ
The data set should be made empty.

NOEMPTYREQ
The data set should not be made empty.

ENABLESTATUS(*cvda***)**
returns a CVDA value identifying whether application programs can access the file. CVDA values are:

DISABLED
The file is unavailable for access by application programs because it has been explicitly disabled. It must be explicitly enabled by a SET FILE ENABLED command or its CEMT equivalent before it can be accessed by application programs.

DISABLING
A request to disable or close the file has been received, but tasks are executing that had previously accessed the file. These tasks are allowed to complete their use of the file, but new tasks are not allowed access.

ENABLED
The file is available for access by application programs.

UNENABLED
The file is unavailable for access by application programs because it is closed. It must be explicitly enabled by an EXEC CICS SET FILE OPEN command or its CEMT equivalent before it can be accessed by application programs.

UNENABLING
A request to close the file has been received, but tasks are executing that had previously accessed the file. These tasks are allowed to complete their use of the file, but new tasks are not allowed access.

EXCLUSIVE(*cvda***) (DAM only)**
returns a CVDA value identifying whether records on this file are to be placed under exclusive control when a read for update is issued. CVDA values are:

EXCTL
A record on this file is placed under exclusive control of the reading task when it is read for update.

NOEXCTL
A record on this file is not placed under exclusive control when it is read for update.

FILE(*filename***)**
specifies the 7-character name of the file about which you are inquiring. See “Argument values” on page 4 for more information about coding *filename*.

FWDRECSTATUS(*cvda***) (VSAM only)**
returns a CVDA value identifying whether the file is forward-recoverable. CVDA values are:

FWDRECOVABLE
The file is forward-recoverable. The RECOVERY option of the RDO FILE resource definition specifies that updates to the file will be recorded, to make forward recovery of the file possible.

NOTFWDRCVBLE
The file is not forward-recoverable.

JOURNALNUM(*data-area***)**
returns a halfword binary field indicating the number of the journal on which CICS writes the information required for automatic journaling (the JOURNAL option value in the RDO FILE resource definition). Journal numbers are between 1 and 99; ‘1’ identifies the system log. A value of '0' indicates no journal activity for this file (JOURNAL(NO) in the RDO FILE resource definition).

KEYLENGTH(*data-area***)**
returns a fullword binary field indicating the length of the key if the file is associated with a VSAM KSDS, or the length of the logical key used for deblocking if the file is associated with a DAM data set. If there is no key, zero is returned.

KEYPOSITION(*data-area***)**
returns a fullword binary field indicating the starting position of the key field in each record relative to the beginning of the record. The start is made at position 0. If there is no key, zero is returned.

LSRPOOLID(*data-area***) (VSAM only)**
returns a fullword binary field indicating the number of the VSAM LSR pool associated with this file, in the range 1–15. If the file does not share buffers, this value is 0.

MAXNUMRECS(*data-area***) (VSAM only)**
returns a fullword binary field indicating the maximum number of records that the data table for this file can hold. A value of zero is returned if the file is not a data table (that is, if no limit was specified in the corresponding option of the RDO FILE resource definition, or if the file is remote).

OBJECT(*cvda***) (VSAM only)**
returns a CVDA value indicating whether the file is associated with a real data set containing records (a VSAM KSDS, ESDS, or RRDS, or an alternate index used directly) or a VSAM path that links an alternate index to its base cluster. CVDA values are:

BASE
The file is associated with a real data set containing records.

PATH
The file is associated with a path.

You get a value of PATH only if the file defines a path to a VSAM base data set through an alternate index. If the file definition allows direct access to an alternate index, or if the path is used merely as an alias to a base data set, you get a value of BASE.

If the file is a data table, the OBJECT option refers to its source data set.

OPENSTATUS(*cvda***)**
returns a CVDA value identifying whether the file is open, closed, or in a transitional state. The OPENSTATUS value affects the ability of application tasks to access the file, but only indirectly; see the ENABLESTATUS option description for the rules. CVDA values are:

CLOSED
The file is closed.

CLOSING
The file is in the process of being closed. Closing a file may require dynamic deallocation of data sets and deletion of shared resources, in which case close processing may last a significant length of time.

CLOSEREQUEST
The file is open and in use by one or more application tasks. An EXEC CICS SET FILE CLOSED or a CEMT SET FILE CLOSED request has been received, but closing is not complete (the ENABLESTATUS of the file is DISABLING).

OPEN
The file is open.

OPENING
The file is in the process of being opened.

READ(*cvda***)**
returns a CVDA value identifying whether you can read records from the file. CVDA values are:

NOTREADABLE
You cannot read records from the file.

READABLE
You can read records from the file.

RECORDFORMAT(*cvda***)**
returns a CVDA value identifying the format of the records on the file. CVDA values are:

FIXED
The records are of fixed length.

UNDEFINED
The format of records on the file is undefined. The UNDEFINED value is possible for DAM data sets only.

VARIABLE
The records are of variable length. If the file is associated with a data table, the record format is always variable length, even if the source data set contains fixed-length records.

RECORDSIZE(*data-area***)**
returns a fullword binary field indicating the actual size of fixed-length records, and the maximum size of variable-length records.

RECOVSTATUS(*cvda***)**
returns a CVDA value identifying whether the file is recoverable. CVDA values are:

NOTRECOVABLE
The file is not recoverable.

RECOVERABLE
The file is recoverable.

RELTYPE(*cvda***) (DAM only)**
returns a CVDA value indicating whether relative or absolute addressing is used to access the file and, if relative, the type of relative addressing. CVDA values are:

DEC The zoned decimal format is being used.

HEX The hexadecimal relative track and record format is being used.

NOTAPPLIC
Absolute (MBBCCHHR) addressing is being used (or the file is a VSAM file).

REMOTENAME(*data-area***)**
returns the 8-character name by which the file is known in the CICS region named in the REMOTESYSTEM option of its FILE definition. Blanks are returned if the file is not remote.

REMOTESYSTEM(*data-area***)**
returns a 4-character name of the CICS region in which the file is defined (from the REMOTESYSTEM value in the FILE definition). Blanks are returned if the file is not remote.

REMOTETABLE(*cvda***) (VSAM only)**
returns a CVDA value indicating whether the file represents an open remote data table. CVDA values are:

REMTABLE
The file represents an open remote data table.

NOTAPPLIC
The file does not represent an open remote data table.

STRINGS(*data-area***) (VSAM only)**
returns a fullword binary field indicating the number of strings (concurrent operations) specified for the file in its FILE definition.

TABLE(*cvda***) (VSAM only)**
returns a CVDA value indicating whether the file represents a data table. CVDA values are:

CICSTABLE
The file represents a CICS-maintained data table.

NOTTABLE
The file does not represent a data table.

USERTABLE
The file represents a user-maintained data table.

TYPE(*cvda***)**
returns a CVDA value identifying the type of data set that corresponds to this file. CVDA values are:

ESDS
The data set is an entry-sequenced data set.

KEYED
The data set is addressed by physical keys.

KSDS
The data set is a key-sequenced data set.

NOTKEYED
The data set is not addressed by physical keys.

RRDS
The data set is a relative record data set.

UPDATE(*cvda***)**
returns a CVDA value identifying whether the file is updatable. CVDA values are:

NOTUPDATABLE
You cannot update records.

UPDATABLE
You can update records.

Conditions

END
RESP2 values:

2 There are no more resource definitions of this type.

FILENOTFOUND
RESP2 values:

1 The file cannot be found.

ILLOGIC
RESP2 values:

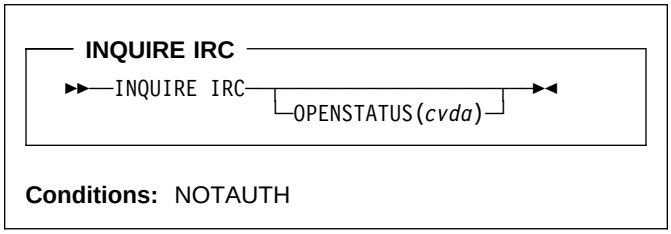
1 You have issued a START command when a browse of this resource type is already in progress, or you have issued a NEXT or an END command when a browse of this resource type is not in progress.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.

INQUIRE IRC

Show the IRC status.



Conditions: NOTAUTH

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The INQUIRE IRC command indicates whether interregion communication (IRC) is open, closed, or in a transitional state in your CICS system. IRC must be open for your region to communicate with another CICS region using a multiregion operation (MRO) connection or for a non-CICS client region to use your CICS over an external CICS interface (EXCI) connection.

Options

OPENSTATUS(*cvda***)**
returns a CVDA value identifying the status of IRC in the system. CVDA values are:

CLOSED
IRC is closed for this system, or is not present in the system.

CLOSING
A SET IRC CLOSED request to quiesce MRO has been received; tasks that were already using an MRO link are being allowed to complete, but new tasks cannot use an MRO link.

IMMCLOSING
A SET IRC IMMCLOSE request to shut down MRO immediately has been received. Tasks that were using an MRO link are being terminated abnormally.

OPEN
IRC is open for this system.

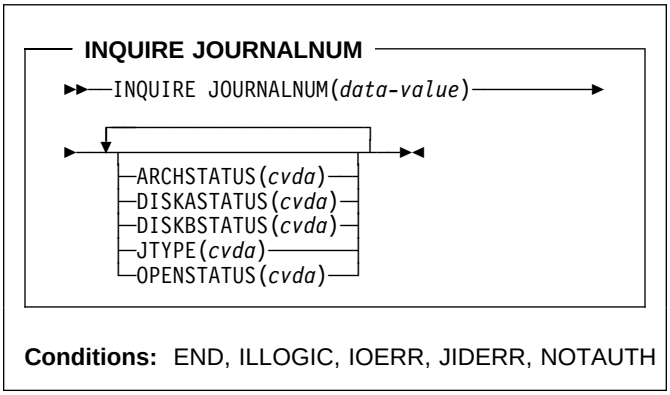
Conditions

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

INQUIRE JOURNALNUM

Retrieve information about the CICS system log or a user journal.



Conditions: END, ILLOGIC, IOERR, JIDERR, NOTAUTH

For more information about the use of CVDAs, see “CICS-value data areas (CVDAs)” on page 7.

Context

The INQUIRE JOURNALNUM command allows you to inquire about the attributes of a journal defined in the CICS journal control table (JCT), including the system log (Journal 1).

Browsing

You can also browse through all of the journals defined in your system by using the browse options (START, NEXT, and END) on INQUIRE JOURNALNUM commands. See “Browsing resource definitions” on page 11 for general information about browsing, syntax, exception conditions, and examples.

Options

ARCHSTATUS(*cvda***)**
returns a CVDA value indicating whether the journal is subject to automatic archiving. Automatic archiving occurs when the journal definition includes AUTOARCH among the JOUROPT values, and is available only for journals consisting of two disk data sets (journals defined with a JTYPE value of DISK2). CVDA values are:

AUTOARCH
The journal is subject to automatic archiving.

NOAUTOARCH
The journal is not subject to automatic archiving.

REVERTED
Automatic archiving was requested, but an error has caused a reversion to operator archiving for this journal. That is, the journal was defined with a JOUROPT value of AUTOARCH, on the DFHJCT TYPE=ENTRY macro, but is currently being handled as if PAUSE had been specified instead, to prevent reuse of a journal data set before it has been archived successfully.

DISKASTATUS(*cvda***)**
returns a CVDA value indicating the status of the first (‘A’) or only data set of a disk journal. CVDA values are:

CURRENT
The data set is the current journal data set.

NOTAPPLIC
The journal is not a disk journal.

NOTREADY
The data set is waiting to be archived.

READY
The data set is ready to be written.

DISKBSTATUS(*cvda***)**
returns a CVDA value indicating the status of the second (‘B’) data set of a journal consisting of two disk data sets. CVDA values are:

CURRENT
The data set is the current journal data set.

NOTAPPLIC
The journal is not a disk journal or its JTYPE value is not DISK2.

NOTREADY
The data set is waiting to be archived.

READY
The data set is ready to be written.

JOURNALNUM(*data-value***)**
specifies the number (between 1 and 99) of the journal about which you are inquiring, in halfword binary form. Journal 1 is the system log.

JTYPE(*cvda***)**
returns a CVDA value identifying what type of journal this is. CVDA values are:

DISK1
The journal is written to a single, reusable data set on disk.

DISK2
The journal is written to two data sets on disk (‘A’ and ‘B’). CICS writes serially to each data set, switching automatically to the other when one is full. DISK2 journals are defined with a JTYPE value of DISK2 and JOUROPT values including AUTOARCH.

DISK2PAUSE
This is the same as DISK2, except that CICS will not reuse a data set that has already been written without operator verification that the current data is no longer needed.

DISK2PAUSE describes a journal defined with a JTYPE value of DISK2 and PAUSE among the JOUROPT values.

DMF The journal data is written to a DMF data set.

Note: SMF is a synonym of DMF and may be used on CICS Transaction Server for VSE/ESA. However the DMF cvda should be used rather than SMF.

TAPE1
The journal is written to a single tape data set.

TAPE2
The journal is written to two tape data sets. CICS writes serially to each data set, switching automatically to the other when one is full, as it does for DISK2 journals. The alternate tape data set can be placed on a second drive ready for use when the first data set fills.

OPENSTATUS(*cvda***)**
returns a CVDA value indicating whether the journal is open for output. CVDA values are:

CLOSED
The journal is not open for output. CLOSED includes transitional states.

OPENOUTPUT
The journal is open for output.

Conditions

END
RESP2 values:

2 There are no more resource definitions of this type.

ILLOGIC
RESP2 values:

1 You have issued a START command when a browse of this resource type is already in progress, or you have issued a NEXT or an END command when a browse of this resource type is not in progress.

IOERR
RESP2 values:

5 An error has occurred in the device, the medium, or the access method.
7 An error occurred writing the journal archiving control data set (JACD).
8 A logic error occurred in recording an archive in the journal archiving control data set (JACD).

JIDERR
RESP2 values:

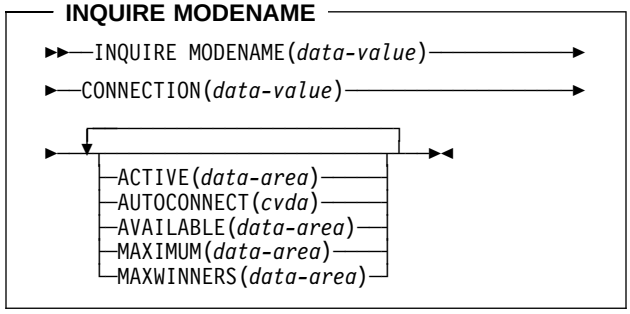
1 The journal cannot be found.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.

INQUIRE MODENAME

Retrieve information about a session group within a connection.



Conditions: END, ILLOGIC, NOTAUTH, SYSIDERR

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The INQUIRE MODENAME command returns information about a group of sessions (sometimes called a "mode") that has been defined within a connection to a remote system. (The MODENAME for the group is the name assigned to the SESSIONS resource definition that creates it.)

MODENAMEs are unique within a given connection, but not across connections. Therefore, to look at a particular session group, you must specify data values for both the MODENAME and CONNECTION options.

Browsing

You can also browse through all of the session groups for a particular connection, or all groups for all connections, by using the browse options (START, NEXT, and END) on INQUIRE MODENAME commands.

As in a single INQUIRE MODENAME command, you must include both the MODENAME and CONNECTION options on an INQUIRE MODENAME NEXT command. The data-area for MODENAME is optional; if you provide it, CICS uses it to return the name of the session group. The data-area for CONNECTION is required, however. If you want to limit your browse to a single connection, specify its name there. To see all groups, initialize this value to nulls on **each** INQUIRE MODENAME NEXT command, and CICS will use the data-area to return the connection name.

See "Browsing resource definitions" on page 11 for general information about browsing, syntax, exception conditions, and examples.

Options

ACTIVE(*data-area***)**
returns a halfword binary field giving the number of sessions within the group which are currently in use.

AUTOCONNECT(*cvda***)**
returns a CVDA value indicating whether the sessions within this group are to be bound automatically whenever CICS starts communication with VTAM. CVDA values are:

ALLCONN
CICS tries to bind both contention-winner and contention-loser sessions.

AUTOCONN
CICS tries to bind only sessions for which it is contention winner.

NONAUTOCONN
CICS does not try to bind any sessions.

AVAILABLE(*data-area***)**
returns a halfword binary field giving the current number of sessions in the group (the number "bound").

CONNECTION(*data-value***)**
specifies the 4-character identifier of the remote system with which this group of sessions is associated (the name of the CONNECTION resource definition for that system).

MAXIMUM(*data-area***)**
returns a halfword binary field giving the maximum number of sessions that the definition of the session group permits.

MAXWINNERS(*data-area***)**
returns a halfword binary field giving the maximum number of sessions that the definition of the session group permits to be contention winners. A single-session APPC definition installed by RDO or autoinstall always shows 0 for this field.

MODENAME(*data-value***)**
specifies the 8-character identifier of the group of sessions about which you are inquiring. This is the name of the SESSIONS resource definition for the group.

Conditions

END
RESP2 values:

2 There are no more resource definitions of this type.

ILLOGIC
RESP2 values:

1 You have issued a START command when a browse of this resource type is already in progress, or you have issued a NEXT or an END

command when a browse of this resource type is not in progress.

NOTAUTH
RESP2 values:

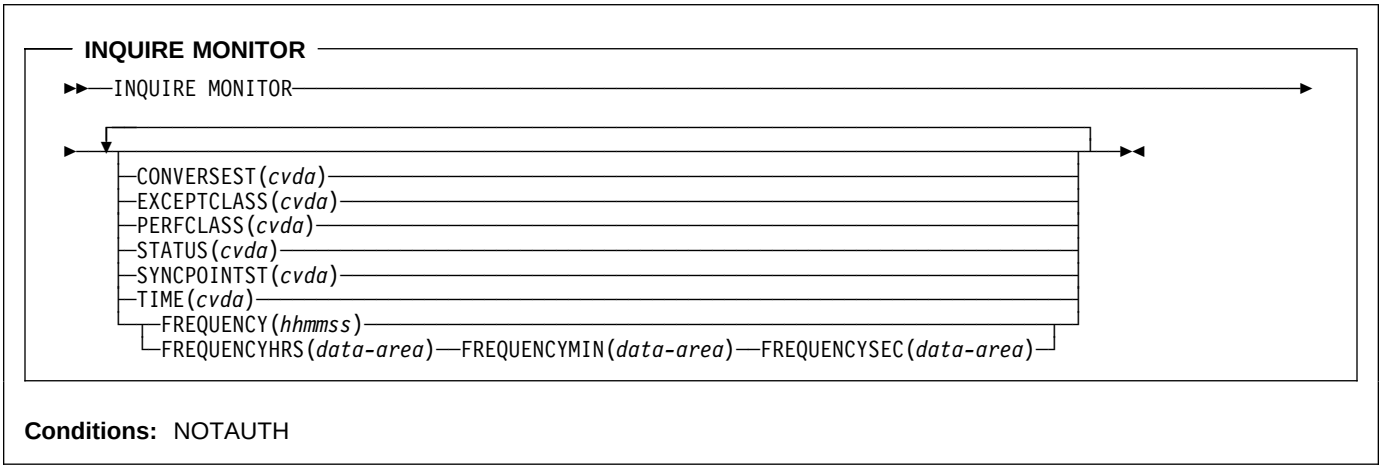
100 The user associated with the issuing task is not authorized to use this command.

SYSIDERR
RESP2 values:

1 The connection cannot be found.
2 The modename within the connection cannot be found.
3 The connection specified on an INQUIRE MODENAME NEXT cannot be found.

INQUIRE MONITOR

Retrieve the status of CICS monitoring.



Conditions: NOTAUTH

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The INQUIRE MONITOR command allows you to find out whether CICS monitoring is active, what types of data are being recorded, and other recording options.

CICS monitoring is controlled by a master switch (the STATUS option) and three switches that govern what types of data are recorded (the EXCEPTCLASS, and PERFCLASS options). See the SET MONITOR command on page 162 for a description of monitor data classes and details of how the switches interact.

Options

CONVERSEST(*cvda*)
returns a CVDA value indicating how CICS is to record performance data for conversational tasks (tasks that wait for terminal or session input). CVDA values are:

CONVERSE
CICS produces a performance class record for a conversational task each time it waits for terminal input as well as at task end, representing the part of the task since the previous terminal wait (or task start). These waits occur during execution of a CONVERSE command or a RECEIVE command that follows a SEND.

NOCONVERSE
CICS accumulates performance data across terminal waits and produces a single performance class record for a conversational task.

EXCEPTCLASS(*cvda*)
returns a CVDA value indicating whether the exception class of monitoring data is recorded when monitoring is active. CVDA values are:

EXCEPT
Exception data is recorded.

NOEXCEPT
Exception data is not recorded.

FREQUENCY(*hhmmss*)
returns the interval at which CICS produces performance class records for long-running tasks. If a task runs longer than the FREQUENCY interval, CICS records its performance data separately for each interval or fraction.

There are two formats for the frequency interval:

- A composite (packed decimal format 0hhmmss+, 4 bytes long) that you obtain by using the FREQUENCY option.
- Separate hours, minutes, and seconds, which you obtain by specifying the FREQUENCYHRS, FREQUENCYMIN, and FREQUENCYSEC options.

(A value of zero means that frequency reporting is inactive; that is, recording of performance data is not affected by the duration of the task.)

FREQUENCYHRS(*data-area*)
returns the hours component of the frequency interval, in fullword binary form (see the FREQUENCY option).

FREQUENCYMIN(*data-area*)
returns the minutes component of the frequency interval, in fullword binary form (see the FREQUENCY option).

FREQUENCYSEC(*data-area*)
returns the seconds component of the frequency interval, in fullword binary form (see the FREQUENCY option).

PERFCLASS(*cvda***)**
returns a CVDA value indicating whether the performance class of monitoring data is recorded when monitoring is active. CVDA values are:

NOPERF
Performance data is not recorded.

PERF
Performance data is recorded.

STATUS(*cvda***)**
returns a CVDA value identifying whether CICS monitoring is active in the system. CVDA values are:

OFF CICS monitoring is not active in the system. No monitoring data is accumulated or written out, irrespective of the settings of the monitoring data classes.

ON CICS monitoring is active. Data is accumulated for all classes of monitor data, and written out for those classes that are active.

SYNCPOINTST(*cvda***)**
returns a CVDA value indicating whether CICS records performance class data separately for each logical unit of work (LUW) within tasks that contain multiple LUWs. An LUW within a task ends when a syncpoint occurs, either explicitly (a SYNCPOINT command) or implicitly (a DL/I TERM call, for example, or task end); a new LUW begins immediately after, except at end of task. When rollback occurs on a syncpoint, the LUW does not end. CVDA values are:

NOSYNCPOINT
Performance data is combined over all LUWs in a task for recording.

SYNCPOINT
Performance data is recorded separately for each LUW.

TIME(*cvda***)**
returns a CVDA value identifying whether the performance class time-stamp fields returned to an application using the COLLECT STATISTICS MONITOR command will be expressed in local or Greenwich mean time. The value of this option has no effect on the other classes of monitoring data. See the *CICS Customization Guide* for information on the SMF header. CVDA values are:

GMT Time stamps are Greenwich mean time.

LOCAL
Time stamps are local time.

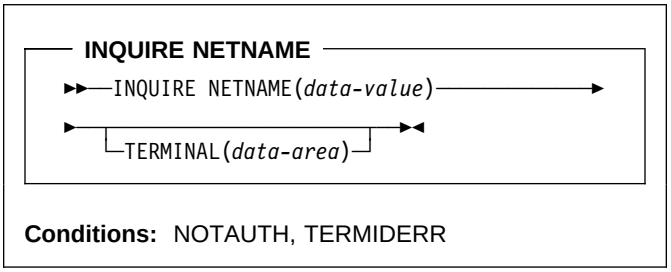
Conditions

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

INQUIRE NETNAME

Retrieve information about a VTAM terminal or session.



Conditions: NOTAUTH, TERMIDERR

Context

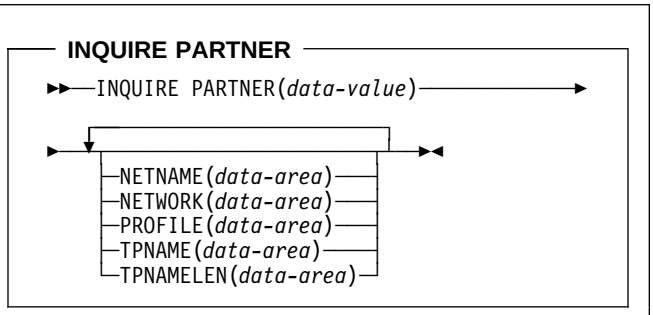
The INQUIRE NETNAME command returns information about a particular terminal or session, just as the INQUIRE TERMINAL command does. The primary difference is that you identify the terminal by its VTAM network identifier, instead of its CICS terminal identifier. Consequently, the roles of the NETNAME and TERMINAL options are reversed; NETNAME is required, and you supply a data-value containing the 8-character network identifier of the terminal about which you are inquiring. TERMINAL is optional. If you use it, CICS returns the corresponding 4-character CICS terminal identifier in the data-area you provide.

The other options for INQUIRE TERMINAL return the same information in an INQUIRE NETNAME command as they do in an INQUIRE TERMINAL command. However, you cannot browse using INQUIRE NETNAME; you must use INQUIRE TERMINAL if you use the START, NEXT, or END options. In addition, you can use INQUIRE NETNAME only for VTAM terminals and sessions; non-VTAM terminals and MRO sessions cannot be the subject of INQUIRE NETNAME commands.

See “INQUIRE TERMINAL” on page 113 for the options and conditions that apply to the INQUIRE NETNAME command.

INQUIRE PARTNER

Retrieve information about a partner.



Conditions: END, ILLOGIC, NOTAUTH, PARTNERIDERR

Context

The INQUIRE PARTNER command returns information about a partner from the partner resource table.

Browsing

You can also browse through all of the partners defined in your system by using the browse options (START, NEXT, and END) on INQUIRE PARTNER commands. See “Browsing resource definitions” on page 11 for general information about browsing, syntax, exception conditions, and examples.

Options

NETNAME(*data-area***)**
returns the 8-character name of the VTAM node in which the partner is located.

NETWORK(*data-area***)**
returns the 8-character name of the network in which the partner is located. If this value is blank, the partner is in the same network as your CICS system.

PARTNER(*data-value***)**
specifies the 8-character name of the partner about which you are inquiring. This is the name assigned in its PARTNER resource definition.

PROFILE(*data-area***)**
returns the 8-character name of the PROFILE definition specified in the PARTNER definition.

TPNAME(*data-area***)**
returns the name of the remote transaction program that runs on the partner LU (from the TPNAME or XTPNAME value in the PARTNER resource definition). This name may be up to 64 characters long; you can determine the actual length with the TPNAMELEN option.

TPNAMELEN(*data-area***)**
returns a halfword binary field giving the length in bytes of the information returned in TPNAME.

Conditions

END
RESP2 values:

2 There are no more resource definitions of this type.

ILLOGIC
RESP2 values:

1 You have issued a START command when a browse of this resource type is already in progress, or you have issued a NEXT or an END command when a browse of this resource type is not in progress.

NOTAUTH
RESP2 values:

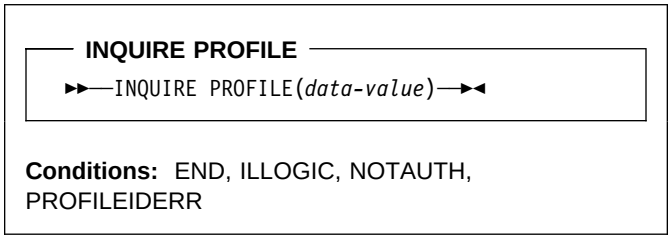
100 The user associated with the issuing task is not authorized to use this command.

PARTNERIDERR
RESP2 values:

1 The partner cannot be found.
2 Partner Resource Manager (PRM) is not active, because it failed to initialize during CICS initialization.

INQUIRE PROFILE

Determine whether a transaction profile is installed.



Conditions: END, ILLOGIC, NOTAUTH, PROFILEIDERR

Context

The INQUIRE PROFILE command allows you to determine whether a particular PROFILE definition is installed in your CICS system. The command has no options; you get a normal response if the profile about which you inquire is installed in your CICS system, and a PROFILEIDERR exception condition if it is not.

Browsing

You can also use the INQUIRE PROFILE command in browse form (the START, NEXT, and END options) to obtain the names of all of the profiles installed in your system. See “Browsing resource definitions” on page 11 for general information about browsing, syntax, exception conditions, and examples.

Options

PROFILE(*data-value***)**
specifies the 8-character name of the profile about which you are inquiring.

Conditions

END
RESP2 values:

2 There are no more resource definitions of this type.

ILLOGIC
RESP2 values:

1 You have issued a START command when a browse of this resource type is already in progress, or you have issued a NEXT or an END command when a browse of this resource type is not in progress.

NOTAUTH
RESP2 values:

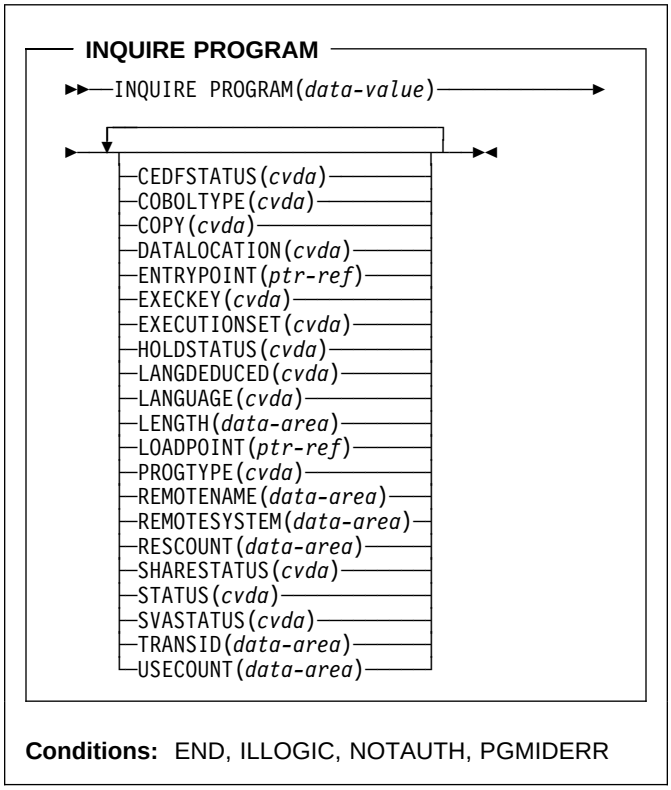
100 The user associated with the issuing task is not authorized to use this command.

PROFILEIDERR
RESP2 values:

1 The profile cannot be found.

INQUIRE PROGRAM

Retrieve information about a program, map set, or partition set.



Conditions: END, ILLOGIC, NOTAUTH, PGMIDERR

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The INQUIRE PROGRAM command returns information about a particular program, map set, or partition set installed in your CICS system. All of these resources are load modules and, therefore, CICS uses the same INQUIRE command for all three. To avoid confusion, we use the word **module** to refer to the object of your inquiry, except in some cases where the option applies only to executable programs.

CICS determines the information you request from both the resource definition and, where applicable, the load module. Information from the module takes precedence over that in the definition if there is a conflict. However, CICS will inspect a module only if it is already loaded and is the copy currently available for use. CICS will not do a load for an INQUIRE PROGRAM command, nor attempt to autoinstall a resource for which it has no definition.

Browsing

You can also browse through the definitions of these three types of resources in your system by using the browse options (START, AT, NEXT, and END) on INQUIRE PROGRAM commands. In browse mode, the definitions are returned in alphabetical order, and you can specify a starting point with the AT option if you wish. See “Browsing resource definitions” on page 11 for general information about browsing, syntax, exception conditions, and examples.

Options

CEDFSTATUS(*cvda*) (programs only)
returns a CVDA value indicating the action taken by the execution diagnostic facility (EDF) transaction if this module is executed under EDF. CVDA values are:

CEDF
EDF diagnostic screens are displayed. If the program was translated with the EDF option, all EDF screens are displayed; if it was translated with NOEDF, only the program initiation and termination screens appear.

NOCEDF
No EDF screens are displayed.

NOTAPPLIC
EDF is not applicable because the module is a remote program, a map set, or a partition set.

COBOLTYPE(*cvda*) (programs only)
returns a CVDA value indicating the type of COBOL compiler used to compile the program, if it is a COBOL program. The type is determined by inspecting the load module. CVDA values are:

COBOL
The module was complied with the DOS/VS COBOL compiler.

COBOLII
The module was compiled with the VS COBOL II compiler.

NOTAPPLIC
COBOL type does not apply, because the module was compiled using the COBOL/VSE compiler,or is a remote program, a map set, or a partition set.

NOTINIT
The module is defined as a COBOL program, but the type cannot be determined because the module has not been loaded yet.

COPY(*cvda*)
returns a CVDA value indicating whether a new copy of the module is required to make it available for use. This requirement occurs after CICS attempts to load the module and cannot find it, because CICS marks it “not loadable” to avoid the overhead of further load attempts. To make the module available again, you need to issue a SET PROGRAM COPY command or its CEMT equivalent. You should ensure that the program exists in one of the sublibraries in the LIBDEF search chain for the CICS job before doing so. CVDA values are:

NOTREQUIRED
A new copy is not required.

REQUIRED
A new copy is required.

DATALOCATION(*cvda*) (programs only)
returns a CVDA value indicating whether this module can accept data addresses higher than 16MB. CVDA values are:

ANY The program can accept an address above 16MB.

BELOW
The program requires any data address returned to it from CICS to be less than 16MB.

NOTAPPLIC
The option is not applicable because the module is a remote program, a map set, or a partition set.

ENTRYPOINT(*ptr-ref*)
returns the entry point of the module, if it is loaded. The top bit of the address is set on if the addressing mode is 31 and off if it is 24. If the module has not been loaded or is a remote program, a null pointer (X'FF000000') is returned.

EXECKEY(*cvda*) (programs only)
returns a CVDA value indicating the storage key of the module, if it is an executable program. The storage key can limit the areas of storage that the program can access, depending on other variables. (For more information on storage protection see the *CICS System Definition Guide*.) CVDA values are:

CICSEXECKEY
The program executes in CICS key.

NOTAPPLIC
The module is a remote program, a map set, or a partition set.

USEREXECKEY
The program executes in user key.

EXECUTIONSET(*cvda*) (programs only)
returns a CVDA value indicating whether the module is restricted to the distributed program link subset of the CICS API. EXECUTIONSET applies only to executable programs, and governs the API only when a program is invoked locally. (When it is invoked remotely—that is, executing at or below the level of a program invoked by a distributed program link—a program is always restricted to this subset.) CVDA values are:

DPLSUBSET
The program is always restricted.

FULLAPI
The program is not restricted unless invoked remotely.

NOTAPPLIC
EXECUTIONSET does not apply because the module is a remote program, a map set, or a partition set.

HOLDSTATUS(*cvda***)**
returns a CVDA value indicating whether a copy of the module is currently loaded with the HOLD option. CVDA values are:

HOLD
A copy is currently loaded with the HOLD option.

NOHOLD
No copy is currently loaded with the HOLD option.

NOTAPPLIC
The module is not currently loaded, or is a remote program.

LANGDEDUCED(*cvda***) (programs only)**
returns a CVDA value indicating the language in which the module is written, if this is known. If the module is not yet loaded, CICS cannot deduce the language. In this case, the CVDA value indicates the defined language taken from the resource definition. CVDA values are:

ASSEMBLER
The language is assembler.

C The language is C.

COBOL
The language is COBOL.

LEVSE
The module, whatever its language, is enabled to run in the LE for VSE/ESA environment.

Note: LE370 is a synonym for LEVSE and may be used on CICS Transaction Server for VSE/ESA. However, the LEVSE CVDA should be used, rather than LE370.

NOTAPPLIC
LANGUAGE does not apply because the module is a remote program, a map set, or a partition set.

NOTDEFINED
The language was not specified in the resource definition, and has not been loaded.

PLI or PL1
The language is PL/I.

LANGUAGE(*cvda***) (programs only)**
returns a CVDA value indicating the language with which the module is defined. This value is taken from the resource definition. CVDA values are:

ASSEMBLER
The language is assembler.

C The language is C.

COBOL
The language is COBOL.

NOTAPPLIC
LANGUAGE does not apply because the module is a remote program, a map set, or a partition set.

NOTDEFINED
The language was not specified in the resource definition.

PLI or PL1
The language is PL/I.

LENGTH(*data-area***)**
returns a fullword binary field giving the length of the module in bytes. A value of 0 is returned if the module has not been loaded in the current CICS session. A value of -1 is returned if it is a remote program.

LOADPOINT(*ptr-ref***)**
returns the load address of the module. If it is not currently loaded, or is a remote program, a null pointer (X'FF000000') is returned.

PROGRAM(*data-value***)**
specifies the 8-character name of the program, map set, or partition set about which you are inquiring.

PROGTYPE(*cvda***)**
returns a CVDA value indicating the type of module. CVDA values are:

MAPSET
The module is a map set. (MAP is still a synonym for MAPSET, but MAPSET is the preferred CVDA value.)

PARTITIONSET
The module is a partition set.

PROGRAM
The module is an executable program.

REMOTENAME(*data-area***) (programs only)**
returns the 8-character name by which the module is known in the CICS region named in the REMOTESYSTEM option of its RDO PROGRAM resource definition. REMOTENAME applies only to programs, and only to those defined to be remote; for local programs, map sets, and partitions sets, the value returned is blanks.

REMOTESYSTEM(*data-area***) (programs only)**
returns the 4-character name of the CICS region in which the module is defined (from the REMOTESYSTEM value in the RDO PROGRAM resource definition). It applies only to programs, and only to those defined to be remote; for local programs, map sets, and partition sets, the value returned is blanks.

RESCOUNT(*data-area***)**
returns a fullword binary field giving the number of separate uses of this module that are taking place at the time of this inquiry. A value of -1 is returned if the module is a remote program.

SHARESTATUS(*cvda***)**
returns a CVDA value indicating where CICS should obtain the module the next time a new copy is required. CVDA values are:

NOTAPPLIC
SHARESTATUS is not applicable because the module is a remote program.

PRIVATE
The module will be loaded from the concatenated sublibraries named in the LIBDEF search chain for the CICS job.

SHARED
The SVA copy will be used, if one is available. If it is not, the module will be loaded as if SHARESTATUS were PRIVATE.

STATUS(*cvda***)**
returns a CVDA value indicating whether the module is available for use. CVDA values are:

DISABLED
The module is not available for use.

ENABLED
The module is available for use.

SVASTATUS(*cvda***)**
returns a CVDA value indicating whether the module resided in the shared virtual area when it was last used.

Note: LPASTATUS is a synonym of SVASTATUS and may be used on CICS/VSE. LPA and NOTLPA are equivalent to SVA and NOTSVA respectively. However, the SVASTATUS option and its CVDAs should be used, rather than LPASTATUS.

CVDA values are:

SVA The copy used was in the shared virtual area (SVA).

NOTAPPLIC
The module has not been used or is a remote program.

NOTSVA
The copy used was in CICS dynamic storage.

TRANSID(*data-area***) (programs only)**
returns the 4-character name of the transaction under which this module, which must be a program, executes remotely (that is, the transaction identifier the remote region assigns to the task created there to execute it when a task in the local region LINKs to it). This value comes from the TRANSID option value in the PROGRAM definition and applies only to programs defined as remote; for local programs, map sets, and partition sets, and when no TRANSID is specified for a remote program, the value returned is blanks.

USECOUNT(*data-area***)**
returns a fullword binary field giving the total number of times the module has been used since the start of the current CICS session. A value of -1 is returned if the program is remote.

Conditions

END
RESP2 values:

2 There are no more resource definitions of this type.

ILLOGIC
RESP2 values:

1 You have issued a START command when a browse of this resource type is already in progress, or you have issued a NEXT or an END command when a browse of this resource type is not in progress.

NOTAUTH
RESP2 values:

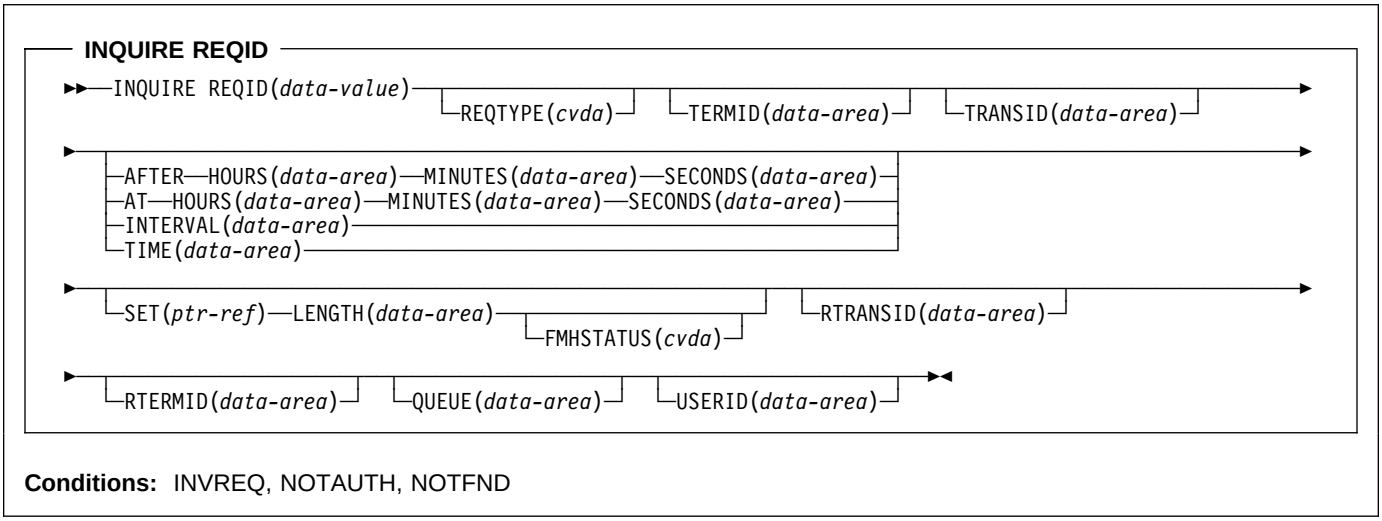
100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.

PGMIDERR
RESP2 values:

1 The program cannot be found. If this error occurs on an INQUIRE PROGRAM NEXT, an earlier cataloging error has made a PROGRAM, MAPSET or PARTITIONSET definition unusable, and the definition must be discarded and reinstalled.

INQUIRE REQID

Retrieve information about a queued request.



Conditions: INVREQ, NOTAUTH, NOTFND

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The INQUIRE REQID command returns information about a queued request. A queued request results from a DELAY, POST, ROUTE, or START command with a nonzero expiry time, and it lasts until that time. For a DELAY command, expiry time is the end of the delay; for a POST, it is the time at which posting is to occur; for a ROUTE, it is the time at which the message is to be delivered; and for a START, it is the time at which CICS is to create the requested task.

After a request expires, you cannot inquire about it with INQUIRE REQID, even if the action requested is not complete. (A request to START a transaction may be delayed beyond expiry time, for example, waiting for the terminal it requires.)

Requests are identified by the REQID value in the originating command (or assigned by CICS, if omitted in the command). REQID values should be and normally are unique; however, if there is more than one queued request with the same identifier, INQUIRE REQID returns information about the one that will expire soonest.

Expiry time can be expressed either as an interval (the length of time from your INQUIRE to expiry) or as an absolute value (the length of time after the midnight previous to your INQUIRE). If expiry is before midnight of the current day, absolute time is the same as time-of-day, using a 24-hour clock. You can request either form, regardless of how the time was specified in the command that created the request.

There are also two formats for expiry time, whether it is an absolute value or an interval:

- A 4-byte packed decimal composite (0hhmmss+), which you obtain by using the TIME or INTERVAL option.
- Separate hours, minutes and seconds, which you obtain by specifying HOURS, MINUTES, and SECONDS with either AT or AFTER.

Expiry time and request type (the type of command that produced it) are available for any queued request. For START requests additional information is available, including data passed from the starting to the started task.

START commands have four options for passing data. The FROM option is primary, and allows you to pass data of variable length, but three others—QUEUE, RTERMID, and RTRANSID—allow you to pass small items of fixed length. They are intended for convenience in conveying resource names to the started transaction, but are not restricted to that purpose. All four data items are kept in temporary storage, and consequently are subject to explicit deletion by another task. If data that you request in an INQUIRE REQID command has been deleted from temporary storage or cannot be read because of an I/O error, CICS raises the INVREQ condition.

Browsing

You also can browse through all of the queued requests by using the browse options (START, NEXT, and END) on INQUIRE REQID commands. See "Browsing resource definitions" on page 11 for general information about browsing, syntax, exception conditions, and examples.

Options

AFTER
requests that CICS return the expiry time (in the HOURS, MINUTES, and SECONDS options) as the **interval** between the current time and the expiry time.

AT requests that CICS return the expiry time (in the HOURS, MINUTES, and SECONDS options) as an **absolute** value (following the midnight preceding this inquiry).

FMHSTATUS(*cvda***)**
returns a CVDA value indicating whether the data passed in the FROM option of the command that created this request contains function management headers. FMHSTATUS applies only to requests resulting from ROUTE commands, or START commands that specify FROM. CVDA values are:

FMH The data contains a function management header.

NOFMH
The data does not contain a function management header.

NOTAPPLIC
The request did not result from a ROUTE or START command, or there was no FROM data.

HOURS(*data-area***)**
returns a fullword binary field giving the hours portion of the expiry time (see the AT and AFTER options).

INTERVAL(*data-area***)**
returns the expiry time as an interval from the current time. The value is a 4-byte packed decimal number in the format 0hhmmss+.

LENGTH(*data-area***)**
returns a halfword binary field giving the length of the data passed in the FROM option of the command that created this request. It applies only to requests resulting from ROUTE commands, or START commands that specify FROM; for other requests, the value returned is zero.

MINUTES(*data-area***)**
returns a fullword binary field giving the minutes portion of the expiry time (see the AT and AFTER options).

QUEUE(*data-area***)**
returns the 8-byte field passed in the QUEUE option of the START command that created this request. It applies only to requests resulting from START commands that specify QUEUE; for other requests, the value returned is blanks.

REQID(*data-value***)**
specifies the 8-byte identifier of the request about which you are inquiring. This is the value specified in the REQID option of the command that generated the request (or assigned by CICS if REQID was omitted).

REQTYPE(*cvda***)**
returns a CVDA value indicating the type of command that created this request. CVDA values are:

DELAY
A DELAY command created this request.

POST
A POST command created this request.

ROUTE
A ROUTE command created this request.

START
A START command created this request.

RTERMID(*data-area***)**
returns the 4-byte field passed in the RTERMID option of the START command that created this request. It applies only to requests resulting from START commands that specify RTERMID; for other requests, the value returned is blanks.

RTRANSID(*data-area***)**
returns the 4-byte field passed in the RTRANSID option of the START command that created this request. It applies only to requests resulting from START commands that specify RTRANSID; for other requests, the value returned is blanks.

SECONDS(*data-area***)**
returns a fullword binary field giving the seconds portion of the expiry time (see the AT and AFTER options).

SET(*ptr-ref***)**
returns the address of the data passed in the FROM option of the command which created this request. It applies only to requests resulting from ROUTE commands, or START commands that specify FROM; for other requests, the value returned is the null pointer (X'FF000000').

TERMID(*data-area***)**
returns the 4-character terminal identifier that was specified in the TERMID option of the START command that created the request. It applies only to requests originating from START commands that specify a terminal; for other requests, the value returned is blanks.

TIME(*data-area***)**
returns the expiry time as an absolute value measured from the midnight preceding this INQUIRE command. The value is a 4-byte packed decimal number in the format 0hhmmss+.

TRANSID(*data-area***)**
returns the 4-character transaction identifier that was specified in the TRANSID option of the command that created the request. It applies only to requests originating from ROUTE or START commands; for other requests, the value returned is blanks.

USERID(*data-area***)**
returns the 8-character identifier of the user associated with the task that issued the command that created this

request. USERID applies only to requests resulting from ROUTE or START commands; for other requests, the value returned is blanks.

Conditions

INVREQ

RESP2 values:

3 An I/O error occurred while an attempt was made to read data from temporary storage for the SET, QUEUE, RTERMID or RTRANSID option.

4 Data required for the SET, QUEUE, RTERMID or RTRANSID option cannot be returned because it has been deleted from temporary storage.

NOTAUTH

RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

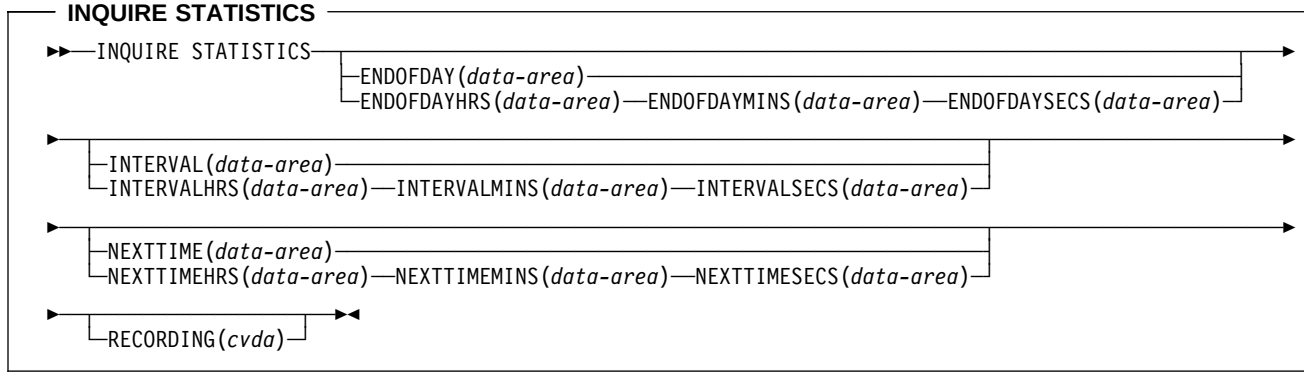
NOTFND

RESP2 values:

1 The REQID cannot be found.

INQUIRE STATISTICS

Retrieve statistics information.



Conditions: NOTAUTH

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The INQUIRE STATISTICS command returns information about the recording of CICS resource and system statistics. CICS records system statistics periodically if the RECORDING switch is on, at a frequency governed by the INTERVAL option. These statistics are called **interval statistics**. At end-of-day time (the ENDOFDAY option), CICS records **end-of-day statistics**—which are the statistics for the interval since the last resetting—whether or not the switch is on, ensuring that statistics are written at least once a day. Recording occurs on a data management facility (DMF) data set, and the counts are reset after recording.

There are two formats for each of the time values that you can retrieve with this command (the end-of-day time, the recording interval, and the next time that recording will occur):

- A 4-byte packed decimal composite (0hhmmss+), which you obtain by using the ENDOFDAY, INTERVAL and NEXTTIME options.
- Separate hours, minutes and seconds, which you obtain by specifying the ENDOFDAYHRS, ENDOFDAYMINS, and ENDOFDAYSECS options (instead of ENDOFDAY), INTERVALHRS, INTERVALMINS, and INTERVALSECS (instead of INTERVAL) and NEXTTIMEHRS, NEXTTIMEMINS, and NEXTTIMESECS (instead of NEXTTIME).

The *CICS Performance Guide* contains more detail about CICS statistics, and the SET STATISTICS command on page 167 describes the relationship between the interval and end-of-day times.

Options

ENDOFDAY(*data-area***)**
returns the end-of-day time, as a 4-byte packed decimal field in the format 0hhmmss+. End-of-day time is expressed in local time.

ENDOFDAYHRS(*data-area***)**
returns the hours component of the end-of-day time, in fullword binary form.

ENDOFDAYMINS(*data-area***)**
returns the minutes component of the end-of-day time, in fullword binary form.

ENDOFDAYSECS(*data-area***)**
returns the seconds component of the end-of-day time, in fullword binary form.

INTERVAL(*data-area***)**
returns a 4-byte packed decimal field giving the recording interval for system statistics.

INTERVALHRS(*data-area***)**
returns the hours component of the recording interval, in fullword binary form.

INTERVALMINS(*data-area***)**
returns the minutes component of the recording interval, in fullword binary form.

INTERVALSECS(*data-area***)**
returns the seconds component of the recording interval, in fullword binary form.

NEXTTIME(*data-area***)**
returns a 4-byte packed decimal field giving the time at which statistics will be recorded next (assuming that the RECORDING switch is not changed from its current value). This is the end-of-day time if RECORDING is

currently off, and the earlier of end-of-day and the end of the current interval otherwise.

NEXTTIMEHRS(*data-area***)**
returns the hours component of the next recording time, in fullword binary form.

NEXTTIMEMINS(*data-area***)**
returns the minutes component of the next recording time, in fullword binary format.

NEXTTIMESECS(*data-area***)**
returns the seconds component of the next recording time, in fullword binary format.

RECORDING(*cvda***)**
returns a CVDA value indicating whether the recording of interval statistics is switched on or off. End-of-day, unsolicited, and requested statistics are always recorded, irrespective of the setting of the RECORDING option. (Unsolicited statistics are resource statistics, recorded when the resource is discarded. Requested statistics are those called for by a PERFORM STATISTICS RECORD command, described on page 140, or by a CEMT PERFORM STATISTICS transaction.)

CVDA values for the RECORDING option are:

OFF Recording is off.

ON Recording is on.

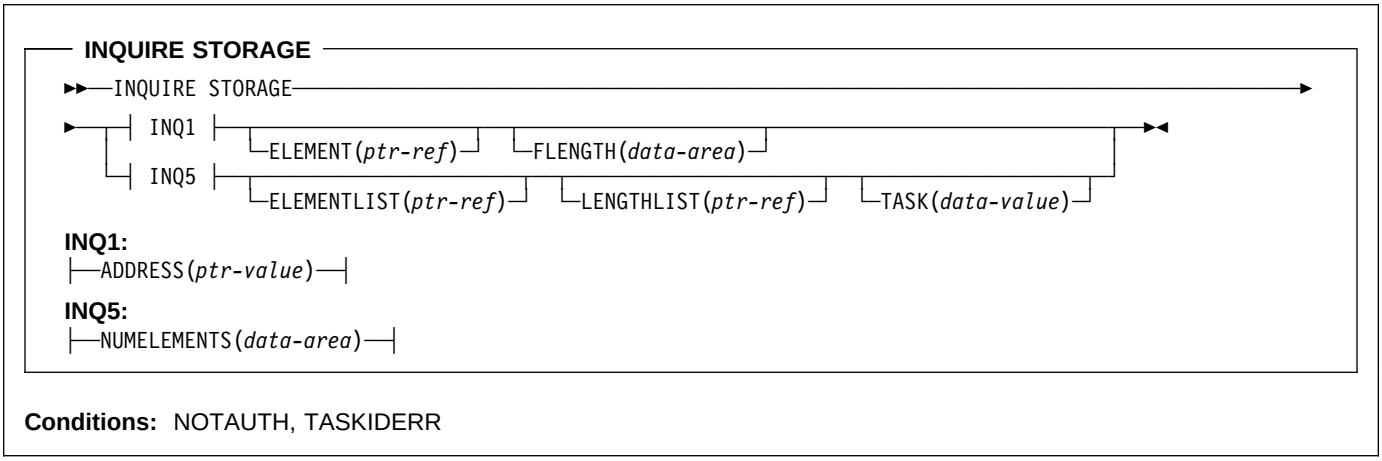
Conditions

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

INQUIRE STORAGE

Retrieve information about task storage.



Conditions: NOTAUTH, TASKIDERR

Context

The INQUIRE STORAGE command has two functions. You can use it to get a list of the task storage areas associated with a particular task (using the NUMELEMENTS option), or you can use it to find the length and starting address of a particular area of storage (using the ADDRESS option). INQUIRE STORAGE applies only to storage allocated to user tasks, which are tasks executing user-defined transactions or the CICS-supplied transactions normally invoked by an operator.

Note: INQUIRE STORAGE does not return information about areas obtained through an EXEC CICS GETMAIN if the command specifies the SHARED option.

Options

ADDRESS(*ptr-value***)**
specifies that you are inquiring about a single area of storage and identifies the area. The address you specify can be anywhere within the area about which you are inquiring; it does not have to be the start of it. CICS returns the length of the area (in FLENGTH) and its starting address (in ELEMENT) if it is a valid element of user task storage.

ELEMENT(*ptr-ref***)**
returns the starting address of the storage area containing the address provided in the ADDRESS option, if the area is user task storage. This is the first byte of the area available for task data, not the preceding storage management control information, if any. If the area is not user task storage, the address returned is nulls.

ELEMENTLIST(*ptr-ref***)**
returns the address of a list of the addresses of all areas of task storage for the task specified in the TASK option. Each address points to the first byte available for data storage, not to preceding storage management control information, if any. The number of addresses in this list is the NUMELEMENTS option value. (Addresses are 4 bytes long, and therefore the length of the list in bytes is 4 times NUMELEMENTS.)

CICS obtains the storage for this list and frees it when the inquiring task ends, or issues another INQUIRE STORAGE command with ELEMENTLIST or LENGTHLIST, or issues an INQUIRE TASK LIST; the task cannot free the storage itself.

FLENGTH(*data-area***)**
returns a fullword binary field giving the length of the storage area containing the address provided in the ADDRESS option. This is the length of the part available for task data; it does not include storage management control information at the beginning or end of the area, if any. If the area is not user task storage, the length returned is -1.

LENGTHLIST(*ptr-ref***)**
returns the address of a list of fullword binary lengths. Each entry in this list is the length of the storage area to which the corresponding entry in the ELEMENTLIST list points. These lengths are the amounts available for data storage and do not include storage management control information, if any.

CICS obtains the storage for this list and frees it when the inquiring task ends, or issues another INQUIRE STORAGE command with ELEMENTLIST or LENGTHLIST, or issues an INQUIRE TASK LIST; the task cannot free the storage itself.

NUMELEMENTS(*data-area***)**
indicates that you are requesting a list of the task storage areas for the task indicated in the TASK option. CICS returns the number of areas, in fullword binary form, in the data area you provide. If you request an

ELEMENTLIST or LENGTHLIST, this value is the number of entries in the list.

TASK(*data-value***)**
specifies, as a 4-byte packed decimal value, the task number for which you are requesting a storage list. If you omit this option but include NUMELEMENTS, CICS assumes the inquiry is for the task issuing the INQUIRE STORAGE command.

Conditions

NOTAUTH
RESP2 values:

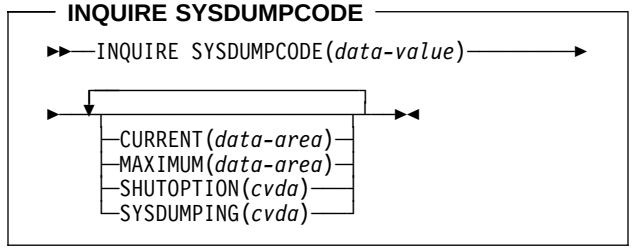
100 The user associated with the issuing task is not authorized to use this command.

TASKIDERR
RESP2 values:

1 The task number does not exist.
2 The task number designates a system task, not a user task.

INQUIRE SYSDUMPCODE

Retrieve information about a system dump table entry.



Conditions: END, ILLOGIC, NOTAUTH, NOTFND

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The INQUIRE SYSDUMPCODE command allows you to look at some of the information in a system dump code table entry.

The table entry tells CICS what actions to take when a system dump request with this code occurs, and how many times to take them (the MAXIMUM option); requests received after the maximum are counted (the CURRENT option), but otherwise ignored.

CICS provides a system dump table with entries for some CICS-defined system dump codes. If it receives a dump request for a code for which it does not have an entry, it builds one, using default values. You can add your own entries with the SET SYSDUMPCODE command or a CEMT transaction. Entries you add remain over executions of CICS until a cold start occurs, but the entries that CICS builds are considered to be temporary and are discarded at shutdown. Consequently, if you enquire about a code that is not explicitly defined before it appears in a dump request, you will get a "not found" response.

Browsing

You can also browse through all of the entries in the system dump code table by using the browse options (START, NEXT and END) on INQUIRE SYSDUMPCODE commands. See "Browsing resource definitions" on page 11 for general information about browsing, syntax, exception conditions, and examples.

Options

CURRENT(*data-area***)**
returns a fullword binary field giving the number of dump requests with this dump code made since the count was

last reset. (The count is reset automatically at CICS shutdown and can be reset explicitly with a SET SYSDUMPCODE command or its CEMT equivalent.) The count includes requests that do not result in a dump because either CICS or VSE suppressed it.

MAXIMUM(*data-area***)**
returns a fullword binary field giving the maximum number of dumps with this code that CICS will take. A value of 999 means the default, 'no limit'.

SHUTOPTION(*cvda***)**
returns a CVDA value indicating whether the CICS system is to be shut down after a request for a dump with this dump code. CVDA values are:

NOSHUTDOWN
The CICS system is not to be shut down.

SHUTDOWN
The CICS system is to be shut down.

SYSDUMPCODE(*data-value***)**
specifies the 8-character system dump code about which you are inquiring. A valid code contains no leading or imbedded blanks.

SYSDUMPING(*cvda***)**
returns a CVDA value indicating whether a dump request with this code should produce a dump or not. Even when a dump is specified, CICS will take one only when the CURRENT value is no greater than the MAXIMUM, and when system dumps are not suppressed globally (see the DUMPING option of the SET SYSTEM command on page 171). CVDA values are:

NOSYSDUMP
A dump is not to be taken.

SYSDUMP
A dump is to be taken.

Note: Dumps from the kernel domain of CICS are not subject to suppression and are taken regardless of SYSDUMPING value.

Conditions

END
RESP2 values:

2 There are no more resource definitions of this type.

ILLOGIC
RESP2 values:

1 You have issued a START command when a browse of this resource type is already in progress, or you have issued a NEXT or an END command when a browse of this resource type is not in progress.

NOTAUTH
RESP2 values:

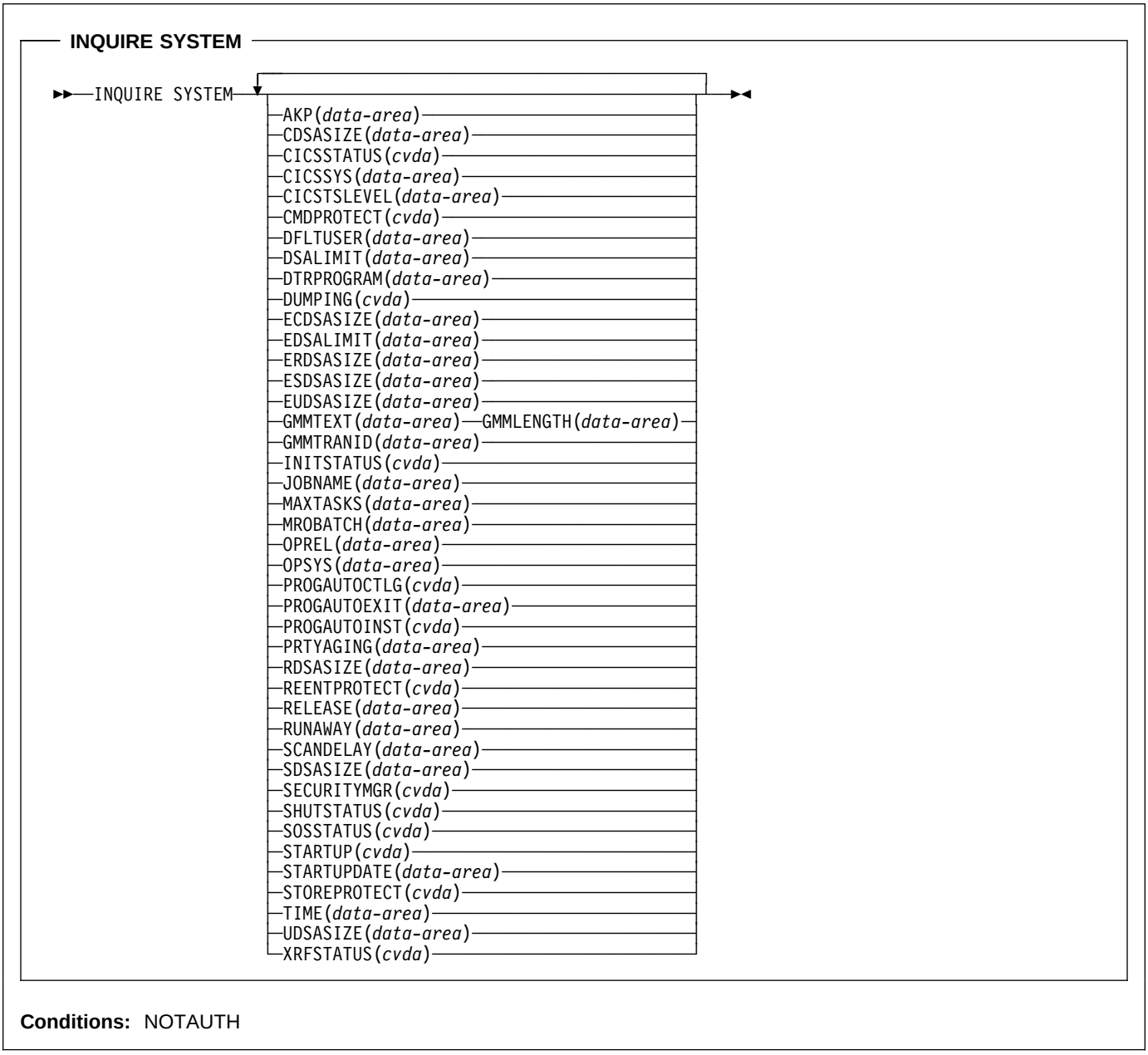
100 The user associated with the issuing task is not authorized to use this command.

NOTFND
RESP2 values:

1 The named dump code cannot be found.

INQUIRE SYSTEM

Retrieve CICS system information.



Conditions: NOTAUTH

For more information about the use of CVDAs, see “CICS-value data areas (CVDAs)” on page 7.

Context

The INQUIRE SYSTEM command returns information about the CICS system under which the task issuing the command is executing.

Many of the options in this command correspond to options in the system initialization table (SIT) and take their initial values from the SIT. Some of these can be changed by a subsequent SET SYSTEM command or its CEMT equivalent. Other options return information about the CICS or VSE release levels, and still others return information determined solely by the current state of the system. Table 3 on page 99 indicates where the option values come from, and, in the case of those set initially by the SIT, the name of the corresponding option. For these options, the *CICS System Definition Guide* is a good source of additional information. For state options, the *CICS Customization Guide* is the primary source.

Table 3. INQUIRE SYSTEM options

Option	Origin
AKP	AKPFREQ in SIT
CDSASIZE	System state
CICSSTATUS	System state
CICSSYS	System state
CICSTSLEVEL	CICS control block
CMDPROTECT	CMDPROT in SIT
DFLTUSER	DFLTUSER in SIT
DSALIMIT	DSALIM in SIT
DTRPROGRAM	DTRPGM in SIT
DUMPING	DUMP in SIT
ECDSASIZE	System state
EDSALIMIT	EDSALIM in SIT
ERDSASIZE	System state
ESDSASIZE	System state
EUDSASIZE	System state
GMMTEXT, GMMLENGTH	GMTEXT in SIT
GMMTRANID	GMTRAN in SIT
INITSTATUS	System state
JOBNAME	JCL or cataloged procedure
MAXTASKS	MXT in SIT
MROBATCH	MROBTCH in SIT
OPREL	VSE system code
OPSYS	VSE system code
PROGAUTOCTLG	PGAICTLG in SIT
PROGAUTOEXIT	PGAIEXIT in SIT
PROGAUTOINST	PGAIPGM in SIT
PRTYAGING	PRTYAGE in SIT
RDSASIZE	System state
REENPROTECT	RENTPGM in SIT
RELEASE	CICS system code
RUNAWAY	ICVR in SIT
SCANDELAY	ICVTSD in SIT
SDSASIZE	System state
SECURITYMGR	SEC in SIT
SHUTSTATUS	System state
SOSSTATUS	System state
STARTUP	System state
STARTUPDATE	System state
STOREPROTECT	STGPROT in SIT and hardware
TIME	ICV in SIT
UDSASIZE	System state
XRFSTATUS	XRF in SIT and system state

Options

AKP(*data-area***)**
returns a fullword binary field giving the activity keypoint trigger value, which is the number of logging operations between the taking of keypoints.

A value of zero means that keypoints are not being taken.

CDSASIZE(*data-area***)**
returns the current size in bytes of the CICS dynamic storage area (CDSA), in fullword binary form. It includes both storage in use and storage available for use. This size is either:

- Fixed, as defined by the CDSASZE system initialization override.
- Calculated and managed by CICS automatically, within the overall limit for dynamic storage areas that reside below the 16MB boundary (the DSALIMIT option value).

CICSTSLEVEL(*data-area***)**
returns a 6-character value identifying the version, release and modification level of the CICS Transaction Server for VSE/ESA product under which the CICS region is running. The value is of the form vvrrmm, and CICS Transaction Server Release 1 returns 010100.

CICSSTATUS(*cvda***)**
returns a CVDA value identifying the current execution status of CICS. CVDA values are:

ACTIVE
CICS is fully active.

FINALQUIESCE
CICS is in the final quiesce stage of shutdown. Programs in the second stage of the program list table for shutdown (PLTSD) are run during this stage.

FIRSTQUIESCE
CICS is in the first quiesce stage of shutdown. Programs in the first stage of the PLTSD are run during this stage.

STARTUP
CICS is starting up but is not yet fully active. Programs in the program list table for program initiation (PLTPI) are run during startup. See the INITSTATUS option for further information.

CICSSYS(*data-area***)**
returns a 1-character value identifying the operating system for which the running CICS system has been built. A value of “F” represents VSE/ESA.

CMDPROTECT(*cvda***)**
returns a CVDA value indicating whether command protection is active or not. With command protection active, when a task issues a command, CICS verifies that the task has write access to the first byte of every area into which CICS is to return information. If any area fails the test, an AEYD abend occurs.

The CVDA values are:

CMDPROT
Command protection is active.

NOCMDPROT
Command protection is not active.

DFLTUSER(*data-area***)**
returns the 8-character identifier of the default user for this CICS region.

DSALIMIT(*data-area***)**
returns a fullword binary field giving the maximum amount of storage, in bytes, within which CICS can dynamically allocate storage for the four individual dynamic storage areas that reside below the 16MB

boundary. (See the CDSASIZE, RDSASIZE, SDSASIZE and UDSASIZE options of this command.)

DTRPROGRAM(*data-area***)**
returns the 8-character name of the program controlling the dynamic routing of transactions.

DUMPING(*cvda***)**
returns a CVDA value indicating whether the taking of CICS system dumps is suppressed. CVDA values are:

NOSYSDUMP
System dumps are suppressed.

SYSDUMP
System dumps are not suppressed.

ECDSASIZE(*data-area***)**
returns the current size in bytes of the extended CICS dynamic storage area (ECDSA), in fullword binary form. It includes both storage in use and storage available for use. This size is either:

- Fixed, as defined by the ECDSASZE system initialization override.
- Calculated and managed by CICS automatically, within the overall limit for dynamic storage areas that reside above the 16MB boundary (the EDSALIMIT option value).

EDSALIMIT(*data-area***)**
returns a fullword binary field giving the maximum amount of storage, in bytes, within which CICS can dynamically allocate storage for the four individual dynamic storage areas that reside above the 16MB boundary. (See the ECDSASIZE, ERDSASIZE, ESDSASIZE and EUDSASIZE options of this command.)

ERDSASIZE(*data-area***)**
returns the current size in bytes of the extended read-only dynamic storage area (ERDSA), in fullword binary form. It includes both storage in use and storage available for use. This size is either:

- Fixed, as defined by the ERDSASZE system initialization override.
- Calculated and managed by CICS automatically, within the overall limit for dynamic storage areas that reside above the 16MB boundary (the EDSALIMIT option value).

ESDSASIZE(*data-area***)**
returns the current size in bytes of the extended shared dynamic storage area (ESDSA), in fullword binary form. It includes both storage in use and storage available for use. This size is either:

- Fixed, as defined by the ESDSASZE system initialization override.
- Calculated and managed by CICS automatically, within the overall limit for dynamic storage areas that reside below the 16MB boundary (the EDSALIMIT option value).

EUDSASIZE(*data-area***)**
returns the current size in bytes of the extended user dynamic storage area (EUDSA), in fullword binary form. It includes both storage in use and storage available for use. This size is either:

- Fixed, as defined by the EUDSASZE system initialization override.
- Calculated and managed by CICS automatically, within the overall limit for dynamic storage areas that reside above the 16MB boundary (the EDSALIMIT option value).

GMMLENGTH(*data-area***)**
returns a halfword binary field giving the length in bytes of the “good morning” message text.

GMMTEXT(*data-area***)**
returns the “good morning” message text in the data-area you provide, which must long enough to accomodate it. The maximum length of any “good morning” message is 246 bytes; the actual length is returned in the GMMLENGTH option value.

GMMTRANID(*data-area***)**
returns the 4-character name of the transaction that generates the “good morning” message.

INITSTATUS(*cvda***)**
returns a fullword binary field giving the initialization status of the CICS system. CVDA values are:

FIRSTINIT
First stage of CICS initialization.

INITCOMPLETE
CICS initialization is complete.

SECONDINIT
Second stage of initialization.

THIRDINIT
Third stage of initialization.

See the *CICS Customization Guide* for more information about CICS initialization.

JOBNAME(*data-area***)**
returns the 8-character VSE jobname under which CICS is running.

MAXTASKS(*data-area***)**
returns a fullword binary field giving the maximum number of tasks that can be eligible for dispatch at any one time in this CICS system. Both active and suspended tasks count toward this limit, but tasks that have not reached the point of initial dispatch do not. System tasks such as terminal and journal control tasks do not count in CICS Transaction Server for VSE/ESA Release 1 either, although they did in earlier releases.

MROBATCH(*data-area***)**
returns a fullword binary field giving the number of events that must occur, from a list of MRO and DASD

I/O events on which CICS is waiting, before CICS is posted explicitly to process them.

OPREL(*data-area***)**
returns a halfword binary field giving the release number of the operating system under which CICS is currently running. For example, for VSE/ESA Version 2 Release 4, the reply is 64, because the VSE supervisor is at issue 6.4.

OPSYS(*data-area***)**
returns a 1-character value identifying the operating system under which CICS is running. A value of "E" represents VSE/ESA.

PROGAUTOCTLG(*cvda***)**
returns a CVDA value indicating whether and when autoinstalled program definitions are cataloged. Cataloged definitions are restored on a warm or emergency restart. Those not cataloged are discarded at shutdown, and must be installed again if they are used in a subsequent execution of CICS.

Decisions to catalog are made both at initial installation and whenever an autoinstalled definition is modified, and are based on the PROGAUTOCTLG value at the time. CVDA values are:

CTLGALL
Definitions are cataloged both when installed and when modified.

CTLGMODIFY
Definitions are cataloged only when modified.

CTLGNONE
Definitions are not cataloged.

PROGAUTOEXIT(*data-area***)**
returns the 8-character name of the user-provided program that is called by the CICS program autoinstall code to provide a model definition.

PROGAUTOINST(*cvda***)**
returns a CVDA value indicating whether autoinstall for programs is active or inactive. When a task requests a program, map set or partition set that is not defined, CICS attempts to create a definition for it automatically if autoinstall for programs is active. If not, CICS raises the PGMIDERR exceptional condition. CVDA values are:

AUTOACTIVE
Autoinstall for programs is active.

AUTOINACTIVE
Autoinstall for programs is not active.

PRTYAGING(*data-area***)**
returns a fullword binary field giving the rate at which CICS increases the priority of a task waiting for dispatch. CICS increases the task priority by 1 after each PRTYAGING milliseconds of wait time without a dispatch.

RDSASIZE(*data-area***)**
returns the current size in bytes of the read-only dynamic storage area (RDSA), in fullword binary form. It includes both storage in use and storage available for use. This size is either:

- Fixed, as defined by the RDSASZE system initialization override.
- Calculated and managed by CICS automatically, within the overall limit for dynamic storage areas that reside below the 16MB boundary (the DSALIMIT option value).

REENTPROTECT(*cvda***)**
returns a CVDA value indicating whether storage for reentrant programs (the RDSA and ERDSA) is in key 0 or CICS key. VSE key 0 storage is write protected from programs running in CICS key or user key; programs in CICS key storage are protected only from those running in user key when CICS key and user key are different (that is, when storage protection is active). CVDA values are:

REENTPROT
Read-only DSAs are in key 0 storage.

NOREENTPROT
Read-only DSAs are in CICS-key storage.

RELEASE(*data-area***)**
returns a 4-character string giving the version and release numbers of the CICS code running. For example, "0230" represents CICS for VSE/ESA Version 2 Release 3, and "0410" represents CICS Transaction Server for VSE/ESA Release 1.

RUNAWAY(*data-area***)**
returns a fullword binary field giving the default value for runaway task time. This value is used for any task executing a transaction whose profile does not specify runaway task time (see the RUNAWAY option of the INQUIRE TRANSACTION command on page 130).

SCANDELAY(*data-area***)**
returns a fullword binary field giving the maximum number of milliseconds between a user task making a terminal I/O request and CICS dispatching the terminal control task to process it. This value is sometimes called the "terminal scan delay," and is set by the ICVTSD option in the system initialization table.

SDSASIZE(*data-area***)**
returns the current size in bytes of the shared dynamic storage area (SDSA), in fullword binary form. It includes both storage in use and storage available for use. This size is either:

- Fixed, as defined by the SDSASZE system initialization override.
- Calculated and managed by CICS automatically, within the overall limit for dynamic storage areas that reside below the 16MB boundary (the DSALIMIT option value).

SECURITYMGR(*cvda***)**
returns a CVDA value identifying whether an external security manager is active in the system, or whether no security is being used. CVDA values are:

EXTSECURITY
An external security manager is active.

NOSECURITY
No security is being used.

SHUTSTATUS(*cvda***)**
returns a CVDA value indicating the shutdown status of CICS (see the CICSSTATUS option on page 99). CVDA values are:

CANCELLED
CICS is canceled.

CONTROLSHUT
CICS is performing a controlled shutdown (that is, a normal shutdown with a warm keypoint).

SHUTDOWN
CICS is performing an immediate shutdown.

NOTAPPLIC
CICS is not shutting down.

SOSSTATUS(*cvda***)**
returns a CVDA value indicating whether CICS is short on storage. CVDA values are:

NOTSOS
CICS is not short on storage in any of the dynamic storage areas.

SOS CICS is short on storage in at least one dynamic storage area above and at least one below the 16MB line.

SOSABOVE
CICS is short on storage in at least one dynamic storage area above 16MB, but none below.

SOSBELOW
CICS is short on storage in at least one dynamic storage area below 16MB, but none above.

STARTUP(*cvda***)**
returns a CVDA value indicating how the current execution of CICS started. CVDA values are:

COLDSTART
CICS performed a cold start (either on request or because of the global catalog had been initialized).

EMERGENCY
CICS performed an emergency restart because the previous run did not shut down normally.

WARMSTART
CICS performed a warm restart following the normal shutdown of the previous run.

STARTUPDATE(*data-area***)**
returns a 4-byte packed-decimal field containing the date on which the current execution of CICS started. The date is in the form **0cyyddd+**, where **c.** is the century code (**0** for the 1900s, **1** for 2000–2099), and **yy** is the low-order two digits of the year and **ddd** is the sequential day of the year.

STOREPROTECT(*cvda***)**
returns a CVDA value indicating whether storage protection is active or not. For storage protection to be active, it must be requested (the STGPROT system initialization parameter), and it must be supported by the hardware. CVDA values are:

ACTIVE
Storage protection is active.

INACTIVE
Storage protection is not active.

TIME(*data-area***)**
returns a fullword binary field giving the maximum interval in milliseconds for which CICS gives control to the operating system if no tasks are ready for dispatch. This value is set by the ICV option in the system initialization table and is sometimes called the “region exit time interval.”

UDSASIZE(*data-area***)**
returns the current size in bytes of the user dynamic storage area (UDSA), in fullword binary form. It includes both storage in use and storage available for use. This size is either:

- Fixed, as defined by the UDSASZE system initialization override.
- Calculated and managed by CICS automatically, within the overall limit for dynamic storage areas that reside below the 16MB boundary (the DSALIMIT option value).

XRFSTATUS(*cvda***)**
returns a CVDA value indicating whether the current execution of CICS started as an active or alternate region under the extended recovery facility (XRF). CVDA values are:

NOTAPPLIC
CICS is running without XRF support (XRF=NO system initialization parameter).

PRIMARY
CICS started as the active region.

TAKEOVER
CICS started as the alternate region.

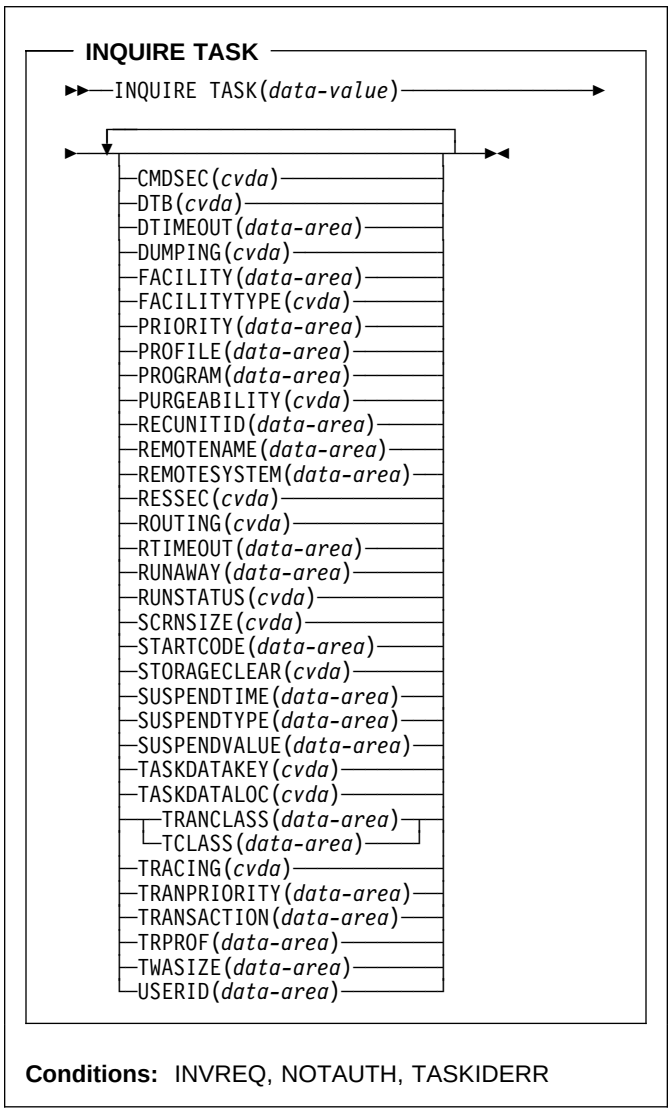
Conditions

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

INQUIRE TASK

Retrieve information about a user task.



Conditions: INVREQ, NOTAUTH, TASKIDERR

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The INQUIRE TASK command returns information about a specific user task. User tasks are those associated with user-defined transactions or with CICS-supplied transactions that are normally invoked by an operator.

Many of the options available on this command are the same as those available on the INQUIRE TRANSACTION command, because a task obtains most of its characteristics from the definition of the transaction it is executing. However, these properties are determined at task initiation. If the transaction definition is changed after the task begins, the task may have a different value for a property than the current transaction definition. Task values can also be changed with a SET TASK command or its CEMT equivalent.

In addition, the INQUIRE TASK command always produces information about the task you specify on the **local** CICS system. You need to keep this in mind for tasks that are subject to routing or that issue LINK commands that may be shipped to another system.

Whenever a task is executed wholly or in part on a system other than the one on which it originates, there is a matching task on the remote system. The task on the originating system takes its characteristics from the definition *on that system* of the transaction it is to execute. The corresponding task on the remote system (if routing takes place or the task issues distributed program links) takes its characteristics from the definition of whatever transaction *on the remote system* that the originating system tells the remote system to use. This remote transaction may have different properties from those of the transaction on the originating system. (It may or may not have a different name; in the case of static transaction routing, the name of the transaction in the remote system comes from the REMOTENAME option of the transaction in the local system.)

Consequently, an inquiry about the task on the originating system may produce entirely different results from an inquiry about the corresponding task on the remote system. For the same reason, a task that issues distributed program links may get a different result from an INQUIRE TASK about itself (taking the task number from the EIB) in a program executing remotely than from the same command in a program executing locally.

Options

CMDSEC(*cvda***)**
returns a CVDA value indicating whether the definition of the TRANSACTION the task is executing specifies command security. CVDA values are:

CMDSECNO
Command security is not specified.

CMDSECYES
Command security is specified.

When a task being checked issues a system programming command, CICS calls the external security manager (ESM) to verify that the user associated with the task has authority to use these commands.

A task is command-checked only when an ESM is active and either the CMDSEC value for the task is CMDSECYES or the system initialization option CMDSEC value is ALWAYS (see the SECURITYMGR option of the INQUIRE SYSTEM command on page 101).

DTB(*cvda***)**
returns a CVDA value indicating how uncommitted changes made to recoverable resources by this task are handled if the task fails. CVDA values are:

BACKOUT
Uncommitted changes are backed out.

COMMIT
Uncommitted changes are committed.

WAIT
The disposition of uncommitted changes is deferred until further information is available; locks on the changed resources are held until the disposition is resolved.

The DTB value is set by the INDOUBT option of the definition of the TRANSACTION this task is executing.

DTIMEOUT(*data-area***)**
returns a fullword binary field giving the deadlock time-out interval, in seconds. CICS abends a task that waits longer than its deadlock timeout value for a locked resource.

DUMPING(*cvda***)**
returns a CVDA value indicating whether CICS should take a transaction dump if the task terminates abnormally. CVDA values are:

NOTRANDUMP
No dump is taken.

TRANDUMP
A dump is taken.

This value applies only to abend dumps and has no effect on DUMP TRANSACTION commands.

FACILITY(*data-area***)**
returns the 4-character name of the facility associated with initiation of this task, if that facility is a transient data queue or a terminal or system. If the task was initiated otherwise, the facility value is blanks. The FACILITYTYPE option tells you what type of facility caused task initiation, and therefore what FACILITY represents.

FACILITYTYPE(*cvda***)**
returns a CVDA value identifying the type of facility that initiated this task. CVDA values are:

DEST
CICS initiated the task to process a transient data queue which had reached trigger level; the FACILITY option returns the name of queue.

TASK
Another task initiated the task with a START command that did not specify a terminal, or CICS created the task internally; the FACILITY option returns blanks in this case.

TERM
Either the task was initiated to process unsolicited input or another task initiated the task with a START command with the TERMID option. In the first case the FACILITY option returns the name of the terminal that sent the input, and in the second, it returns the terminal named in TERMID.

PRIORITY(*data-area***)**
returns a fullword binary field giving the total priority of the task. Total priority is the sum of the priority of the user associated with the task, the priority of the terminal which is the principal facility, and the priority of the TRANSACTION being executed (see the TRANPRIORITY option). A task's priority may be changed subsequent to attach by an EXEC CICS CHANGE TASK command.

PROFILE(*data-area***)**
returns the 8-character name of the PROFILE for the TRANSACTION this task is executing.

PROGRAM(*data-area***)**
returns the 8-character name of the program executed first in this task.

PURGEABILITY(*cvda***)**
returns a CVDA value indicating whether CICS is allowed to purge this task (that is, to terminate it abnormally). Purge requests come from SET TASK PURGE commands (or CEMT equivalents), and CICS can generate them internally to reclaim resources to relieve a system stall condition. CVDA values are:

NOTPURGEABLE
The task cannot be purged.

PURGEABLE
The task can be purged.

The PURGEABILITY value is set initially by the SPURGE option in the definition of the RDO TRANSACTION this task is executing.

RECUNITID(*data-area***)**
returns the 8-byte identifier of the current unit of recovery in this task. CICS assigns this value at the start of the logical unit of work (unit of recovery), using the system clock value at that time to ensure a unique value.

REMOTENAME(*data-area***)**
returns the 4-character name assigned in the REMOTENAME option of the definition of the TRANSACTION which this task is executing. When CICS routes a task statically, REMOTENAME is the name of the transaction that the partner task on the remote system executes. Consequently REMOTENAME is significant to the task about which you are inquiring only if it is subject to routing.

CICS returns blanks if the RDO TRANSACTION resource definition does not specify REMOTENAME.

REMOTESYSTEM(*data-area***)**
returns the 4-character name assigned in the REMOTESYSTEM option of the definition of the TRANSACTION which this task is executing. When CICS routes a task statically, REMOTESYSTEM is the name of the CONNECTION definition of the system to which the task is routed. Like REMOTENAME, REMOTESYSTEM is significant to the task about which you are inquiring only if it is subject to routing.

CICS returns blanks if the RDO TRANSACTION resource definition does not specify REMOTESYSTEM.

RESSEC(*cvda***)**
returns a CVDA value indicating whether the definition of the TRANSACTION the task is executing specifies resource-level security checking. CVDA values are:

RESSECNO
Command security is not specified.

RESSECYES
Command security is specified.

When a task is being checked, CICS verifies on each command that the user associated with the task has authority to access the resource named in the way requested.

A task is checked only when an external security manager is active and either the RESSEC value for the task is RESSECYES or the system initialization option RESSEC value is ALWAYS (see the SECURITYMGR option of the INQUIRE SYSTEM command on page 101).

ROUTING(*cvda***)**
returns a CVDA value indicating whether the transaction this task is executing specifies dynamic routing or not (in the DYNAMIC option in the RDO TRANSACTION resource definition). Dynamic routing occurs just before the initial dispatch of a task, and therefore this value indicates whether dynamic routing may have occurred (if the task is already in execution) or may yet occur (if it has not yet been dispatched). CVDA values are:

DYNAMIC
Dynamic routing applies.

STATIC
Dynamic routing does not apply.

RTIMEOUT(*data-area***)**
returns a fullword binary field giving the read time-out interval, in seconds. CICS abends a task if it waits for input longer than its read time-out value. The RTIMEOUT value is set by the RTIMOUT option in the RDO PROFILE resource definition associated with the RDO TRANSACTION this task is executing.

RUNAWAY(*data-area***)**
returns the “runaway task” time for this task, in milliseconds, as a fullword binary value. If a task keeps control of the processor for more than this interval on a single dispatch, CICS assumes it is in a loop and abends it. If the value is zero, CICS does not monitor the task for a runaway condition.

RUNSTATUS(*cvda***)**
returns a CVDA value indicating the dispatch status of the task. CVDA values are:

DISPATCHABLE
The task is ready to run.

RUNNING
The task is running.

SUSPENDED
The task is not ready to run.

SCRNSIZE(*cvda***)**
returns a CVDA value indicating whether the alternate or the default screen size applies to this task. CVDA values are:

ALTERNATE
Alternate screen size applies.

DEFAULT
Default screen size applies.

The SCRNSIZE value is set by the same-named option in the RDO PROFILE resource definition associated with the RDO TRANSACTION this task is executing.

STARTCODE(*data-area***)**
returns a 2-character value indicating how this task started. Possible values are:

D The task was initiated to process a distributed programming link (DPL) command that did not specify the SYNCONRETURN option. (The task is not allowed to issue syncpoints.)

DS The task was initiated to process a distributed programming link (DPL) command containing the SYNCONRETURN option. (The task is allowed to issue syncpoints).

QD CICS initiated the task to process a transient data queue that had reached trigger level.

S Another task initiated this one, using a START command that did not pass data in the FROM option.

SD Another task initiated this one, using a START command that passed data in the FROM option.

SZ The task was initiated with a FEPI START command (see the *CICS Front End Programming Interface User's Guide* for further information).

TO The task was initiated to process unsolicited input from a terminal (or another system), and the transaction to be executed was determined from the input.

TP The task was initiated to process unsolicited input or in response to a RETURN IMMEDIATE command in another task. In either case, the transaction to be executed was preset (in the

RETURN command or in the associated TERMINAL definition) without reference to input.

U CICS created the task internally.

STORAGECLEAR(*cvda***)**
returns a CVDA value indicating whether CICS should clear storage that is released from this task (to prevent other tasks accidentally viewing confidential data). CVDA values are:

CLEAR
Storage will be cleared.

NOCLEAR
Storage will not be cleared.

SUSPENDTIME(*data-area***)**
returns a fullword binary field giving the number of seconds (rounded down) for which the task has been suspended since last dispatch, if its RUNSTATUS value is SUSPENDED. If the task is running or dispatchable, the SUSPENDTIME value is 0.

SUSPENDTYPE(*data-area***)**
returns an 8-character text string indicating why this task is suspended, if it is (blanks are returned for tasks that are running or dispatchable). See the SUSPENDVALUE option also.

SUSPENDVALUE(*data-area***)**
returns the 8-character name of the resource for which this task is waiting (the name of the file if the task is enqueued on a record, for example). SUSPENDVALUE applies only to suspended tasks; if the task is running or dispatchable, the value returned is blanks.

For information on the values that can appear in the SUSPENDTYPE and SUSPENDVALUE options, and how they can be used as an aid in problem determination, see the “resource type” and “resource name” details in the *CICS Problem Determination Guide*.

TASK(*data-value***)**
specifies the 4-byte packed-decimal sequence number of the task about which you are inquiring.

TASKDATAKEY(*cvda***)**
returns a CVDA value indicating the storage key in which CICS obtains storage for this task. This includes the task life-time storage—the transaction work area (TWA) and the EXEC interface block (EIB)—and the storage that CICS obtains on behalf of programs that run under this task.

See the description of the TASKDATAKEY option in an RDO TRANSACTION resource definition in the *CICS Resource Definition Guide* for more information.

CVDA values are:

CICSDATAKEY
CICS obtains storage from CICS-key storage.

USERDATAKEY
CICS obtains storage from user-key storage.

The value returned for TASKDATAKEY is taken from the definition of the TRANSACTION that the task is executing. To determine whether storage protection is active (that is, whether user-key has a different value from CICS-key), you need to issue an INQUIRE SYSTEM command with the STOREPROTECT option.

TASKDATALOC(*cvda***)**
returns a CVDA value indicating whether task-lifetime storage for this task (CICS control blocks for the task such as the EIB and TWA) should be acquired above or below the 16MB line. CVDA values are:

ANY Task-lifetime storage can be either below or above the 16MB line.

BELOW
Task-lifetime storage must be below the 16MB line.

TCLASS(*data-area***)**
returns a fullword binary field giving the number of the transaction class to which this task belongs, if it belongs to a numbered transaction class. This option is retained for compatibility with earlier releases, where transaction classes were numbered from 1 to 10. If the task does not belong to such a class, the value returned is zero. (Also see the TRANCLASS option of this command.)

TRACING(*cvda***)**
returns a CVDA value indicating the type of tracing in effect for this task. CVDA values are:

SPECTRACE
Tracing for this task is special.

SPRSTRACE
Tracing for this task is suppressed.

STANTRACE
Tracing for this task is standard.

For further information on the types of tracing, see the *CICS Problem Determination Guide* and the description of the CETR transaction in the *CICS-Supplied Transactions* manual.

TRANCLASS(*data-area***)**
returns the 8-character name of the transaction class to which the task belongs. If the task is not assigned to any class, the default class DFHTCL00 is returned. If the task belongs to a numbered class, the value returned is DFHTCLnn, where **nn** is the two-digit class number.

TRANPRIORITY(*data-area***)**
returns a fullword binary field giving the component of the total priority of the task that came from the PRIORITY option in the definition of the RDO TRANSACTION being executed. (See also the PRIORITY option of this command.)

TRANSACTION(*data-area***)**
returns the 4-character name of the transaction that this task is executing.

TRPROF(*data-area***)**
returns the 8-character name of the PROFILE definition used for intersystem flows if the task is routed on an ISC link.

TWASIZE(*data-area***)**
returns a fullword binary field giving the size in bytes of the transaction work area (TWA) for this task.

USERID(*data-area***)**
returns the 8-character identifier of the user associated with the task.

Conditions

INVREQ
RESP2 values:

3 TCLASS cannot be returned because the task is in a transaction class that does not correspond to TCLASS values 1 through 10.
10 Neither RTIMEOUT nor SCRNSIZE can be returned because the selected task's PROFILE entry cannot be located.

NOTAUTH
RESP2 values:

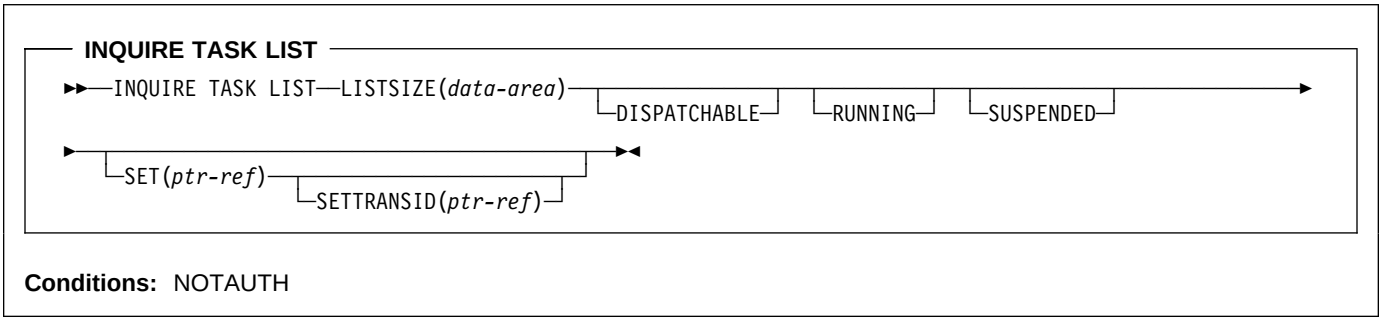
100 The user associated with the issuing task is not authorized to use this command.

TASKIDERR
RESP2 values:

1 The task cannot be found.
2 The task is executing a type of transaction which is not subject to this command.

INQUIRE TASK LIST

Retrieve a list of user tasks.



Conditions: NOTAUTH

Context

The INQUIRE TASK LIST command returns a list of user tasks. User tasks are those associated with user-defined transactions or with CICS-supplied transactions that are normally invoked by an operator. You can restrict the list to tasks that are DISPATCHABLE (ready to run), RUNNING, or SUSPENDED at the time of the inquiry, or any combination of these.

If the program issuing the EXEC CICS INQUIRE TASK LIST command is being run under CEDF, the CEDF task will not appear in the task list because CEDF is pseudoconversational.

Options

DISPATCHABLE
specifies that tasks ready to run (dispatchable) should be included in the task list. These tasks are also included if you specify none of the category options (DISPATCHABLE, RUNNING, and SUSPENDED).

LISTSIZE(*data-area***)**
returns a fullword binary field giving the number of tasks in the categories you included in your inquiry. This is the number of entries in the lists that the SET and SETTRANSID options produce. If there are no tasks in the categories requested, LISTSIZE contains zero.

RUNNING
specifies that the task executing (the one issuing the command) should included in the task list. It is also included if you specify none of the category options (DISPATCHABLE, RUNNING, and SUSPENDED).

SET(*ptr-ref***)**
returns the address of a list of 4-byte packed-decimal task numbers. Each entry in the list identifies a task in one of the categories requested (see the DISPATCHABLE, RUNNING and REQUESTED options). If there are no tasks in the categories requested, the SET pointer contains a null value.

CICS obtains the storage for this list and frees it when the inquiring task issues another INQUIRE TASK LIST or ends; the task cannot free the storage itself.

SETTRANSID(*ptr-ref***)**
returns the address of a list of 4-byte transaction identifiers. Each entry in the list is the name of the transaction that the task in the corresponding entry in the SET list is executing. If there are no tasks in the categories that you have specified, the SETTRANSID pointer contains a null value.

CICS obtains the storage for this list and frees it when the inquiring task issues another INQUIRE TASK LIST or ends; the task cannot free the storage itself.

SUSPENDED
specifies that suspended tasks (tasks waiting for some event or condition) should be included in the task list. For this purpose, tasks which have not reached the point of initial dispatch, either because the task class to which they belong is at its maximum or because the maximum for the system has been reached, are considered suspended. Suspended tasks are also included if you specify none of the category options (DISPATCHABLE, RUNNING, and SUSPENDED).

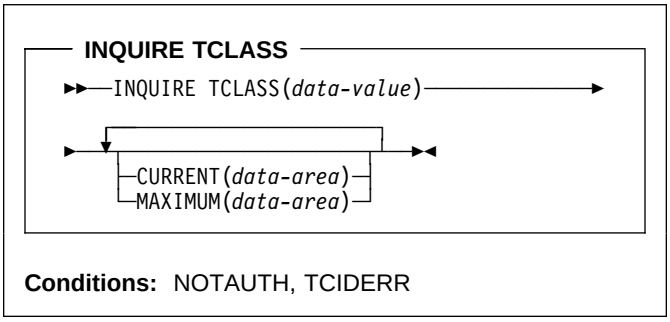
Conditions

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

INQUIRE TCLASS

Retrieve information about a transaction class.



Context

The INQUIRE TCLASS command allows you to determine the current and maximum numbers of tasks within an installation-defined transaction class. This command is limited to the numbered classes of earlier releases of CICS and is retained for compatibility with those releases. The INQUIRE TRANCLASS command, described on page 126, has the same function and can be used for either the old numbered or the new named classes.

Options

CURRENT(*data-area***)**
returns a fullword binary field giving the current number of tasks in the class about which you are inquiring. This number includes both tasks that are running and tasks that have not yet been dispatched because the maximum for either the class or the system has been reached. (See the MAXIMUM option of this command and the MAXTASKS option of the INQUIRE SYSTEM command for more about these limits.) The CURRENT value corresponds to the sum of the ACTIVE and QUEUED values in an INQUIRE TRANCLASS command, and therefore can exceed the MAXIMUM value.

MAXIMUM(*data-area***)**
returns a fullword binary field giving the largest number of tasks that are allowed to run concurrently in the class about which you are inquiring. (This value corresponds to the MAXACTIVE value in an INQUIRE TRANCLASS command.)

TCLASS(*data-value***)**
specifies the number of the task class about which you are inquiring, in fullword binary form. The number must be in the range 1–10.

Conditions

NOTAUTH
RESP2 values:

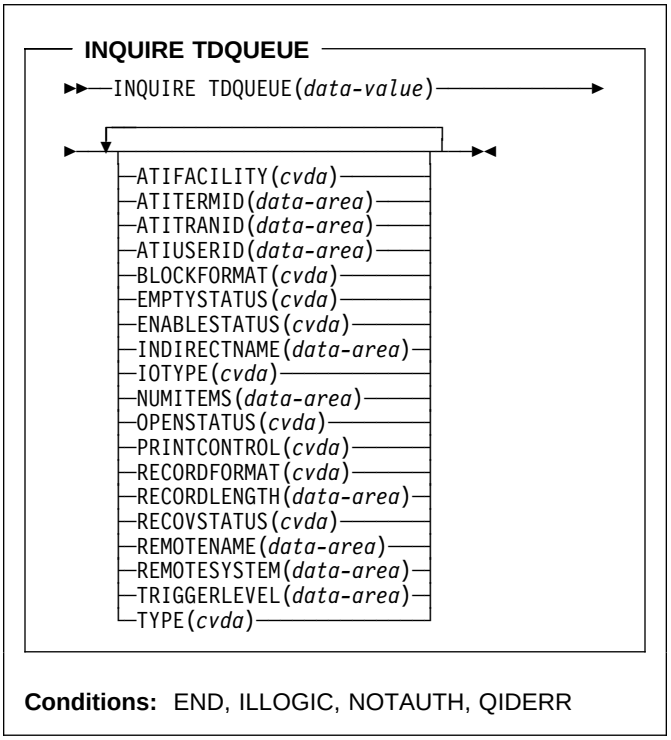
100 The user associated with the issuing task is not authorized to use this command.

TCIDERR
RESP2 values:

1 The named task class cannot be found.

INQUIRE TDQUEUE

Retrieve information about a transient data queue.



Conditions: END, ILLOGIC, NOTAUTH, QIDERR

For more information about the use of CVDAs, see “CICS-value data areas (CVDAs)” on page 7.

Context

The INQUIRE TDQUEUE command retrieves information about a particular transient data queue.

Transient data queues, also called destinations, are defined in the destination control table (DCT) of CICS. There are two basic types: **intrapartition** and **extrapartition**. Intrapartition queues are managed and stored entirely by CICS, and are subject to automatic task initiation (ATI). ATI means that when the number of items on the queue reaches the value in the TRIGGERLEVEL option, CICS automatically creates a task to process the queue.

An extrapartition queue is a VSE sequential data set (or a spool file). Extrapartition queues are not subject to ATI, and consequently the associated options produce null values. Furthermore, if the data set is not open, CICS may not be able to determine some of the values, such as BLOCKFORMAT and RECORDFORMAT. Null values, explained in “Null values” on page 10, are returned in such cases.

Two other queue types appear in the DCT: **indirect** and **remote**, both of which point, eventually, to one of the basic types.

An indirect queue points to another queue on the same CICS system, and is essentially an alias for the other queue. When you name an indirect queue in an INQUIRE TDQUEUE command, CICS returns only the TYPE value (which is INDIRECT) and the name of the queue to which the indirect definition points (the INDIRECTNAME value). You need a second INQUIRE TDQUEUE against the INDIRECTNAME value to determine the characteristics of the underlying queue.

A remote queue is one defined on another CICS system. When you inquire about such a queue, the local CICS system returns only the information it maintains locally about the queue: the TYPE (REMOTE), the system on which it is defined (the REMOTESYSTEM value), its name there (REMOTENAME), and whether it is available to applications on the local system (its ENABLESTATUS).

Browsing

You can also browse through all of the transient data queues defined in your system by using the browse options (START, NEXT, and END) on INQUIRE TDQUEUE commands. See “Browsing resource definitions” on page 11 for general information about browsing, syntax, exception conditions, and examples.

Options

ATIFACILITY(*cvda*) (intrapartition queues only)
returns a CVDA value indicating whether the queue has a terminal (or session) associated with it. If it does, and CICS creates a task to process the queue because its trigger level has been reached, the terminal is assigned as the principal facility of the task. See also the ATITERMID and ATITRANID options. CVDA values are:

NOTAPPLIC
The queue is not intrapartition.

NOTERMINAL
No terminal is associated with the queue.

TERMINAL
A terminal is associated with the queue.

ATITERMID(*data-area*) (intrapartition queues only)
returns the 4-character name of the terminal or session associated with the queue, if any (see the ATIFACILITY option). Otherwise, blanks are returned.

ATITRANID(*data-area*) (intrapartition queues only)
returns the 4-character identifier of the transaction to be executed when CICS initiates a task automatically to process the queue. This option applies only to intrapartition queues intended for ATI; for other types of queues, and for intrapartition queues where no transaction has been specified in the queue definition, the value returned is blanks.

ATIUSERID(*data-area***) (intrapartition queues only)**
returns the 8-byte user identifier associated with the queue. CICS assigns this value to a task it creates to process the queue if there is no terminal associated with the queue. If the queue is not intrapartition, or no transaction is defined for it (the ATITRANID option), blanks are returned.

BLOCKFORMAT(*cvda***) (extrapartition queues only)**
returns a CVDA value indicating whether the data set associated with the queue is in blocked record format or not. It applies only to extrapartition queues. CVDA values are:

BLOCKED
The records are blocked.

NOTAPPLIC
The data set is not open, or the queue is not extrapartition.

UNBLOCKED
The records are not blocked.

EMPTYSTATUS(*cvda***) (extrapartition queues only)**
returns a CVDA value indicating the state of the queue with regard to space. CICS detects a FULL condition only when a task attempts to add a record and there is no space, and detects EMPTY only when a task attempts to read and there are no records. Consequently, a value of NOTEMPTY is returned **unless** one of these conditions has been detected. EMPTYSTATUS applies only to extrapartition queues. CVDA values are:

EMPTY
The queue is empty.

FULL
The queue is full.

NOTAPPLIC
The option does not apply because the queue is not open or is not extrapartition.

NOTEMPTY
No operation against the queue has indicated that it is either empty or full.

ENABLESTATUS(*cvda***) (all except indirect queues)**
returns a CVDA value indicating whether the queue can be accessed by applications. For remote queues, this value reflects whether the local CICS will forward commands to access the queue to the remote system or reject them with a DISABLED exception condition; it does not necessarily reflect the state of the queue on the remote system. CVDA values are:

DISABLED
The queue cannot be accessed by applications. (For extrapartition queues, this value does not necessarily mean that the associated data set is closed.)

ENABLED
The queue can be accessed by applications.

NOTAPPLIC
The queue is indirect.

INDIRECTNAME(*data-area***) (indirect queues only)**
returns the 4-character name of the queue that this indirect queue points to. This option applies only to queues defined as indirect; for other types of queues, blanks are returned.

IOTYPE(*cvda***) (extrapartition queues only)**
returns a CVDA value indicating whether the queue was defined for INPUT, OUTPUT, or READBACK. CVDA values are:

INPUT
The queue is defined for input and will be read forward.

NOTAPPLIC
The queue is not open or is not an extrapartition queue.

OUTPUT
The queue is defined for output.

READBACK
The queue is defined for input and will be read backward.

NUMITEMS(*data-area***) (intrapartition queues only)**
returns a fullword binary field giving the number of items in the queue. A value of –1 is returned if the queue is not intrapartition.

OPENSTATUS(*cvda***) (extrapartition queues only)**
returns a CVDA value indicating whether the queue is open, closed, or in an intermediate state. CVDA values are:

CLOSED
The queue is closed.

CLOSING
The queue is closing.

NOTAPPLIC
The queue is not extrapartition.

OPEN
The queue is open.

OPENING
The queue is opening.

PRINTCONTROL(*cvda***) (extrapartition queues only)**
returns a CVDA value indicating the type of print control, if any, defined for the queue. Printer control characters appear in the first position of the every record when used. However, CICS does not check this character when records are written to the queue, or remove the character when records are read from the queue; use and enforcement of the printer control conventions are up to the applications using the queue. CVDA values are:

ASACTL
ASA control characters are used.

MCHCTL
Machine control characters are used.

NOCTL
No print control characters are used.

NOTAPPLIC
The queue is not open or is not extrapartition.

RECORDFORMAT(*cvda***) (extrapartition queues only)**
returns a CVDA value indicating whether the queue has fixed- or variable-length records. CVDA values are:

FIXED
The queue has fixed-length records.

NOTAPPLIC
The queue is not open or is not extrapartition.

VARIABLE
The queue has variable-length records.

RECORDLENGTH(*data-area***) (extrapartition queues only)**
returns a fullword binary field giving the record length (in bytes) for queues having fixed-length records, and the maximum record length for queues having variable-length records. RECORDLENGTH applies only to extrapartition queues; for others, –1 is returned.

RECOVSTATUS(*cvda***) (intrapartition queues only)**
returns a CVDA value indicating the type of recovery defined for the queue. Recovery is available only for intrapartition queues. CVDA values are:

LOGICAL
The queue is logically recoverable.

NOTAPPLIC
The queue is not intrapartition.

NOTRECOVABLE
The queue is not recoverable.

PHYSICAL
The queue is physically recoverable.

REMOTENAME(*data-area***) (remote queues only)**
returns the 4-character name of this queue in the remote CICS region in which the queue is defined (from the RMTNAME option in its definition). REMOTENAME applies only to queues defined as remote; for other queues the value returned is blanks.

REMOTESYSTEM(*data-area***) (remote queues only)**
returns the 4-character name of the CICS region in which the queue is defined (from the SYSIDNT value in its definition). REMOTESYSTEM applies only to queues defined as remote; for other queues the value returned is blanks.

TDQUEUE(*data-value***)**
specifies the 4-character name of the transient data queue about which you are inquiring.

TRIGGERLEVEL(*data-area***) (intrapartition only)**
returns a fullword binary field giving the number of items the queue must reach before automatic transaction initiation (ATI) occurs. When the queue reaches this depth, CICS invokes a task to process it automatically. A value of zero means the queue is not subject to ATI; a value of –1 is returned if the queue is not intrapartition.

TYPE(*cvda***)**
returns a CVDA value identifying the type of queue. CVDA values are:

EXTRA
The queue is extrapartition.

INDIRECT
The queue is indirect.

INTRA
The queue is intrapartition.

REMOTE
The queue is remote.

Conditions

END
RESP2 values:

2 There are no more resource definitions of this type.

ILLOGIC
RESP2 values:

1 You have issued a START command when a browse of this resource type is already in progress, or you have issued a NEXT or an END command when a browse of this resource type is not in progress.

NOTAUTH
RESP2 values:

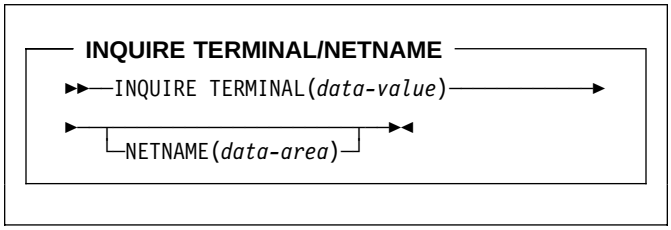
100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.

QIDERR
RESP2 values:

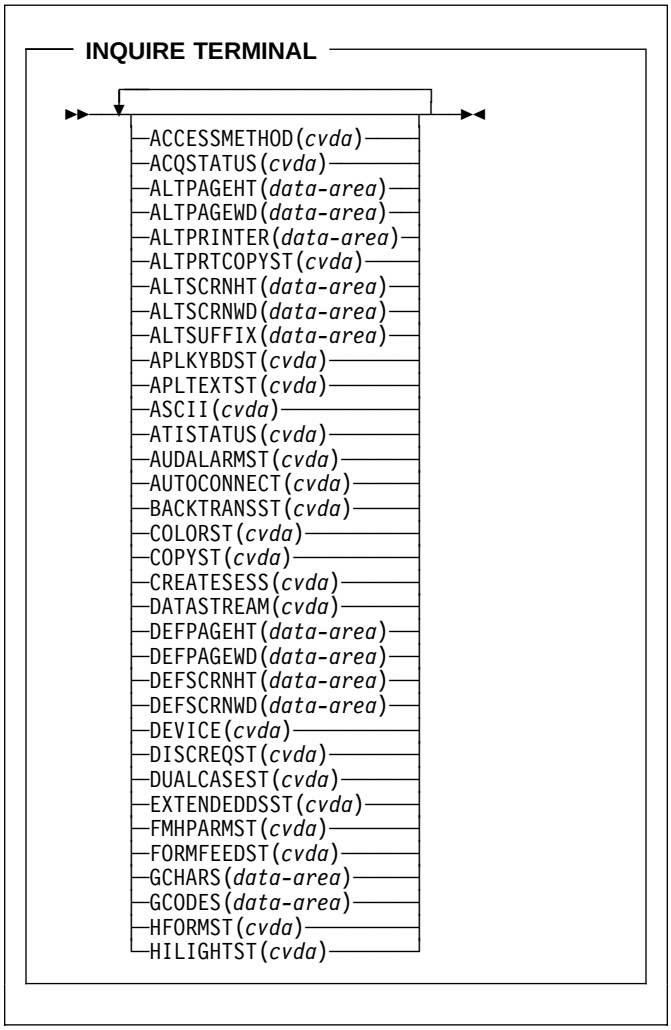
1 The named queue cannot be found.

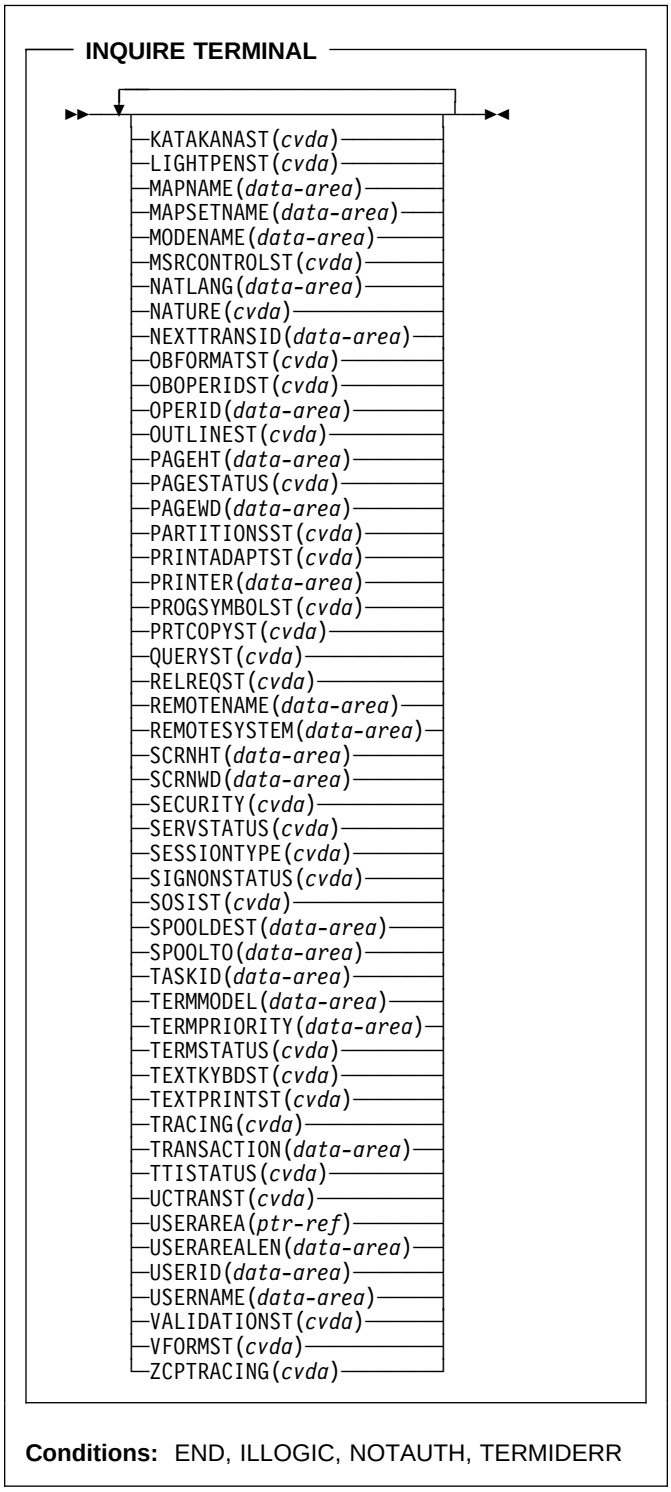
INQUIRE TERMINAL

Retrieve information about a terminal or session.



The following options apply to both the INQUIRE TERMINAL and the INQUIRE NETNAME command.





Conditions: END, ILLOGIC, NOTAUTH, TERMIDERR

For more information about the use of CVDAs, see “CICS-value data areas (CVDAs)” on page 7.

Context

The INQUIRE TERMINAL and INQUIRE NETNAME commands both return information about a particular terminal or session installed in your CICS system.

You can use them to inquire about any type of terminal resource, including physical terminals owned locally (by the region in which the INQUIRE was issued), remote terminals (terminals defined locally as owned by another region), surrogate terminals (partial definitions which represent terminals owned by another region, shipped to the local region the first time the definition is needed), and models (definitions used only to autoinstall other terminals).

You can also use INQUIRE TERMINAL to inquire about an APPC, LUTYPE6.1 or MRO session or, where there are parallel sessions, session group. To get full detail about the associated connection, however, you must use an INQUIRE CONNECTION command.

Some of the options in this command return system status information, such as whether the terminal is acquired or not, whether it is in use by a task, and so on. Most options, however, reflect the definition of the terminal or session, modified, possibly, by subsequent SET TERMINAL commands or the information obtained from the hardware in a QUERY.

A terminal is specified by an RDO TERMINAL resource definition and the RDO TYPETERM definition to which it refers. Characteristics shared by many terminals, such as screen size and 3270 features, are defined by TYPETERM, and those specific to one terminal, such as the name of the associated printer, are in the TERMINAL definition, which may have been autoinstalled. For a session, the CONNECTION defines shared properties and SESSIONS defines specifics. See the *CICS Resource Definition Guide* for more information about RDO TERMINAL, TYPETERM, SESSIONS, and CONNECTION resource definitions.

In most cases, options of this type have the same name—or one recognizably similar—as the option in the resource definition. Where this is not the case, the option descriptions that follow indicate the corresponding resource options.

INQUIRE NETNAME returns the same information as INQUIRE TERMINAL. With INQUIRE TERMINAL, you identify the object of your inquiry by providing its CICS terminal identifier in the TERMINAL option. NETNAME is optional. If you include it, CICS returns the VTAM network identifier in the data area you provide.

In an INQUIRE NETNAME command, the roles of TERMINAL and NETNAME are reversed. You identify the terminal about which you are inquiring by supplying its network identifier in NETNAME, and CICS returns the corresponding CICS terminal identifier in TERMINAL if you also include that option. TERMINAL must appear before NETNAME (if present) in an INQUIRE TERMINAL command, and vice-versa in an INQUIRE NETNAME command.

All of the other options apply to both commands and return the same information. Not all options apply to all types of terminals, however. In particular, when CICS ships a terminal definition from the owning region to a remote region, an inquiry issued in the owning region (where the definition is of a real terminal) produces more information than an inquiry issued in the remote region, where the definition is a **surrogate** for the one in the owning region.

Browsing

You can also browse through the definitions of all the terminals installed in your system by using the browse options (START, NEXT and END) on INQUIRE TERMINAL commands (the browse options are not available on INQUIRE NETNAME). See “Browsing resource definitions” on page 11 for general information about browsing, syntax, exception conditions, and examples.

Options

ACCESSMETHOD(*cvda***)**
returns a CVDA value indicating the access method defined for the terminal. CVDA values are:

BSAM
The access method is BSAM.

BTAM
The access method is BTAM.

CONSOLE
The terminal is an operating system console, accessed through VSE console support facilities.

NOTAPPLIC
The terminal is an MRO session.

VTAM
The access method is VTAM.

ACQSTATUS(*cvda***) (VTAM only)**
returns the same value as the TERMSTATUS option and is retained only for compatibility purposes. You should use TERMSTATUS in new applications.

ALTPAGEHT(*data-area***)**
returns a halfword binary field giving the height (in lines) of the alternate page size. See also the DEFPAGEHT and PAGEHT options.

ALTPAGEWD(*data-area***)**
returns a halfword binary field giving the width (in characters) of the alternate page size. See also the DEFPAGEWD and PAGEWD options.

ALTPRINTER(*data-area***)**
returns the 4-character name of the printer designated for print key requests and ISSUE PRINT commands from tasks at this terminal when the printer named in the PRINTER option of the RDO TERMINAL resource definition is not available.

ALTPRTCOPYST(*cvda***)**
returns a CVDA value indicating whether CICS is to use the hardware copy feature to satisfy a print request on the printer named in the ALTPRINTER option. CVDA values are:

ALTPRTCOPY
CICS is to use the hardware copy feature.

NOALTPRTCOPY
CICS is not to use the hardware copy feature.

NOTAPPLIC
The terminal is not a VTAM terminal, or is a remote terminal, a surrogate terminal, or a model definition.

ALTSCRNHT(*data-area***)**
returns a halfword binary field giving the height (in lines) of the alternate screen size. See also the DEFSCRNHT and SCRNHT options of this command.

ALTSCRNWD(*data-area***)**
returns a halfword binary field giving the width (in characters) of the alternate screen size. See also the DEFSCRNWD and SCRNWD options of this command.

ALTSUFFIX(*data-area***)**
returns the 1-character suffix that BMS appends to map set names for maps written to this terminal when the screen is the alternate size and suffixing is in use.

APLKYBDST(*cvda***)**
returns a CVDA value indicating whether the terminal has the APL keyboard feature. CVDA values are:

APLKYBD
The terminal has the APL keyboard feature.

NOAPLKYBD
The terminal does not have the APL keyboard feature.

APLTEXTST(*cvda***)**
returns a CVDA value indicating whether the terminal has the APL text feature. CVDA values are:

APLTEXT
The terminal has the APL text feature.

NOAPLTEXT
The terminal does not have the APL text feature.

ASCII(*cvda***)**
returns a CVDA value indicating the type of ASCII code the terminal uses, if applicable. CVDA values are:

ASCII7
The code is 7-bit ASCII.

ASCII8
The code is 8-bit ASCII.

NOTAPPLIC
The terminal does not use ASCII.

ATISTATUS(*cvda***)**
returns a CVDA value indicating whether CICS can initiate a task automatically (ATI) with this terminal as its principal facility.

ATI The terminal can be used in ATI.

NOATI
The terminal cannot be used in ATI.

AUDALARMST(*cvda***)**
returns a CVDA value indicating whether the terminal has the 3270 audible alarm feature. CVDA values are:

AUDALARM
The terminal has the audible alarm feature.

NOAUDALARM
The terminal does not have the audible alarm feature.

AUTOCONNECT(*cvda***)**
returns a CVDA value indicating whether CICS should attempt to establish (bind) a session with this terminal when communication with VTAM is established CVDA values are:

ALLCONN
CICS binds the session. This value is returned when the AUTOCONNECT value is ALL in the associated RDO TYPETERM resource definition (when you are inquiring about a terminal) or ALLCONN in the RDO SESSIONS resource definition (when you are inquiring about a session).

AUTOCONN
CICS binds the session. This value is returned when the AUTOCONNECT value is YES in the associated RDO TYPETERM resource definition (in an inquiry about a terminal) or AUTOCONN in the RDO SESSIONS resource definition (in an inquiry about a session).

NONAUTOCONN
CICS does not bind a session.

NOTAPPLIC
The terminal is not a VTAM terminal, or is a remote terminal, a surrogate, or a model.

BACKTRANSST(*cvda***)**
returns a CVDA value indicating whether the terminal has the 3270 background transparency feature. Background transparency allows you to control whether the display area behind a character is clear (transparent) or shaded. CVDA values are:

BACKTRANS
The terminal has the background transparency feature.

NOBACKTRANS
The terminal does not have the background transparency feature.

COLORST(*cvda*)
returns a CVDA value indicating whether the terminal has the 3270 extended color feature, which allows colors to be selected for individual fields or characters. CVDA values are:

COLOR
The terminal has the extended color feature.

NOCOLOR
The terminal does not have the extended color feature.

COPYST(*cvda*)
returns a CVDA value indicating whether the control unit through which the terminal is attached includes the copy feature. COPYST applies only to 3270 terminals. CVDA values are:

COPY
The control unit has the copy feature.

NOCOPY
The control unit does not have the copy feature.

CREATESESS(*cvda*) (VTAM only)
returns a CVDA value indicating whether CICS should attempt to acquire the terminal if it is required for an automatic task initiation (ATI) request. Only VTAM physical terminals can be acquired by CICS; sessions are not eligible. CVDA values are:

CREATE
The terminal can be acquired.

NOCREATE
The terminal cannot be acquired.

NOTAPPLIC
The terminal is not a VTAM terminal or is a session (APPC, LUTYPE6.1 or MRO).

DATASTREAM(*cvda*)
returns a CVDA value indicating the type of data stream used by the terminal. CVDA values are:

DS3270
The terminal uses the 3270 data stream.

NOTAPPLIC
The terminal does not use either the 3270 or SCS data stream.

SCS The terminal uses SNA character strings.

DEFPAGEHT(*data-area*)
returns a halfword binary field giving the height (in lines) of the default page size. (The corresponding option in the TYPETERM definition is PAGESIZE.) See also the ALTPAGEHT and PAGEHT options of this command.

DEFPAGEWD(*data-area*)
returns a halfword binary field giving the width (in characters) of the default page size. (The corresponding option in the RDO TYPETERM definition is PAGESIZE.) See also the ALTPAGEWD and PAGEWD options of this command.

DEFSCRNHT(*data-area*)
returns a halfword binary field giving the height (in lines) of the default screen size. See also the ALTSCRNHT and SCRNHT options of this command.

DEFSCRNWD(*data-area*)
returns a halfword binary field giving the width (in characters) of the default screen size. See also the ALTSCRNWD and SCRNWD options of this command.

DEVICE(*cvda*)
returns a CVDA value identifying the terminal or session type. CVDA values for this option are listed in “CVDAs returned by the INQUIRE NETNAME|TERMINAL DEVICE command” on page 203.

DISCREQST(*cvda*)
returns a CVDA value indicating whether CICS is to honor a request to disconnect the terminal. Disconnect requests result from an ISSUE DISCONNECT command, or a CESF (sign-off) task with the GOODNIGHT or LOGOFF option. CVDA values are:

DISCREQ
CICS will honor a request to disconnect this terminal (with a VTAM CLSDST request to terminate the session if the terminal is a VTAM terminal).

NODISCREQ
CICS will not honor a request to disconnect this terminal.

DUALCASEST(*cvda*)
returns a CVDA value indicating whether the terminal has a typewriter keyboard or an operator console keyboard. CVDA values are:

DUALCASE
The terminal has a typewriter keyboard.

NODUALCASE
The terminal has an operator console keyboard (this keyboard is *not* restricted to a single case), or is not a 3270 display.

EXTENDEDDSST(*cvda*)
returns a CVDA value indicating whether the terminal supports the 3270 extended data stream. The terminal has this support if the RDO TYPETERM resource definition specifies it either explicitly (in the EXTENDEDDS option) or implicitly, by specifying features that use the extended data stream (see the BACKTRANST, COLORST, HILIGHTST, MSRCONTROLST, OUTLINEST, PARTITIONSST, PROGSYMBOLST, SOSIST, and VALIDATIONST options of this command). Extended data stream support implies that the terminal accepts write structured fields commands, including QUERY, and, conversely, support for QUERY (that is, a value of ALL or COLD for the QUERY option) implies support for the extended data stream. CVDA values are:

EXTENDEDDS
The terminal supports the extended data stream.

NOEXTENDEDDS
The terminal does not support the extended data stream.

FMHPARMST(*cvda***)**
returns a CVDA value indicating whether BMS accepts user-supplied values for inclusion in a function management header (FMH) to be built by BMS. This support is available only on 3650 terminals. CVDA values are:

FMHPARM
BMS allows user-supplied values.

NOFMHPARM
BMS does not allow user-supplied values.

FORMFEEDST(*cvda***)**
returns a CVDA value indicating whether the terminal has the forms feed feature. CVDA values are:

FORMFEED
The terminal has the forms feed feature.

NOFORMFEED
The terminal does not have the forms feed feature.

GCHARS(*data-area***)**
returns a halfword binary field giving the graphic character set global identifier (GCSGID), which identifies the set of graphic characters that can be input or output at this terminal. (The corresponding option in the TYPETERM definition is CGCSGID.)

The GCHARS option applies only to graphic terminals; for others 0 is returned.

GCODES(*data-area***)**
returns a halfword binary field giving the code page global identifier (CPGID), which identifies the EBCDIC code page that defines the code points for the characters that can be input or output at the terminal. (The corresponding option in the RDO TYPETERM resource definition is CGCSGID.)

The GCODES option applies only to graphic terminals; for others 0 is returned.

HFORMST(*cvda***)**
returns a CVDA value indicating whether the terminal has the horizontal forms feature, which is required for use of horizontal tabbing when formatting documents for output. CVDA values are:

HFORM
The terminal has the horizontal forms feature.

NOHFORM
The device does not have the horizontal forms feature.

HILIGHTST(*cvda***)**
returns a CVDA value indicating whether the terminal has the 3270 extended highlighting facility, which enables fields or characters to be displayed in reverse-video, underlined, or blinking. CVDA values are:

HILIGHT
The terminal has extended highlighting.

NOHILIGHT
The terminal does not have extended highlighting.

KATAKANAST(*cvda***)**
returns a CVDA value indicating whether the terminal is a Katakana terminal. CVDA values are:

KATAKANA
The terminal is a Katakana terminal.

NOKATAKANA
The terminal is not a Katakana terminal.

LIGHTPENST(*cvda***)**
returns a CVDA value indicating whether the terminal has the 3270 selector pen feature. CVDA values are:

LIGHTPEN
The terminal has the selector pen feature.

NOLIGHTPEN
The terminal does not have the selector pen feature.

MAPNAME*(data-area)*
returns the 7-character name of the map that was most recently referenced in the MAP option of a SEND MAP command processed for this terminal. If this terminal is a surrogate, and the terminal owning system is a CICS Transaction Server for VSE/ESA Release 1 region, the map name may be the last map sent by the terminal-owning region or another AOR in which this terminal has been represented as a surrogate device. The map name returned may no longer be held in the device buffer, because an intervening BMS command such as SEND TEXT or SEND CONTROL (or a terminal control SEND command), or operator action, may have partially or completely removed the map display. If the terminal is not supported by BMS (for example, this terminal is a session), or CICS has no record of any map being sent, the value returned is blanks.

MAPSETNAME*(data-area)*
returns the 8-character name of the mapset that was most recently referenced in the MAPSET option of a SEND MAP command processed for this terminal. If the MAPSET option was not specified on the most recent request, BMS uses the map name as the mapset name. In both cases, the mapset name used may be suffixed by a terminal or alternate suffix. If this terminal is a surrogate, the mapset name may be the last mapset used by the terminal owning region or another AOR in which this terminal has been represented as a surrogate device. If the terminal is not supported by BMS (for example this terminal is a session), or CICS has no

record of any mapset being used, the value returned is blanks.

Note: See the *CICS Application Programming Guide* for information about mapset suffixing.

MODENAME(*data-area***) (APPC only)**
returns the 8-character name of the session group to which the session about which you are inquiring belongs (from the LOGMODE option of the RDO SESSIONS resource definition). MODENAME applies only to APPC logical units; for other types, the value returned is blanks.

MSRCONTROLST(*cvda***)**
returns a CVDA value indicating whether the terminal has a magnetic slot reader. This feature is available only on 8775 and 3643 terminals. CVDA values are:

MSRCONTROL
The terminal has a magnetic slot reader.

NOMSRCONTROL
The terminal does not have a magnetic slot reader.

NATLANG(*data-area***)**
returns a 1-character value giving the national language specified in the RDO TERMINAL resource definition. This value cannot be changed by any command, and is not necessarily the same as the national language currently in use at the terminal. To determine current language, see the NATLANGINUSE option of the ASSIGN command in the *CICS Application Programming Reference* manual. Possible values are:

C Chinese

E English

G German

K Katakana

blank
No value specified in RDO TERMINAL resource definition.

NATURE(*cvda***)**
returns a CVDA value identifying the nature of the terminal definition. CVDA values are:

MODEL
A model terminal definition, used only to build definitions of real terminals.

SESSION
A remote session.

SURROGATE
A surrogate terminal definition, representing a terminal owned by another CICS region.

TERMINAL
A physical terminal definition.

NETNAME(*data-area***)**
returns the 8-character network name of the terminal about which you are inquiring.

For a physical terminal, this is the name by which this terminal is known to VTAM. For ISC sessions, it is the name by which the session (or session group, if there are parallel sessions) is known to VTAM. For MRO sessions, it is the name used by the connected region to log on to the interregion communication program.

Note: The description above applies to the NETNAME option in an INQUIRE TERMINAL command. In an INQUIRE NETNAME command, the roles of NETNAME and TERMINAL are reversed. NETNAME specifies the name of the terminal or session about which you are inquiring to CICS, rather than returning information, and TERMINAL returns the corresponding terminal identifier if you use it. See the description of INQUIRE NETNAME on page 84.

NEXTTRANSID(*data-area***)**
returns the 4-character identifier of the transaction to be executed to process the next unsolicited input from this terminal. This value comes from the TRANSACTION value in the RDO TERMINAL or SESSIONS resource definition, if one has been specified. If the value has not been specified, it was set by the previous task for which the terminal was principal facility (in the TRANSID option of its final RETURN command) and will be blanks if that task did not specify a value or if an active task has the terminal as principal facility.

OBFORMATST(*cvda***)**
returns a CVDA value indicating whether outboard formatting can be used for this terminal. CVDA values are:

NOOBFORMAT
This terminal does not support outboard formatting.

OBFORMAT
This terminal supports outboard formatting.

OBOPERIDST(*cvda***)**
returns a CVDA value indicating whether CICS uses outboard operator identifiers to support the BMS routing facilities at this terminal. This option only applies to the 3790 and 3770 batch data interchange logical units. CVDA values are:

NOOBOPERID
CICS does not use outboard operator identifiers.

OBOPERID
CICS uses outboard operator identifiers.

OPERID(*data-area***)**
returns the 3-character operator identification code of the user signed on at the terminal.

Note: If the terminal is a surrogate terminal, this value may not be current; it represents the user signed on at the time the terminal definition was shipped from the

owning CICS region to this one, who may since have signed off. For information, see the *CICS Security Guide*.

The OPERID may also be different from that of the user currently signed on if it has been changed with the SET TERMINAL command.

OUTLINEST(*cvda***)**
returns a CVDA value indicating whether the terminal has the 3270 field outlining feature. CVDA values are:

NOOUTLINE
The terminal does not support field outlining. (This value is always returned for a model terminal.)

OUTLINE
The terminal supports field outlining.

PAGEHT(*data-area***)**
returns a halfword binary field giving the height (in lines) of the current page size for the terminal. See the DEFPAGEHT and ALTPAGEHT options of this command.

PAGESTATUS(*cvda***)**
returns a CVDA value indicating how pages of BMS messages with a disposition of PAGING should be delivered to the terminal. CVDA values are:

AUTOPAGEABLE
Pages are written automatically in sequence.

PAGEABLE
Pages are written on request from the operator.

PAGEWD(*cvda***)**
returns a halfword binary field giving the width (in characters) of the current page size for the terminal. See also the DEFPAGEWD and ALTPAGEWD options of this command.

PARTITIONSST(*cvda***)**
returns a CVDA value indicating whether the terminal supports partitions. CVDA values are:

NOPARTITIONS
The terminal does not support partitions.

PARTITIONS
The terminal supports partitions.

PRINTADAPTST(*cvda***)**
returns a CVDA value indicating whether the terminal has the printer adapter feature. CVDA values are:

NOPRINTADAPT
The terminal does not have a printer adapter.

PRINTADAPT
The terminal has a printer adapter.

PRINTER(*data-area***)**
returns the 4-character name of the preferred printer for print key requests and ISSUE PRINT commands from tasks at this terminal. This printer is used if available; if not, the printer named in the ALTPRINTER option is second choice.

PROGSYMBOLST(*cvda***)**
returns a CVDA value indicating whether the terminal supports the 3270 programmed symbol feature, which enables the terminal to use multiple character sets. CVDA values are:

NOPROGSYMBOL
The terminal does not support programmable symbols.

PROGSYMBOL
The terminal supports programmable symbols.

PRTCOPYST(*cvda***)**
returns a CVDA value indicating whether CICS is to use the hardware copy feature to satisfy a print request on the printer named on the PRINTER option. CVDA values are:

NOPRTCOPY
CICS is not to use the hardware copy feature.

NOTAPPLIC
The terminal is not a VTAM terminal, or is a remote terminal, a surrogate terminal, or a model definition.

PRTCOPY
CICS is to use the hardware copy feature.

QUERYST(*cvda***)**
returns a CVDA value indicating whether and when CICS should use a QUERY structured field to determine the characteristics of the terminal.

ALLQUERY
The terminal is to be queried each time it is connected.

COLDQUERY
The terminal is to be queried only when it is first connected after a cold start of CICS. The device characteristics are stored on the CICS global catalog (DFHGCD) for use on subsequent warm and emergency starts.

NOQUERY
The terminal is not to be queried.

RELREQST(*cvda***) (VTAM only)**
returns a CVDA value indicating whether CICS is to honor requests from VTAM to release the terminal or session. CVDA values are:

NORELREQ
CICS cannot release the logical unit, or the access method is not VTAM.

RELREQ
CICS can release the logical unit.

REMOTENAME(*data-area***)**
returns the 4-character name of this terminal in the remote CICS region in which it is defined.

REMOTENAME applies only to terminals defined as remote; for others the value returned is blanks.

REMOTESYSTEM(*data-area***)**
returns the 4-character name of the CICS region in which the terminal is defined. REMOTESYSTEM applies only to terminals defined as remote; for others the value returned is blanks.

SCRNHT(*data-area***) (or SCREENHEIGHT)**
returns a halfword binary field giving the height (in lines) of the current screen size as defined by:

- the SCRNSIZE option on the RDO PROFILE for the task for which this terminal is the principal facility, and
- the ALTSCREEN and DEFSCREEN options on the RDO TYPETERM associated with this terminal.

See also the DEFSCRNHT and ALTSCRNHT options of this command.

Note: SCRNHT is a synonym for the SCREENHEIGHT option of earlier releases of CICS. For compatibility, CICS recognizes SCREENHEIGHT as equivalent.

SCRNWD(*data-area***) (or SCREENWIDTH)**
returns a halfword binary field giving the width (in characters). of the current screen size as defined by:

- the SCRNSIZE option on the RDO PROFILE for the task for which this terminal is the principal facility, and
- the ALTSCREEN and DEFSCREEN options on the RDO TYPETERM associated with this terminal.

See also the DEFSCRNWD and ALTSCRNWD options of this command.

Note: SCRNWD is a synonym for the SCREENWIDTH option of earlier releases of CICS. For compatibility, CICS recognizes SCREENWIDTH as equivalent.

SECURITY(*cvda***)**
returns a CVDA value indicating whether the terminal has preset security, that is, whether a USERID value has been specified in the RDO TERMINAL or SESSIONS resource definition, so that it is permanently signed on. CVDA values are:

NOPRESETSEC
The terminal does not have preset security.

PRESETSEC
The terminal has preset security.

SERVSTATUS(*cvda***)**
returns a CVDA value indicating whether the terminal is available for use (from the point of view of the local CICS system, which may be different from the system which owns the terminal). SERVSTATUS corresponds to the INSERVICE option in the TERMINAL definition. “Available” (INSERVICE) does not necessarily imply, for a VTAM terminal, that the terminal is acquired.

GOINGOUT
The terminal will be put in OUTSERVICE status as soon as some current work has completed and is not available to new tasks.

INSERVICE
The terminal is available.

OUTSERVICE
The terminal is not available.

SESSIONTYPE(*cvda***)**
returns a CVDA value identifying the type of the session about which you are inquiring. This option applies only to VTAM sessions. CVDA values are:

APPCPARALLEL
This is a parallel APPC session group.

APPCSINGLE
This is a single APPC session.

LU61
This is an LUTYPE6.1 session.

NOTAPPLIC
The terminal is not one of the above.

SIGNONSTATUS(*cvda***)**
returns a CVDA value identifying whether the terminal currently has a signed-on user. CVDA values are:

SIGNEDOFF
The terminal does not have a signed-on user.

SIGNEDON
The terminal has a signed-on user.

SOSIST(*cvda***)**
returns a CVDA value indicating whether the terminal supports mixed EBCDIC and double-byte character set (DBCS) fields. CVDA values are:

NOSOSI
The terminal does not support mixed fields.

SOSI
The terminal supports mixed fields.

SPOOLDEST(data-area)
This option is only used in systems with the report controller installed. For printer terminals, this gives the destination name associated with the printer (as an 8-character string). For non-printer terminals, this field is blank.

SPOOLTO(data-area)
This option is only used in systems with the report controller installed. For non-printer terminals, this gives the name of the printer to which the terminal’s report files are spooled (as an 8-character string). For printer terminals, this field is blank.

TASKID(*data-area***)**
returns a fullword binary field giving the number of the user task currently executing at this terminal. Zero is returned if no task is using the terminal.

TERMINAL(*data-value***)**
specifies the 4-character name of terminal or session about which you are inquiring, in an INQUIRE TERMINAL command. In an INQUIRE NETNAME command, this option *returns* the terminal identifier that corresponds to the NETNAME value you specified. See the NETNAME option and the general information for this command.

TERMMODEL(*data-area***)**
returns a halfword binary field giving the terminal model number.

TERMPRIORITY(*data-area***)**
returns a fullword binary field giving the priority of the terminal relative to other terminals, in the range 0–255.

TERMSTATUS(*cvda***) (VTAM only)**
returns a CVDA value indicating whether CICS is in session with the logical unit represented by this terminal. CVDA values are:

ACQUIRED
CICS is in session with the logical unit.

ACQUIRING
The session is in the process of being acquired.

NOTAPPLIC
The terminal is not a VTAM terminal.

RELEASED
CICS is not in session with the logical unit.

RELEASING
The session is in the process of being released.

TEXTKYBDST(*cvda***)**
returns a CVDA value indicating whether the terminal has the 3270 text-keyboard feature. CVDA values are:

NOTEXTKYBD
The terminal does not have the text-keyboard feature.

TEXTKYBD
The terminal has the text-keyboard feature.

TEXTPRINTST(*cvda***)**
returns a CVDA value indicating whether the terminal has the 3288 text-print feature. CVDA values are:

NOTEXTPRINT
The terminal does not have the text-print feature.

TEXTPRINT
The terminal has the text-print feature.

TRACING(*cvda***)**
returns a CVDA value indicating the type of tracing defined for this terminal. CVDA values are:

SPECTRACE
Special tracing is specified.

STANTRACE
Standard tracing is specified.

For a task that has this terminal as its principal facility, this value is combined with the TRACING option value of the transaction the task is executing to determine whether tracing is standard, special, or suppressed.

If the transaction TRACING value is SUPPRESSED, no tracing occurs. Otherwise, tracing is special if either the terminal or the transaction specifies SPECTRACE, standard if both specify STANTRACE.

A TRACING value of STANTRACE is assigned when the terminal is defined. You can specify SPECTRACE only with a SET TERMINAL command or the CICS-supplied CETR transaction.

TRANSACTION(*data-area***)**
returns the 4-character identifier of the transaction being executed by the task for which this terminal is the principal facility. Blanks are returned if no task is currently running at the terminal.

TTISTATUS(*cvda***)**
returns a CVDA value indicating whether this terminal can initiate tasks by entering unsolicited input. CVDA values are:

NOTTI
This terminal cannot initiate transactions.

TTI This terminal can initiate transactions.

UCTRANST(*cvda***)**
returns a CVDA value indicating whether input from this terminal is translated to upper case automatically, at the time of receipt. (Translation can be suppressed, but only in a conversational task, when input is solicited with a RECEIVE or CONVERSE ASIS command.) This value comes from the UCTRAN option of the RDO TYPETERM resource definition associated with the terminal; there is also an UCTRAN option in a RDO PROFILE resource definition, but that value is not pertinent here. CVDA values are:

NOUCTRAN
Input from this terminal is not translated to upper case on receipt. (It will be translated before presentation to the task issuing a RECEIVE, however, if the RDO PROFILE resource definition for the transaction being executed specifies translation.)

TRANIDONLY
This value is the same as NOUCTRAN, with one difference. If the input is unsolicited, and CICS needs to use the initial characters of the input to decide which transaction to execute, that decision is made from a *copy* of the input which has been translated to upper case. There is no difference in the data presented to the task between these two options.

UCTRAN
The input is translated to upper case on receipt (and unaffected by the translation option in the PROFILE).

USERAREA(*ptr-ref***)**
returns the address of the terminal control table user area (TCTUA) for this terminal. If there is no TCTUA, the address returned is X'FF000000'.

USERAREALEN(*data-area***)**
returns a halfword binary field giving the length of the user area. Zero is returned if there is no user area.

USERID(*data-area***)**
returns the 8-character identifier of the user signed on at this terminal or session.

If there is no signed-on user, the default userid—as specified in the DFLTUSER system initialization parameter—is returned.

USERNAME(*data-area***)**
returns the 20-character name of the user signed on at this terminal or session (that is, the name corresponding to the USERID option value). If the information, which is provided by the external security manager, is shorter than 20 bytes, CICS pads it to 20 with trailing blanks. Blanks are returned if there is no signed on user.

VALIDATIONST(*cvda***)**
returns a CVDA value identifying whether the device has the extended validation feature, which allows you to request special processing of keyboard input, additional to normal 3270 function. This feature is available only on 8775 and 3290 terminals. CVDA values are:

NOVALIDATION
The terminal does not have the extended validation feature or is a model terminal.

VALIDATION
The terminal has the extended validation feature.

VFORMST(*cvda***)**
returns a CVDA value indicating whether the terminal has the vertical forms feature, which is required for use of vertical tabbing when formatting documents for output. CVDA values are:

NOVFORM
The device does not have the vertical forms feature.

VFORM
The terminal has the vertical forms feature.

ZCPTRACING(*cvda***) (VTAM only)**
returns a CVDA value indicating whether this terminal will be traced when CICS tracing for VTAM terminals is turned on. CVDA values are:

NOTAPPLIC
The terminal is not a VTAM terminal, or is a surrogate terminal or a model definition.

NOZCPTRACE
The terminal will not be traced.

ZCPTRACE
The terminal will be traced.

Conditions

END
RESP2 values:

2 There are no more resource definitions of this type.

ILLOGIC
RESP2 values:

1 You have issued a START command when a browse of this resource type is already in progress, or you have issued a NEXT or an END command when a browse of this resource type is not in progress.

NOTAUTH
RESP2 values:

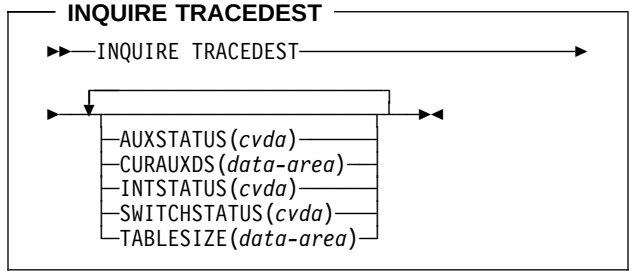
100 The user associated with the issuing task is not authorized to use this command.

TERMIDERR
RESP2 values:

1 The named terminal cannot be found.

INQUIRE TRACEDEST

Retrieve information about tracing.



Conditions: NOTAUTH

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The INQUIRE TRACEDEST command tells you where CICS trace entries are currently being written: either the CICS internal trace table, or the auxiliary trace data set. The number and types of trace entries are controlled by switch settings that you can determine with the INQUIRE TRACEFLAG and INQUIRE TRACETYPE commands.

Options

AUXSTATUS(*cvda***)**
returns a CVDA value indicating whether auxiliary tracing is active, that is, whether trace entries are being written to an auxiliary trace data set. CVDA values are:

AUXPAUSE
: Auxiliary tracing is not currently active, but was earlier in the current execution of CICS. It was suspended with a SET TRACEDEST AUXPAUSE command (or the CEMT equivalent). The current auxiliary trace data set has been left open, and a subsequent SET TRACEDEST AUXSTART command will cause trace entries to be written immediately following those that were written before the AUXPAUSE request.

AUXSTART
: Auxiliary tracing is active.

AUXSTOP
: Auxiliary tracing is not active (the current trace data set, if any, is closed).

CURAUXDS(*data-area***)**
returns the 1-character identifier of the current auxiliary trace data set, which can be 'A', 'B' or blank.

If your CICS system is initialized to allow auxiliary tracing, it will have either a single auxiliary trace data set, known as the 'A' data set, or two, 'A' and 'B'. The "current" or "active" one receives trace entries when auxiliary tracing is turned on, and the other, if there are two, is a standby, for use when the current one becomes full (see the SWITCHSTATUS option). If there is no auxiliary trace data set, the CURAUXDS value is blank.

INTSTATUS(*cvda***)**
returns a CVDA value indicating whether internal tracing is active, that is, whether trace entries are being written in the internal trace table. CVDA values are:

INTSTART
: Internal tracing is on.

INTSTOP
: Internal tracing is off.

Note: Exception trace entries are always written to the internal trace table, regardless of the INTSTATUS value.

SWITCHSTATUS(*cvda***)**
returns a CVDA value indicating the action that CICS is to take when the active auxiliary trace data set fills. If there are two data sets, CICS can switch them automatically when this occurs. Switching involves closing the current active data set, opening the standby, and reversing the designation of which is active and standby. Without automatic switching, auxiliary tracing is stopped and cannot resume without a SET TRACEDEST command or the CEMT equivalent.

CVDA values are:

NOSWITCH
: CICS takes no action.

SWITCHALL
: CICS is to switch data sets every time the current one is full.

SWITCHNEXT
: CICS is to switch data sets when the current one is full, but only once; thereafter NOSWITCH will be in effect.

TABLESIZE(*data-area***)**
returns a fullword binary field giving the size of the internal trace table in kilobytes.

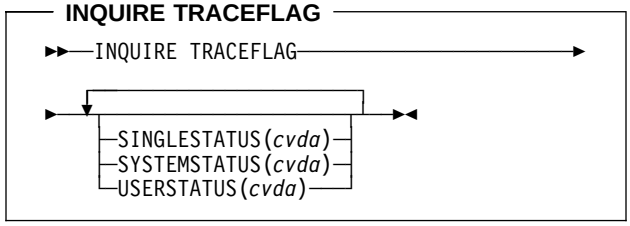
Conditions

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

INQUIRE TRACEFLAG

Retrieve information about trace flags.



Conditions: NOTAUTH

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The INQUIRE TRACEFLAG command returns the current settings of the flags that control tracing in CICS generally and for the task that issued the command specifically.

Tracing facilities and control are discussed in detail in the *CICS Problem Determination Guide*.

Options

SINGLESTATUS(*cvda*)
returns a CVDA value indicating whether tracing is turned on or suppressed for the task that issued this INQUIRE TRACEFLAG command. No non-exception trace entries are made for a task when this flag is off, regardless of the settings of the master trace flags (exception trace entries are *always* recorded).

The SINGLESTATUS value comes from the TRACE option in the definition of the TRANSACTION the task is executing, unless a different value has been specified, either for the transaction or for the terminal that is the principal facility, by means of the CICS-supplied CETR transaction. When a task is in progress, its SINGLESTATUS value can also be changed with a SET TRACEFLAG command.

CVDA values are:

SINGLEOFF
Tracing is suppressed.

SINGLEON
Tracing is allowed.

SYSTEMSTATUS(*cvda*)
returns a CVDA value indicating the status of the system master trace flag. This flag governs whether CICS makes or suppresses standard trace entries (it does not affect special or exception trace entries). It applies to all tasks and all system activity; however, for such trace entries to be recorded for any particular task, both the system master flag and the SINGLESTATUS flag for that task must be on.

CVDA values are:

SYSTEMOFF
Standard tracing is suppressed.

SYSTEMON
Standard tracing is active.

USERSTATUS(*cvda*)
returns a CVDA value indicating the status of the user master trace flag. This flag governs whether non-exception user trace entries are recorded or suppressed (entries that specify the EXCEPTION option are never suppressed). It applies to all tasks; however, for such entries to be recorded for any particular task, both the user master trace flag and the SINGLESTATUS flag for that task must be on. CVDA values are:

USEROFF
User tracing is suppressed.

USERON
User tracing is allowed.

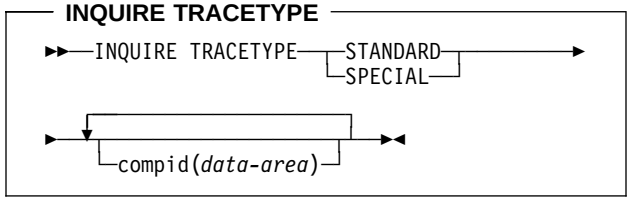
Conditions

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

INQUIRE TRACETYPE

Retrieve information about CICS system tracing.



Conditions: NOTAUTH, NOTFND

Context

The INQUIRE TRACETYPE command tells you which levels of tracing are currently in effect for particular CICS system components.

Each CICS component has trace levels defined separately for standard CICS tracing and special tracing (see the *CICS Problem Determination Guide* for definitions of these terms and for information about CICS tracing in general). You can ask about either type in an INQUIRE TRACETYPE command, and for any number of components, but you can ask about only one type in a single command.

For each component that you specify, the trace levels are returned as a 32-bit string (in a 4-character data area). The bits are read from left to right; that is, the first bit is on if trace level 1 is in effect, bit 2 corresponds to trace level 2, and so on. A value of X'80000000' thus represents trace level 1. Bits for trace levels that are not defined are set to zero.

Options

compid(*data-area***)**
returns the trace levels for the CICS component identified by “compid” in the format described above.

CICS components can be identified by a 2-character identifier or, in some cases, a descriptive keyword. For example, to determine the trace levels for the directory manager component of CICS, you can specify either:

```
INQUIRE TRACETYPE DD(data-area)
```

or

```
INQUIRE TRACETYPE DIRMGR(data-area)
```

The following list shows all the 2-character identifiers, and the keywords for those components that have them.

AP	APPLICATION	Application
BF		Built-in functions
BM		Basic mapping support
CP	CPI	Common programming interface
DC		Dump control
DD	DIRMGR	Directory manager
DI		Batch data interchange
DM	DOMAINMGR	Domain manager
DS	DISPATCHER	Dispatch manager
DU	DUMP	Dump manager
EI		EXEC interface
FC		File control
GC	GLOBALCATLG	CICS global catalog manager
IC		Interval control
IS		Intersystem communication
JC		Journal control
KC		Task control
KE	KERNEL	Kernel
LC	LOCALCATLG	CICS local catalog manager
LD	LOADER	Program load manager
LM	LOCKMGR	Lock manager
ME	MESSAGE	Message manager
MN	MONITOR	Monitoring manager
PA	PARAMGR	Parameter manager
PC		Program control
PG	PROGMGR	Program manager
RC		Report Controller
SC		Storage control
SM	STORAGE	Storage manager
SP		Syncpoint manager
ST	STATISTICS	Statistics manager
SZ		Front-end programming interface
TC		Terminal control
TD		Transient data
TI	TIMER	Timer manager
TR	TRACE	Trace manager
TS		Temporary storage
UE		User exit interface
US	USER	User interface
XM	TRANMGR	Transaction manager
XS	SECURITY	Security manager

SPECIAL
indicates that CICS should return the trace levels for special tracing.

STANDARD
indicates that CICS should return the trace levels for standard tracing.

Conditions

NOTAUTH
RESP2 values:

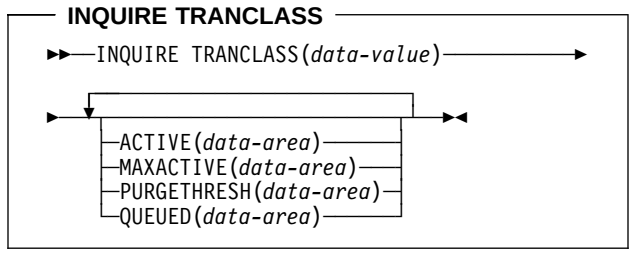
100 The user associated with the issuing task is not authorized to use this command.

NOTFND
RESP2 values:

1 CICS was initialized without support for at least one of the components listed in the command; trace levels were returned for all other components.

INQUIRE TRANCLASS

Retrieve information about a transaction class.



Conditions: INVREQ, NOTAUTH, TCIDERR

Context

The INQUIRE TRANCLASS command allows you to determine the limits defined for a transaction class and the current activity within the class.

Browsing

You can also browse through the definitions of all the transaction classes in your system by using the browse options (START, AT, NEXT and END) on INQUIRE TRANCLASS commands. In browse mode, definitions are returned in alphabetical order, and you can specify a starting point with the AT option if you wish. See “Browsing resource definitions” on page 11 for general information about browsing, syntax, exception conditions, and examples.

Options

ACTIVE(*data-area***)**
returns a fullword binary field giving the current number of tasks in this class. This count does not include tasks that are queued waiting for initial dispatch.

MAXACTIVE(*data-area***)**
returns a fullword binary field giving the largest number of tasks in the transaction class which are allowed to run concurrently.

PURGETHRESH(*data-area***)**
returns a fullword binary field giving the maximum number of tasks in this class that can be queued awaiting initial dispatch (see the QUEUED option). Tasks in this class that arrive while the queue is at its PURGETHRESH limit are purged.

QUEUED(*data-area***)**
returns a fullword binary field giving the number of tasks that are queued awaiting initial dispatch. Queuing occurs either because the number of active tasks is already at the maximum, or because the maximum for

the system has been reached (see the MAXTASKS option in the INQUIRE SYSTEM command).

TRANCLASS(*data-value***)**
specifies the 8-character name of the transaction class about which you are inquiring. If the class is one of the numbered classes used in earlier releases of CICS, its name is DFHTCLnn, where “nn” is the 2-digit class number.

Conditions

INVREQ
RESP2 values:

12 The TRANCLASS definition is in use.

NOTAUTH
RESP2 values:

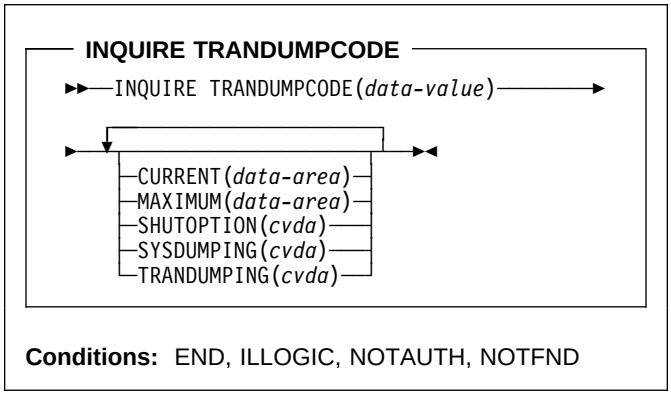
100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.

TCIDERR
RESP2 values:

1 The transaction class cannot be found.

INQUIRE TRANDUMPCODE

Retrieve information about a transaction dump code.



Conditions: END, ILLOGIC, NOTAUTH, NOTFND

For more information about the use of CVDAs, see “CICS-value data areas (CVDAs)” on page 7.

Context

The INQUIRE TRANDUMPCODE command allows you to look at some of the information in the transaction dump table entry for a particular transaction dump code.

The table entry tells CICS what actions to take when a transaction dump request with this code is received. Possible actions are: taking a transaction dump, taking a system dump (a VSE SDUMP), and shutting down CICS. The table entry also indicates how many times this set of actions is to be taken (the MAXIMUM option); requests received after the maximum are counted (the CURRENT option), but otherwise ignored.

CICS provides a transaction dump table with default actions for CICS transaction abend codes (those beginning with the letter *A*). These can be changed and others can be added with the SET TRANDUMPCODE command or the CEMT transaction; such changes are preserved over executions of CICS, until a cold start occurs.

CICS builds table entries, using default values, when it receives a dump request with a code for which it does not have an entry. You can also add your own entries with the SET TRANDUMPCODE command or a CEMT transaction.

Entries you add remain over executions of CICS until a cold start occurs, but the entries CICS builds are considered temporary and are discarded at shutdown.

Consequently, if you enquire about a code that is not explicitly defined before it appears in a dump request, you will get a “not found” response.

Browsing

You can also browse through all of the entries in the transaction dump table by using the browse options (START, NEXT and END) on INQUIRE TRANDUMPCODE commands. See “Browsing resource definitions” on page 11 for general information about browsing, syntax, exception conditions, and examples.

Options

CURRENT(*data-area***)**
returns a fullword binary field giving the number of dump requests with this dump code made since the count was last reset. (The count is reset automatically at CICS shutdown and can be reset explicitly with a SET SYSDUMPCODE RESET command or its CEMT equivalent.) The count includes requests that do not result in dumps, either because they are suppressed for this code or because the number for this code has reached its maximum.

MAXIMUM(*data-area***)**
returns a fullword binary field giving the maximum number of times CICS will take the set of actions indicated in the transaction dump table entry when a dump request with with this code is received. A value of 999 means the default, ‘no limit’.

SHUTOPTION(*cvda***)**
returns a CVDA value indicating whether the CICS system is to be shut down after a request for a dump with this dump code. CVDA values are:

NOSHUTDOWN
The CICS system is not to shut down.

SHUTDOWN
The CICS system is to shut down.

SYSDUMPING(*cvda***)**
returns a CVDA value indicating whether a system dump should be taken when a transaction dump request with this code is received. Even when the dump table entry specifies a system dump, however, one will be taken only when the CURRENT value is no greater than the MAXIMUM, and system dumps are not suppressed system-wide (see the DUMPING option in the INQUIRE SYSTEM command). CVDA values are:

NOSYSDUMP
A system dump is not to be taken.

SYSDUMP
A system dump is to be taken.

TRANDUMPCODE(*data-value***)**
specifies the 4-character transaction dump code about which you are inquiring. A valid transaction dump code has no leading or imbedded blanks.

TRANDUMPING(*cvda***)**
returns a CVDA value indicating whether a transaction dump should be taken when a transaction dump request with this code is received. Even when the dump table entry specifies a transaction dump, however, one will be taken only when the CURRENT value is no greater than the MAXIMUM. CVDA values are:

NOTRANDUMP
The transaction dump is to be suppressed.

TRANDUMP
The transaction dump is to be taken.

Conditions

END
RESP2 values:

2 There are no more resource definitions of this type.

ILLOGIC
RESP2 values:

1 You have issued a START command when a browse of this resource type is already in progress, or you have issued a NEXT or an END command when a browse of this resource type is not in progress.

NOTAUTH
RESP2 values:

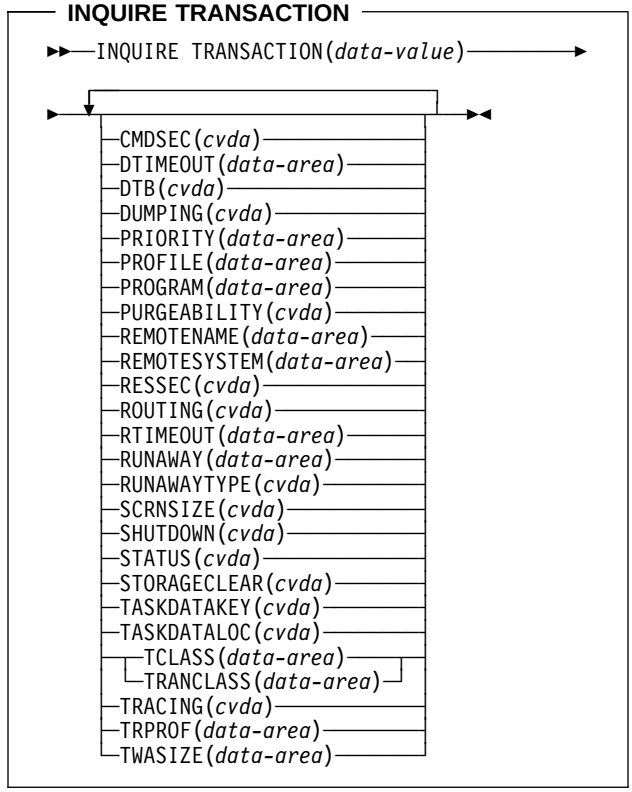
100 The user associated with the issuing task is not authorized to use this command.

NOTFND
RESP2 values:

1 The dump code cannot be found.

INQUIRE TRANSACTION

Retrieve information about a TRANSACTION definition.



Conditions: END, ILLOGIC, INVREQ, NOTAUTH, TRANSIDERR

For more information about the use of CVDAs, see “CICS-value data areas (CVDAs)” on page 7.

Context

The INQUIRE TRANSACTION command retrieves information about a particular transaction installed in your CICS system.

Most of the values come from the RDO TRANSACTION resource definition, but a few come from the RDO PROFILE resource definition to which it refers (these are noted in the descriptions). See the *CICS Resource Definition Guide* for full details about the attributes of these two types of resources.

Many of the values produced by an INQUIRE TRANSACTION command are the same as those produced by the same-named options in an INQUIRE TASK command, when the task is executing the transaction, because a task acquires most of its characteristics from the definition of the transaction. However, as noted in the description of that command, the values for a task also reflect the CICS system environment.

Furthermore, when a task is routed from one CICS to another, the transaction specified in the sending region may be different from the one executed in the receiving region, so that an inquiry about its TRANSACTION value can produce different results in the sending and receiving regions. Indeed, in the case of dynamic routing, the transaction specified in the sending CICS (and shown as the TRANSACTION value in an INQUIRE TASK there) need not even be defined if the default processing for an undefined transaction code is dynamic routing.

Browsing

You can also browse through all of the TRANSACTION definitions in your system by using the browse options (START, AT, NEXT, and END) on INQUIRE TRANSACTION commands. In browse mode, the definitions are returned in alphabetic order, and you can specify a starting point with the AT option if you wish. See “Browsing resource definitions” on page 11 for general information about browsing, syntax, exception conditions, and examples.

Options

CMDSEC(*cvda*)
returns a CVDA value indicating whether command security checking should be performed for tasks executing this transaction. CVDA values are:

CMDSECNO
: Command security checking should not be performed.

CMDSECYES
: Command security checking should be performed.

DTB(*cvda*)
returns a CVDA value indicating how uncommitted changes made to recoverable resources by a task executing this transaction should be handled if the task fails. CVDA values are:

BACKOUT
: Uncommitted changes should be backed out.

COMMIT
: Uncommitted changes should be committed.

WAIT
: The disposition of uncommitted changes should be deferred until further information is available.

DTIMEOUT(*data-area*)
returns a fullword binary field giving the deadlock time-out value (in seconds) for a task executing this transaction. CICS abends a task that waits for a locked resource longer than its deadlock timeout value.

DUMPING(*cvda***)**
returns a CVDA value indicating whether CICS should take a transaction dump if a task executing this transaction terminates abnormally. CVDA values are:

NOTRANDUMP
No dump should be taken.

TRANDUMP
A dump should be taken.

This value applies only to abend dumps and has no effect on DUMP TRANSACTION commands.

PRIORITY(*data-area***)**
returns a fullword binary field giving the priority of this transaction relative to other transactions in the CICS system, in the range 1–255.

PROFILE(*data-area***)**
returns the 8-character name of the RDO PROFILE definition for this transaction. The profile defines attributes that govern the interaction between a task executing the transaction and the terminal or session which is its principal facility.

PROGRAM(*data-area***)**
returns the 8-character name of the first program invoked by a task executing this transaction.

PURGEABILITY(*cvda***)**
returns a CVDA value indicating whether CICS is allowed to purge this task (that is, to terminate it abnormally). Purge requests come from SET TASK PURGE commands (or CEMT equivalents), and CICS can generate them internally to reclaim resources to relieve a system stall condition. CVDA values are:

NOTPURGEABLE
The task cannot be purged.

PURGEABLE
The task can be purged.

The PURGEABILITY value is set initially by the SPURGE option in the definition of the TRANSACTION this task is executing.

REMOTENAME(*data-area***)**
returns the 8-character name by which this transaction is known in the remote system, if it is defined as a remote transaction. (Read the description of "Defining a TRANSACTION" in the *CICS Resource Definition Guide* for a fuller discussion of the length of REMOTENAME). Blanks are returned if the transaction is not remote.

REMOTESYSTEM(*data-area***)**
returns the 4-character name of the remote system on which this transaction is defined, if it is defined as a remote transaction. Blanks are returned if the transaction is not remote.

RESSEC(*cvda***)**
returns a CVDA value identifying whether resource-level security checking should be performed for a task executing this transaction. CVDA values are:

RESSECNO
Resource-level checking should not be performed.

RESSECYES
Resource-level checking should be performed.

ROUTING(*cvda***)**
returns a CVDA value indicating whether a task executing this transaction is subject to dynamic routing. CVDA values are:

DYNAMIC
The task can be routed dynamically.

STATIC
The task cannot be routed dynamically.

RTIMEOUT(*data-area***)**
returns a fullword binary field giving the read time-out value for a task executing this transaction, in seconds. CICS abends a task if it waits for input longer than its read time-out value. This value is defined in the RDO PROFILE definition (see the PROFILE option of this command).

RUNAWAY(*data-area***)**
returns a fullword binary field giving the “runaway task” time, in milliseconds, for tasks executing this transaction. If a task keeps control of the processor for more than this interval, CICS assumes it is in a loop and abends it. If the value is zero, CICS does not monitor the task for a runaway condition.

RUNAWAYTYPE(*cvda***)**
returns a CVDA value indicating the source of the RUNAWAY option value for this transaction. CVDA values are:

SYSTEM
The value is the current default for the system (see the ICVR option of the INQUIRE SYSTEM command).

USER
The value was defined explicitly in the TRANSACTION definition.

SCRNSIZE(*cvda***)**
returns a CVDA value indicating whether a task executing this transaction should use the alternate or the default screen size. This value is defined in the RDO PROFILE definition (see the PROFILE option). CVDA values are:

ALTERNATE
The alternate screen size is to be used.

DEFAULT
The default screen size is to be used.

SHUTDOWN(*cvda***)**
returns a CVDA value indicating whether this transaction can be executed during CICS shutdown by a task created to process unsolicited input. (the transaction also can be executed in this situation if it appears in the transaction list table (XLT) for shutdown). CVDA values are:

SHUTDISABLED
The transaction cannot be executed.

SHUTENABLED
The transaction can be executed.

STATUS(*cvda***)**
returns a CVDA value indicating whether the transaction is available for use. CVDA values are:

DISABLED
The transaction is not available for use.

ENABLED
The transaction is available for use.

STORAGECLEAR(*cvda***)**
returns a CVDA value indicating whether CICS should clear storage that is released from a task executing this transaction (to prevent other tasks accidentally viewing confidential data). CVDA values are:

CLEAR
Storage will be cleared.

NOCLEAR
Storage will not be cleared.

TASKDATAKEY(*cvda***)**
returns a CVDA value indicating the key of the storage CICS assigns to a task executing this transaction. This storage includes task life-time storage—the transaction work area (TWA) and the EXEC interface block (EIB)—and the storage that CICS obtains on behalf of programs that run under the task.

CVDA values are:

CICSDATAKEY
CICS-key storage is assigned.

USERDATAKEY
User-key storage is assigned.

TASKDATALOC(*cvda***)**
returns a CVDA value indicating whether task-lifetime storage for a task executing this transaction should be above or below the 16MB line. Task-lifetime storage includes the EIB and TWA. CVDA values are:

ANY Task-lifetime storage can be above or below the 16MB line.

BELOW
Task-lifetime storage must be below the 16MB line.

TCLASS(*data-area***)**
returns a fullword binary field giving the number of the transaction class to which the transaction belongs, if the task belongs to a numbered class. Zero is returned if the transaction does not belong to any class, and an INVREQ exception condition is raised if the transaction belongs to a class that does not correspond to a numbered class.

The TCLASS option is retained for compatibility with earlier releases of CICS, where transaction classes were numbered from 1 to 10. In this release, transaction classes have 8-character names, specified by the TRANCLASS value in the definition (see that option of this command).

A class is numbered only if its name is of the form DFHTCLnn, where “nn” is a number from 00 to 10, and it is this number that is returned by the TCLASS option in this command. (The TRANSACTION definition can contain a TCLASS value as well, to allow the same definition to be installed in a system running under an earlier release, but the TCLASS value is ignored in this release and does not need to correspond to the TRANCLASS value.)

TRACING(*cvda***)**
returns a CVDA value indicating the type of tracing to be done for tasks executing this transaction. CVDA values are:

SPECTRACE
Tracing is to be special.

SPRSTRACE
Tracing is suppressed.

STANTRACE
Tracing is to be standard.

If this value is other than SPRSTRACE and the task has a principal facility, the tracing value for the task is determined from a combination of the TRACING values for its terminal and the transaction it is executing. In this case, tracing is special if either the terminal or the transaction specifies SPECTRACE, standard if both specify STANTRACE.

A TRACING value of STANTRACE is assigned when the transaction is defined. You can specify other values only with a SET TERMINAL command or the CICS-supplied CETR transaction.

TRANCLASS(*data-area***)**
returns the 8-character name of the transaction class to which this transaction belongs. If the transaction does not belong to any class, the value DFHTCL00 is returned.

TRANSACTION(*data-value***)**
specifies the 4-character name of the TRANSACTION definition about which you are inquiring.

TRPROF(*data-area***)**
returns the 8-character name of the PROFILE definition used to define attributes associated with the session used for routing, if transaction routing occurs.

TWASIZE(*data-area***)**
returns a fullword binary field giving the size, in bytes, of the transaction work area (TWA) for this transaction.

Conditions

END
RESP2 values:

2 There are no more resource definitions of this type.

ILLOGIC
RESP2 values:

1 You have issued a START command when a browse of this resource type is already in progress, or you have issued a NEXT or an END command when a browse of this resource type is not in progress.

INVREQ
RESP2 values:

3 The TCLASS option has been specified in this INQUIRE command, and the transaction belongs to a class that is not one of the numbered classes DFHTCL00 through DFHTCL10.
10 The PROFILE definition associated with the transaction is not available.

NOTAUTH
RESP2 values:

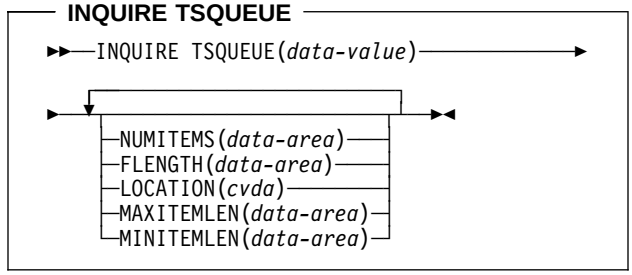
100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.

TRANSIDERR
RESP2 values:

1 The transaction could not be found.

INQUIRE TSQUEUE

Retrieve information about a temporary storage queue.



Conditions: END, ILLOGIC, NOTAUTH, QIDERR

For more information about the use of CVDAs, see “CICS-value data areas (CVDAs)” on page 7.

Context

The INQUIRE TSQUEUE command returns information about a particular temporary storage queue.

Browsing

You can also browse through all of the temporary storage queues in your system by using the browse options (START, AT, NEXT, and END) on INQUIRE TSQUEUE commands. In browse mode, the definitions are returned in alphabetic order, and you can specify a starting point with the AT option if you wish. If you want to see all the queues with names beginning with a certain string of letters, for example, you can start your browse with an AT value of those letters, padded on the right to 8 characters with nulls (X'00').

In a browse, CICS returns all queues, and you may see queues created by CICS for internal use as well as those created by user applications. In particular, queues with names that start with these characters are CICS queues: ‘**’, ‘$$’, X'FA' through X'FF', ‘CEBR’ and ‘DF’.

See “Browsing resource definitions” on page 11 for general information about browsing, syntax, exception conditions, and examples.

Options

NUMITEMS(*data-area***)**
returns a halfword binary field giving the number of items in the temporary storage queue.

FLENGTH(*data-area***)**
returns a fullword binary field giving the total length in bytes of all the items in the temporary storage queue.

For information about how CICS calculates the length of items, see the MAXITEMLEN option.

LOCATION(*cvda***)**
returns a CVDA value indicating where the temporary storage queue resides. CVDA values are:

AUXILIARY
The temporary storage queue is held in the CICS temporary storage VSAM data set.

MAIN
The temporary storage queue is held in main storage.

MAXITEMLEN(*data-area***)**
returns a halfword binary field giving the length in bytes of the largest item in the temporary storage queue.

The length of a queue item is the sum of the length of the user data plus 24 bytes for header information, rounded up. For main storage queues, the length is rounded up to the boundary of the VSE storage subpool used to store it; subpool boundaries are always some multiple of 64.

For auxiliary temporary storage, the length is rounded to the next higher multiple of either 64 or 128 (depending on the control interval size of the temporary storage data set). However, if any item in the queue exceeds the control interval size, -1 is returned for all three lengths associated with the queue (FLENGTH, MAXITEMLEN and MINITEMLEN). (For background information about CI sizes, see the *CICS System Definition Guide*.)

MINITEMLEN(*data-area***)**
returns a halfword binary field giving the length in bytes of the smallest item in the temporary storage queue. For information about how CICS calculates the length of items, see the MAXITEMLEN option.

TSQUEUE(*data-value***)**
specifies the 8-character name of the temporary storage queue about which you are inquiring.

Conditions

END
RESP2 values:

2 There are no more resource definitions of this type.

ILLOGIC
RESP2 values:

1 You have issued a START command when a browse of this resource type is already in progress, or you have issued a NEXT or an END command when a browse of this resource type is not in progress.

NOTAUTH
RESP2 values:

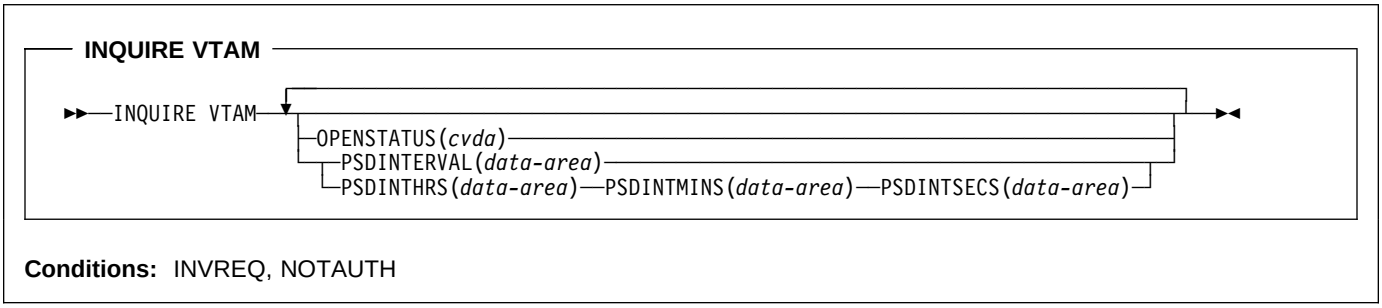
100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.

QIDERR
RESP2 values:

1 The temporary storage queue cannot be found.

INQUIRE VTAM

Retrieve information about the connection between CICS and VTAM.



Conditions: INVREQ, NOTAUTH

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The INQUIRE VTAM command returns information about type and state of the connection between VTAM and your CICS system.

Options

OPENSTATUS(*cvda***)**
returns a CVDA value indicating the status of the connection between CICS and VTAM. CVDA values are:

CLOSED
The connection between CICS and VTAM has not yet been established or has been terminated.

CLOSEFAILED
The connection is open but is not usable because a previous request to close the connection failed. You should retry the close request.

CLOSING
The connection between CICS and VTAM is in the process of closing.

FORCECLOSING
The connection between CICS and VTAM is in the process of closing following a SET VTAM FORCECLOSE command.

IMMCLOSING
The connection between CICS and VTAM is in the process of closing following a SET VTAM IMMCLOSE command.

OPEN
There is a connection between CICS and VTAM.

PSDINTERVAL(*data-area***)**
returns the persistent session delay (PSD) interval, which is the length of time that sessions are held in recovery-pending state after a CICS failure. (See the PSDINT system initialization parameter in the *CICS System Definition Guide* for more information about this option.) There are two formats for the PSD interval:

- A composite (packed decimal format **0hhmmss+**, 4 bytes long), which you obtain by using the PSDINTERVAL option.
- Separate hours, minutes, and seconds, which you obtain by specifying the PSDINTHRS, PSDINTMINS, and PSDINTSECS options.

(A value of zero means that sessions will not be held after a failure.)

PSDINTHRS(*data-area***)**
returns the hours component of the PSD interval, in fullword binary form (see the PSDINTERVAL option).

PSDINTMINS(*data-area***)**
returns the minutes component of the PSD interval, in fullword binary form (see the PSDINTERVAL option).

PSDINTSECS(*data-area***)**
returns the seconds component of the PSD interval, in fullword binary form (see the PSDINTERVAL option).

Conditions

INVREQ
RESP2 values:

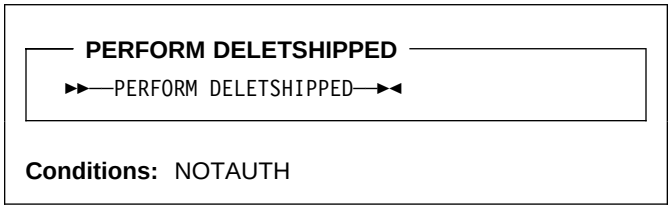
1 VTAM is not present in the system.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

PERFORM DELETSHIPPED

Delete inactive shipped terminal definitions.



Context

The PERFORM DELETSHIPPED command causes immediate invocation of the CICS mechanism for deleting inactive shipped terminal definitions. It does **not** reset the interval at which this mechanism is normally invoked. That is, it does not affect the time remaining until the next automatic invocation.

A shipped definition is inactive if the terminal has not been used locally for a specified period of time and no task is waiting to be attached which requires the terminal. You can determine the length of time a shipped terminal must remain unused to be eligible for deletion and the interval at which CICS checks for such terminals with the INQUIRE DELETSHIPPED command, and you can set these values with the SET DELETSHIPPED command. For more information about shipped definitions, see the *CICS Intercommunication Guide* and *CICS Resource Definition Guide*.

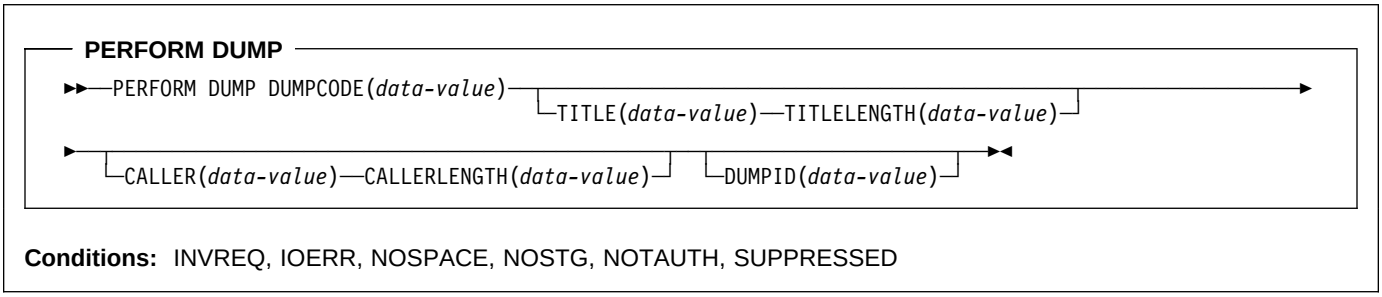
Conditions

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

PERFORM DUMP

Request a system dump of CICS.



Conditions: INVREQ, IOERR, NOSPACE, NOSTG, NOTAUTH, SUPPRESSED

Context

The PERFORM DUMP command requests a system dump (a VSE SDUMP) of the CICS partition in which it is issued.

The system dump table entry for the dump code specified in the DUMPCODE option determines the processing that occurs on a PERFORM DUMP command: whether a dump is taken, and whether shutdown occurs. If there is no entry for the dump code you specify, CICS creates a temporary one using default values. See the INQUIRE SYSDUMPCODE command for more information about this process and the *CICS Problem Determination Guide* for general information about the system dump table.

While a VSE SDUMP is being taken, all other CICS activity ceases. The program issuing the command does not regain control until the dump is complete, and then only if the dump does not cause CICS to shut down.

Options

CALLER(*data-value***)**
specifies the text that appears after 'CALLER' in the summary of dump domain information at the top of the dump. This text can be up to 8 characters long. It is intended to identify the source of the request for the dump, but is not restricted to that purpose.

CALLERLENGTH(*data-value***)**
specifies, as a fullword binary value, the number of characters in the CALLER text.

DUMPCODE(*data-value***)**
specifies the 8-character dump code for this dump request, which determines the system dump table entry used in processing it.

The code can be either CICS-defined or user-defined. Most CICS codes are a CICS message identifier with the initial 'DFH' removed, but there are a few additional ones. The *VSE/ESA Messages and Codes Volume 3* manual lists all CICS messages and also the additional dump codes (under "System dump codes").

User-defined codes can be any character string that does not contain leading or imbedded blanks.

CICS provides system dump table entries for some CICS-defined codes and builds them as needed for others. The installation can provide entries for user-defined codes, or CICS will build temporary entries, as explained above.

DUMPID(*data-value***)**
returns a 9-character identifier for this particular dump. This value is intended to distinguish this dump uniquely from any others, but it is not restricted to this use.

TITLE(*data-value***)**
specifies the text that is printed as a title in the summary of dump domain information at the top of the dump. It can be up to 80 characters long.

TITLELENGTH(*data-value***)**
specifies, as a fullword binary value, the number of characters in the TITLE text.

Conditions

INVREQ
RESP2 values:

6 TITLELENGTH is greater than 80 bytes.
7 CALLERLENGTH is greater than 8 bytes.
13 The DUMPCODE contains leading or imbedded blanks.

IOERR
RESP2 values:

9 CICS is not authorized by VSE to take dumps.
10 An error occurred during system dumping.
12 VSE cannot process the dump because there is no SYSDUMP dump data set or because it is full.
13 An error occurred in the CICS routine that issues VSE SDUMP requests.

NOSPACE
RESP2 values:

4 The dump is incomplete due to lack of dump data-set space.

NOSTG
RESP2 values:

5 CICS cannot complete the dump because of insufficient storage.

NOTAUTH
RESP2 values:

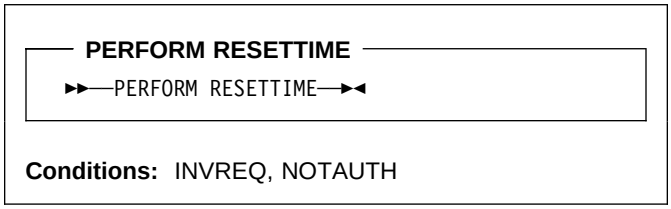
100 The user associated with the issuing task is not authorized to use this command.

SUPPRESSED
RESP2 values:

1 The dump was not taken because the number of dumps with this dump code exceeds the maximum for the code.
2 The dump was not taken because the system dump table entry for this code indicates no system dump.
3 The dump was not taken because it was suppressed by a user exit program.
8 The dump was not taken because system dumps are suppressed globally by means of the DUMP=NO system initialization parameter, or set by means of an EXEC CICS SET SYSTEM command or a CEMT SET SYSTEM transaction.

PERFORM RESETTIME

Reset date and time.



Conditions: INVREQ, NOTAUTH

Context

The PERFORM RESETTIME command resets the CICS date and time from the VSE system date and time.

Conditions

INVREQ
RESP2 values:

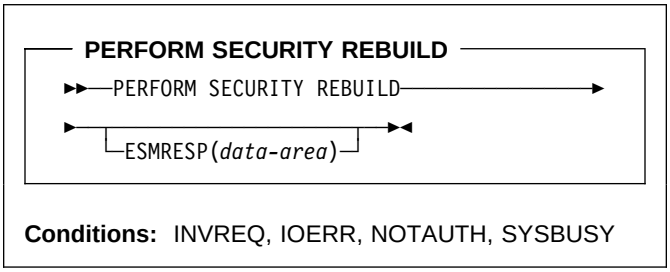
1 There is no clock in the system.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

PERFORM SECURITY REBUILD

Refresh security information.



Conditions: INVREQ, IOERR, NOTAUTH, SYSBUSY

Context

The PERFORM SECURITY REBUILD command is a request for CICS security information to be refreshed from its external security manager (ESM) source, so that it reflects any updates made since the information was last retrieved. and the performance of other CICS tasks can be severely affected.

ESM note

The effect of this command depends on the particular ESM on your system. For example, the command has no effect if the Basic Security Manager (BSM) supplied with VSE/ESA is installed.

Options

ESMRESP(*data-area***)**
returns a fullword binary field giving the response code from the external security manager. This value is also returned in the RESP2 field of the response code. If an exception condition prevents CICS from invoking the ESM, the ESMRESP value is left unchanged.

Conditions

INVREQ
RESP2 values:

1 No ESM is installed, or the ESM is inactive.
5 The ESM is temporarily inactive and cannot perform the action requested.

IOERR
RESP2 values:

3 Error returned from ESM. The return code is in ESMRESP, if the option was used.

NORMAL
RESP2 values:

0 Profiles were rebuilt successfully. (The ESM does not support dynamic refresh of security profiles.)
4 The ESM contains support for refreshing its own resource profiles, so this CICS command is not required.

NOTAUTH
RESP2 values:

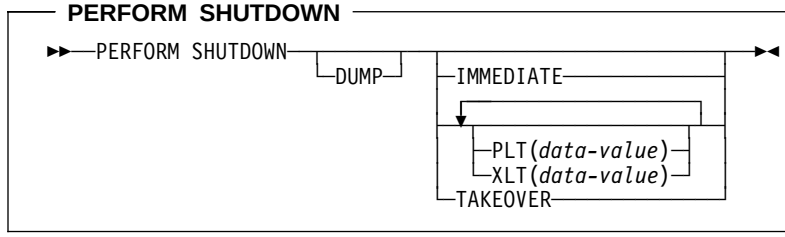
100 The user associated with the issuing task is not authorized to use this command.

SYSBUSY
RESP2 values:

3 A security rebuild is currently in progress.

PERFORM SHUTDOWN

Shut down the CICS system.



Conditions: INVREQ, IOERR, NOTAUTH

Context

The PERFORM SHUTDOWN command shuts down the CICS system. The shutdown can be either normal (controlled) or immediate. Control does not return to the program issuing the command, unless an exception condition occurs.

In processing this command, CICS invokes the programs in the shutdown program list table (PLT) as part of the task that issued the command. If any program in the list requires a terminal (that is, uses the principal facility), you should not issue the command in a task that does not have one, because the task will abend on the first attempt to use the non-existent terminal. Shutdown will proceed, but the task will be backed out to its most recent SYNCPOINT, and the remaining programs in the list will not be executed.

The *CICS Customization Guide* contains more information about PLTs and steps in the shutdown process.

Options

DUMP
specifies that a VSE SDUMP of the CICS partition should be taken as part of the shutdown process, if the system dump table entry for the dump code 'TM1798', which governs this dump, specifies this.

IMMEDIATE
specifies that CICS is to shut down immediately, terminating all active tasks and VTAM sessions abnormally. If IMMEDIATE is not specified, CICS shuts down normally, allowing these tasks to complete and quiescing the sessions.

PLT(*data-value***)**
specifies the 2-character suffix that identifies the PLT for this shutdown. (The table is a load module named DFHPLT followed by this suffix.)

The value “NO” means that no PLT programs are run. If you do not supply a PLT value, the value specified by the PLTSD system initialization parameter, if any, is used. This option applies only to a normal shutdown; the PLT is not run in an immediate shutdown or during an XRF takeover.

TAKEOVER
specifies that this CICS system is to be shut down normally, and then the alternate CICS system is to take over. This option is valid only when the system initialization parameter XRF=YES was specified for CICS startup.

XLT(*data-value***)**
specifies the 2-character suffix that identifies the transaction list table (XLT) to be used for this shutdown. (The table is a load module named DFHXLT followed by this suffix.)

This table lists the transactions that can be initiated by unsolicited terminal input during the first quiesce stage of a normal shutdown. No other transactions can be initiated from a terminal during shutdown, except for CEMT, CESF, and a small number of other CICS-supplied transactions related to terminals.

This option is meaningful only when IMMEDIATE or TAKEOVER are not present; no new transactions are accepted during an immediate shutdown or during an XRF takeover. A suffix of “NO” means that no transactions besides those cited above are allowed. If you do not supply an XLT value, the value specified by the XLT system initialization parameter, if any, is used.

Conditions

INVREQ
RESP2 values:

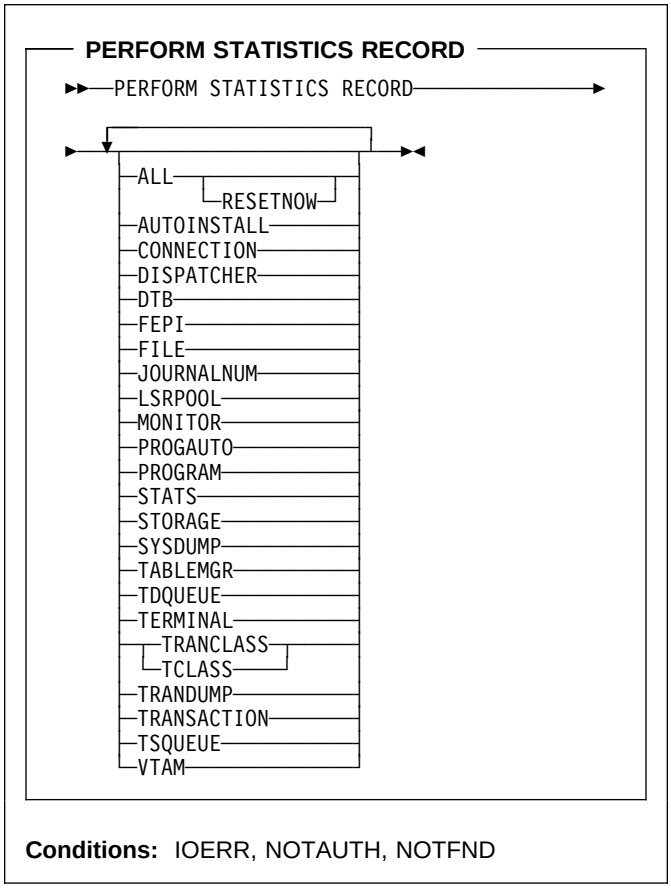
1 A normal shutdown was requested when shutdown was already in progress.
2 The XLT cannot be found.
3 The PLT cannot be found.
4 XRF is not in effect.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

PERFORM STATISTICS RECORD

Record statistics immediately.



Conditions: IOERR, NOTAUTH, NOTFND

Context

The PERFORM STATISTICS RECORD command causes current statistics for the resource types and system functions that you specify to be recorded (written out to the DMF data set). Recording occurs immediately, and is not governed by the system options that control the recording of these statistics at intervals. (See the discussion of **interval statistics** in the SET STATISTICS command on page 167.)

Execution of this command does not affect interval or end-of-day statistics either, except when you specify RESETNOW, because the counts are not reset unless RESETNOW is specified.

You can specify as many types of statistics as you wish, or you can request all (the ALL option). For each type you request, CICS provides all of the information available (the information that is recorded in interval statistics). For system services, such as dispatch and dynamic transaction backout, CICS keeps summary (global) statistics. For resource types, CICS keeps specific statistics for each installed resource of the type in question, and for some resource types, CICS keeps global counts as well.

The *CICS Performance Guide* contains details about CICS statistics.

Options

ALL
records statistics for all resource types and system services. This is the same information that is recorded for interval statistics, and includes counts from the user domain, which are not otherwise available with this command.

In addition, you can reset the counts when you use this option (see the RESETNOW option).

AUTOINSTALL
records global statistics on the automatic installation of terminal definitions.

CONNECTION
records specific statistics for all connections installed in your system.

DISPATCHER
records global statistics on the dispatch function, including task counts and concurrency levels and limits.

DTB
records global statistics on the dynamic transaction backout function.

FEPI
records global statistics on the front-end programming interface (FEPI) and specific statistics on FEPI connections, targets and pools.

FILE
records specific statistics for all files installed in your system.

JOURNALNUM
records specific statistics for all journals installed in your system.

LSRPOOL
records specific statistics on all VSAM LSR pools defined in your system, including statistics on the files within the pool additional to the statistics produced by the FILE option.

MONITOR
records global statistics on the monitor function of CICS.

PROGAUTO
records global statistics on automatic installation of program definitions.

PROGRAM
records global and specific statistics for all programs installed in your system.

RESETNOW
resets all statistics to initial values after recording. You can use this option only in conjunction with the ALL option. The definition of the initial value depends on the statistic being kept; see the *CICS Performance Guide* for details.

STATS
records global statistics about the statistics-gathering function of CICS.

STORAGE
records global statistics for all CICS dynamic storage subpool areas, and specific statistics by subpool.

SYSDUMP
records global statistics on system dumps and specific statistics for each dump code in the system dump code table.

TABLEMGR
records global statistics on the CICS table manager.

TCLASS
records specific statistics for every transaction class defined in your system. This option has the same effect as TRANCLASS and is retained for compatibility with older versions of CICS only; use TRANCLASS instead where possible.

TDQUEUE
records global statistics for transient data and specific statistics for each queue defined in your system.

TERMINAL
records specific statistics for each terminal and session installed in your system.

TRANCLASS
records specific statistics for every transaction class defined in your system.

TRANDUMP
records global statistics on transaction dumps and specific statistics for each dump code in the transaction dump table.

TRANSACTION
records global statistics on transactions and specific statistics for each transaction installed in the system.

TSQUEUE
records global statistics on temporary storage.

VTAM
records global VTAM statistics for your system.

Conditions

IOERR

RESP2 values:

n Statistics for at least one of the options chosen were not available; usually the reason for this error is corruption of the memory in which they are accumulated. (See note below.)

NOTAUTH

RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

NOTFND

RESP2 values:

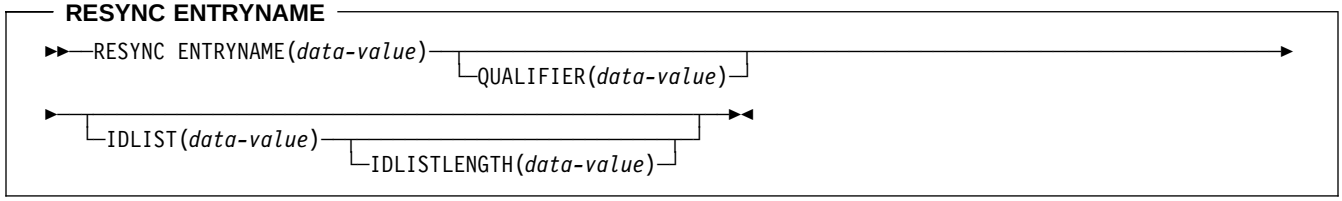
n Statistics for at least one of the options chosen were not available because CICS was initialized without support for the function. (See note below.)

Note: When statistics of a requested type are unavailable, CICS raises the IOERR or NOTFND exception condition, as appropriate, but continues through the remaining types, recording as much information as available. The RESP2 value “n” identifies the last type to fail in this way, as follows:

n	Resource type
1	AUTOINSTALL
2	CONNECTION
3	DISPATCHER
5	DTB
6	FILE
8	JOURNALNUM
10	LSRPOOL
11	MONITOR
12	PROGRAM
13	STATS
14	STORAGE
15	SYSDUMP
16	TABLEMGR
18	TCLASS OR TRANCLASS
19	TDQUEUE
20	TERMINAL
21	TRANDUMP
22	TRANSACTION
23	TSQUEUE
24	VTAM
25	FEPI
26	PROGAUTO

RESYNC ENTRYNAME

Determine the disposition of “in doubt” units of work.



Conditions: NOTAUTH

Context

The RESYNC command allows a non-CICS resource manager to determine whether units of work about which it is “in doubt” were committed or backed out.

A resource manager can be in doubt about a unit of work if it has been invoked for the first phase of syncpoint, but not for the second, when it is told whether to commit or roll back. A failure of either the resource manager or CICS between Phase 1 and Phase 2 leaves the resource manager in doubt about that unit of work.

CICS saves or reconstructs the disposition of any such unit of work until a RESYNC command or a cold start. CICS also saves the disposition of any unit of work about which the resource manager replies “remember” to the second-phase syncpoint invocation, so that if the resource manager cannot commit or roll back as directed, it can request the disposition later for recovery.

To use the saved disposition information, the resource manager must have a record of which units of work are in doubt or “remembered.” It can then issue a RESYNC command with a list of these units of work, either in its task-related user exit or an associated administrative transaction.

In response, CICS creates a task, CRSY, for each in-doubt in the list. The CRSY task invokes the task-related user exit once on behalf of its particular unit of work. This invocation is identified to the exit as a phase 2 syncpoint request and as such indicates whether the unit of work was committed or rolled back. The exit can then relay this information in the form the resource manager requires.

At this time CICS also **discards** all other disposition information it has kept for the resource manager. Therefore, the resource manager must resynchronize all in-doubts at once. A resource manager is identified by the name of its task-related user exit and, optionally, a qualifier to this name. Use of a qualifier allows multiple instances of the same resource manager to resynchronize independently.

Control is returned to the program that issued the RESYNC command as soon as the CRSY tasks have been scheduled. They run asynchronously, in parallel, according to normal CICS dispatch rules. Consequently, the exit should be enabled, started and initialized to the point where it can process these invocations before the RESYNC command.

If the exit is not available, a CRSY task will save the disposition of its unit of work, but since this occurs later in time, no exceptional condition occurs on the RESYNC.

Options

ENTRYNAME(*data-value***)**
specifies the 8-character name of the task-related user exit for the resource manager. This is the ENTRYNAME value of the ENABLE command that established the exit, or, if ENTRYNAME was omitted, the PROGRAM value.

IDLIST(*data-value***)**
specifies the list of units of work to be resynchronized. Each entry in the list is the *address* of the 8-byte identifier of an in-doubt unit of work. The end of the list may be indicated by the high-order bit turned on, or IDLISTLENGTH may be used.

Units of work are identified by the UEPURID value passed to the task-related user exit.

Note: IDLIST is optional, but if you omit it, CICS discards all of the saved disposition information for the resource manager.

IDLISTLENGTH(*data-value***)**
specifies a halfword binary value indicating the length (in bytes, counting 4 bytes per in-doubt) of the address-list.

QUALIFIER(*data-value***)**
specifies an 8-character qualifier to the ENTRYNAME value, which identifies the particular instance of the resource manager to which the RESYNC command applies. The qualifier is optional; it is intended for systems where more than one copy of a resource manager can be in use.

When it is in use, this value is assigned to a unit of work by the task-related user exit at the time the unit of work

takes place, via the UEPRMQUA value in the user exit parameter list. If the RESYNC command specifies a qualifier, CICS uses only disposition information saved with the same QUALIFIER and ENTRYNAME values. Similarly, it discards saved dispositions only if they have the same two values and were not included in the IDLIST.

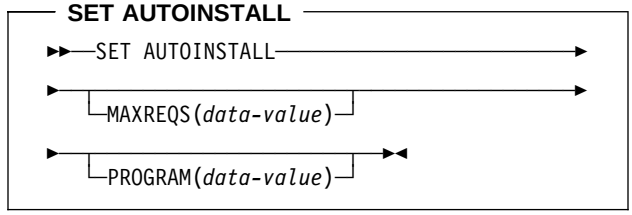
Conditions

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

SET AUTOINSTALL

Change autoinstall values.



Conditions: INVREQ, NOTAUTH, PGMIDERR

Context

The SET AUTOINSTALL command lets you change some of the values that control the automatic installation of VTAM terminals (autoinstall) in your CICS system.

Options

MAXREQS(*data-value***)**
specifies the largest number of autoinstall requests that can be processed concurrently, as a fullword binary value. The value must be in the range 0–999.

Note: MAXREQS does not limit the total number of terminals that can be installed automatically, only the arrival rate. However, you can prevent automatic installation of any additional terminals by setting MAXREQS to 0. Terminals already autoinstalled are not affected, but if they log off, they cannot log on again while MAXREQS is 0.

PROGRAM(*data-value***)**
specifies the 8-character name of the program to be used in the autoinstall process for terminals. You can specify either an installation-specific program, the CICS-supplied default, DFHZATDX, or the VSE/ESA-supplied program IESZATDX.

Note: This program and any programs it invokes must be installed before they can be used in the terminal autoinstall process. You can do this either with explicit RDO PROGRAM definitions or by exploiting program autoinstall. Otherwise, the terminal autoinstall process fails when it is next used.

Conditions

INVREQ
RESP2 values:

1 VTAM is not in use in this system.
2 The MAXREQS value is not in the range 0–999.

4 One of the modules invoked by DFHZATDX (DFHZATA or DFHZATD) cannot be found.

NOTAUTH
RESP2 values:

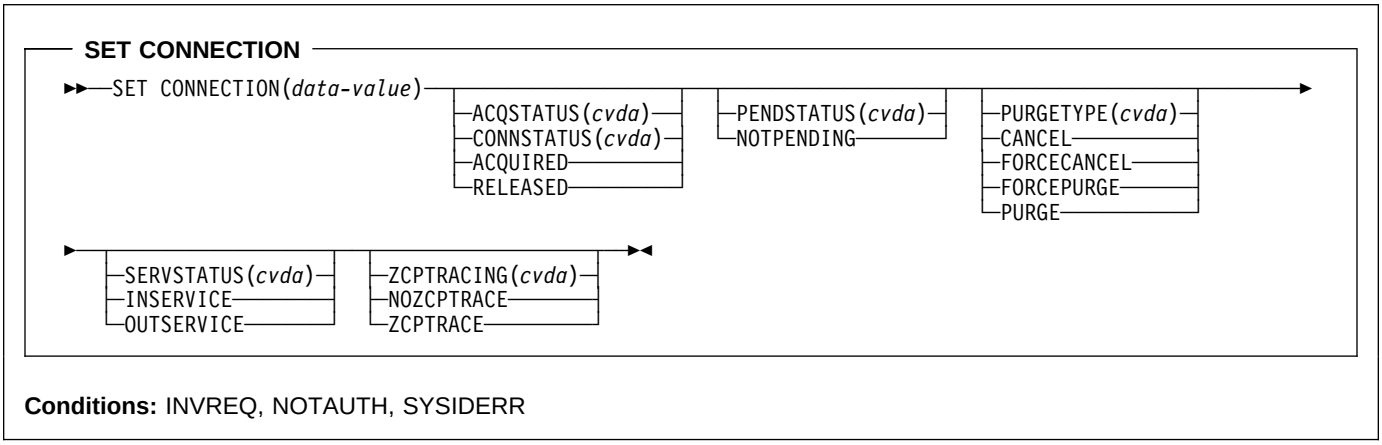
100 The user associated with the issuing task is not authorized to use this command.

PGMIDERR
RESP2 values:

3 The program name cannot be found.

SET CONNECTION

Change the definition or status of a connection or cancel work associated with it.



Conditions: INVREQ, NOTAUTH, SYSIDERR

For more information about the use of CVDAs, see “CICS-value data areas (CVDAs)” on page 7.

Context

The SET CONNECTION command allows you to change both the definition and the current status of a connection between your local CICS region and another CICS region or another system. A CONNECTION definition is sometimes known as a “system entry.”

There are two main types of system connection:

- Multiregion operation (MRO), which uses CICS interregion communication (IRC) to establish a connection between two MRO partners. An MRO connection can exist only between two CICS regions on the same VSE image.

  A special form of MRO connection, used by the external CICS interface (EXCI), can exist between a CICS region and a non-CICS client program (for example, a VSE batch program) running in the same VSE image. An EXCI connection connects the client program to a CICS region running in the same VSE image.
- Intersystem communication (ISC) connections, between CICS and any other system which supports VTAM APPC or LUTYPE6.1 communications. For example, ISC connections can exist between CICS regions running in different VSE/ESA images or on different operating system platforms, between CICS and any APPC device, and between CICS and IMS.

SET CONNECTION can be used for all of these connections, although not all options apply to all types. Exceptions are noted in the option descriptions that follow. In addition, you cannot use SET CONNECTION for either a remote connection or a connection defined indirectly. (See the *CICS Intercommunication Guide* for more information about ISC and MRO connections, and the *CICS External CICS Interface* manual for more information about EXCI.)

For some options, CICS returns control to the task that issued the SET CONNECTION command after the request is scheduled but before it is completed. You can test for completion, if you need to know, with an INQUIRE CONNECTION command, or, in the case of an APPC connection, with INQUIRE MODENAME in browse mode.

Options

ACQSTATUS(*cvda***) (APPC only)**
specifies the same information as the CONNSTATUS option and is retained only for compatibility. You should use CONNSTATUS in new applications.

CONNECTION(*data-value***)**
specifies the 4-character name of the connection that you are modifying (that is, the name by which the connected region is known to your CICS system, from its CONNECTION definition).

CONNSTATUS(*cvda***) (APPC only)**
specifies whether or not CICS is to be in session with the remote system represented by this connection (that is, whether the connection is to be **acquired** in the VTAM sense).

CONNSTATUS applies only to APPC connections in a SET CONNECTION command. For an MRO connection, the CONNSTATUS value is determined by the SERVSTATUS value, and you cannot set it directly, even though you can inquire about it in an INQUIRE CONNECTION command. CONNSTATUS does not apply at all to EXCI and or LUTYPE6.1 connections.

CVDA values are:

ACQUIRED
CICS is to be in session, and is to establish a connection if none exists. If the SERVSTATUS

value of the connection is OUTSERVICE, you must specify INSERVICE as well as ACQUIRED, because CICS will not acquire an APPC connection that is out of service. In addition, you cannot specify this value if the current CONNSTATUS value is FREEING (see the CONNSTATUS option in the INQUIRE CONNECTION command).

RELEASED
: CICS is not to be in session, and is to terminate the connection if one exists. CICS delays releasing the connection until any tasks currently using a session on the connection terminate. Consequently, you must specify PURGE or FORCEPURGE as well as RELEASED if sessions are in use and you want the release to occur immediately.

Note: CICS uses a task that executes LU Services Manager transaction CLS1 to acquire or release sessions on an APPC parallel-session connection. Data is passed to the task in a temporary storage queue whose name begins with the default prefix of DF. If your system defines queues named starting with DF as recoverable, CICS cannot initiate this task until a subsequent commit on the part of the task that changed the CONNSTATUS value (either a SYNCPOINT command or an implicit syncpoint).

PENDSTATUS(*cvda***) (APPC only)**
specifies that the resynchronization process that normally occurs when a connection is acquired is to be overridden. The CVDA value to request override is NOTPENDING. It causes CICS to:

- Commit unilaterally any suspended recoverable changes associated with units of work that required synchronization with the remote system.
- Erase its memory of the remote system's log name. This action causes CICS to specify the VTAM option COLD on the next exchange of log names (XLN) with the remote system, which occurs when the connection is re-established. COLD tells the remote system not to send resynchronization information. For this reason, you cannot specify NOTPENDING after a connection has progressed beyond the exchange of log names.

XLN and resynchronization are described in the *CICS Intercommunication Guide* and the *Systems Network Architecture—LU6.2 Reference: Peer Protocols* manual.

PURGETYPE(*cvda***)**
specifies that work occurring on or scheduled for sessions on this connection is to be canceled.

The PURGE and FORCEPURGE values allow you to purge (terminate abnormally) the tasks *currently* using a session on this connection as principal or alternate facility.

For such tasks, these options have the same effect in a SET CONNECTION command as they do in a SET TASK or SET TERMINAL command. However, since there may be multiple tasks, deferred purges and tasks exempted because of purgeability status are not reported as exceptions. See page 173 for details on how these options work and precautions about using them.

PURGE and FORCEPURGE apply only to APPC and LUTYPE6.1 connections in this command, but you can use them for an individual MRO session in a SET TERMINAL command.

The CANCEL and FORCECANCEL options cancel the *scheduled* work represented by the set of automatic initiate descriptors (AIDs) for the connection. Each AID represents a request for a task which is to execute with a session on this connection as its principal facility.

These options have the same effect in this command as CANCEL in SET TERMINAL, and you can use them for any type of connection. See page 179 for details. They must be used alone, with no other option specified.

The difference between CANCEL and FORCECANCEL is that AIDs for certain CICS-supplied system transactions are exempted from a CANCEL request, whereas FORCECANCEL applies to all. Canceling the exempted AIDs can lead to unpredictable results and, under some circumstances, can cause CICS to terminate abnormally. Consequently, you should use FORCECANCEL only in exceptional situations. Table 4 lists AIDs that require FORCECANCEL.

Table 4. Transactions for which AIDs require FORCECANCEL

Remote delete AIDs	CRMD
Remote scheduler AIDs	CRSR
LU6.2 service manager 1 AIDs	CLS1
LU6.2 service manager 2 AIDs	CLS2
LU6.2 service manager 3 AIDs	CLS3
Remote schedule PURGE AIDs	CRSQ
Resource manager resynchronization AIDs	CRSY
Autoinstall terminal delete AIDs	CATD
Restart terminal delete AIDs	CATR

You can determine whether AIDs were canceled by a SET CONNECTION command by inspecting the RESP2 value returned. It will be 58 if any were canceled and 59 if not.

CVDA values are:

CANCEL
: AIDs for this connection are to be canceled, except those for the transactions in Table 4.

FORCECANCEL
: All AIDs for this connection are to be canceled.

FORCEPURGE
: Tasks using this connection are to be terminated as soon as consistent with system integrity and without regard to data integrity.

PURGE
: Tasks using this connection are to be terminated as soon as both system and data integrity can be maintained.

  PURGE FORCE has been replaced by FORCEPURGE and is retained only for compatibility. You should use FORCEPURGE in new applications.

Note: When a request in one CICS system requires a connection owned by another CICS, both the originating CICS and the CICS that owns the connection maintain an AID to represent the request. If you cancel any such AIDs by issuing a SET CONNECTION CANCEL in the CICS that owns the connection, that CICS notifies the originating CICS systems to cancel their corresponding AIDs. The originating CICS systems write message DFHTF0100 to their CSMT transient data destinations to indicate how many AIDs were canceled for this reason and how many remain for the connection.

SERVSTATUS(*cvda***)**
specifies whether the connection is to be available for use. It corresponds to the INSERVICE option in the CONNECTION definition. CVDA values are:

INSERVICE
: The connection is to be available.

OUTSERVICE
: The connection is not to be available.

The processing that occurs when a connection goes from OUTSERVICE to INSERVICE status, and the status of the individual sessions on the connection, vary with the type of connection, as follows:

- For a parallel-session APPC connection, the LU Services Manager sessions are placed in service, enabling the connection to be acquired, but other sessions on the connection remain out of service until the connection is acquired. For a single-session APPC link, the session itself is marked in service. No attempt is made to establish communication in either case unless ACQUIRED is also specified.
- For a CICS-to-CICS MRO connection, all sessions on the connection are placed in service. If interregion communication is started, CICS attempts to establish communication with the remote system. Success requires that IRC be open on the remote region as well, and that its definition of the connection also be in INSERVICE status. When all of these conditions are met, the connection becomes ACQUIRED as well as INSERVICE (see the CONNSTATUS option).
- For an EXCI connection, all receive sessions (pipes) are placed in service, available to a client program that establishes communication.
- For an LUTYPE6.1 connection, all sessions are placed in service, but communication is not attempted.

Similarly, the processing that occurs when a connection goes from INSERVICE to OUTSERVICE status, and the status of individual sessions, vary with the type of connection.

- For a parallel-session APPC connection, OUTSERVICE causes the LU Services Manager sessions to be placed out of service, so that the connection cannot be reacquired until the connection is put in service again. For single-session APPC, the session is marked out of service, with the same effect. (The connection must be released before it can be placed out of service; you can request RELEASED in the same command if necessary.)
- For other types of connection, activity is quiesced. Tasks using a session on the connection are allowed to complete, but no additional tasks are allowed to use the connection. (Tasks running under the execution diagnostic facility (EDF) complete, but without EDF.) If the connection is LUTYPE6.1, you can specify PURGE or FORCEPURGE to terminate any such tasks immediately. Once the connection is quiesced, the sessions are placed out of service. CICS then releases the connection if it is currently in ACQUIRED status.

ZCPTRACING(*cvda***) (VTAM only)**
specifies whether sessions on this connection are to be traced when CICS tracing for VTAM sessions is turned on (this is the tracing controlled by the TC option in the SET TRACETYPE command). CVDA values are:

NOZCPTRACE
: Sessions are not to be traced.

ZCPTRACE
: Sessions are to be traced.

Conditions

INVREQ
RESP2 values:

1 CONNSTATUS (or ACQSTATUS) was specified for a non-APPC connection.
2 The CONNSTATUS (or ACQSTATUS) value or the SERVSTATUS value would result in a connection that was both ACQUIRED and OUTSERVICE.
3 CONNSTATUS (or ACQSTATUS) has an invalid CVDA value.
4 SERVSTATUS has an invalid CVDA value.

5 NOTPENDING was specified for a non-APPC connection.
6 PURGETYPE was specified for a non-VTAM connection.
7 PURGETYPE has an invalid CVDA value.
8 PENDSTATUS has an invalid CVDA value.
11 The connection is remote.
13 ZCPTRACING has an invalid CVDA value.
16 The connection is defined as an indirect link.
17 CONNSTATUS (or ACQSTATUS) was specified, but CICS was initialized without support ISC support (ISC=NO system initialization parameter).
18 NOTPENDING was specified for a connection which has completed XLN processing.
19 ACQUIRED was specified for a connection in FREEING status.
22 Other options were specified with CANCEL or FORCECANCEL.
23 The CONNECTION value is the name of the local CICS system, not a CONNECTION definition.

IOERR

RESP2 values:

10 Unexpected error

NORMAL

RESP2 values:

50 AIDs were successfully cancelled.
51 No AIDs were cancelled.

NOTAUTH

RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

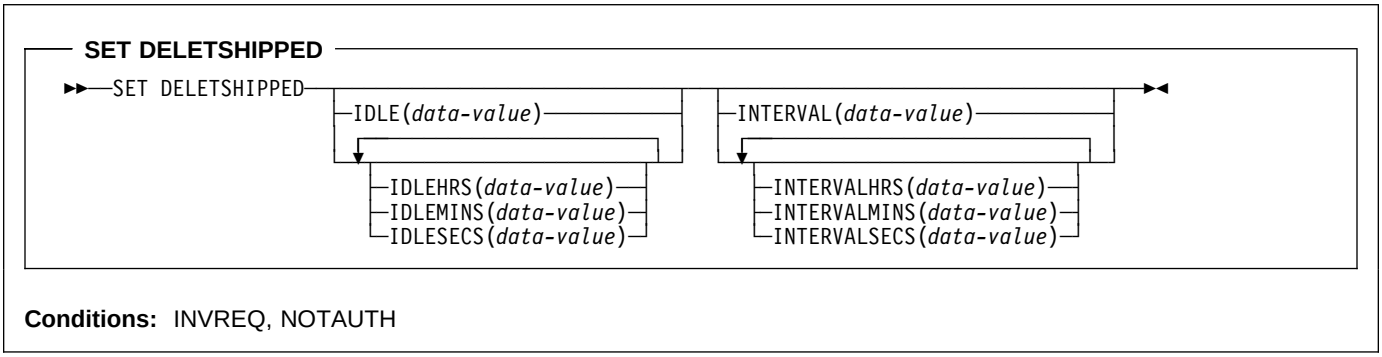
SYSIDERR

RESP2 values:

9 The connection could not be found.

SET DELETSHIPPED

Change the system settings that control automatic deletion of shipped terminal definitions.



Conditions: INVREQ, NOTAUTH

Context

The SET DELETSHIPPED command allows you to change values that control the timeout mechanism that CICS provides for deleting definitions of shipped terminals that are inactive. A shipped definition is inactive if the terminal has not been used locally for a specified period of time and no task is waiting to be attached which requires the terminal. For more information about shipped definitions, see the *CICS Intercommunication Guide* and the *CICS Resource Definition Guide*.

You can change both the length of time a shipped terminal must remain inactive before being eligible for deletion (IDLE time), and the interval at which CICS checks for such terminals (the INTERVAL). Time values can be expressed in several different ways:

- A 4-byte packed decimal composite, in the format **0hhmmss+**, where the hours (hh) are in the range 0–99, and minutes (mm) and seconds (ss) are both from 0–59. Use the IDLE and INTERVAL options for this format.
- With separate values for hours, minutes and seconds. Use IDLEHRS, IDLEMINS, and IDLESECS instead of IDLE for this format, and INTERVALHRS, INTERVALMINS, and INTERVALSECS instead of INTERVAL. You can use any combination of hours, minutes, and seconds. If you use only one, the time value must be *less* than 100 hours, so that the range for hours is 0–99, the range for minutes is 0–5999, and the range for seconds is 0–359999. If you use two or three, the range is the same for hours, but minutes and seconds must both be in the range 0–59.

For example, to specify an IDLE time of 1 hour and 15 minutes, you could use any of the following:

IDLE(011500)
IDLEHRS(1) IDLEMINS(15)
IDLEMINS(75)
IDLESECS(4500).

Options

IDLE(*data-value***)**
specifies the idle time, as a 4-byte packed decimal value in the form "**0hhmmss**+". Idle time is the minimum time that a terminal must be inactive to be eligible for deletion.

See the notes at the beginning of this command description for the range of values allowed.

IDLEHRS(*data-value***)**
specifies, as a fullword binary value, the idle time in hours (when used alone) or the hours component of the idle time (when used with IDLEMINS or IDLESECS). See the IDLE option of this command.

IDLEMINS(*data-value***)**
specifies, as a fullword binary value, the idle time in minutes (when used alone) or the minutes component of the idle time (when used with IDLEHRS or IDLESECS). See the IDLE option of this command.

IDLESECS(*data-value***)**
specifies, as a fullword binary value, the idle time in seconds (when used alone) or the seconds component of the idle time (when used with IDLEHRS or IDLEMINS). See the IDLE option of this command.

INTERVAL(*data-value***)**
specifies, as a 4-byte packed decimal value in the form "**0hhmmss**+", the interval between invocations of the timeout delete mechanism.

When you change the checking interval, the next interval is measured from *the time the command is issued*, **not** from the previous invocation or CICS startup. If you want immediate deletion, use the PERFORM DELETSHIPPED command, described on page 135.

See the notes at the beginning of this command description for the range of values allowed.

INTERVALHRS(*data-value***)**
specifies, as a fullword binary value, the invocation interval in hours (when used alone) or the hours

component of the interval (when used with IDLEMINS or IDLESECS). See the INTERVAL option of this command.

INTERVALMINS(*data-value***)**
specifies, as a fullword binary value, the invocation interval in minutes (when used alone) or the minutes component of the interval (when used with INTERVALHRS or INTERVALSECS). See the INTERVAL option of this command.

INTERVALSECS(*data-value***)**
specifies, as a fullword binary value, the invocation interval in seconds (when used alone) or the seconds component of the interval (when used with INTERVALHRS or INTERVALMINS). See the INTERVAL option of this command.

Conditions

INVREQ
RESP2 values:

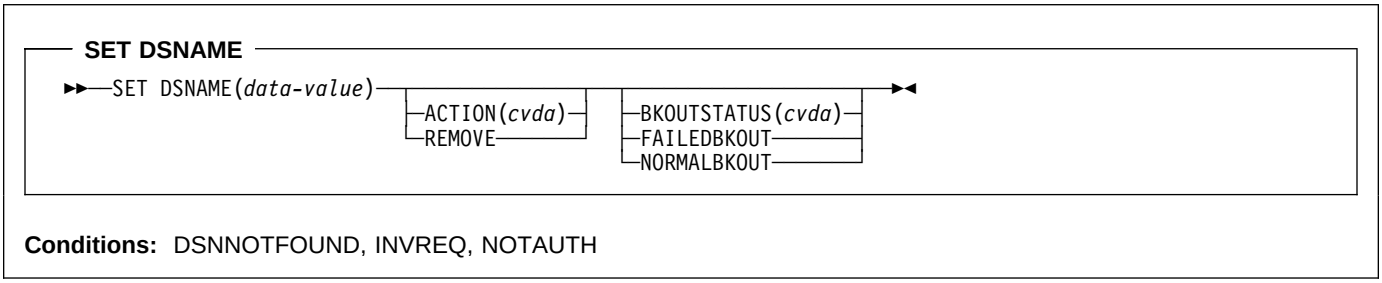
1 The INTERVAL value is invalid.
2 The INTERVALHRS value is not in the range 0–99.
3 The INTERVALMINS value is invalid.
4 The INTERVALSECS value is invalid.
5 The IDLE value is invalid.
6 The IDLEHRS value is not in the range 0–99.
7 The IDLEMINS value is invalid.
8 The IDLESECS value is invalid.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

SET DSNAME

Change the backout status of a data set or remove a data set from CICS.



Conditions: DSNNOTFOUND, INVREQ, NOTAUTH

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The SET DSNAME command allows you to change the backout status of a VSAM data set associated with a FILE resource definition. You may need to do this after a failure that requires forward recovery, batch backout or other recovery processing.

For this function:

- At least one FILE definition must point to the data set, through the DSNAME option in the resource definition or the file-id value on the associated JCL DLBL statement.
- All files referring to the data set must be closed at the time of the command, but at least one must have been opened during the current execution of CICS.
- The data set must be a base VSAM data set.

SET DSNAME has a further function, REMOVE, which you can use for DAM data sets and VSAM paths, as well as base VSAM data sets. This option is for data sets that have been associated with a FILE definition during the current execution of CICS, but which are no longer needed, and to which *no* CICS files currently refer. REMOVE deletes control blocks for the data set from storage and the CICS global catalog, without changing associated FILE definitions (use the DISCARD FILE command if you no longer need a file definition).

To determine whether a data set meets the conditions for this command, you can use the INQUIRE DSNAME command to determine the backout status and number of files associated, and INQUIRE FILE in browse mode to look for open files. SET FILE can be used to close a file or change the data set name.

Options

ACTION(*cvda***)**
specifies an action to be taken on the data set. CVDA values are:

REMOVE
The data set is no longer required on your CICS system. Control blocks for it are to be discarded from memory and the CICS global catalog.

You can remove a data set whether it was associated with a file dynamically (in the DSNAME of the FILE definition) or through JCL. In either case, you must first dissociate the data set from the file by setting DSNAME to a value other than the name of the data set. In addition, the data set must have a backout status of NORMALBKOUT.

No other options can be used with REMOVE.

BKOUTSTATUS(*cvda***) (VSAM only)**
specifies the backout status value which CICS is to assign to the data set. CVDA values are:

FAILEDBKOUT
Backout is required.

NORMALBKOUT
Backout has been completed or was not necessary.

Note: You cannot apply this option to a data set that is currently in FAILINGBKOUT status.

DSNAME(*data-value***)**
specifies the 44-character name of the data set whose status is to be changed.

Conditions

DSNNOTFOUND
RESP2 values:

1 CICS does not have a control block for this data set.
15 CICS does not have a control block for this data set (this value occurs only when RECOVERED is specified).

INVREQ
RESP2 values:

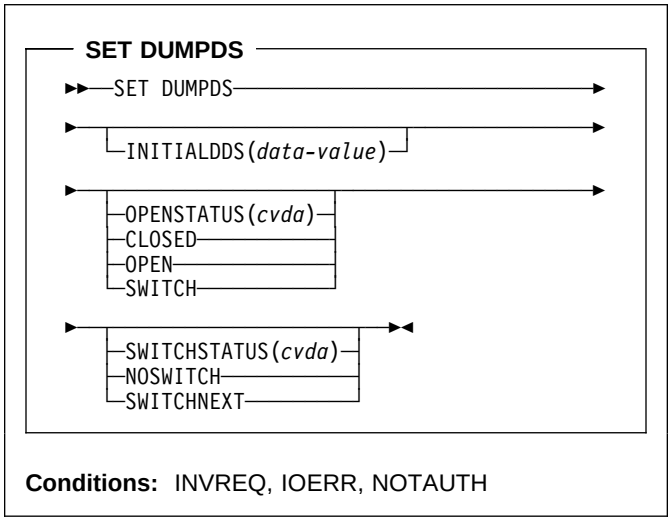
2 BKOUTSTATUS has an invalid CVDA value.
3 ACTION has an invalid CVDA value.
4 BKOUTSTATUS was specified for a data set not opened during this CICS session.
5 NORMALBKOUT has been requested for a data set that is in a FAILINGBKOUT state.
6 FAILEDBKOUT has been requested for a data set that is in a FAILINGBKOUT state.
7 BKOUTSTATUS was specified for a DAM data set.
8 BKOUTSTATUS was specified for a path.
9 BKOUTSTATUS was specified for a data set to which an open file refers.
10 REMOVE was specified for a data set to which a FILE definition refers.
11 REMOVE was specified for a VSAM data set not in NORMALBKOUT status.
12 REMOVE was specified with BKOUTSTATUS.
13 REMOVE was specified for a data set in use by another INQUIRE or SET DSNAME command, or by CICS file control processing.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

SET DUMPDS

Change the status of the transaction dump data sets.



Conditions: INVREQ, IOERR, NOTAUTH

For more information about the use of CVDAs, see “CICS-value data areas (CVDAs)” on page 7.

Context

The SET DUMPDS command allows you to change the status of CICS transaction dump data sets. Normally, either there is one of these, known as the ‘A’ dump data set, or there are two, ‘A’ and ‘B’. One is “active” (receiving dumps) and the other, if there are two, is “inactive” (standby). Specifically, you can:

- Open or close the active data set
- Switch the roles of the active and standby data sets
- Request CICS to switch automatically when the active data set is full
- Specify which data set will be active the next time CICS is initialized.

Note: It is possible to bring up a CICS system without any transaction dump data sets. In this situation, only the last two functions are available.

Control does not return to the task issuing the command until the requested change has been made.

Options

INITIALDDS(*data-value***)**
specifies, as a 1-character value, which dump data set is to be active first on subsequent warm or emergency restarts. This value is recorded in the CICS global catalog and overrides the previous value, which is set initially by the DUMPDS system initialization parameter.

The values permitted are A, B, and X. X means that CICS is to use the data set that was not active when CICS last terminated (normally or abnormally); it corresponds to the AUTO setting for the DUMPDS system initialization parameter (described in the *CICS System Definition Guide*).

OPENSTATUS(*cvda***)**
specifies actions to be taken on the transaction dump data sets. CVDA values are:

CLOSED
The active CICS dump data set is to be closed.

OPEN
The active CICS dump data set is to be opened.

SWITCH
The roles of the dump data sets are to be switched, if there are two. The data set that is currently active is to become standby, and closed if it is open. The current standby is to become the active data set, and opened if closed.

If you attempt to change the open status of a data set that does not exist, an IOERR exception condition occurs. This can happen if you specify SWITCH when there is only one dump data set, or if you specify any OPENSTATUS value when there are no dump data sets.

SWITCHSTATUS(*cvda***)**
specifies whether CICS is to switch active data sets automatically the next time the current dump data set fills. The SWITCHSTATUS value is recorded in the CICS global catalog, and therefore is remembered over warm and emergency restarts. (It is set initially by the DUMPSW system initialization parameter, described in the *CICS System Definition Guide*.) An automatic switch occurs only once; another SET DUMPDS SWITCHNEXT command is required after each switch to maintain automatic switching. CVDA values are:

NOSWITCH
The data sets are not be switched.

SWITCHNEXT
The data sets are to be switched. (SWITCHNEXT has no effect unless there are two dump data sets at the time the active one fills.)

Conditions

INVREQ
RESP2 values:

1 INITIALDDS has an invalid value.
2 SWITCHSTATUS has an invalid CVDA value.
3 OPENSTATUS has an invalid CVDA value.

IOERR
RESP2 values:

4 OPEN or SWITCH caused an error opening a data set.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

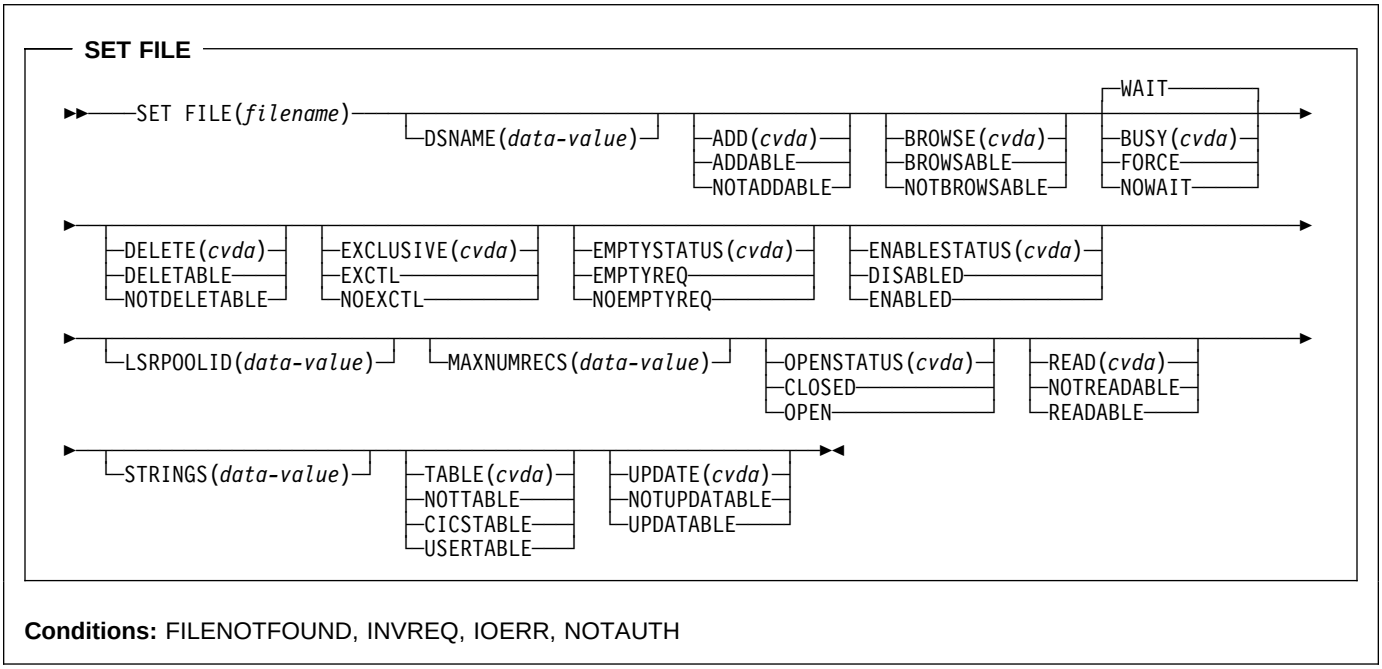
Examples

```
EXEC CICS SET DUMPDS
              INITIALDDS('A')
              SWITCH
              NOSWITCH
```

This example tells CICS that the A dump data set is to be active first on subsequent warm and emergency restarts. The OPENSTATUS setting of SWITCH makes the currently active dump data set inactive, and the currently inactive dump data set active. The NOSWITCH option tells CICS that when the (new) active dump data set is full, there is to be no automatic switch to the inactive dump data set.

SET FILE

Change the definition or status of a file.



Conditions: FILENOTFOUND, INVREQ, IOERR, NOTAUTH

Note: This command replaces the SET DATASET command. For compatibility, the translator accepts the keywords DATASET for FILE, OBJECTNAME for DSNAME and EMPTY for EMPTYREQ, but you should use the new keywords in new applications. For more information about the use of CVDAs, see “CICS-value data areas (CVDAs)” on page 7.

Context

The SET FILE command allows you to change some elements of both the definition and the current status of a file. You can use it for any FILE definition installed on your CICS system except one defined as remote.

CICS requires the file to have an OPENSTATUS value of CLOSED and an ENABLESTATUS of either DISABLED or UNENABLED before changing the value of any other option. You can combine changes to OPENSTATUS and ENABLESTATUS with those to other options in most cases, however, because CICS applies option values in the following order if they are present: CLOSED, DISABLED, others, OPEN, ENABLED.

Options

ADD(*cvda*)
specifies whether records can be added to the file. CVDA values are:

ADDABLE
New records are to be allowed. (ADDABLE implies READABLE; see the READ option.)

NOTADDABLE
New records are not to be allowed.

BROWSE(*cvda*)
specifies whether the file can be browsed (read sequentially). CVDA values are:

BROWSABLE
Browsing is to be allowed. (BROWSABLE implies READABLE; see the READ option.)

NOTBROWSABLE
Browsing is not to be allowed.

BUSY(*cvda*)
specifies what CICS is to do if tasks that have issued one or more recoverable requests within the current unit-of-work are still in execution when you issue a SET FILE command with CLOSED or DISABLED specified. (The BUSY option is ignored unless one of these options is present.) CVDA values are:

FORCE
CICS is to terminate abnormally all tasks using the file, close or disable it as requested, and then

return control to the task that issued the command.

Note: The FORCE option terminates tasks with the CICS mechanism used for a SET TASK FORCEPURGE command. Data integrity is not guaranteed, and under certain circumstances, CICS itself can terminate abnormally. See page 173 for details and precautions about using this option.

NOWAIT
: NOWAIT has the same effect as WAIT, except that CICS returns control to the task that issued the command immediately and processes the SET FILE request asynchronously.

WAIT
: CICS is to quiesce activity on the file, close or disable it as requested, and then return control to the task that issued the command. During quiesce, tasks that have used the file already are allowed to complete, but tasks that have not yet used it are denied access.

Note: CICS rejects both FORCE and WAIT if the task issuing the SET FILE command has used the file, because FORCE would abend the task, and WAIT would cause a permanent wait.

DELETE(*cvda*) (VSAM only)
specifies whether records can be deleted from the file. CVDA values are:

DELETABLE
: Deletions are to be allowed. (DELETABLE implies READABLE; see the READ option.)

NOTDELETABLE
: Deletions are not to be allowed.

DSNAME(*data-value*) (VSAM ONLY)
specifies the name of the VSAM data set associated with this FILE definition. The name is composed of 1 to 44 characters, valid characters are A-Z, 0-9, @, #, $, ., and -. Names consisting of more than eight characters must be segmented by periods; 1-8 characters may be specified between periods. The first character of any name or name-segment must be chosen from A-Z, @, #, and $. The last character of a name cannot be a period, and the name may not contain two consecutive periods.

CICS allocates this data set dynamically when the file is opened if there is no JCL DLBL statement for the file. If there is a DLBL statement, the data set name there takes precedence, and this option has no effect during the current execution of CICS, except to enable a SET DSNAME REMOVE command (see page 152).

Note: If the file is no longer needed, but you do not wish to discard the definition entirely, you can specify a DSNAME that starts with a null character (X'00'). This value signals CICS not to build control blocks that it ordinarily builds for the data set associated with a file.

EMPTYSTATUS(*cvda*) (VSAM only)
specifies whether the data set to which the file refers should be initialized to empty when the file is opened. It is meaningful only if the associated data set is defined as reusable. CVDA values are:

EMPTYREQ
: The data set is to be set to empty.

Note: If you specify this value for a file which points to a nonreusable data set, CICS raises an exception when the file is next opened.

NOEMPTYREQ
: The data is not to be set to empty.

ENABLESTATUS(*cvda*)
specifies whether application programs can access the file. CVDA values are:

DISABLED
: The file is to be unavailable.

Note: Setting a file DISABLED prevents any task from using the file that has not used it already. If there are tasks that have used the file, the BUSY option determines whether CICS will permit them to complete and when the task that issued the SET FILE command will regain control (see the BUSY option of this command).

ENABLED
: The file is to be available.

EXCLUSIVE(*cvda*) (DAM only)
specifies whether records on this file should be placed under exclusive control when a read for update is issued. CVDA values are:

EXCTL
: Records are to be under exclusive control.

NOEXCTL
: Records are not to be under exclusive control.

FILE(*filename*)
specifies the 7-character name of the file whose definition or status is to be changed. See “Argument values” on page 4 for more information on coding *filename*.

LSRPOOLID(*data-value*) (VSAM only)
specifies, as a fullword binary value, whether the file is to use VSAM local shared resources (LSR) and if so, the number of the pool to which it is to belong. Pool numbers are in the range 1–15. A value of zero means that the file is not to share buffers. (Data tables must use LSR, and thus zero is not allowed for a table.)

MAXNUMRECS(*data-value*) (VSAM only)
specifies, as a fullword binary value, the maximum number of records the data table for this file can hold. The value must be in the range 16 to 16777215 (16MB–1).

Note: MAXNUMRECS is meaningful only for data tables (files defined with a TABLE value of CICSTABLE or USERTABLE), and consequently, an INQUIRE FILE command on a file that is not a table may return a MAXNUMRECS value of zero, even though you are not allowed to set the value to zero.

OPENSTATUS(*cvda***)**
specifies whether the data set associated with the file is to be open or closed. CVDA values are:

CLOSED
The data set is to be closed.

Note: Setting a file CLOSED prevents any task from using the file that has not used it already. If there are tasks that have used the file, the BUSY option determines whether CICS will permit them to complete and also when the task that issued the SET FILE command will regain control (see the BUSY option of this command).

OPEN
The data set is to be open.

READ(*cvda***)**
specifies whether records can be read from the file when no other processing options are allowed (reading is automatically permitted if the file is defined as ADDABLE, BROWSABLE, DELETABLE, or UPDATABLE, even when NOTREADABLE). CVDA values are:

NOTREADABLE
Read requests are to be rejected.

READABLE
Read requests are to be allowed.

STRINGS(*data-value***) (VSAM only)**
specifies, as a fullword binary value, the maximum number of concurrent operations to allow on this file, in the range 1–255.

TABLE(*cvda***) (VSAM only)**
specifies whether the file is to be a data table and if so, the type of table. CVDA values are:

CICSTABLE
The file is to be a CICS-maintained data table.

NOTTABLE
The file is not to be a data table.

USERTABLE
The file is to be a user-maintained data table. The record format for the file must be VARIABLE if you specify this value.

Note: MAXNUMRECS must be greater than zero for either a CICS- or user-maintained table.

UPDATE(*cvda***)**
specifies whether records in the file can be updated (rewritten). CVDA values are:

NOTUPDATABLE
Updates are not to be allowed.

UPDATABLE
Updates are to be allowed. (UPDATABLE implies READABLE; see the READ option.)

Conditions

FILENOTFOUND
RESP2 values:

18 The file cannot be found.

INVREQ
RESP2 values:

1 The file is remote.
2 The file is not closed.
3 The file is not in DISABLED or UNENABLED status.
4 ADD has an invalid CVDA value.
5 BROWSE has an invalid CVDA value.
6 BUSY has an invalid CVDA value.
7 DELETE has an invalid CVDA value.
9 EMPTYSTATUS has an invalid CVDA value.
10 LSRPOOLID was specified for a non-VSAM file.
11 The LSRPOOLID value is outside the valid range, which is from 0 to 15.
12 READ has an invalid CVDA value.
13 The STRINGS value is out of range, or the file is non-VSAM.
14 UPDATE has an invalid CVDA value.
15 The data set associated with the file cannot be opened because it has had a backout failure.
16 OPENSTATUS has an invalid CVDA value.
17 ENABLESTATUS has an invalid CVDA value.
19 DELETE was specified for a non-VSAM file.
20 EMPTYSTATUS was specified for a non-VSAM file.
21 CLOSED or DISABLED has been specified, but this transaction has an incomplete request against the file.
22 ENABLED was specified for a file that is currently in DISABLING or UNENABLING status.
23 EXCLUSIVE has an invalid CVDA value.
24 EXCLUSIVE was specified for a non-DAM file.
28 OPEN, CLOSE, ENABLE, or DISABLE was specified but a global user exit running at exit point XFCSREQ instructed CICS not to carry out the command.
29 TABLE has an invalid CVDA value.
30 The MAXNUMRECS value is out of range.
31 TABLE was specified for a non-VSAM file.
32 The TABLE option is invalid for a file defined with the REUSE option.
33 The TABLE option is invalid for a file defined as UNBLOCKED.
34 MAXNUMRECS was specified for a non-VSAM file.

35 The MAXNUMRECS option is invalid for a file defined with the REUSE option.
36 The MAXNUMRECS option is invalid for a file defined as UNBLOCKED.
37 The TABLE or LSRPOOLID value will result in an inconsistent combination.
38 The TABLE or MAXNUMRECS value will result in an inconsistent combination.
39 USERTABLE was specified but the record format is not VARIABLE.
68 DSNAME or OBJECTNAME specified for a non-VSAM file.
69 DSNAME has an invalid value.

IOERR
RESP2 values:

***** OPEN has failed in VSAM; the RESP2 field contains the VSAM response code.
***** CLOSE has failed in VSAM; the RESP2 field contains the VSAM response code.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.

Examples

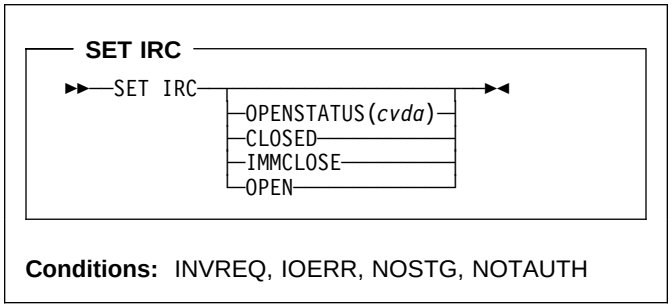
```
EXEC CICS SET FILE ('FILE12')
             WAIT
             CLOSED
             DISABLED
             DELETABLE
             LSRPOOLID(7)
             STRINGS(50)

EXEC CICS SET FILE ('FILE12')
             OPEN
             ENABLED
```

The first command tells CICS to disable the file FILE12, close it, and then change its definition to permit deletions, use LSR pool 7, and allow up to 50 concurrent operations. If tasks are using the file at the time of the SET command, CICS will first set the ENABLESTATUS to DISABLING and allow these tasks to finish before completing the command and returning control to the task that issued it.

The second SET FILE command reopens the file and makes it available for use.

SET IRC

Open or close interregion communication.



Conditions: INVREQ, IOERR, NOSTG, NOTAUTH

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The SET IRC command allows you to start (open) or stop (close) interregion communication (IRC) in your CICS region. IRC must be open for your region to communicate with another CICS region using a multiregion operation (MRO) connection or for a non-CICS client region to use your CICS over an external CICS interface (EXCI) connection.

Support for this type of communication must be specified at CICS startup (in the ISC initialization option), and at least one CONNECTION resource must be defined with an ACCESSMETHOD value indicating MRO; otherwise exception conditions occur when you attempt to open IRC. The *CICS Intercommunication Guide* describes the various requirements.

Options

OPENSTATUS(*cvda***)**
specifies whether IRC communications should be started (open) or stopped (closed), and if CICS needs to stop IRC, whether tasks using MRO should be allowed to complete first. CVDA values are:

CLOSED
IRC is to be stopped. If it is currently open, CICS is to quiesce all MRO activity and then close IRC. Tasks using CICS-to-CICS MRO sessions and EXCI sessions are allowed to complete before closure, but new tasks requiring IRC are not initiated.

IMMCLOSE
IRC is to be stopped. If currently open, CICS is to terminate abnormally any tasks using IRC immediately and then close IRC.

OPEN
IRC is to be started. If currently closed, CICS is to open it.

Conditions

INVREQ
RESP2 values:

1 A program required for IRC, DFHCRSP, is unavailable.
2 OPENSTATUS has an invalid CVDA value.
4 CICS was initialized without IRC support (ISC=NO system initialization parameter).
5 No connection has been defined.
6 The VTAM APPLID for this CICS is blanks; IRC requires a non-blank APPLID.
7 Another CICS using IRC has the same VTAM APPLID as this one; unique names are required.
8 IRC rejected the open of this CICS because it had already reached the maximum number of logons.
16 Unable to locate DFHSCTE program.
18 IRC support (the DFHIRP module) is below the level required by this CICS system.

IOERR
RESP2 values:

12 IRC initialization failed.
13 The logon to IRC failed.
14 An attempt to attach the node error transaction, CSNC, failed.
15 An error occurred closing IRC.

NOSTG
RESP2 values:

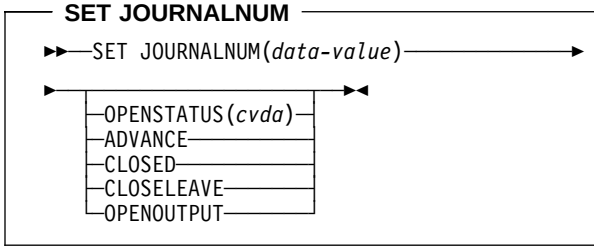
9 Insufficient CICS DSA storage.
10 Insufficient system GETVIS(SVA) storage
11 Insufficient partition GETVIS storage

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

SET JOURNALNUM

Open or close a journal, or change the current data set.



Conditions: ILLOGIC, INVREQ, IOERR, JIDERR, NOTAUTH

For more information about the use of CVDAs, see “CICS-value data areas (CVDAs)” on page 7.

Context

The SET JOURNALNUM command allows you to open or close a journal, to switch or reset a disk journal, or to change the volume of a tape journal. The options that apply depend on the type of the journal, as noted in the descriptions below. See the JTYPE option of the INQUIRE JOURNALNUM command or the *CICS Resource Definition Guide* for more information about journal types.

SET JOURNALNUM commands apply to the system log (Journal 1) as well as user-defined journals. However, you should not set the log CLOSED, because any task that writes to the log thereafter will fail. If CICS attempts to back out the failing task, it will not be able to write the required records to the log, and will abend. If you need to change the data set being used for the log, use the ADVANCE option instead.

Options

JOURNALNUM(*data-value***)**
specifies, as a halfword binary value, the number of the journal that you are changing. Journal numbers are in the range 1–99. Journal 1 is the CICS system log.

OPENSTATUS(*cvda***)**
specifies the change to be made to the journal. CVDA values are:

ADVANCE
If the journal is on tape, CICS closes the current volume and opens the next one.

For a DISK2 journal, the roles of the two data sets are switched. The data set that CICS is currently writing is closed and becomes the standby, and the standby is opened and becomes the current data set.

For a DISK1 journal, the data set is closed and reopened, so that subsequent writes to the journal reuse the data set from the beginning.

ADVANCE cannot be used for a DMF journal and causes an exception condition.

In all cases, the journal must be open when ADVANCE is requested.

CLOSED
: The journal is closed, if open. If it is a tape journal, the current volume is rewound.

CLOSELEAVE
: The journal is closed, if open. CLOSELEAVE has the same effect as CLOSED for a disk journal, but for a tape journal, it does not rewind the volume.

OPENOUTPUT
: The journal is opened for output, if not already open. If you have specified deferred opening in a definition of a journal, SET JOURNALNUM OPENOUTPUT can be used to open it, which must be done for the journal to be used in CICS.

Conditions

ILLOGIC

RESP2 values:

6 ADVANCE is specified for a journal that is not open.

INVREQ

RESP2 values:

2 OPENSTATUS has an invalid CVDA value.
3 The OPENSTATUS value is not valid for this type of journal.

IOERR

RESP2 values:

5 An error has occurred in the device, the medium, or the access method.
7 Journal archiving control data set (JACD) error.
8 Journal archiving control data set (JACD) logic error.

JIDERR

RESP2 values:

1 The journal cannot be found.

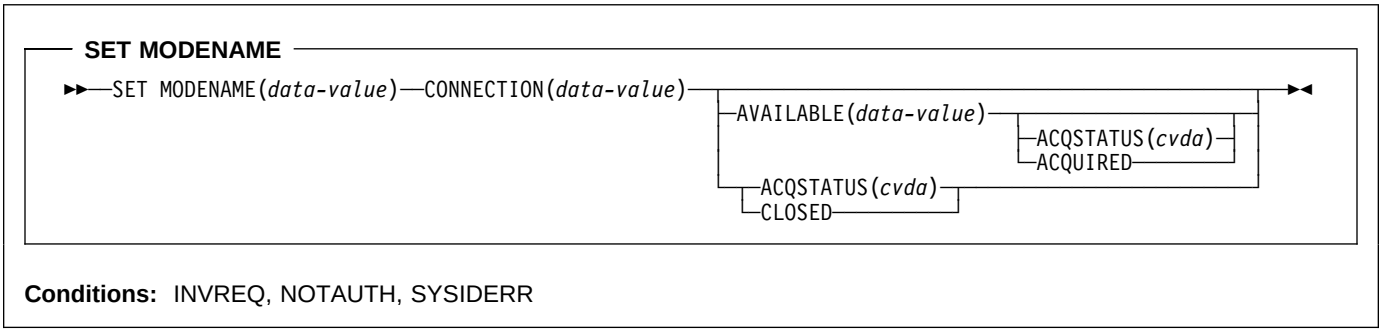
NOTAUTH

RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.

SET MODENAME

Change the number of sessions in an APPC session group.



Conditions: INVREQ, NOTAUTH, SYSIDERR

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The SET MODENAME command enables you to increase or decrease the number of sessions **available** (bound) in a session group on a particular APPC connection. You identify the group to be changed by the MODENAME and CONNECTION values in its RDO SESSIONS resource definition, rather than the name of the RDO SESSIONS resource definition. You need both values because MODENAMEs are not necessarily unique across connections.

SET MODENAME applies only to parallel session groups on an APPC connection on which CICS is already in session with its partner system, and only to groups created with a SESSIONS resource definition (not to SNASVCMG LU services manager sessions). The changes last only until the connection is released or the number of sessions is changed again.

If you increase the number of sessions, you can specify whether or not CICS should acquire the additional sessions; if you decrease the number, CICS unbinds the excess sessions automatically. If more than the target number of sessions are in use at the time of the command, CICS allows activity to quiesce before unbinding. Tasks using a session on the connection are allowed to complete, but new tasks requiring a session are not started until activity drops below the new limit.

Note: CICS uses a task that executes LU Services Manager transaction CLS1 to acquire or release sessions on parallel-session APPC connections. Data is passed to the task in a temporary storage queue whose name begins with the default prefix of DF. If your system defines queues named starting with DF as recoverable, CICS cannot initiate this task until a subsequent commit on the part of the task that issued the SET MODENAME command (either a SYNCPOINT command an implicit syncpoint).

Options

ACQSTATUS(*cvda***)**
specifies either that additional sessions are to be acquired if the AVAILABLE value increases the number, or that the number of available sessions is to be set to zero. CVDA values are:

ACQUIRED
Additional sessions, if any, are to be acquired.

CLOSED
The number of sessions is to be set to zero. CLOSED is equivalent to specifying AVAILABLE (0) and should not be specified with AVAILABLE. This value prevents either of the connected systems from using a session in the group.

AVAILABLE(*data-value***)**
specifies, as a halfword binary value, the number of sessions which are to be available for use at any one time. The range for this value is from zero to the MAXIMUM value specified in the RDO SESSIONS resource definition; you can determine this limit, if necessary, with an INQUIRE MODENAME command.

CONNECTION(*data-value***)**
specifies the 4-character name of the connection for which this group of sessions is defined (from the CONNECTION value in the RDO SESSIONS resource definition).

MODENAME(*data-value***)**
specifies the 8-character MODENAME value of the group of sessions that you are modifying (from its RDO SESSIONS resource definition).

Conditions

INVREQ
RESP2 values:

3 MODENAME 'SNASVCMG' was specified.
4 The AVAILABLE value is out of range.

5 AVAILABLE was specified but CICS is not in session on this connection.
6 CLOSED was specified with AVAILABLE.
7 ACQSTATUS has an invalid CVDA value.
8 This is not a parallel-session APPC group.
9 ACQUIRED was specified but CICS is not in session on this connection.

NOTAUTH
RESP2 values:

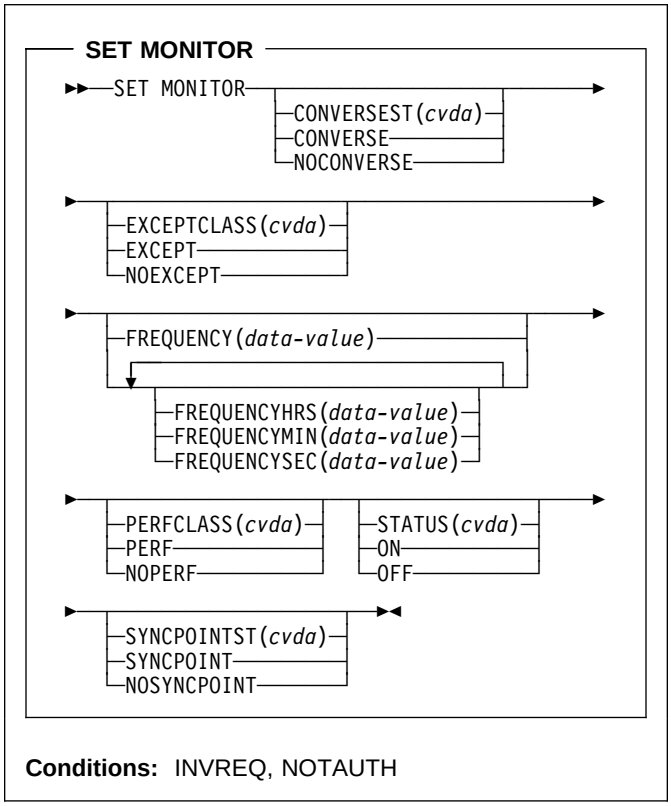
100 The user associated with the issuing task is not authorized to use this command.

SYSIDERR
RESP2 values:

1 The connection cannot be found.
2 The MODENAME within the connection cannot be found.

SET MONITOR

Change CICS monitoring options.



Conditions: INVREQ, NOTAUTH

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The SET MONITOR command allows you to switch CICS monitoring on or off, to modify the settings of the monitoring options, and to select the classes of monitoring data to be recorded.

CICS monitoring is controlled by a master switch (the STATUS option). Monitor data is accumulated only while the STATUS option has the value ON, and only for tasks that **begin** while STATUS is ON.

When monitoring is active, CICS accumulates two types of data for each individual task:

- Performance data (types and counts of CICS commands, timings, and so on.)
- Exception data (waiting for a VSAM string, for example)

Two additional switches determine which of these classes of monitor data are recorded (written out to the DMF data set). Exception data is recorded only if EXCEPTCLASS is EXCEPT, and performance data only if PERFCLASS is PERF. For an individual task, class data is recorded only if

the class switch is on both at the time the task **starts** and at the time that class of data is written out.

Exception class data is written at the end of the event to which the exception corresponds. Performance class data is written only at these specific times:

- At end of task
- At a terminal-receive wait, if the CONVERSEST value is CONVERSE
- At a frequency interval, if the interval is not zero
- At a syncpoint, if the SYNCPOINTST value is SYNCPOINT
- When a user event monitoring point with the DELIVER option occurs

If you change STATUS from ON to OFF, CICS stops accumulating and recording monitor data. Data for tasks in flight that is not already recorded is lost even if you turn monitoring back on before end of task.

Furthermore, if you are recording performance data, you should specify NOPERF in any command that sets monitoring OFF, to ensure that buffers containing recorded data for completed tasks are flushed; some of this data can be lost otherwise.

If you leave STATUS on but turn one of the recording options off and then back on during a task, however, data loss depends on the class, as follows:

- Exception data is not written out for exceptions that occur while EXCEPTCLASS is NOEXCEPT but, if you change back to EXCEPT, subsequent exceptions are recorded.
- If you change PERFCLASS from PERF to NOPERF during execution of a task, performance data already accumulated is recorded, but then recording stops. Accumulation continues, however. Therefore, if you change back to PERF before task end, no data is lost unless a monitor point with the DELIVER option occurs while NOPERF is in force. (DELIVER resets the counters.) The other conditions that ordinarily cause writing—syncpoint with a SYNCPOINTST value of SYNCPOINT, terminal receive wait with a CONVERSEST value of CONVERSE, or expiration of the frequency interval—do not reset the counts while recording is off, so that no counts are lost, although they may be combined.

Options

CONVERSEST(*cvda***)**
specifies how CICS is to record performance data for conversational tasks (tasks that wait for terminal or session input).

CONVERSE
: CICS is to produce a performance class record each time the task waits for terminal input as well as at task end, representing the part of the task since the previous wait (or task start). (Waits occur during execution of a CONVERSE command or a RECEIVE command that follows a SEND.)

NOCONVERSE
: CICS is to accumulate performance data across terminal waits and produce a single performance class record.

EXCEPTCLASS(*cvda***)**
specifies whether the exception class of monitoring data is to be recorded when monitoring is active. CVDA values are:

EXCEPT
: Exception data is to be recorded.

NOEXCEPT
: Exception data is not to be recorded.

FREQUENCY(*data-value***)**
specifies the interval at which CICS is to produce performance class records for long-running tasks. If a task runs longer than the frequency interval, CICS records its performance data separately for each interval or fraction.

The frequency interval can be expressed in several ways:

- A 4-byte packed decimal composite, in the format **"0hhmmss+"**, using the FREQUENCY option.
- With separate hours, minutes, and seconds, using the FREQUENCYHRS, FREQUENCYMIN, and FREQUENCYSEC options. You can use these options singly or in any combination.

Whichever method you use, the interval value must be either zero or in the range from 15 minutes to 24 hours. Zero means CICS is to produce performance records only at task end, regardless of the length of the task.

In addition, if you use FREQUENCY or more than one of the separate options, the minutes and seconds portions of the value must not be greater than 59 (FREQUENCYMIN or FREQUENCYSEC used alone can exceed 59). For example, you could express an interval of 1 hour and 30 minutes in any of the following ways:

- FREQUENCY(13000)
- FREQUENCYHRS(1), FREQUENCYMIN(30)
- FREQUENCYMIN(90)
- FREQUENCYSEC(5400)

FREQUENCYHRS(*data-value***)**
specifies the hours component of the frequency interval, in fullword binary form (see the FREQUENCY option of this command).

FREQUENCYMIN(*data-value***)**
specifies the minutes component of the frequency interval, in fullword binary form (see the FREQUENCY option of this command).

FREQUENCYSEC(*data-value***)**
specifies the seconds component of the frequency interval, in fullword binary form (see the FREQUENCY option of this command).

PERFCLASS(*cvda***)**
specifies whether the performance class of monitoring data is to be recorded when monitoring is active. CVDA values are:

NOPERF
Performance data is not to be recorded.

PERF
Performance data is to be recorded.

STATUS(*cvda***)**
specifies whether CICS monitoring is to be active or disabled. CVDA values are:

OFF Monitoring is not to occur. No data will be accumulated or written out, irrespective of the settings of the monitoring data classes.

ON Monitoring is to be active. Data will be accumulated for all classes of monitor data, and written out for those classes that are active.

SYNCPOINTST(*cvda***)**
specifies whether CICS is to record performance class data separately for each logical unit of work (LUW) within tasks that contain multiple LUWs. An LUW within a task ends when a syncpoint occurs, either explicitly (a SYNCPOINT command) or implicitly (a DL/I TERM call, for example, or task end); a new LUW begins immediately after, except at end of task. When rollback occurs on a syncpoint, the LUW does not end. CVDA values are:

NOSYNCPOINT
Performance data is to be combined over all LUWs in a task.

SYNCPOINT
Performance data is to be recorded separately for each LUW.

Conditions

INVREQ
RESP2 values:

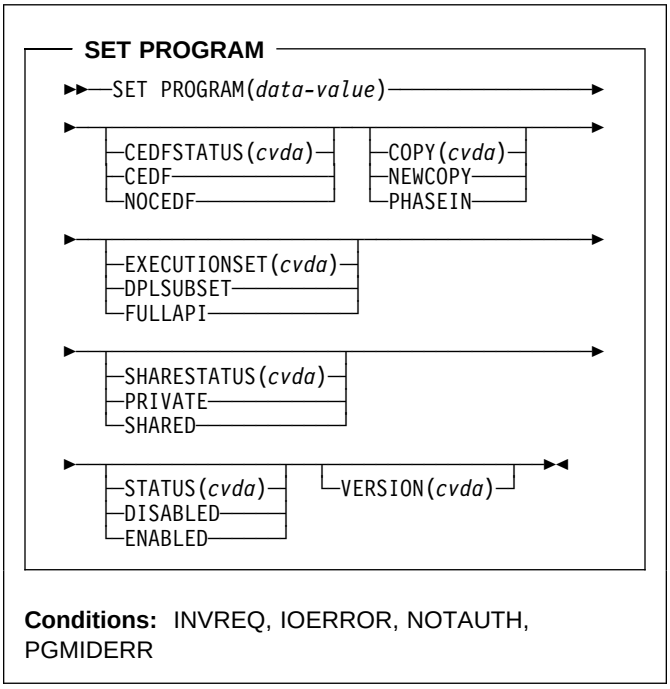
1 STATUS has an invalid CVDA value.
2 PERFCLASS has an invalid CVDA value.
3 EXCEPTCLASS has an invalid CVDA value.
5 CONVERSEST has an invalid CVDA value.
6 SYNCPOINTST has an invalid CVDA value.
7 The FREQUENCY value is invalid. (The hours exceed 24, minutes or seconds exceed 59, or total value is out of range.)
8 The FREQUENCYHRS value is out of range.
9 The FREQUENCYMIN value is out of range.
10 The FREQUENCYSEC value is out of range.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

SET PROGRAM

Change a PROGRAM, MAPSET, or PARTITIONSET definition.



Conditions: INVREQ, IOERROR, NOTAUTH, PGMIDERR

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The SET PROGRAM command modifies the definition of a particular program, map set, or partition set installed in your CICS system. All of these resources are load modules and, therefore, CICS uses the same SET command for all three. To avoid confusion, we use the word **module** to refer to the object of your command, except when the option applies only to executable programs.

Options

CEDFSTATUS(*cvda***) (programs only)**
specifies what action the execution diagnostic facility (EDF) is to take if this program is executed under EDF. CVDA values are:

CEDF
: EDF diagnostic screens are to be displayed. If the program was translated with the EDF option, all EDF screens are displayed; if it was translated with NOEDF, only the program initiation and termination screens appear.

NOCEDF
: No EDF screens are displayed.

You cannot specify CEDFSTATUS for a remote program.

COPY(*cvda***)**
specifies that a new copy of the program is to be used the next time the module is requested. EXEC CICS LINK, XCTL, LOAD, ENABLE and BMS commands can cause a module request.

CICS does not load the module at this time, but it does ensure that a copy is available. If you have specified the SHARED option and the module is in the shared virtual area, the SVA copy satisfies this requirement. Otherwise, CICS searches the sublibraries in the LIBDEF search chain for the CICS job, and returns an IOERR exception if it cannot locate a copy there. CVDA values are:

NEWCOPY
: The module is to be refreshed only if it is not currently in use; otherwise CICS returns an INVREQ exception instead. (You can determine whether a module is in use from the RESCOUNT option in an INQUIRE PROGRAM command; a value of zero means the program is not in use.)

PHASEIN
: The refresh is to occur whether or not the module is in use. If it is, the copy or copies in use remain until they are no longer in use, but all requests that occur after the refresh use the new copy.

COPY cannot be specified for any module currently loaded with the HOLD option, or for any program defined as remote.

EXECUTIONSET(*cvda***) (programs only)**
specifies whether the program is to be restricted to executing the distributed program link (DPL) subset of the CICS API. EXECUTIONSET applies only to executable programs, and governs the API only when a program executes locally. (Programs are always restricted to this subset when invoked remotely—that is, when executing at or below the level of a program invoked by DPL.) CVDA values are:

DPLSUBSET
: The program is always to be restricted. You cannot specify this value for CICS-supplied programs (those beginning with 'DFH').

FULLAPI
: The program is not to be restricted unless invoked remotely.

PROGRAM(*data-value***)**
specifies the 8-character name of the program, map set, or partition set definition to be changed.

SHARESTATUS(*cvda***)**
specifies where CICS should obtain the module the next time a new copy is required. A new copy request can result from either an explicit request (SET PROGRAM COPY or the CEMT equivalent) or from a command that

requires the module that is issued when CICS does not currently have a copy. CVDA values are:

PRIVATE
: The module is to be loaded from a sublibrary of the LIBDEF search chain for the CICS job.

SHARED
: The shared virtual area copy is to be used, if one is available. If not, the module will be loaded as if SHARESTATUS were PRIVATE.

You cannot specify SHARESTATUS for a remote program.

STATUS(*cvda***)**
specifies whether the module is to be available for use. CVDA values are:

ENABLED
: The module is to be available.

DISABLED
: The module is to be unavailable. Programs beginning with 'DFH' cannot be disabled.

For a program defined as remote, this option governs availability only when the program is invoked through the local CICS system; it does not change availability on the remote system.

VERSION(*cvda***)**
returns a CVDA value indicating whether the copy CICS located for a COPY request is different from the current copy. A value is returned only when the COPY option is also specified; in other cases the CVDA value is unchanged. For this purpose, CICS defines "different" to mean a switch from a copy loaded from a sublibrary of the LIBDEF search chain for the CICS job, to the shared virtual area (SVA) copy or vice-versa, or a copy loaded from a disk location different from that of the current copy. CVDA values are:

NEWCOPY
: The new copy is different.

OLDCOPY
: The new copy is not different.

Conditions

INVREQ
RESP2 values:

1 DISABLED or DPLSUBSET was specified for a program beginning 'DFH'.
2 STATUS has an invalid CVDA value.
3 NEWCOPY was specified and RESCOUNT is not equal to zero.
4 SHARESTATUS has an invalid CVDA value.
5 COPY has an invalid CVDA value.
6 COPY was specified for a module currently loaded with the HOLD option.
9 CEDFSTATUS has an invalid CVDA value.
17 You have specified an option that is invalid for a remote program (CEDFSTATUS, COPY, EXECUTIONSET or SHARESTATUS).
18 You have specified an option that is invalid for a map set (CEDFSTATUS or EXECUTIONSET).
19 You have specified an option that is invalid for a partition set (CEDFSTATUS or EXECUTIONSET).
20 EXECUTIONSET has an invalid CVDA value.

IOERR
RESP2 values:

8 The COPY option was specified but CICS could not locate the module.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.

PGMIDERR
RESP2 values:

7 The program, map set, or partition set cannot be found.

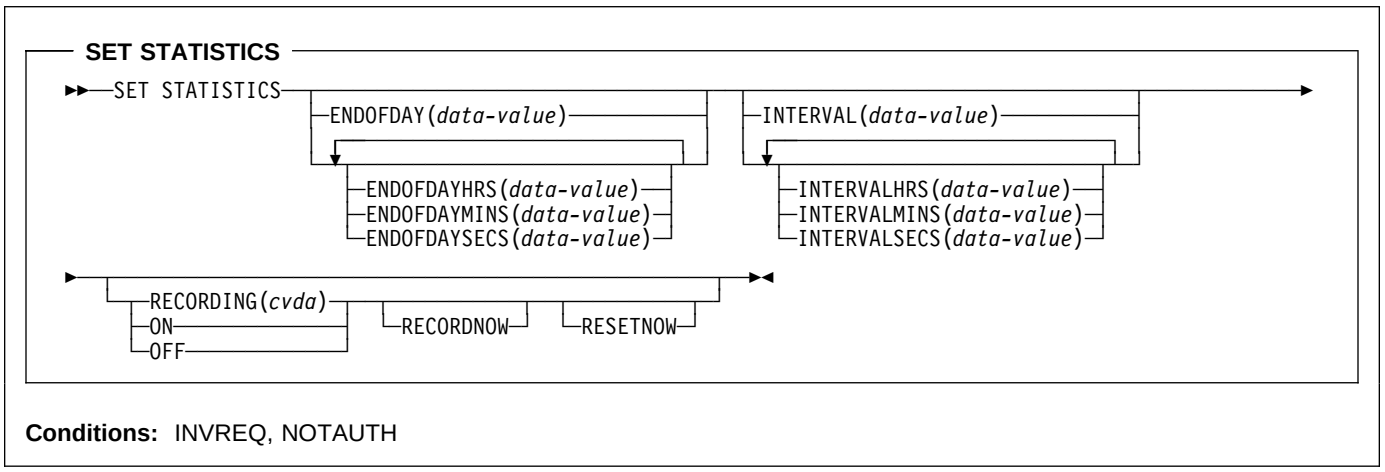
Examples

```
EXEC CICS SET PROGRAM ('PROGA')
              PHASEIN
              PRIVATE
              DISABLED
```

In this example, CICS is to make module PROGA unavailable for new requests, and to locate a new copy in one of the LIBDEF search chain sublibraries for the CICS job. Any copies of PROGA with a nonzero RESCOUNT will remain until no longer in use, but new requests for PROGA will fail until PROGA is set to ENABLED status. On the first request after the module is enabled, CICS will load the new copy and make it the current one.

SET STATISTICS

Change the recording of CICS statistics.



Conditions: INVREQ, NOTAUTH

For more information about the use of CVDAs, see “CICS-value data areas (CVDAs)” on page 7.

Context

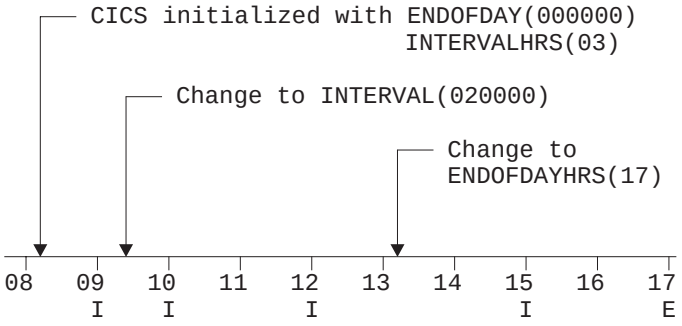
The SET STATISTICS command allows you to change values that control the recording of CICS statistics and to reset the counts.

CICS records system and resource statistics periodically if the RECORDING switch is on, at a frequency governed by the INTERVAL option. These statistics are called **interval statistics**. At end-of-day time (the ENDOFDAY option), CICS records **end-of-day statistics**—which are the statistics for the interval since the last resetting—whether or not the switch is on, ensuring that statistics are written at least once a day. Recording occurs on a data management facility (DMF) data set, and the counts are reset after recording.

When CICS is initialized, the length of the first interval is adjusted so that an integral number of intervals remains until end-of-day time. If you change the recording interval, the same adjustment is made to the current interval. Changing the end-of-day value, however, does not affect recording times until the new end-of-day is reached. The arrival of end-of-day time, whether changed or not, ends the current recording interval. After the statistics are written out, the next interval is adjusted again if necessary, so that the recording interval divides the time remaining to the next end-of-day evenly.

Note: These adjustments are made whether or not the statistics for the interval get recorded. Consequently, if you want to capture all of the statistics, set RECORDING ON or let your end-of-day recording cover all of them by setting the recording interval to 24 hours.

These rules are illustrated by the following example. **I** indicates an interval recording and **E** indicates an end-of-day recording. The system is cold started with STATRCD, the option that sets the initial value for the RECORDING switch, set to ON.



The *CICS Performance Guide* contains more detail about CICS statistics, including the values to which various types of statistics are reinitialized.

The two time values that you can set with this command can be expressed in several ways:

- A 4-byte packed decimal composite, in the format **“0hhmmss+”**, which you specify with the ENDOFDAY or INTERVAL option.
- Separate hours, minutes and seconds, which you specify with the ENDOFDAYHRS, ENDOFDAYMINS, and ENDOFDAYSECS options (instead of ENDOFDAY) and INTERVALHRS, INTERVALMINS, and INTERVALSECS (instead of INTERVAL). You can use these options singly or in any combination.

For example, you could express an INTERVAL of 1 hour and 30 minutes in any of the following ways:

- INTERVAL(13000)
- INTERVALHRS(1), INTERVALMINS(30)
- INTERVALMINS(90)
- INTERVALSECS(5400)

Options

ENDOFDAY(*data-value***)**
specifies the end-of-day time, as a 4-byte packed decimal field in the format 0hhmmss+.

End-of-day time is expressed in local time and must be in the range 00:00:00–23:59:59. When you use the ENDOFDAY option, or more than one of the separate end-of-day options, neither the minutes nor the seconds portions can exceed 59. If you use ENDOFDAYMINS alone the limit is 1439 and for ENDOFDAYSECS used alone it is 86399.

ENDOFDAYHRS(*data-value***)**
specifies the hours component of the end-of-day time, in fullword binary form. (See the ENDOFDAY option.)

ENDOFDAYMINS(*data-value***)**
specifies the minutes component of the end-of-day time, in fullword binary form. (See the ENDOFDAY option.)

ENDOFDAYSECS(*data-value***)**
specifies the seconds component of the end-of-day time, in fullword binary form. (See the ENDOFDAY option.)

INTERVAL(*data-value***)**
specifies the recording interval for system statistics, as a 4-byte packed decimal field in the format 0hhmmss+. The interval must be at least a minute and no more than 24 hours. When you use the INTERVAL option, or more than one of the separate interval options, neither the minutes nor the seconds portions of the time must exceed 59. If you use INTERVALMINS alone the range is 1–1440 and for INTERVALSECS used alone it is 60–86400.

INTERVALHRS(*data-value***)**
specifies the hours component of the recording interval, in fullword binary form. (See the INTERVAL option.)

INTERVALMINS(*data-value***)**
specifies the minutes component of the recording interval, in fullword binary form. (See the INTERVAL option.)

INTERVALSECS(*data-value***)**
specifies the seconds component of the recording interval, in fullword binary form. (See the INTERVAL option.)

RECORDING(*cvda***)**
specifies whether interval statistics are to be recorded.

(Statistics are always accumulated, and end-of-day, unsolicited and requested statistics always recorded, regardless of the setting of the RECORDING option. Unsolicited statistics are resource statistics, recorded when the resource is discarded. Requested statistics are those called for by a PERFORM STATISTICS RECORD command, described on page 140, or by a CEMT PERFORM STATISTICS transaction.)
CVDA values are:

OFF Recording is off.

ON Recording is on.

RECORDNOW
specifies that the current statistics are to be to written out immediately. The effect is the same as a PERFORM STATISTICS RECORD ALL command and, as in the case of that command, the counts are not reset unless you specify RESETNOW as well. RECORDNOW can be specified only when the RECORDING status is changed from ON to OFF or from OFF to ON.

RESETNOW
specifies that the statistics counters are to be reset to their initial values. The initial value for a given counter depends on the type of statistic being collected; see 'CICS statistics tables' in the *CICS Performance Guide* for specific information. The reset can be requested only when the RECORDING status is changed from ON to OFF or from OFF to ON.

Conditions

INVREQ
RESP2 values:

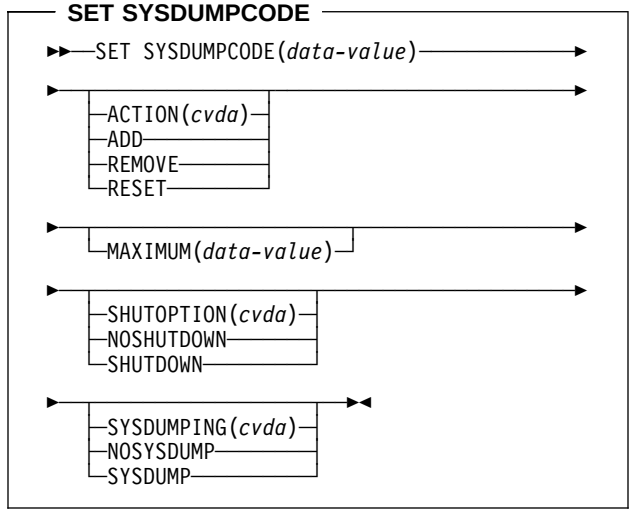
1 The INTERVAL value is out of range.
2 The ENDOFDAY value is out of range.
3 RECORDING has an invalid CVDA value.
4 The INTERVALHRS value is out of range.
5 The INTERVALMINS value is out of range.
6 The INTERVALSECS value is out of range.
7 More than one of the interval values has been used and the combination either exceeds 24 hours or is less than 1 minute.
8 The ENDOFDAYHRS value is out of range.
9 The ENDOFDAYMINS value is out of range.
10 The ENDOFDAYSECS value is out of range.
11 RESETNOW or RECORDNOW has been specified, but the RECORDING value has not been changed.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

SET SYSDUMPCODE

Change an entry in the system dump table.



Conditions: DUPREC, INVREQ, IOERR, NOSPACE, NOTAUTH, NOTFND

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The SET SYSDUMPCODE command allows you to change the system dump table entry for a particular dump code, to add a new dump code to the table, or to delete one.

The table entry tells CICS what actions to take when a system dump request with this code occurs. Possible actions include taking a system dump (a VSE SDUMP), and shutting down CICS. The table entry also indicates how many times this set of actions is to be taken (the MAXIMUM value); after the maximum is reached, requests are counted but otherwise ignored.

Table updates are recorded in the CICS global catalog (DFHGCD) and preserved over executions of CICS until a cold start occurs, except in the case of temporary table entries. CICS creates a temporary entry when it receives a dump request with a code for which there is no table entry; these entries, and any changes to them, last only for the current execution of CICS. If you want to preserve changes to a temporary entry over restarts, you need to remove the dump code from the table and then add it back.

For information about system dumps, see the *CICS Problem Determination Guide*.

Options

ACTION(*cvda***)**
specifies what action is to be taken for the dump code. CVDA values are:

ADD An entry for this code is to be added to the table.

REMOVE
The entry for this code is to be removed from the table. No other option can be specified on a SET SYSDUMPCODE REMOVE command.

RESET
The current number of dump requests for this code is to be set to zero. (See the CURRENT option of the INQUIRE SYSDUMPCODE command.)

MAXIMUM(*data-value***)**
specifies, as a fullword binary value, the maximum number of dumps with this code that CICS should request, in the range 0–999. After the maximum is reached, CICS counts but otherwise ignores dump requests with this code. A value of 999 means there is no limit, and is the default for new entries if you do not specify a MAXIMUM value.

You cannot specify both MAXIMUM and SHUTDOWN.

SHUTOPTION(*cvda***)**
specifies whether the system is to be shut down after a request for a dump with this dump code. CVDA values are:

NOSHUTDOWN
The system is not to be shut down.

SHUTDOWN
The system is to be shut down.

NOSHUTDOWN is assumed if you omit this value from a SET SYSDUMPCODE ADD command. You cannot specify both MAXIMUM and SHUTDOWN.

SYSDUMPCODE(*data-value***)**
specifies the 8-character system dump code for which the system dump table entry is to be modified. A valid system dump code contains no leading or imbedded blanks.

SYSDUMPING(*cvda***)**
specifies whether a system dump request with this code should produce a dump. CVDA values are:

NOSYSDUMP
A dump is not to be taken.

SYSDUMP
A dump is to be taken.

Even when SYSDUMP is specified, CICS takes a dump only if the number of requests for this code is less than the MAXIMUM and system dumps are not suppressed globally (see the DUMPING option of the INQUIRE SYSTEM command).

If the SYSDUMPING option is omitted from a SET SYSDUMPCODE ADD command, SYSDUMP is assumed.

Conditions

DUPREC
RESP2 values:

10 ADD is specified for a dump code already in the system dump table.

INVREQ
RESP2 values:

2 ACTION has an invalid CVDA value.
4 SYSDUMPING has an invalid CVDA value.
5 The MAXIMUM value is out of range.
6 SHUTOPTION has an invalid CVDA value.
7 REMOVE is specified with other options.
8 Both MAXIMUM and SHUTDOWN are specified.
9 The dump code is invalid.

IOERR
RESP2 values:

11 An error occurred updating the CICS global catalog (DFHGCD). The entry is changed for the current run, but is not recorded for restarts.

NOSPACE
RESP2 values:

12 The CICS global catalog (DFHGCD) is full. The entry is changed for the current run, but is not recorded for restarts.

NOTAUTH
RESP2 values:

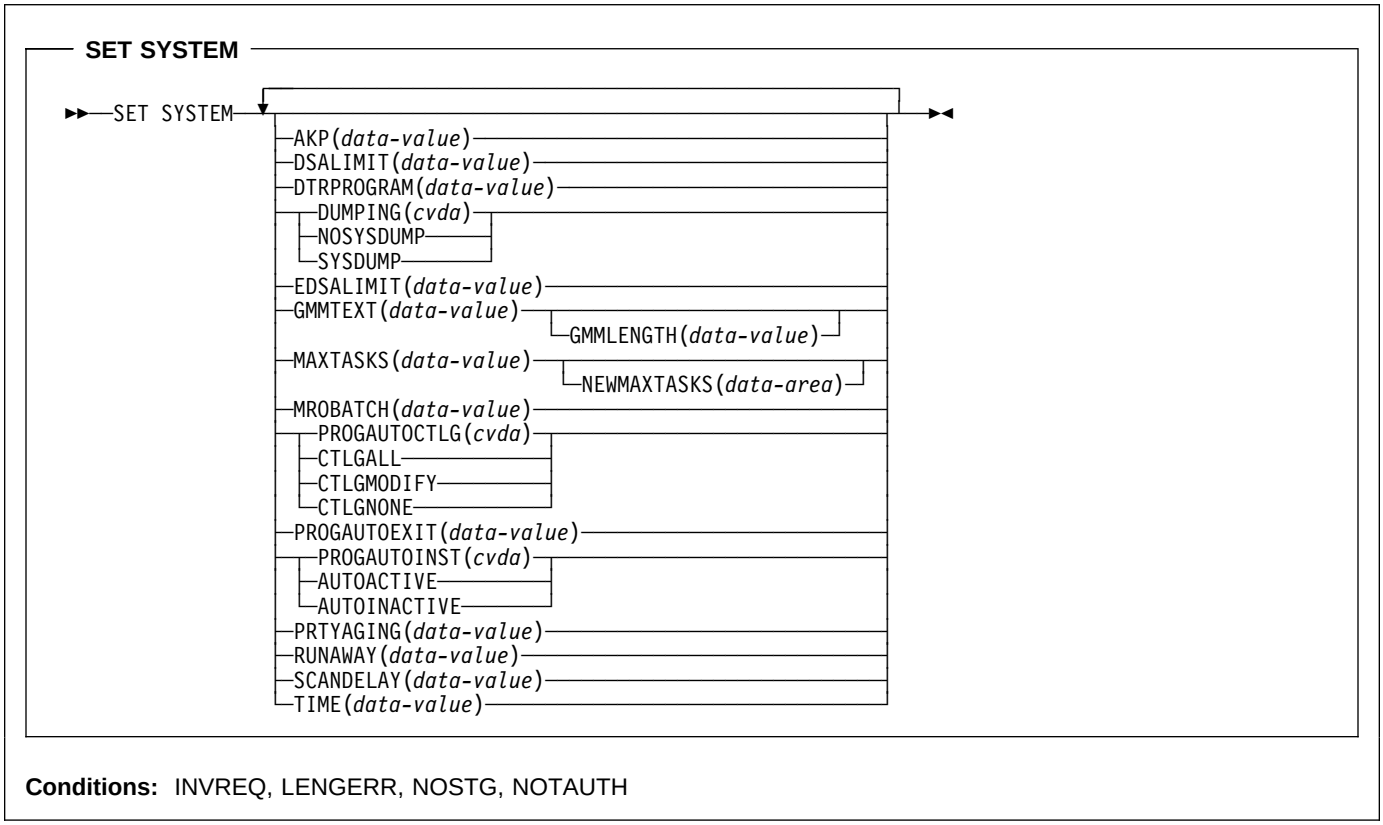
100 The user associated with the issuing task is not authorized to use this command.

NOTFND
RESP2 values:

1 The dump code cannot be found.

SET SYSTEM

Change CICS system option values.



Conditions: INVREQ, LENGERR, NOSTG, NOTAUTH

Note: For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The SET SYSTEM command allows you to change the values of some of the options that control the execution of your CICS system.

These values are set initially by system initialization parameters, described in the *CICS System Definition Guide*. System initialization parameters that correspond to those in this command have the same or similar names, except where noted, and Table 3 on page 99 lists the exact correspondence.

Options

AKP(*data-value***)**
specifies, as a fullword binary value, the activity keypoint trigger value, which is the number of logging operations between the taking of keypoints. The number must be either zero, which turns off keypointing, or in the range 200–65535. This value cannot be changed if CICS was initialized without keypointing (that is, with the AKPFREQ system initialization parameter set to zero).

DSALIMIT(*data-value***)**
specifies, as a fullword binary value, the maximum amount of storage, in bytes, within which CICS can allocate storage for the four individual dynamic storage areas (DSAs) that reside below the 16MB boundary. If DSALIMIT specifies a value lower than the current limit, CICS may not be able to implement the new limit immediately, but will attempt to do so over time as storage is freed. The range for DSALIMIT is 2MB–16MB.

DTRPROGRAM(*data-value***)**
specifies the 8-character name of the program that is to control the dynamic routing of transactions.

DUMPING(*cvda***)**
specifies a CVDA value indicating whether the taking of CICS system dumps is to be suppressed. CVDA values are:

NOSYSDUMP
System dumps are to be suppressed.

SYSDUMP
System dumps are not to be suppressed.

EDSALIMIT(*data-value***)**
specifies, as a fullword binary value, the maximum amount of storage, in bytes, within which CICS can

allocate storage for the four individual dynamic storage areas that reside above the 16MB boundary. If EDSALIMIT specifies a value lower than the current limit, CICS may not be able to implement the new limit immediately, but will attempt to do so over time as storage is freed. The range for EDSALIMIT is 10MB–2GB.

GMMLENGTH(*data-value***)**
specifies, as a halfword binary value, the length of the "good morning" message text. The range for this value is 1–246.

GMMTEXT(*data-value***)**
specifies the "good morning" message text, which can be up to 246 characters long.

MAXTASKS(*data-value***)**
specifies, as a fullword binary value, the maximum number of user tasks that can be eligible for dispatch at any one time in this CICS system. Both active and suspended tasks count toward this limit, but tasks that have not reached the point of initial dispatch do not. System tasks such as terminal and journal control tasks do not count in CICS Transaction Server for VSE/ESA Release 1 either, although they did in earlier releases. The value can be in the range 1–999.

MROBATCH(*data-value***)**
specifies, as a fullword binary value, the number of events that must occur, from a list of MRO and DASD I/O events on which CICS is waiting, before CICS is posted explicitly to process them. The value must be in the range 1–255.

NEWMAXTASKS(*data-area***)**
returns the new value of MAXTASKS, in fullword binary form.

When you set MAXTASKS in a SET SYSTEM command, CICS adjusts the value you specify downward if there is not enough storage for the value you request; NEWMAXTASKS tells you what the value is after any such adjustment. CICS also raises the NOSTG condition when it reduces the value, although it continues processing your command.

PROGAUTOCTLG(*cvda***)**
specifies whether and when autoinstalled program definitions are to be cataloged. Cataloged definitions are restored on a warm or emergency restart. Those not cataloged are discarded at shutdown and must be installed again if used in a subsequent execution of CICS.

Decisions to catalog are made both at initial installation and whenever an autoinstalled definition is modified, and are based on the PROGAUTOCTLG value at the time. CVDA values are:

CTLGALL
Definitions are to be cataloged when installed and when modified.

CTLGMODIFY
Definitions are to be cataloged only when modified.

CTLGNONE
Definitions are not to be cataloged.

PROGAUTOEXIT(*data-value***)**
specifies the 8-character name of the user-provided program to be called by the CICS program autoinstall code to provide a model definition.

Note: This program (and any programs it invokes) must be installed before they can be used in the program autoinstall process, either by explicit PROGRAM definitions or by autoinstall when some other autoinstall program is in force. Otherwise, the program autoinstall process fails when next used, and CICS makes it inactive.

PROGAUTOINST(*cvda***)**
specifies whether autoinstall for programs is to be active or inactive. When a task requests a program, map set or partition set that is not defined, CICS attempts to create a definition for it automatically if autoinstall for programs is active. If not, CICS raises the PGMIDERR exceptional condition. CVDA values are:

AUTOACTIVE
Autoinstall for programs is to be active.

AUTOINACTIVE
Autoinstall for programs is to be inactive.

PRTYAGING(*data-value***)**
specifies, as a fullword binary value, the rate at which CICS is to increase the priority of a task waiting for dispatch. CICS increases the task priority by 1 after each PRTYAGING milliseconds of wait time without a dispatch. The value must be in the range 0–65535.

RUNAWAY(*data-value***)**
specifies, as a fullword binary value, the default for runaway task time. This value is used for any task executing a transaction with a profile that does not specify runaway task time (see the RUNAWAY option of the INQUIRE TRANSACTION command on page 130 and RUNAWAY option of RDO TRANSACTION resource definition in the *CICS Resource Definition Guide*.)

The value must be either zero, which means that runaway task detection is not required for tasks using the default value, or in the range 500–2700000. The value you supply is rounded down to the nearest multiple of 500.

SCANDELAY(*data-value***)**
specifies, as a fullword binary value, the maximum number of milliseconds between a user task making a terminal I/O request and CICS dispatching the terminal control task to process it. This value is sometimes called the "terminal scan delay," and is set initially by the system initialization option ICVTSD. The value must be in the range 0–5000.

TIME(*data-value***)**
specifies, as a fullword binary value, the maximum interval in milliseconds for which CICS gives control to the operating system if no tasks are ready for dispatch. This value is set initially by the ICV system initialization parameter and is sometimes called the "region exit time interval." The TIME value must be in the range 100–3600000 and must not be less than the SCANDELAY value. You can determine the current SCANDELAY value, if you are not setting it at the same time, with the INQUIRE SYSTEM SCANDELAY command.

Conditions

INVREQ
RESP2 values:

1 The MAXTASKS value is out of range.
3 The AKP value is out of range.
5 TIME is not in the range 100–3600000.
6 The RUNAWAY value is out of range.
7 MROBATCH is not in the range 1–255.
9 DUMPING has an invalid CVDA value.
12 AKP was specified, but CICS was initialized without keypointing.
13 TIME is less than SCANDELAY.
14 PRTYAGING is not in the range 0–65535.
15 SCANDELAY is not in the range 0–5000.
19 The PROGAUTOEXIT value contains an invalid character.
20 DSALIMIT is not in the range 2MB to 16MB.
21 EDSALIMIT is not in the range 10MB to 2GB.
22 There is insufficient VSE storage to allocate DSALIMIT.
23 There is insufficient VSE storage to allocate EDSALIMIT.
24 The DTRPROGRAM value contains an invalid character.

LENGERR
RESP2 values:

20 The GMMLENGTH value is out of range.

NOSTG
RESP2 values:

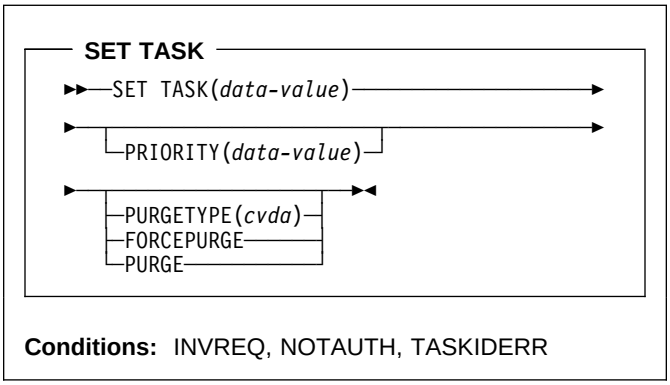
16 CICS reduced the value you requested for MAXTASKS because of storage constraints; see the NEWMAXTASKS option.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

SET TASK

Purge a task or change its priority.



Conditions: INVREQ, NOTAUTH, TASKIDERR

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The SET TASK command allows you to purge a task (terminate it abnormally) or to change its priority. Not all tasks can be changed with this command, however; in particular, CICS-created tasks that are essential to system operation are ineligible.

Options

PRIORITY(*data-value***)**
specifies, as a fullword binary value, the priority you want for the task. The value must be in the range 0–255.

PURGETYPE(*cvda***)**
specifies that CICS is to purge the task, and indicates conditions for doing so.

Purging a task at the wrong time can result in a loss of data integrity or, in some circumstances, can cause CICS to abend. CICS always defers purging until the task reaches a state where the system itself does not appear to be at risk, but you can specify whether CICS also should wait until data integrity can be ensured.

If CICS accepts a purge request, it returns a NORMAL response to SET TASK. You can tell whether execution has been deferred by inspecting the RESP2 value. If RESP2 is zero, the purge has been completed; if RESP2 is 13, it has been deferred. CVDA values are:

FORCEPURGE
The task is to be terminated as soon as consistent with system integrity and without regard to data integrity.

Note: CICS cannot always determine whether a forced purge is safe; it is possible to abend the system when you specify FORCEPURGE.

PURGE
The task is to be terminated as soon as both system and data integrity can be maintained.

Note: You cannot purge a task with this CVDA value if its RDO TRANSACTION resource definition specifies SPURGE(NO).

TASK(*data-value***)**
specifies the 4-byte packed-decimal sequence number of the task you are changing.

Conditions

INVREQ
RESP2 values:

3 PURGETYPE has an invalid CVDA value.
4 PRIORITY is not in the range 0–255.
5 The task is not in a valid state for purging.

NORMAL
RESP2 values:

13 Purge deferred

NOTAUTH
RESP2 values:

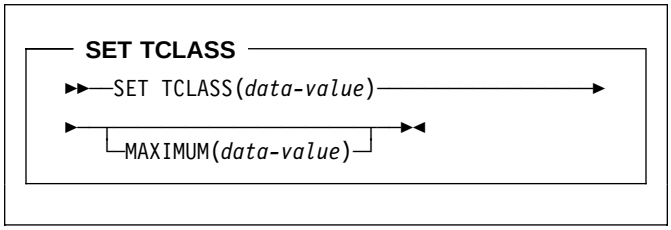
100 The user associated with the issuing task is not authorized to use this command.

TASKIDERR
RESP2 values:

1 The task cannot be found.
2 The task is protected by CICS and not eligible for modification with this command.

SET TCLASS

Set the maximum number of tasks in a transaction class.



Conditions: INVREQ, NOTAUTH, TCIDERR

Context

The SET TCLASS command allows you to set the maximum number of tasks in a particular transaction class which are allowed to run concurrently.

This command is limited to the numbered classes of earlier releases of CICS and is retained for compatibility with those releases. The SET TRANCLASS command, described on page 187, provides the same function and can be used for either the old numbered or new named classes.

Options

MAXIMUM(*data-value***)**
specifies, as a fullword binary value, the largest number of tasks in the transaction class that are allowed to run concurrently. The value must be in the range 0 - (MAXTASKS - 1). (This value corresponds to the MAXACTIVE value in a SET TRANCLASS command. See the description of this option on page 187 for a description of what happens when you change the MAXACTIVE limit.)

TCLASS(*data-value***)**
specifies, as a fullword binary value, the task-class identifier, which must be in the range 1–10.

Conditions

INVREQ
RESP2 values:

2 The MAXIMUM value is not in the range 0-999.

NOTAUTH
RESP2 values:

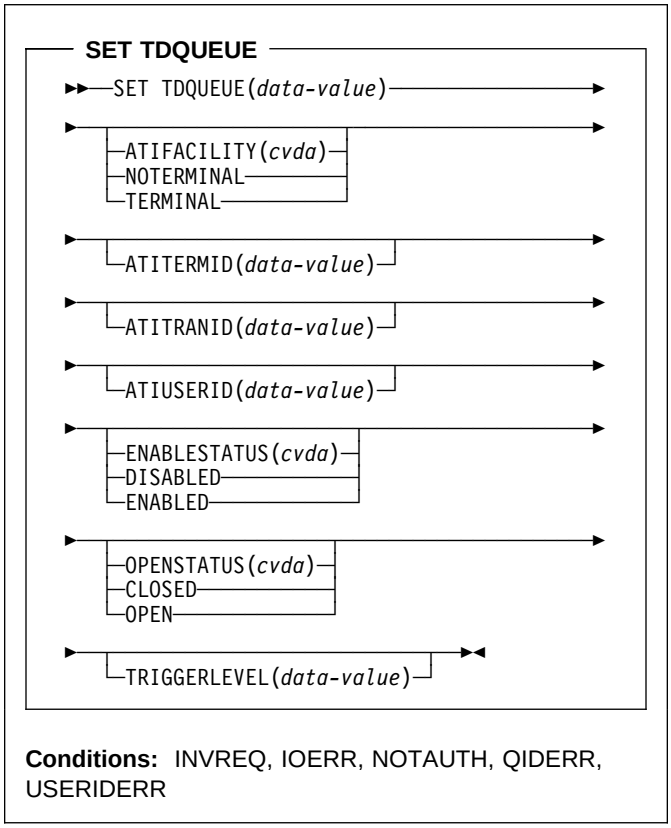
100 The user associated with the issuing task is not authorized to use this command.

TCIDERR
RESP2 values:

1 The transaction class cannot be found.

SET TDQUEUE

Change the attributes of a transient data queue.



Conditions: INVREQ, IOERR, NOTAUTH, QIDERR, USERIDERR

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The SET TDQUEUE command allows you to change some attributes of a transient data queue.

Transient data queues, also called destinations, are defined in the destination control table (DCT) of CICS. There are two basic types: **intrapartition** and **extrapartition**. Intrapartition queues are managed and stored entirely by CICS, and are eligible for automatic task initiation (ATI), the facility that CICS provides for scheduling tasks automatically. For a transient data queue, ATI is governed by the TRIGGERLEVEL option value. If it is nonzero, CICS automatically creates a task to process the queue when the number of items on the queue reaches this trigger level; a value of zero exempts the queue from ATI.

An extrapartition queue is a VSE sequential data set (or a spool file). Extrapartition queues are not subject to ATI.

There are two other types of queue: **indirect** and **remote**, both of which point to one of the basic types. You cannot modify the definition of either with a SET TDQUEUE command, however. (See the INQUIRE TDQUEUE command for more information about these queues.)

Options

ATIFACILITY(*cvda***) (intrapartition queues only)**
specifies whether the queue has a terminal (or session) associated with it. When ATI occurs, this option determines whether the task that CICS creates to process the queue has a principal facility or not. CVDA values are:

NOTERMINAL
: ATI tasks are to execute without a principal facility.

TERMINAL
: ATI tasks require the terminal specified in ATITERMID as principal facility.

ATITERMID(*data-value***) (intrapartition queues only)**
specifies the 4-character name of the terminal or session associated with the queue, if any. When CICS creates a task to process the queue, this terminal is the principal facility if the ATIFACILITY value is TERMINAL.

You can set this value at any time, but it is used only during ATI, and only when ATI tasks are to have a principal facility. When ATIFACILITY is NOTERMINAL, CICS retains but does not use the ATITERMID value, and does not display it in an INQUIRE TDQUEUE command.

ATITRANID(*data-value***) (intrapartition queues only)**
specifies the 4-character identifier of the transaction to be executed when CICS initiates a task automatically to process the queue. This value is used only during ATI. CICS does not check the ATITRANID value when you set it but, when ATI occurs, the created task will abend unless the ATITRANID value names a TRANSACTION defined at the time. Furthermore, this transaction must not be defined as remote.

ATIUSERID(*data-value***) (intrapartition queues only)**
specifies the 8-byte user identifier associated with the queue, if any. If there is no terminal associated with the queue when ATI occurs, CICS assigns this user to the task it creates to process the queue.

You can set this value at any time, but it used only during ATI, and only when the ATIFACILITY value is NOTERMINAL. When ATIFACILITY is TERMINAL, CICS retains but does not use the ATIUSERID value, and does not display it in an INQUIRE TDQUEUE command.

In addition to the authority checks made for any SET TDQUEUE command, when ATIUSERID is specified, CICS invokes the external security manager to ensure that the user associated with the task issuing the command has authority to act for the user named in ATIUSERID.

ENABLESTATUS(*cvda***)**
specifies whether the queue can be accessed by applications. CVDA values are:

DISABLED
The queue cannot be accessed by applications. You cannot specify this value for a queue whose name begins with the letter “C”, because CICS does not allow you to disable CICS-defined queues.

ENABLED
The queue can be accessed by applications.

For extrapartition queues, changing the ENABLESTATUS value affects only the availability of the queue; CICS does not open or close the associated data set.

OPENSTATUS(*cvda***) (extrapartition queues only)**
specifies whether the data set associated with the queue is to be open or closed. CVDA values are:

CLOSED
The data set is to be closed.

OPEN
The data set is to be open.

You cannot change the OPENSTATUS value of a queue that is DISABLED.

TDQUEUE(*data-value***)**
specifies the 4-character name of the transient data queue (destination) whose attributes you are changing.

TRIGGERLEVEL(*data-value***) (intrapartition only)**
specifies, as a fullword binary value, the number of items that must be on the queue for ATI to occur, or, alternatively, that ATI is not to occur. The number must be in the range 0–32767. If is zero, no ATI occurs; otherwise, when the queue reaches the TRIGGERLEVEL depth, CICS creates a task to process it automatically. See also the ATIFACILITY, ATITERMINAL, ATITRANSID and ATIUSERID options of this command.

Conditions

INVREQ
RESP2 values:

2 TRIGGERLEVEL was specified for an extrapartition queue.
3 The TRIGGERLEVEL value is not in the range 0–32767.
4 ATITERMID was specified for an extrapartition queue.
5 ATITRANID was specified for an extrapartition queue.
6 ATIFACILITY was specified for an extrapartition queue.
7 ATIFACILITY has an invalid CVDA value.
8 OPENSTATUS has an invalid CVDA value.
9 OPENSTATUS was specified for an intrapartition queue.
10 ENABLESTATUS has an invalid CVDA value.
11 DISABLED was specified for a queue beginning with “C”.
12 The queue is remote.
13 The queue is indirect.
15 OPENSTATUS was specified for a DISABLED queue.
16 OPENSTATUS was specified, but the JCL DLBL to which the queue definition points was not found.
19 ATIUSERID was specified for an extrapartition queue.
20 The ESM interface is not initialized.
21 CICS has received an unknown response from the ESM.
22 The ESM did not respond.

IOERR
RESP2 values:

14 An error occurred opening or closing the data set associated with the queue. This could have been caused by a missing DLBL in the CICS startup JCL.
17 The queue cannot be set CLOSED because there is no space in the associated data set.

NOTAUTH
RESP2 values:

ESM note

The actual RESP2 values possible depend on the particular ESM installed on your system.

23 The user named in the ATIUSERID option is not authorized.
24 The user named in ATIUSERID has been revoked.
25 During SECLABEL processing by the external security manager, an error occurred.
27 The user named in the ATIUSERID option is not allowed to access the queue.
100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.
102 The user associated with the issuing task is not an authorized surrogate for the user specified in ATIUSERID.

QIDERR
RESP2 values:

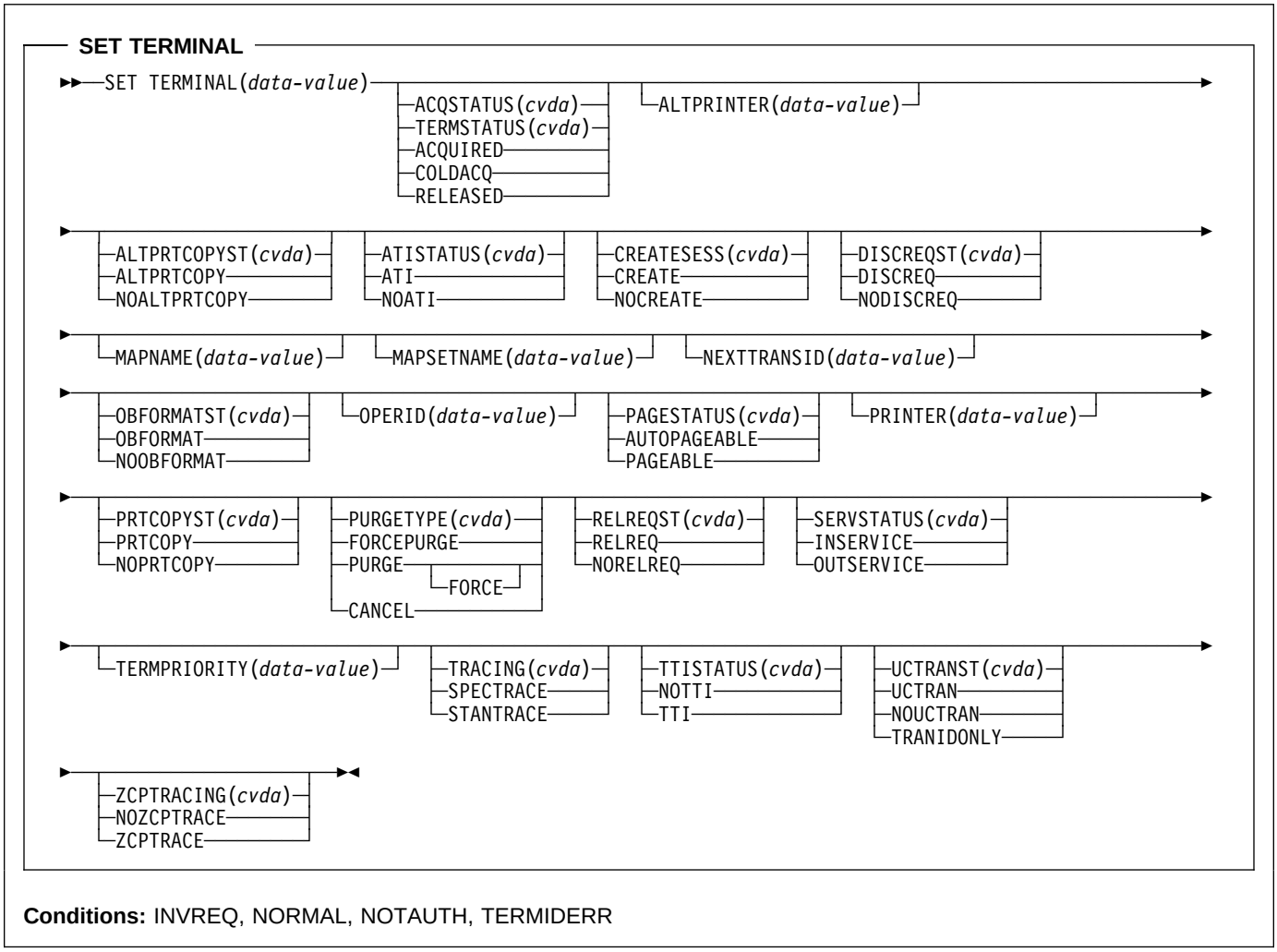
1 The queue cannot be found.

USERIDERR
RESP2 values:

28 The user named in ATIUSERID is not known to the ESM.

SET TERMINAL

Change the definition or status of a terminal or cancel work associated with it.



Conditions: INVREQ, NORMAL, NOTAUTH, TERMIDERR

For more information about the use of CVDAs, see “CICS-value data areas (CVDAs)” on page 7.

Context

The SET TERMINAL command allows you to change both the definition and the current status of a terminal. It applies to physical terminals (those defined with TERMINAL and TYPETERM resource definitions), and many options apply to LUTYPE6.1 sessions as well. You cannot use it for APPC or MRO sessions, except as noted in the description of the PURGETYPE option.

In general you cannot use SET TERMINAL for remote terminals either, but if a terminal TCTTE is available in a remote system, in either model or surrogate form, a change can be made to tracing or NEXTTRANSID in the remote definition. This change is not shipped back to the TOR. This allows the user to make a change which applies only to the remote TCTTE. The SET TERMINAL command can also be used to change the UCTRANST option of a surrogate terminal. This change will be shipped back to the TOR and intermediate systems. Attempting to change any other attribute for a model or surrogate terminal will result in INVREQ with RESP2=24.

You also can use SET TERMINAL to purge the task currently executing with the terminal as its principal or alternate facility, and to cancel work scheduled for the terminal. See the PURGETYPE option for details about these functions.

Options

ACQSTATUS(*cvda*) (VTAM only)
specifies the same value as TERMSTATUS and is retained only for compatibility purposes. You should use TERMSTATUS in new applications (see page 180).

ALTPRINTER(*data-value*)
specifies the 4-character name of the alternate printer for print key requests and ISSUE PRINT commands issued in tasks for which this terminal is the principal facility. This printer is used when the one named in the PRINTER option is not available.

If you do not want an alternate designated, set the ALTPRINTER value to blanks. If you do this, you must ensure that the ALTPRTCOPYST value is NOALTPRTCOPY: you can make this change in the same command if necessary.

The printer you specify must be a 3270 printer owned by the same CICS system as the terminal, and there are other restrictions. See the ALTPRINTER, ALTPRINTCOPY, PRINTER and PRINTCOPY options of a RDO TERMINAL resource definition in the *CICS Resource Definition Guide* for full details.

Note: For VTAM terminals, in a transaction routing environment, this command will not take effect until the next flow across the link from the TOR to the AOR for the named terminal.

ALTPRTCOPYST(*cvda*)
specifies whether CICS is to use the hardware copy feature to satisfy a print request for which the alternate printer is used (see the ALTPRINTER option). CVDA values are:

ALTPRTCOPY
CICS is to use the hardware copy feature.

Note: You cannot specify ALTPRTCOPY unless an alternate printer is defined.

NOALTPRTCOPY
CICS is not to use the hardware COPY feature.

ATISTATUS(*cvda*)
specifies whether CICS can initiate a task automatically (ATI) with this terminal or session as its principal facility. For sessions, this option also governs whether the session can be allocated as an alternate facility. CVDA values are:

ATI ATI and use as an alternate facility are to be allowed.

NOATI
ATI and use as an alternate facility are not to be allowed. This value cannot be assigned to a terminal whose TTISTATUS value is NOTTI.

CREATESESS(*cvda*) (VTAM only)
specifies whether CICS should attempt to acquire the terminal, if necessary, for an automatic task initiation (ATI) request. CVDA values are:

CREATE
The terminal should be acquired.

NOCREATE
The terminal should not be acquired.

DISCREQST(*cvda*)
specifies whether CICS is to honor a disconnect request from the terminal. A disconnect request results from an ISSUE DISCONNECT command or a CESF (sign-off) task with the GOODNIGHT or LOGOFF option. CVDA values are:

DISCREQ
CICS is to honor a request to disconnect this terminal (with a VTAM CLSDST request to terminate the session if the terminal is a VTAM terminal).

NODISCREQ
CICS is not to honor a request to disconnect this terminal.

MAPNAME(*data-area*)
specifies the 7-character name of the map that is to be saved (stored) by CICS as the name of the last map sent to this device. If this terminal is a surrogate, the map name specified is returned in the DETACH sequence to the terminal-owning region when the currently executing transaction terminates, unless the map name is superseded by a subsequent SEND MAP command. You can use the MAPNAME option to restore a map name that was returned to the application program in a previous INQUIRE TERMINAL command. If the terminal is not supported by BMS (for example, this terminal is a session), an INVREQ condition is raised with a RESP2 value of 60.

MAPSETNAME(*data-area*)
specifies the 8-character name of the mapset that is to be saved by CICS as the name of the last mapset used in a SEND MAP command processed for this terminal. If this terminal is a surrogate, the mapset name specified is returned in the DETACH sequence to the terminal-owning region when the currently executing transaction terminates, unless the mapset name is superseded by a subsequent SEND MAP command. The MAPSETNAME option can be used to restore a mapset name that was returned to the application program in a previous INQUIRE TERMINAL command. If the terminal is not supported by BMS (for example, this terminal is a session), an INVREQ condition is raised with a RESP2 value of 60.

NEXTTRANSID(*data-value*)
specifies the 4-character identifier of the transaction to be executed to process the next unsolicited input from this terminal. If you specify blanks, CICS sets the next transaction identifier to nulls to indicate that no such value is defined for the terminal.

If no task is executing with the terminal as its principal facility at the time of the SET TERMINAL command, the

effect is as if the previous task at the terminal had specified your NEXTTRANSID value in the TRANSID option of its final RETURN command.

The same thing happens if there is a task executing, provided the task does not set TRANSID on its final RETURN command and provided it does not abend. Otherwise its TRANSID value (or CICS abend cleanup) overrides your NEXTTRANSID.

When there is a task executing (on your CICS system), you can specify NEXTTRANSID for a remote terminal, and the effect is the same. This is the only time you can use NEXTTRANSID for a terminal owned by another region, however; at other times, CICS will raise an INVREQ exception.

Changes made to a remote TCTTE in this way are not shipped back to the TOR.

Note: You cannot specify NEXTTRANSID for a terminal defined with a permanent "next transaction" value (see the TRANSACTION option of the INQUIRE TERMINAL command).

OBFORMATST(*cvda***)**
specifies whether outboard formatting can be used at this terminal. CVDA values are:

NOOBFORMAT
Outboard formatting cannot be used.

OBFORMAT
Outboard formatting can be used.

Note: OBFORMATST cannot be specified for a console or 3790.

OPERID(*data-value***)**
Specifies an operator identification code that is to be associated with the terminal. The identification code can be up to 3 characters long. The operator identification code will continue to be associated with the terminal until it is changed by another SET TERMINAL OPERID command, or until the user signed on at the terminal changes (i.e. until a user signs on or signs off at the terminal).

PAGESTATUS(*cvda***)**
specifies how pages of BMS messages with a disposition of PAGING are to be delivered to the terminal. CVDA values are:

AUTOPAGEABLE
Pages are to be written automatically in sequence.

PAGEABLE
Pages are to be written on request from the operator.

PRINTER(*data-value***)**
specifies the 4-character name of the primary printer for print key requests and ISSUE PRINT commands issued in tasks for which this terminal is the principal facility. This printer is used if available; if not, the printer named in the ALTPRINTER option is second choice.

If you want no printer designated for this purpose, set the PRINTER value to blanks. If you do this, you must ensure that the ALTPRINTER value is blanks and that the PRTCOPYST and ALTPRTCOPYST values are NOPRTCOPY and NOALTPRTCOPY respectively; you can make these settings in the same command if necessary.

The printer you specify must be a 3270 printer owned by the same CICS as the terminal, and there are other restrictions. See the PRINTER and PRINTCOPY options of the RDO TERMINAL resource definition in the *CICS Resource Definition Guide* for full details.

Note: For VTAM terminals, in a transaction routing environment, this command will not take effect until the next flow across the link from the TOR to the AOR for the named terminal.

PRTCOPYST(*cvda***)**
specifies whether CICS is to use the hardware copy feature to satisfy a print request for which the primary printer is used (see the PRINTER option of this command). CVDA values are:

NOPRTCOPY
CICS is not to use the hardware copy feature.

PRTCOPY
CICS is to use the hardware copy feature.

Note: You cannot specify PRTCOPY unless a primary printer is defined.

PURGETYPE(*cvda***)**
specifies that work occurring at or scheduled for the terminal or session is to be canceled.

The PURGE and FORCEPURGE values allow you to purge (terminate abnormally) the task *currently* using this terminal as its principal or alternate facility. You can use them for VTAM terminals and for LUTYPE6.1 and MRO sessions, but not for non-VTAM terminals or APPC sessions.

When there is such a task, these options have the same effect in a SET TERMINAL command as they do in a SET TASK command, except that the RESP2 value for a deferred purge is 53 rather than 13. See page 173 for details on how these options work and precautions about using them. (If there is no task at the terminal, no purge occurs and no exception condition is raised.)

The CANCEL option cancels the *scheduled* work represented by the set of automatic initiate descriptors (AIDs) for the terminal (session). It must be used alone, without other options. CANCEL can be used for any type of terminal or any type of session.

Each AID represents a request for a task which is to execute with the terminal as its principal facility. An AID can originate from a transient data queue reaching its trigger level, a START command, a ROUTE command, or an internal CICS action. (AIDs represent work scheduled for the current time or earlier. Use the CANCEL command, described in the *CICS Application*

Programming Reference manual, to cancel work scheduled in the future, such as an unexpired START or ROUTE command. See also the INQUIRE REQID command on page 90.)

Note: An AID that results from a transient data queue reaching trigger level ceases to exist as soon as the associated task is initiated, and thus is not subject to a CANCEL issued after task start. However, if the task has not drained its queue by task end, CICS will create another AID to process the queue, whether or not a CANCEL occurred during execution of the task.

When a request in one CICS system is associated with a terminal owned by another CICS, both systems maintain an AID to represent the request. If you cancel any such AIDs by issuing a SET TERMINAL CANCEL in the CICS that owns the terminal, that CICS notifies the originating CICS's to cancel their corresponding AIDs. The originating CICS's write message DFHTF0100 to their CSMT transient data destinations to indicate how many AIDs were canceled for this reason and how many remain for the terminal. CVDA values are:

CANCEL
: AIDs associated with this terminal are to be canceled.

  Note: When you specify CANCEL, you cannot use any other options. If your CANCEL request is accepted, you get a NORMAL response. You can tell whether any AIDs were canceled by inspecting the RESP2 value returned; it will be 58 if any AIDs were canceled and 59 if not.

FORCEPURGE
: The task at the terminal is to be terminated as soon as consistent with system integrity and without regard to data integrity.

PURGE
: The task at the terminal is to be terminated as soon as both system and data integrity can be maintained.

  PURGE FORCE is equivalent to FORCEPURGE and is retained only for compatibility. You should use FORCEPURGE in new applications.

RELREQST(*cvda***) (VTAM only)**
specifies whether CICS is to honor requests from VTAM to release the terminal or session. Release occurs on request, unless a task is using the terminal as principal or alternate facility, in which case it is deferred until task end. CVDA values are:

NORELREQ
: CICS is not to release the terminal.

RELREQ
: CICS is to release the terminal.

SERVSTATUS(*cvda***)**
specifies whether the terminal is to be available for use. SERVSTATUS corresponds to the INSERVICE option in the TERMINAL definition. CVDA values are:

INSERVICE
: The terminal is to be available.

OUTSERVICE
: The terminal is not to be available. If the terminal is the principal or alternate facility of a task at the time you set it to OUTSERVICE, CICS waits until the task completes to make the change, but starts no other tasks at the terminal. (If the task is running under the execution diagnostic facility (EDF), EDF control ends and the task completes without EDF.) Consequently, you need to purge the task with PURGE or FORCEPURGE if you want the change to be immediate when a task is present.

When the status of a terminal changes from INSERVICE to OUTSERVICE, CICS signs off the operator and, if it is a VTAM terminal, releases it (sets the TERMSTATUS value to RELEASED). If you change a terminal that is subject to automatic signon from OUTSERVICE to INSERVICE, CICS performs the signon, but it does *not* acquire a released VTAM terminal unless you also specify a TERMSTATUS VALUE of ACQUIRED.

Note: To prevent unintended effects, CICS does not permit a task to set the status of its own principal facility to OUTSERVICE unless that facility is a printer.

TERMINAL(*data-value***)**
specifies the 4-character name of the terminal or session whose definition or status is to be changed.

TERMPRIORITY(*data-value***)**
specifies, as a fullword binary value, the priority of the terminal, relative to other terminals, in the range 0–255. The dispatch priority of a task is the smaller of 255 and the sum of the priorities of terminal that is the principal facility, the user signed on at the terminal, and the transaction being executed.

TERMSTATUS(*cvda***) (VTAM only)**
specifies whether CICS is to be in session with this terminal. CVDA values are:

ACQUIRED
: CICS is to be in session, and is to acquire a session if none exists. If the SERVSTATUS of the terminal is OUTSERVICE, you must specify INSERVICE as well as ACQUIRED (or COLDACQ), because CICS will not acquire a terminal that is out of service.

COLDACQ
: COLDACQ requests the same status that ACQUIRED does, and causes any pending resynchronization information to be discarded first.

RELEASED
CICS is not to be in session, and is to terminate the session if one exists. Termination occurs immediately unless the terminal is the principal or alternate facility of a task and you have not specified PURGE or FORCEPURGE; in this case CICS waits until the task ends.

TRACING(*cvda***)**
specifies the type of tracing to be associated with this terminal.

For a task that has this terminal as its principal facility, this value is combined with the TRACING option value of the transaction the task is executing to determine whether tracing is standard, special, or suppressed. If the transaction TRACING value is SUPPRESSED, no tracing occurs. Otherwise, tracing is special if either the terminal or the transaction specifies SPECTRACE, standard if both specify STANTRACE. CVDA values are:

SPECTRACE
Special tracing is specified.

STANTRACE
Standard tracing is specified.

Note: You can specify TRACING for a remote terminal, but only if there is a task (on your CICS) executing with the terminal as its principal facility. The tracing applies only to your CICS, not to the CICS that owns the terminal, and the change lasts only for the duration of the task (and any successor tasks invoked by the IMMEDIATE option on a final RETURN command).

TTISTATUS(*cvda***)**
specifies whether this terminal is to be allowed to initiate tasks by sending unsolicited input. CVDA values are:

NOTTI
The terminal is not to initiate tasks. You cannot specify this value for a terminal whose ATISTATUS is NOATI. In addition, to prevent unintended effects, CICS does not allow a task to assign this value to its own principal facility unless that facility is a printer.

TTI This terminal is to be able to initiate tasks.

UCTRANST(*cvda***)**
specifies whether input from this terminal is to be translated to upper case automatically, at the time of receipt. CVDA values are:

NOUCTRAN
Input from this terminal is not to be translated on receipt. (It still can be translated before presentation to a task if the PROFILE definition for the transaction being executed specifies translation. See the UCTRAN option in the INQUIRE PROFILE command.)

TRANIDONLY
This value is the same as NOUCTRAN, with one difference. If the input is unsolicited, and CICS needs to use the initial characters of the input to decide which transaction to execute, that decision is made from a *copy* of the input which has been translated to upper case. There is no difference between these two options in the data presented to a task issuing a RECEIVE.

UCTRAN
The input is to be translated on receipt.

Note: Translation, whether caused by the UCTRAN value for the terminal or the transaction, can be suppressed with the ASIS option when input is solicited in a conversational task. However, it cannot be suppressed for unsolicited input (the only input in pseudoconversational and non-conversational tasks).

This command may be used to set the upper case translation option for a remote terminal if the named terminal is the principal facility of the task issuing the command. If the remote terminal is not the principal facility the INVREQ condition will be raised with a RESP2 value of 24. The upper case translate option will also be changed in the terminal owning region and any intermediate regions in a daisy chaining setup.

Table 5. The effect of the UCTRAN parameters

Profile	Terminal (TYPETERM)		
	UCTRAN (YES)	**UCTRAN (NO)**	**UCTRAN (TRANID)**
UCTRAN (YES)	Tranid: Yes Data: Yes	Tranid: Yes Data: Yes	Tranid: Yes Data: Yes
UCTRAN (NO)	Tranid: Yes Data: Yes	Tranid: No Data: No	Tranid: Yes Data: No

Note: This table shows which portion of the terminal input is translated (transaction id and/or data) according to the setting of the UCTRAN on the PROFILE and TYPETERM resource definitions.

ZCPTRACING(*cvda***) (VTAM only)**
specifies whether this terminal is to be traced as part of CICS tracing for VTAM terminals. CVDA values are:

NOZCPTRACE
The terminal is not to be traced.

ZCPTRACE
The terminal is to be traced.

Conditions

INVREQ
RESP2 values:

1 TERMSTATUS or ACQSTATUS was specified for a non-VTAM terminal.
2 TERMSTATUS or ACQSTATUS has an invalid CVDA value.
4 ATISTATUS has an invalid CVDA value.
5 The ATISTATUS or TTISTATUS value specified would result in NOATI and NOTTI.

6 CREATESESS was specified for non-VTAM terminal.
7 CREATESESS has an invalid CVDA value.
9 PAGESTATUS has an invalid CVDA value.
11 OUTSERVICE has been specified for the principal facility.
13 SERVSTATUS has an invalid CVDA value.
15 The TERMPRIORITY value is out of range.
17 NOTTI has been specified for the principal facility.
18 TTISTATUS has an invalid CVDA value.
21 PURGETYPE has an invalid CVDA value.
22 TRACING has an invalid CVDA value.
24 An option invalid for a remote terminal was specified.
25 ACQUIRED was specified for a terminal not in service.
26 PURGE was specified, but the task at the terminal is NOTPURGEABLE.
28 ZCPTRACING has an invalid CVDA value.
29 ZCPTRACING was specified for a non-VTAM terminal, or VTAM is not installed.
31 An option invalid for a remote terminal was specified, or the terminal, which is remote, is not currently the principal facility of a task on your system.
33 An option other than CANCEL was specified for an APPC session.
34 A permanent transaction has been defined for this terminal (in the TRANSACTION option of the RDO TERMINAL resource definition).
37 Automatic signon failed: the terminal was not placed in service.
38 OBFORMATST has an invalid CVDA value.
39 RELREQST has an invalid CVDA value.
40 DISCREQST has an invalid CVDA value.
41 ALTPRTCOPYST has an invalid CVDA value.
42 PRTCOPYST has an invalid CVDA value.
43 UCTRANST has an invalid CVDA value.
44 The ALTPRTCOPYST or ALTPRINTER value would result in ALTPRTCOPY with no alternate printer defined.
45 The PRINTER or ALTPRINTER value would cause an alternate printer to be defined without a primary printer.
46 OBFORMATST was specified for a console or 3790.
48 The PRTCOPYST or PRINTER value would result in PRTCOPY with no primary printer defined.
50 The TERMSTATUS value cannot be honored because VTAM is closed or closing.
51 The PRINTER or ALTPRINTER option was specified for a non-3270 terminal.
52 The PRTCOPYST or ALTPRTCOPST option was specified for a non-3270 terminal.
54 An option other than PURGETYPE was specified for an MRO session.
57 Other options were specified with CANCEL.
60 MAPNAME or MAPSETNAME specified but the terminal is not a type that is supported by BMS.

NORMAL
RESP2 values:

53 Purge deferred.
58 AIDs are successfully cancelled.
59 No AIDs are cancelled.

NOTAUTH
RESP2 values:

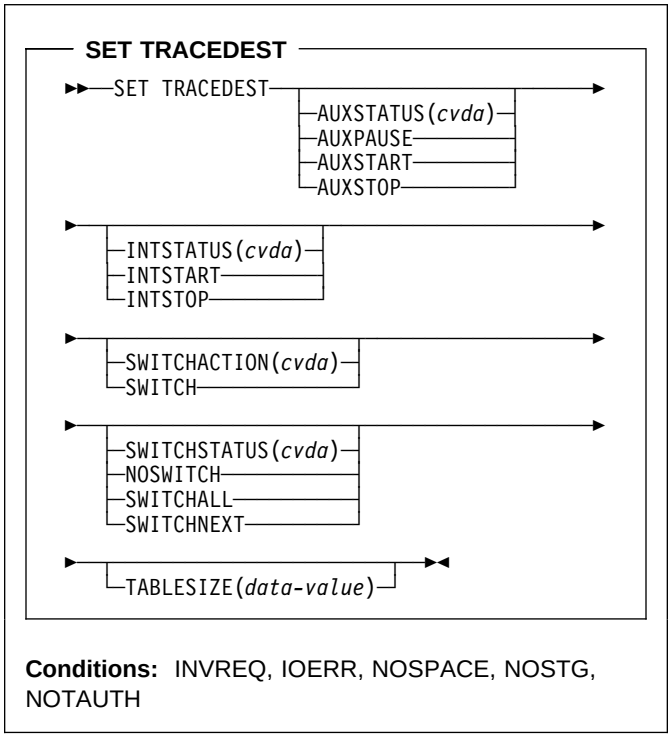
100 The user associated with the issuing task is not authorized to use this command.

TERMIDERR
RESP2 values:

23 The terminal cannot be found.

SET TRACEDEST

Change tracing options.



Conditions: INVREQ, IOERR, NOSPACE, NOSTG, NOTAUTH

For more information about the use of CVDAs, see “CICS-value data areas (CVDAs)” on page 7.

Context

CICS can write trace entries to two possible destinations: the CICS internal trace table, and the auxiliary trace data set. The SET TRACEDEST command allows you to specify which destinations are to receive the entries. You also can use it to change the size of the trace table and to switch auxiliary trace data sets.

Two other commands, SET TRACEFLAG and SET TRACETYPE, and a CICS-supplied transaction, CETR, can be used to control the number and type of trace entries.

Changes made with this command are not recorded in the CICS catalog. Therefore the options affected are always reset to the corresponding system initialization parameters at CICS startup. These are INTSTATUS and TRTABSZ (for internal tracing), and AUXTR and AUXTRSW (auxiliary tracing). See the *CICS System Definition Guide* for more information about these system initialization parameters.

Options

AUXSTATUS(*cvda***)**
specifies whether auxiliary tracing is to occur, that is, whether trace entries are to be written to the active CICS auxiliary trace data set. (See the SWITCHACTION option for more about auxiliary trace data sets.) CVDA values are:

AUXPAUSE
: CICS is to stop writing entries, but is to leave the data set open at its current position. A subsequent AUXSTART request will resume writing entries immediately after those that preceded the AUXPAUSE request. You can specify AUXPAUSE only when auxiliary tracing is currently active.

AUXSTART
: Entries are to be written. The data set is to be opened first if currently closed.

AUXSTOP
: Entries are not to be written. The data set is to be closed if open. A subsequent AUXSTART request will cause new entries to be written at the start of the data set, overwriting the previous contents, unless there are two auxiliary trace data sets and they are switched between the AUXPAUSE and AUXSTART.

INTSTATUS(*cvda***)**
specifies whether internal tracing is to occur, that is, whether non-exception trace entries are to be recorded in the internal trace table. (Exception entries are always recorded.) CVDA values are:

INTSTART
: Entries are to be recorded.

INTSTOP
: Entries are not to be recorded.

SWITCHACTION(*cvda***)**
specifies that the auxiliary trace data sets are to be switched.

If your system supports auxiliary tracing, it has either one or two auxiliary trace data sets. One is “active,” which means it receives trace entries when auxiliary tracing is turned on, and the other, if there are two, is a standby.

When there are two, you can reverse their roles by specifying SWITCH. This causes CICS to close the current active data set, open the standby, and reverse the designation of which is active and which standby.

If there is only one (or none), SWITCH causes an exception condition, because CICS attempts to open a data set that is not defined.

The CVDA value is:

SWITCH
: CICS is to perform a switch.

Note: If you request AUXSTATUS and SWITCHACTION in the same command, AUXSTATUS is set first.

SWITCHSTATUS(*cvda***)**
specifies what action CICS is to take when the current active auxiliary trace data set fills. When this occurs, CICS cannot continue auxiliary tracing unless a switch or an AUXSTOP-AUXSTART sequence takes place (see the SWITCHACTION and AUXSTATUS options). CVDA values are:

NOSWITCH
CICS is to take no action.

SWITCHALL
CICS is to switch every time the active data set fills.

SWITCHNEXT
CICS is to switch when the current data set is full, but only once; thereafter NOSWITCH is to be in effect.

TABLESIZE(*data-value***)**
specifies, as a fullword binary value, the size of the internal trace table in kilobytes. If you specify a value that is different from the current trace table size, CICS suspends internal tracing while the change is made, frees the old one, and obtains a new table of the requested size. Data that was in the old table is lost.

The table is allocated in multiples of 4KB, with a minimum size of 16KB. Consequently, the value you specify is increased to the next multiple of 4, and to 16 if you specify less than 16. The new table is allocated from partition GETVIS and the maximum size is determined by the storage available within the partition.

Conditions

INVREQ
RESP2 values:

1 INTSTATUS has an invalid CVDA value.
2 A TABLESIZE value of < –1 has been specified.
3 AUXSTATUS has an invalid CVDA value.
4 SWITCHSTATUS has an invalid CVDA value.
6 AUXPAUSE was specified, but auxiliary tracing is not active.
11 SWITCHACTION has an invalid CVDA value.

IOERR
RESP2 values:

10 A SWITCH request or a SET AUXSTART request resulted in an “open” error for the trace data set.

NOSPACE
RESP2 values:

7 There is insufficient space for the new trace table.

NOSTG
RESP2 values:

8 There is insufficient space for an auxiliary trace buffer.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

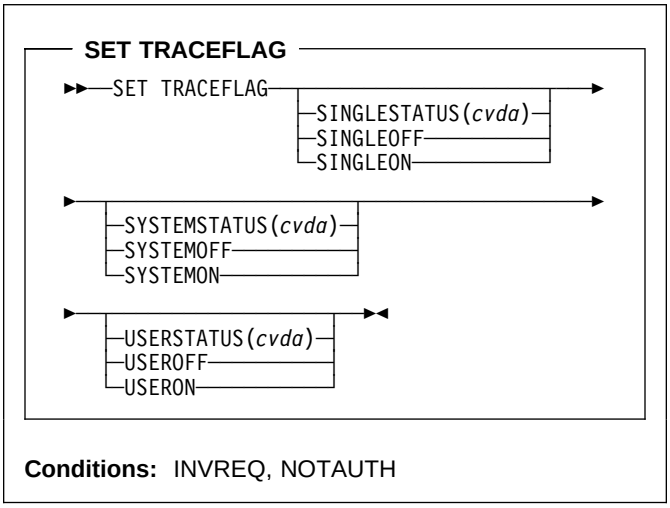
Examples

```
EXEC CICS SET TRACEDEST
              SWITCH
              NOSWITCH
```

The SWITCH option tells CICS to switch now from the active auxiliary trace data set (which is not necessarily full) to the alternate. The NOSWITCH option tells CICS not to switch when the new active data set fills.

SET TRACEFLAG

Change settings of trace flags.



Conditions: INVREQ, NOTAUTH

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The SET TRACEFLAG command allows you to change the flags that control the creation of trace entries in CICS. (See the *CICS Problem Determination Guide* for more information about tracing facilities and control.)

Changes made with this command are not recorded in the CICS catalog, and therefore do not persist beyond CICS shutdown.

Options

SINGLESTATUS(*cvda***)**
specifies whether tracing is to be turned on or suppressed for the task issuing this SET TRACEFLAG command. No non-exception trace entries are made for a task when this flag is off (exception trace entries are *always* recorded).

When tracing is allowed, the type of tracing is standard unless special tracing has been requested (in an earlier use of the CETR transaction) for the transaction being executed or the terminal that is the principal facility. CVDA values are:

SINGLEOFF
Tracing is suppressed.

SINGLEON
Tracing is allowed.

SYSTEMSTATUS(*cvda***)**
specifies how the system master trace flag is to be set. This flag determines whether CICS makes or suppresses standard trace entries (it does not govern special or exception trace entries). It applies to all tasks and all system activity; however, for standard trace entries to be recorded for any particular task, both the system master flag and the SINGLESTATUS flag for the task must be on. CVDA values are:

SYSTEMOFF
Standard tracing is to be suppressed.

SYSTEMON
Standard tracing is to be active.

USERSTATUS(*cvda***)**
specifies whether the user master trace flag is to be set on or off. This flag governs whether non-exception user trace entries are recorded or suppressed (entries that specify the EXCEPTION option are never suppressed). It applies to all tasks; however, for user entries to be recorded for any particular task, both the user master trace flag and the SINGLESTATUS flag for that task must be on. CVDA values are:

USEROFF
User tracing is suppressed.

USERON
User tracing is allowed.

Conditions

INVREQ
RESP2 values:

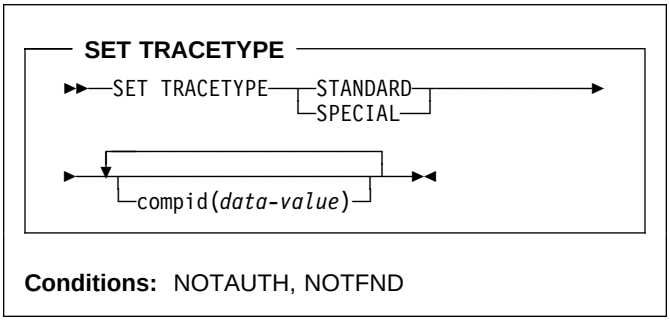
1 SYSTEMSTATUS has an invalid CVDA value.
2 USERSTATUS has an invalid CVDA value.
3 SINGLESTATUS has an invalid CVDA value.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

SET TRACETYPE

Change the tracing levels of CICS components.



Conditions: NOTAUTH, NOTFND

Context

The SET TRACETYPE command allows you to change the levels of tracing for one or more CICS components.

Each CICS component has trace levels defined separately for standard CICS tracing and special tracing (see the *CICS Problem Determination Guide* for definitions of these terms and for information about CICS tracing in general). You can set either type for any number of components in a SET TRACETYPE command, but you can set only one type per command.

For each component that you specify, you define the trace levels as a bit string. The bits are read from left to right; that is, the first bit corresponds to trace level 1, the second to trace level 2, and so on. A value of 1 turns on the trace level; 0 turns it off. For example, X'C0000000' turns trace levels 1 and 2 on and all others off.

Although most components define only a few trace levels, you must provide a 32-bit (4-byte) data value. CICS ignores bits that do not correspond to trace levels, and thus it does not matter whether you specify 0 or 1 for them.

Options

compid(*data-value***)**
sets the trace levels for the CICS component identified by "compid," using the bits in the data value as described above.

CICS components can be identified by a 2-character designation or, in some cases, a descriptive keyword. For example, to set the trace levels for the storage manager component of CICS, you can specify either:

```
SET TRACETYPE SM(data-value)
```

or

```
SET TRACETYPE STORAGE(data-value)
```

The following list shows all the 2-character identifiers, and the keywords for those components that have them.

AP	APPLICATION	Application
BF		Built-in functions
BM		Basic mapping support
CP	CPI	Common programming interface
DC		Dump control
DD	DIRMGR	Directory manager
DI		Batch data interchange
DM	DOMAINMGR	Domain manager
DS	DISPATCHER	Dispatch manager
DU	DUMP	Dump manager
EI		EXEC interface
FC		File control
GC	GLOBALCATLG	CICS global catalog manager
IC		Interval control
IS		Intersystem communication
JC		Journal control
KC		Task control
KE	KERNEL	Kernel
LC	LOCALCATLG	CICS local catalog manager
LD	LOADER	Program load manager
LM	LOCKMGR	Lock manager
ME	MESSAGE	Message manager
MN	MONITOR	Monitoring manager
PA	PARAMGR	Parameter manager
PC		Program control
PG	PROGMGR	Program manager
RC		Report Controller
SC		Storage control
SM	STORAGE	Storage manager
SP		Syncpoint manager
ST	STATISTICS	Statistics manager
SZ		Front-end programming interface
TC		Terminal control
TD		Transient data
TI	TIMER	Timer manager
TR	TRACE	Trace manager
TS		Temporary storage
UE		User exit interface
US	USER	User interface
XM	TRANMGR	Transaction manager
XS	SECURITY	Security manager

SPECIAL
specifies that you want to set levels for special tracing for the components listed.

STANDARD
specifies that you want to set levels for standard tracing for the components listed.

Conditions

NOTAUTH
RESP2 values:

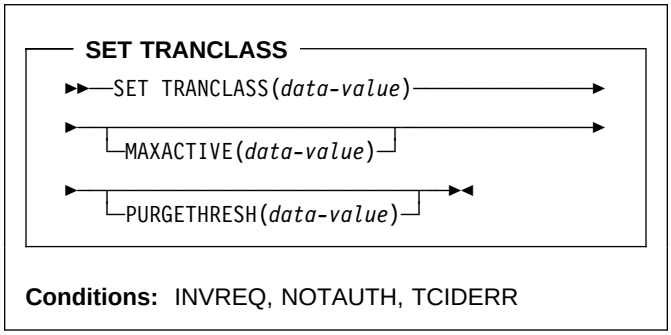
100 The user associated with the issuing task is not authorized to use this command.

NOTFND
RESP2 values:

1 At least one CICS component was not accessible. Trace levels were set for the other components.

SET TRANCLASS

Set limits for a transaction class.



Conditions: INVREQ, NOTAUTH, TCIDERR

Context

The SET TRANCLASS command allows you to change the limits that govern tasks within a particular transaction class. These are the maximum number of tasks that can run concurrently (the MAXACTIVE value) and the maximum number that can queue awaiting initial dispatch (the PURGETHRESH value).

Options

MAXACTIVE(*data-value***)**
specifies, as a fullword binary value, the largest number of tasks in the transaction class that can run concurrently. The value can be in the range 0–999.

Raising the MAXACTIVE limit has an immediate effect if the old value of MAXACTIVE has caused queuing, because CICS dispatches queued tasks up to the new MAXACTIVE value. The effect of lowering MAXACTIVE, however, is gradual. Tasks in the class that are already running are allowed to complete normally, but new tasks are not dispatched until the number running drops below the new limit. If you lower MAXACTIVE to zero, you prevent any task in the class from starting execution until MAXACTIVE is increased.

PURGETHRESH(*data-value***)**
specifies, as a fullword binary value, one more than the maximum number of tasks in this class that can be queued awaiting initial dispatch. Queuing can occur either because the number of active tasks in the class is already at the MAXACTIVE value or because the maximum for the system has been reached (see the MAXTASKS option in the INQUIRE SYSTEM command). Tasks that arrive while the queue is at its PURGETHRESH limit are purged (abended with a code of AKCC).

The PURGETHRESH value for a class can be between 0–1000000. A value of zero means there is no purge threshold limit, that is, that any number of tasks can be

queued. A value of one means that no tasks can be queued.

Raising the PURGETHRESH limit allows more transactions to queue and has an effect only when a task is attached that would have been purged if the old value were in effect.

However, if you lower the PURGETHRESH limit beyond the current size of the queue, enough queued tasks are abended to reduce the queue to the new limit. If you raise MAXACTIVE at the same time you lower PURGETHRESH, CICS dispatches as many queued tasks as possible before purging queued tasks, to minimize the number of tasks that get abended. Tasks are abended in priority order, starting with the lowest priority task.

TRANCLASS(*data-value***)**
specifies the 8-character name of the transaction class that you are changing. If the class is one of the numbered classes used in earlier releases of CICS, its name is DFHTCLnn, where "nn" is the two-digit class number.

Conditions

INVREQ
RESP2 values:

2 The MAXACTIVE value is not in the range 0–999.
3 The PURGETHRESH value is not in the range 0–1000000.

NOTAUTH
RESP2 values:

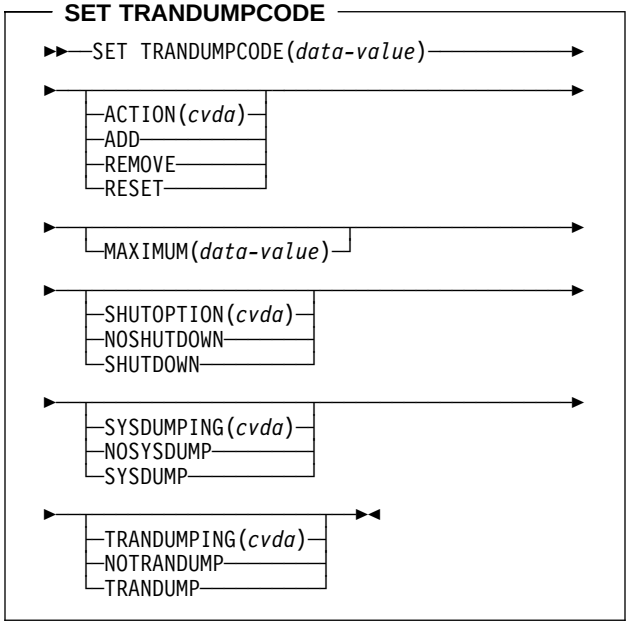
100 The user associated with the issuing task is not authorized to use this command.
101 The access requested to this transaction class is not authorized.

TCIDERR
RESP2 values:

1 The transaction class cannot be found.

SET TRANDUMPCODE

Change an entry in the transaction dump table.



Conditions: DUPREC, INVREQ, IOERR, NOSPACE, NOTAUTH, NOTFND

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The SET TRANDUMPCODE command allows you to change the transaction dump table entry for a particular dump code, to add a new dump code to the table, or to delete one.

The table entry tells CICS what actions to take when a transaction dump request with this code is received. Possible actions include taking a transaction dump, taking a system dump (a VSE SDUMP), and shutting down CICS. The table entry also indicates how many times this set of actions is to be taken (the MAXIMUM value); after the maximum is reached, requests are counted but otherwise ignored.

Table updates are recorded in the CICS global catalog (DFHGCD) and preserved over executions of CICS until a cold start occurs, except in the case of temporary table entries. CICS creates a temporary entry when it receives a dump request with a code for which there is no table entry; these entries, and any changes to them, last only for the current execution of CICS. If you want preserve changes to a temporary entry over restarts, you need to remove the dump code from the table and then add it back.

For information about transaction dumps, see the *CICS Problem Determination Guide*.

Options

ACTION(*cvda***)**
specifies what action is to be taken for the dump code. CVDA values are:

ADD An entry for this code is to be added to the table.

REMOVE
The entry for this code is to be removed from the table. No other options can be specified on a REMOVE request.

RESET
The current number of dump requests for this dump code is to be set to zero. (See the CURRENT option of the INQUIRE TRANDUMPCODE command.)

MAXIMUM(*data-value***)**
specifies, as a fullword binary value, the maximum number of times CICS should take the set of actions indicated in the dump table entry. After the maximum is reached, CICS counts but otherwise ignores dump requests with this code. The valid range is 0–999. A value of 999 means there is no limit, and is the default used if you omit this option from an ADD request.

You cannot specify both MAXIMUM and SHUTDOWN on a SET TRANDUMPCODE command.

SHUTOPTION(*cvda***)**
specifies whether the CICS system is to be shut down after a request for a dump with this dump code. CVDA values are:

NOSHUTDOWN
The system is not to be shut down.

SHUTDOWN
The system is to be shut down.

If this option is omitted from an ADD request, NOSHUTDOWN is assumed.

You cannot specify both MAXIMUM and SHUTDOWN on a SET TRANDUMPCODE command.

SYSDUMPING(*cvda***)**
specifies whether a system dump (a VSE SDUMP) should be taken when a transaction dump request with this code is received. CVDA values are:

NOSYSDUMP
A system dump is not to be taken.

SYSDUMP
A system dump is to be taken.

Even when SYSDUMP is specified, CICS takes a dump only if the number of requests for this code is less than the MAXIMUM and system dumps are not suppressed globally (see the DUMPING option of the INQUIRE SYSTEM command).

If this option is omitted from an ADD request, NOSYSDUMP is assumed.

TRANDUMPCODE(*data-value***)**
specifies the 4-character transaction dump code for which the transaction dump table entry is to be changed. A valid transaction dump code has no leading or imbedded blanks.

TRANDUMPING(*cvda***)**
specifies whether a transaction dump should be taken when a transaction dump request with this code is received. CVDA values are:

NOTRANDUMP
A transaction dump is not to be taken.

TRANDUMP
A transaction dump is to be taken.

Even when TRANDUMP is specified, CICS will dump only when the count of requests for this code is no greater than the MAXIMUM.

If this option is omitted from an ADD request, TRANDUMP is assumed.

Conditions

DUPREC
RESP2 values:

10 ADD is specified for a dump code already in the transaction dump table.

INVREQ
RESP2 values:

2 ACTION has an invalid CVDA value.
3 TRANDUMPING has an invalid CVDA value.
4 SYSDUMPING has an invalid CVDA value.
5 The MAXIMUM value is out of range.
6 SHUTOPTION has an invalid CVDA value.
7 REMOVE is specified with other options.
8 Both MAXIMUM and SHUTDOWN are specified.
9 The dump code is invalid.

IOERR
RESP2 values:

11 An error occurred updating the CICS global catalog (DFHGCD). The entry is changed for the current run, but is not recorded for restarts.

NOSPACE
RESP2 values:

12 The CICS global catalog (DFHGCD) is full. The entry is changed for the current run, but is not recorded for restarts.

NOTAUTH
RESP2 values:

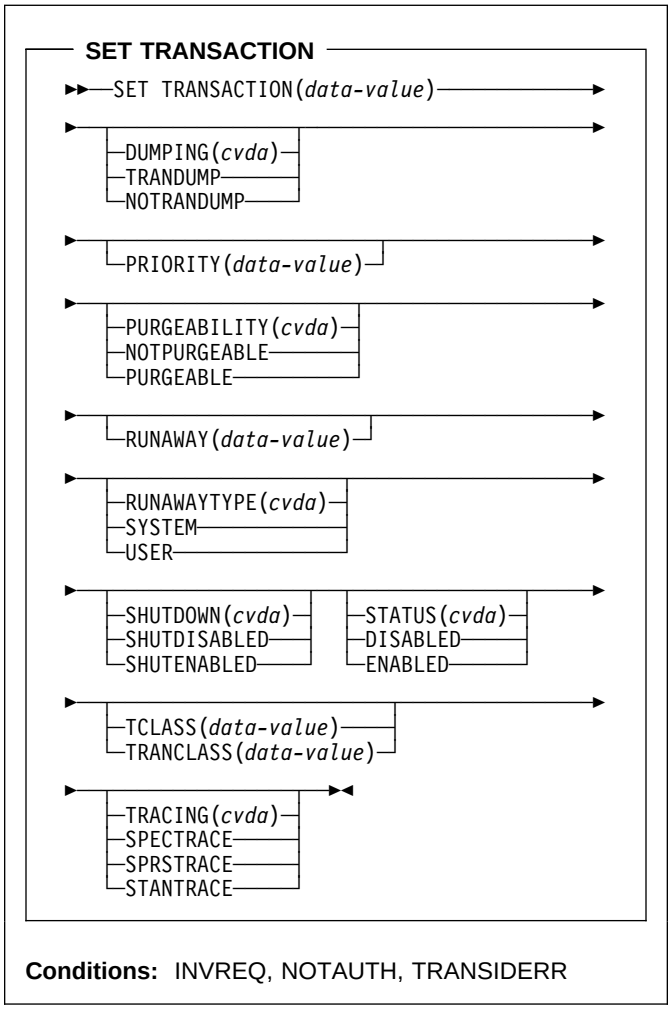
100 The user associated with the issuing task is not authorized to use this command.

NOTFND
RESP2 values:

1 The dump code cannot be found.

SET TRANSACTION

Change a TRANSACTION definition.



Conditions: INVREQ, NOTAUTH, TRANSIDERR

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The SET TRANSACTION command allows you to change some attributes of a TRANSACTION definition.

You can change only the definitions in the local CICS system with this command. If you change a transaction that executes remotely (that is, one that specifies a REMOTESYSTEM value), your changes are made, but they have no effect on the definition in the remote system to which the local definition points, and therefore no effect on tasks that execute the transaction. If a transaction is defined as remote, i.e. it will run in another system, a change may be made to the remote definition but this will not be shipped back to the AOR.

Changing a TRANSACTION definition affects only future tasks; to change a task already executing the transaction, use the SET TASK command.

Options

DUMPING(*cvda*)
specifies whether CICS should take a transaction dump if a task executing this transaction terminates abnormally. CVDA values are:

NOTRANDUMP
No dump should be taken.

TRANDUMP
A dump should be taken.

This value applies only to abend dumps and has no effect on DUMP TRANSACTION commands.

PRIORITY(*data-value*)
specifies, as a fullword binary value, the priority of this transaction relative to other transactions in the CICS system. The value must be in the range 1–255.

PURGEABILITY(*cvda*)
returns a CVDA value indicating whether CICS is allowed to purge this task (that is, to terminate it abnormally). Purge requests come from SET TASK PURGE commands (or CEMT equivalents), and CICS can generate them internally to reclaim resources to relieve a system stall condition. CVDA values are:

NOTPURGEABLE
The task cannot be purged.

PURGEABLE
The task can be purged.

The PURGEABILITY value is set initially by the SPURGE option in the definition of the TRANSACTION this task is executing.

RUNAWAY(*data-value*)
specifies, as a fullword binary value, the “runaway task” time, in milliseconds, for tasks executing this transaction. The value must be in the range 0–2700000. If a task keeps control of the processor for more than this interval, CICS assumes it is in a loop and abends it. If the value is zero, CICS does not monitor the task for a runaway condition.

Note: If you specify RUNAWAY, you must set RUNAWAYTYPE to USER in the same SET command, even if RUNAWAYTYPE already has a value of USER.

RUNAWAYTYPE(*cvda*)
specifies where the runaway task time for a task executing this transaction should be obtained. CVDA values are:

SYSTEM
The system default for runaway-task time should be used. (An INQUIRE SYSTEM command with the RUNAWAY option will tell you what the system value is.)

USER
The RUNAWAY value for this transaction should be used. You must specify a value for RUNAWAY when you specify USER.

SHUTDOWN(*cvda*)
specifies whether this transaction can be executed during CICS shutdown by a task created to process unsolicited terminal input (the transaction also can be executed in this situation if it appears in the transaction list table (XLT) for shutdown). CVDA values are:

SHUTDISABLED
The transaction cannot be executed.

SHUTENABLED
The transaction can be executed.

STATUS(*cvda*)
specifies whether the transaction is to be available for use. CVDA values are:

DISABLED
The transaction is not available for use.

ENABLED
The transaction is available for use.

Transactions beginning with the letter “C” are CICS-supplied and cannot be disabled.

TCLASS(*data-value*)
specifies, as a fullword binary value, the user-defined task class of this transaction, which must be in the range 0–10. When executed under CICS Transaction Server for VSE/ESA Release 1, SET TRANSACTION TCLASS sets the TRANCLASS value in a TRANSACTION definition.

TCLASS is provided only for compatibility with earlier releases of CICS, where transaction classes were numbered rather than named, and you can use it only to assign a name of the form DFHTCLnn, where nn is the number you specify, in the range 01–10. (It does not change the TCLASS value in the TRANSACTION definition, which CICS maintains for situations in which the same TRANSACTION definition is used for several different releases. See the descriptions of TCLASS and TRANCLASS in the INQUIRE TRANSACTION command for more information.)

TRACING(*cvda*)
specifies the type of tracing to be done for tasks executing this transaction. See the *CICS Problem Determination Guide* for definitions of tracing types. CVDA values are:

SPECTRACE
Tracing is to be special.

SPRSTRACE
Tracing is to be suppressed.

STANTRACE
Tracing is to be standard.

TRANCLASS(*data-value***)**
specifies the 8-character name of the transaction class to which this transaction is to belong.

TRANSACTION(*data-value***)**
specifies the 4-character name of the TRANSACTION definition that you are changing.

Conditions

INVREQ
RESP2 values:

2 PURGEABILITY has an invalid CVDA value.
3 STATUS has an invalid CVDA value.
4 DISABLED has been specified for a CICS-supplied transaction.
5 The TCLASS value is invalid or TRANCLASS name is not known.
7 TRACING has an invalid CVDA value.
8 DUMPING has an invalid CVDA value.
9 The PRIORITY value is out of range.
10 RUNAWAYTYPE has an invalid CVDA value.
11 SHUTDOWN has an invalid CVDA value.
12 USER has been specified without a RUNAWAY value.
13 RUNAWAY has been specified without a RUNAWAYTYPE value of USER.
14 The RUNAWAY value is out of range.

NOTAUTH
RESP2 values:

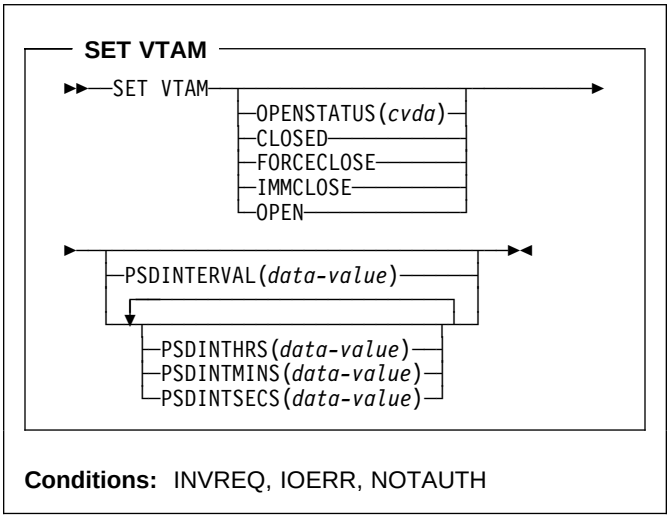
100 The user associated with the issuing task is not authorized to use this command.
101 The user associated with the issuing task is not authorized to access this particular resource in the way required by this command.

TRANSIDERR
RESP2 values:

1 The transaction cannot be found.

SET VTAM

Modify the CICS VTAM connection.



Conditions: INVREQ, IOERR, NOTAUTH

For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

Context

The SET VTAM command allows you to establish or terminate the CICS connection to VTAM and to modify the persistent session delay interval value that CICS passes to VTAM.

Options

OPENSTATUS(*cvda***)**
specifies whether or not CICS is to have a connection to VTAM (that is, whether the VTAM ACB is to be open or closed) and, if CICS must close the ACB to comply, how the shut down should be done. CVDA values are:

CLOSED
The connection is to be closed. If it is currently open, CICS is to quiesce all VTAM activity and then close the VTAM ACB. Tasks using VTAM terminals or sessions are allowed to complete before closure, but new tasks requiring VTAM are not begun.

FORCECLOSE
The connection is to be closed. If currently open, CICS is to close the VTAM ACB immediately. Both VTAM sessions and tasks using VTAM will terminate abnormally as a result.

If VTAM persistent sessions support is in use (that is, the SIT parameter PSDINT has a value other than 0) the sessions will persist when the ACB is closed. They will be unbound if the ACB is re-opened dynamically. If CICS has shutdown in any way other than a normal shutdown (see the *CICS Recovery and Restart Guide* for a description of normal shutdown), and is restarted with the system initialization parameter START=AUTO, then an emergency restart will be performed, and the sessions will be restored.

IMMCLOSE
The connection is to be closed. If currently open, CICS is to terminate abnormally any tasks using VTAM immediately, do an orderly shutdown of all its VTAM sessions, and then close the VTAM ACB.

OPEN
A connection is to be open. If the VTAM ACB is closed, CICS is to open it.

PSDINTERVAL(*data-value***)**
specifies the persistent session delay (PSD) interval value, which determines whether and for how long VTAM is to hold sessions in recovery-pending state after a CICS failure. The range for the value is 0–23:59:59. Zero causes the persistent session feature not to be used; sessions are terminated at the time of the failure.

Note: Zero is the only value allowed in a system which is eligible for the extended recovery facility; see the XRFSTATUS option in the INQUIRE SYSTEM command.

When you specify a PSD interval, CICS sets the system initialization parameter PSDINT (see the *CICS System Definition Guide* for more information). CICS passes this value to VTAM whenever it opens the ACB. This will occur immediately if you specify an OPENSTATUS value of OPEN in the same SET SYSTEM command, or if the VTAM ACB is already open and you do not close it. If the ACB is closed or being closed, or if the open attempt fails, the new value is established on the next successful open.

The PSD interval can be expressed in several ways:

- A 4-byte packed decimal composite, in the format **"0hhmmss+"**, using the PSDINTERVAL option.
- With separate hours, minutes, and seconds, using the PSDINTHRS, PSDINTMINS, and PSDINTSECS options. You can use these options singly or in any combination.

When you use PSDINTERVAL or more than one of the separate options, the minutes and seconds portions of the value must not be greater than 59 (PSDINTMINS or PSDINTSECS used alone can exceed 59). For example, you could express an interval of 1 hour and 30 minutes in any of the following ways:

- PSDINTERVAL(13000)
- PSDINTHRS(1), PSDINTMINS(30)
- PSDINTMINS(90)
- PSDINTSECS(5400)

PSDINTHRS(*data-value***)**
specifies the hours component of the PSD interval, in fullword binary form (see the PSDINTERVAL option).

PSDINTMINS(*data-value***)**
specifies the minutes component of the PSD interval, in fullword binary form (see the PSDINTERVAL option).

PSDINTSECS(*data-value***)**
specifies the seconds component of the PSD interval, in fullword binary form (see the PSDINTERVAL option).

Conditions

INVREQ
RESP2 values:

1 VTAM is not present in the system.
2 OPENSTATUS has an invalid CVDA value.
4 The PSDINTERVAL value is out of range.
5 The PSDINTHRS value is out of range.
6 The PSDINTMINS value is out of range.
7 The PSDINTSECS value is out of range.
8 A PSDINTERVAL value > 0 was specified in an XRF-eligible system. (XRF=YES system initialization parameter).
9 VTAM reported an error while an attempt was being made to set the PSD interval.
10 A PSD interval has been specified but either the VTAM currently in use (or the VTAM library used when the terminal control table was assembled) does not support persistent sessions. The interval may have been specified earlier than this command; see the PSDINTERVAL description. If OPEN was also requested, CICS has opened the VTAM ACB.
11 The ACB has opened successfully, but an error occurred in at least one of the sessions that persisted from the previous failure.
12 Your OPEN request did not complete because another task subsequently requested a close of the VTAM connection.
13 An error occurred during recovery of sessions, and the VTAM ACB will be closed as a result.
14 CICS is performing cleanup processing following a predatory XRF takeover. CICS rejects OPEN requests with this error, without invoking VTAM, during this activity. OPEN requests are processed as usual as soon as cleanup is complete.

IOERR
RESP2 values:

n An error occurred during the opening of the ACB. If CICS could not process the request, the RESP2 value is 3. If VTAM detected the failure, CICS returns the value set in the ERROR field of the ACB in RESP2. You can look up these errors in the *VTAM Programming* manual, under *OPEN Macroinstruction*.

NOTAUTH
RESP2 values:

100 The user associated with the issuing task is not authorized to use this command.

Appendix A. CICS-value data areas used by all commands

This section lists the CICS-value data-area (CVDA) values and their numeric equivalents for all of the EXEC CICS commands. CVDAs are described beginning on page 7.

Using the tables

The section consists of three tables. The first, beginning below, is in character sequence of the CVDA values. The second, beginning on page 199, is in numeric sequence. The third, beginning on page 203, gives the CVDA values returned by the INQUIRE TERMINAL|NETNAME DEVICE command.

CVDAs and numeric values in alphabetic sequence

CVDA	Value
ACQFAIL	515
ACQUIRED	69
ACQUIRING	71
ACTIVE	181
ADD	291
ADDABLE	41
ADDFAIL	519
ADVANCE	265
ALARM	501
ALLCONN	169
ALLOCATED	81
ALLQUERY	431
ALTERABLE	52
ALTERNATE	197
ALTPRTCOPY	446
ANY	158
APLKYBD	391
APLTEXT	393
APPC	124
APPCPARALLEL	374
APPCSINGLE	373
APPLICATION	559
ASACTL	224
ASCII7	616
ASCII8	617
ASSEMBLER	150
ATI	75
ATTENTION	524
AUDALARM	395
AUTOACTIVE	630
AUTOARCH	262
AUTOCONN	170
AUTOINACTIVE	631
AUTOPAGEABLE	80
AUTOSTART	618
AUXILIARY	247
AUXPAUSE	313
AUXSTART	312
AUXSTOP	314
AVAILABLE	95
BACKOUT	192
BACKTRANS	397
BASE	10
BDAM	2
BEGINSESSION	510
BELOW	159
BGAM	63
BLK	47
BLOCKED	16
BROWSABLE	39
BSAM	61
BTAM	62
BUSY	612
C	149
CANCEL	526
CANCELLED	624
CD	491
CEDF	370
CICS	660
CICSDATAKEY	379
CICSEXECKEY	381
CICSTABLE	101
CLEAR	640
CLOSED	19
CLOSELEAVE	261
CLOSEREQUEST	22
CLOSING	21
CMDPROT	673
CMDSECNO	205
CMDSECYES	207
COBOL	151
COBOLII	375
COLDACQ	72
COLDQUERY	433
COLDSTART	266
COLOR	399
COMMIT	208
CONFFREE	82
CONFRECEIVE	83
CONFSEND	84
CONNECTED	690
CONSOLE	66
CONTROLSHUT	623
CONVERSE	600
CONVIDLE	518
COPY	401
CREATE	67
CTLGALL	632
CTLGMODIFY	633
CTLGNONE	634
CTRLABLE	56
CURRENT	260
DAM	2
DATA	508
DATASTREAM	543
DEC	46
DEFAULT	198
DEFRESP1	497
DEFRESP1OR2	528
DEFRESP2	498
DEFRESP3	499
DELAY	637
DELETABLE	43
DELETEFAIL	520

CVDA	Value
DEST	235
DISABLED	24
DISABLING	25
DISCARDFAIL	513
DISCREQ	444
DISK1	252
DISK2	253
DISK2PAUSE	254
DISPATCHABLE	228
DMF	255
DPLSUBSET	383
DS3270	615
DUALCASE	403
EB	490
EMERGENCY	268
EMPTY	210
EMPTYREQ	31
ENABLED	23
ESDS	5
EXCEPT	332
EXCEPTRESP	523
EXCI	650
EXCTL	48
EXTENDEDDS	405
EXTRA	221
EXTSECURITY	194
FAILEDBKOUT	357
FAILINGBKOUT	358
FCLOSE	273
FINALQUIESCE	183
FINPUT	270
FIRSTINIT	625
FIRSTQUIESCE	182
FIXED	12
FMH	502
FMHPARM	385
FOPEN	272
FORCE	342
FORCECLOSE	351
FORCECLOSING	353
FORCEPURGE	237
FORMATEDF	606
FORMATTED	542
FORMFEED	407
FOUTPUT	271
FREE	85
FREEING	94
FULL	212
FULLAPI	384
FWDRECOVABLE	354
GENERIC	651
GMT	604
GOINGOUT	172
HEX	45
HFORM	409
HILIGHT	413
HOLD	163
IGNORE	1
IMMCLOSE	350
IMMCLOSING	352
INACTIVE	378
INBOUND	547
INDIRECT	122
INITCOMPLETE	628
INOUT	532
INPUT	226
INSERVICE	73
INSTALLED	550
INSTALLFAIL	512
INTRA	222
INTSTART	310
INTSTOP	311
INVALID	359
IRC	121
KATAKANA	415
KEYED	8
KSDS	6
LE370	377
LEVSE	377
LIC	493
LIGHTPEN	417
LOCAL	605
LOG	54
LOGICAL	216
LOGTERM	269
LOSE	544
LPA	165
LUP	541
LUSTAT	525
LUW	246
LU61	125
MAIN	248
MAP	155
MAPSET	155
MCHCTL	241
MDT	506
MODEL	370
MORE	492
MSRCONTROL	419
NEGATIVE	530
NEWCOPY	167
NEWSESSION	485
NOALARM	500
NOALTPRTCOPY	447
NOAPLKYBD	392
NOAPLTEXT	394
NOATI	76
NOAUDALARM	396
NOAUTOARCH	263
NOBACKTRANS	398
NOCEDF	371
NOCLEAR	641
NOCMDPROT	674
NOCOLOR	400
NOCONV	556
NOCONVERSE	601
NOCOPY	402
NOCREATE	68
NOCTL	223
NODISCREQ	445
NODUALCASE	404
NOEMPTYREQ	32
NOEXCEPT	333
NOEXCTL	49
NOEXTENDEDDS	406
NOFMH	503
NOFMHPARM	386
NOFORMATEDF	607
NOFORMFEED	408
NOHFORM	410
NOHILIGHT	414
NOHOLD	164

CVDA	Value
NOKATAKANA	416
NOLIGHTPEN	418
NOLOG	55
NOMDT	507
NOMSGJRNL	531
NOMSRCONTROL	420
NONAUTOCONN	171
NONCICS	661
NONE	496
NOOBFORMAT	422
NOOBOPERID	388
NOOUTLINE	424
NOPARTITIONS	426
NOPERF	331
NOPRESETSEC	243
NOPRINTADAPT	428
NOPROGSYMBOL	430
NOPRTCOPY	449
NOQUERY	432
NOREENTPROT	681
NORELREQ	443
NORMALBKOUT	356
NORMALRESP	522
NOSECURITY	196
NOSHUTDOWN	289
NOSOSI	435
NOSTSN	487
NOSWITCH	285
NOSYSCONNECT	654
NOSYNCPOINT	603
NOSYSDUMP	185
NOTADDABLE	42
NOTALTERABLE	53
NOTAPPLIC	1
NOTASKSTART	608
NOTBROWSABLE	40
NOTBUSY	613
NOTCDEB	495
NOTCONNECTED	691
NOTCTRLABLE	57
NOTDEFINED	659
NOTDELETABLE	44
NOTEMPTY	211
NOTERMINAL	214
NOTEXTKYBD	437
NOTEXTPRINT	439
NOTFWDRCVBLE	361
NOTINBOUND	546
NOTINIT	376
NOTINSTALLED	551
NOTKEYED	9
NOTLPA	166
NOTPENDING	127
NOTPURGEABLE	161
NOTRANDUMP	187
NOTREADABLE	36
NOTREADY	259
NOTRECOVABLE	30
NOTREQUIRED	667
NOTSOS	669
NOTSVA	166
NOTTABLE	100
NOTTI	78
NOTUPDATABLE	38
NOUCTRAN	451
NOVALIDATION	441
NOVFORM	412
NOWAIT	341
NOWRITE	275
NOZCPTRACE	365
OBFORMAT	421
OBOPERID	387
OBTAINING	96
OFF	200
OK	274
OLD	26
OLDCOPY	162
OLDSESSION	486
ON	201
OPEN	18
OPENING	20
OPENOUTPUT	257
OUTLINE	423
OUTPUT	227
OUTSERVICE	74
PAGEABLE	79
PARTITIONS	425
PARTITIONSET	156
PATH	11
PENDBEGIN	558
PENDDATA	560
PENDFREE	86
PENDING	126
PENDPASS	565
PENDRECEIVE	87
PENDRELEASE	562
PENDSTART	561
PENDSTSN	557
PENDUNSOL	564
PERF	330
PHASEIN	168
PHYSICAL	215
PLI	152
PL1	152
POSITIVE	529
POST	636
PRESETSEC	242
PRIMARY	110
PRINTADAPT	427
PRIVATE	174
PROGRAM	154
PROGSYMBOL	429
PROTECTED	504
PRTCOPY	448
PURGE	236
PURGEABLE	160
READABLE	35
READBACK	209
READONLY	275
READY	258
RECEIVE	88
RECOVERABLE	29
RECOVERED	277
REENTPROT	680
RELEASE	563
RELEASED	70
RELEASING	549
RELREQ	442
REMOTE	4
REMOVE	276
REMTABLE	103
REQUIRED	666

CVDA	Value
RESET	290
RESSECINT	203
RESSECNO	202
RESSECYES	204
REVERTED	264
ROLLBACK	89
ROUTE	638
RRDS	7
RTR	527
RU	494
RUNNING	229
SCS	614
SECONDINIT	626
SEND	90
SESSION	372
SESSIONFAIL	517
SESSIONLOST	516
SETFAIL	514
SHARE	27
SHARED	173
SHUTDOWN	288
SHUTDISABLED	645
SHUTENABLED	644
SIGNEDOFF	245
SIGNEDON	244
SINGLEOFF	324
SINGLEON	323
SMF	255
SOS	668
SOSI	434
SPECIFIC	652
SPECTRACE	177
SPRSTRACE	175
STANDBY	629
STANTRACE	176
START	635
STARTED	609
STARTUP	180
STOPPED	610
STSN	509
STSNSET	488
STSNTEST	489
SURROGATE	371
SUSPENDED	231
SVA	165
SWITCH	188
SWITCHALL	287
SWITCHING	225
SWITCHNEXT	286
SYNCFREE	91
SYNCPOINT	602
SYNCRECEIVE	92
SYNCSEND	93
SYSCONNECT	653
SYSDUMP	184
SYSTEM	643
SYSTEMOFF	320
SYSTEMON	319
TAKEOVER	111
TAPE1	250
TAPE2	251
TASK	233
TASKSTART	611
TERM	234
TERMINAL	213
TEXTKYBD	436
TEXTPRINT	438
THIRDINIT	627
TIMEOUT	511
TPS55M2	552
TPS55M3	553
TPS55M4	554
TPS55M5	555
TRANDUMP	186
TRANIDONLY	452
TTI	77
T3278M2	533
T3278M3	534
T3278M4	535
T3278M5	536
T3279M2	537
T3279M3	538
T3279M4	539
T3279M5	540
UCTRAN	450
UNBLOCKED	17
UNDEFINED	14
UNDETERMINED	355
UNENABLED	33
UNPROTECTED	505
UNSOLDATA	521
UPDATABLE	37
USER	642
USERDATAKEY	380
USEREXECKEY	382
USEROFF	322
USERON	321
USERTABLE	102
VALID	360
VALIDATION	440
VARIABLE	13
VFORM	411
VSAM	3
VTAM	60
WAIT	340
WARMSTART	267
WIN	545
XNOTDONE	144
XOK	143
ZCPTRACE	364

CVDAs and numeric values in numeric sequence

Value	CVDA
1	NOTAPPLIC
1	IGNORE
2	BDAM
2	DAM
3	VSAM
4	REMOTE
5	ESDS
6	KSDS
7	RRDS
8	KEYED
9	NOTKEYED
10	BASE
11	PATH
12	FIXED
13	VARIABLE
14	UNDEFINED
16	BLOCKED
17	UNBLOCKED
18	OPEN
19	CLOSED
20	OPENING
21	CLOSING
22	CLOSEREQUEST
23	ENABLED
24	DISABLED
25	DISABLING
26	OLD
27	SHARE
29	RECOVERABLE
30	NOTRECOVABLE
31	EMPTYREQ
32	NOEMPTYREQ
33	UNENABLED
35	READABLE
36	NOTREADABLE
37	UPDATABLE
38	NOTUPDATABLE
39	BROWSABLE
40	NOTBROWSABLE
41	ADDABLE
42	NOTADDABLE
43	DELETABLE
44	NOTDELETABLE
45	HEX
46	DEC
47	BLK
48	EXCTL
49	NOEXCTL
52	ALTERABLE
53	NOTALTERABLE
54	LOG
55	NOLOG
56	CTRLABLE
57	NOTCTRLABLE
60	VTAM
61	BSAM
62	BTAM
63	BGAM
66	CONSOLE
67	CREATE
68	NOCREATE
69	ACQUIRED
70	RELEASED
71	ACQUIRING
72	COLDACQ
73	INSERVICE
74	OUTSERVICE
75	ATI
76	NOATI
77	TTI
78	NOTTI
79	PAGEABLE
80	AUTOPAGEABLE
81	ALLOCATED
82	CONFFREE
83	CONFRECEIVE
84	CONFSEND
85	FREE
86	PENDFREE
87	PENDRECEIVE
88	RECEIVE
89	ROLLBACK
90	SEND
91	SYNCFREE
92	SYNCRECEIVE
93	SYNCSEND
94	FREEING
95	AVAILABLE
96	OBTAINING
100	NOTTABLE
101	CICSTABLE
102	USERTABLE
103	REMTABLE
110	PRIMARY
111	TAKEOVER
121	IRC
122	INDIRECT
124	APPC
125	LU61
126	PENDING
127	NOTPENDING
143	XOK
144	XNOTDONE
149	C
150	ASSEMBLER
151	COBOL
152	PLI
152	PL1
154	PROGRAM
155	MAP
155	MAPSET
156	PARTITIONSET
158	ANY
159	BELOW
160	PURGEABLE
161	NOTPURGEABLE
162	OLDCOPY
163	HOLD
164	NOHOLD
165	LPA
165	SVA
166	NOTLPA
166	NOTSVA
167	NEWCOPY
168	PHASEIN
169	ALLCONN
170	AUTOCONN
171	NONAUTOCONN

Value	CVDA
172	GOINGOUT
173	SHARED
174	PRIVATE
175	SPRSTRACE
176	STANTRACE
177	SPECTRACE
180	STARTUP
181	ACTIVE
182	FIRSTQUIESCE
183	FINALQUIESCE
184	SYSDUMP
185	NOSYSDUMP
186	TRANDUMP
187	NOTRANDUMP
188	SWITCH
192	BACKOUT
194	EXTSECURITY
196	NOSECURITY
197	ALTERNATE
198	DEFAULT
200	OFF
201	ON
202	RESSECNO
203	RESSECINT
204	RESSECYES
205	CMDSECNO
207	CMDSECYES
208	COMMIT
209	READBACK
210	EMPTY
211	NOTEMPTY
212	FULL
213	TERMINAL
214	NOTERMINAL
215	PHYSICAL
216	LOGICAL
221	EXTRA
222	INTRA
223	NOCTL
224	ASACTL
225	SWITCHING
226	INPUT
227	OUTPUT
228	DISPATCHABLE
229	RUNNING
231	SUSPENDED
233	TASK
234	TERM
235	DEST
236	PURGE
237	FORCEPURGE
241	MCHCTL
242	PRESETSEC
243	NOPRESETSEC
244	SIGNEDON
245	SIGNEDOFF
246	LUW
247	AUXILIARY
248	MAIN
250	TAPE1
251	TAPE2
252	DISK1
253	DISK2
254	DISK2PAUSE
255	DMF
255	SMF

Value	CVDA
257	OPENOUTPUT
258	READY
259	NOTREADY
260	CURRENT
261	CLOSELEAVE
262	AUTOARCH
263	NOAUTOARCH
264	REVERTED
265	ADVANCE
266	COLDSTART
267	WARMSTART
268	EMERGENCY
269	LOGTERM
270	FINPUT
271	FOUTPUT
272	FOPEN
273	FCLOSE
274	OK
275	NOWRITE
275	READONLY
276	REMOVE
277	RECOVERED
285	NOSWITCH
286	SWITCHNEXT
287	SWITCHALL
288	SHUTDOWN
289	NOSHUTDOWN
290	RESET
291	ADD
310	INTSTART
311	INTSTOP
312	AUXSTART
313	AUXPAUSE
314	AUXSTOP
319	SYSTEMON
320	SYSTEMOFF
321	USERON
322	USEROFF
323	SINGLEON
324	SINGLEOFF
330	PERF
331	NOPERF
332	EXCEPT
333	NOEXCEPT
340	WAIT
341	NOWAIT
342	FORCE
350	IMMCLOSE
351	FORCECLOSE
352	IMMCLOSING
353	FORCECLOSING
354	FWDRECOVABLE
355	UNDETERMINED
356	NORMALBKOUT
357	FAILEDBKOUT
358	FAILINGBKOUT
359	INVALID
360	VALID
361	NOTFWDRCVBLE
364	ZCPTRACE
365	NOZCPTRACE
370	MODEL
370	CEDF
371	SURROGATE
371	NOCEDF
372	SESSION

Value	CVDA
373	APPCSINGLE
374	APPCPARALLEL
375	COBOLII
376	NOTINIT
377	LE370
377	LEVSE
378	INACTIVE
379	CICSDATAKEY
380	USERDATAKEY
381	CICSEXECKEY
382	USEREXECKEY
383	DPLSUBSET
384	FULLAPI
385	FMHPARM
386	NOFMHPARM
387	OBOPERID
388	NOOBOPERID
391	APLKYBD
392	NOAPLKYBD
393	APLTEXT
394	NOAPLTEXT
395	AUDALARM
396	NOAUDALARM
397	BACKTRANS
398	NOBACKTRANS
399	COLOR
400	NOCOLOR
401	COPY
402	NOCOPY
403	DUALCASE
404	NODUALCASE
405	EXTENDEDDS
406	NOEXTENDEDDS
407	FORMFEED
408	NOFORMFEED
409	HFORM
410	NOHFORM
411	VFORM
412	NOVFORM
413	HILIGHT
414	NOHILIGHT
415	KATAKANA
416	NOKATAKANA
417	LIGHTPEN
418	NOLIGHTPEN
419	MSRCONTROL
420	NOMSRCONTROL
421	OBFORMAT
422	NOOBFORMAT
423	OUTLINE
424	NOOUTLINE
425	PARTITIONS
426	NOPARTITIONS
427	PRINTADAPT
428	NOPRINTADAPT
429	PROGSYMBOL
430	NOPROGSYMBOL
431	ALLQUERY
432	NOQUERY
433	COLDQUERY
434	SOSI
435	NOSOSI
436	TEXTKYBD
437	NOTEXTKYBD
438	TEXTPRINT
439	NOTEXTPRINT

Value	CVDA
440	VALIDATION
441	NOVALIDATION
442	RELREQ
443	NORELREQ
444	DISCREQ
445	NODISCREQ
446	ALTPRTCOPY
447	NOALTPRTCOPY
448	PRTCOPY
449	NOPRTCOPY
450	UCTRAN
451	NOUCTRAN
452	TRANIDONLY
485	NEWSESSION
486	OLDSESSION
487	NOSTSN
488	STSNSET
489	STSNTEST
490	EB
491	CD
492	MORE
493	LIC
494	RU
495	NOTCDEB
496	NONE
497	DEFRESP1
498	DEFRESP2
499	DEFRESP3
500	NOALARM
501	ALARM
502	FMH
503	NOFMH
504	PROTECTED
505	UNPROTECTED
506	MDT
507	NOMDT
508	DATA
509	STSN
510	BEGINSESSION
511	TIMEOUT
512	INSTALLFAIL
513	DISCARDFAIL
514	SETFAIL
515	ACQFAIL
516	SESSIONLOST
517	SESSIONFAIL
518	CONVIDLE
519	ADDFAIL
520	DELETEFAIL
521	UNSOLDATA
522	NORMALRESP
523	EXCEPTRESP
524	ATTENTION
525	LUSTAT
526	CANCEL
527	RTR
528	DEFRESP1OR2
529	POSITIVE
530	NEGATIVE
531	NOMSGJRNL
532	INOUT
533	T3278M2
534	T3278M3
535	T3278M4
536	T3278M5
537	T3279M2

Value	CVDA
538	T3279M3
539	T3279M4
540	T3279M5
541	LUP
542	FORMATTED
543	DATASTREAM
544	LOSE
545	WIN
546	NOTINBOUND
547	INBOUND
549	RELEASING
550	INSTALLED
551	NOTINSTALLED
552	TPS55M2
553	TPS55M3
554	TPS55M4
555	TPS55M5
556	NOCONV
557	PENDSTSN
558	PENDBEGIN
559	APPLICATION
560	PENDDATA
561	PENDSTART
562	PENDRELEASE
563	RELEASE
564	PENDUNSOL
565	PENDPASS
600	CONVERSE
601	NOCONVERSE
602	SYNCPOINT
603	NOSYNCPOINT
604	GMT
605	LOCAL
606	FORMATEDF
607	NOFORMATEDF
608	NOTASKSTART
609	STARTED
610	STOPPED
611	TASKSTART
612	BUSY
613	NOTBUSY
614	SCS
615	DS3270
616	ASCII7
617	ASCII8
618	AUTOSTART
623	CONTROLSHUT
624	CANCELLED
625	FIRSTINIT
626	SECONDINIT
627	THIRDINIT
628	INITCOMPLETE
629	STANDBY
630	AUTOACTIVE
631	AUTOINACTIVE
632	CTLGALL
633	CTLGMODIFY
634	CTLGNONE
635	START
636	POST
637	DELAY
638	ROUTE
640	CLEAR
641	NOCLEAR
642	USER
643	SYSTEM
644	SHUTENABLED
645	SHUTDISABLED
650	EXCI
651	GENERIC
652	SPECIFIC
653	SYSCONNECT
654	NOSYSCONNECT
659	NOTDEFINED
660	CICS
661	NONCICS
666	REQUIRED
667	NOTREQUIRED
668	SOS
669	NOTSOS
673	CMDPROT
674	NOCMDPROT
680	REENTPROT
681	NOREENTPROT
690	CONNECTED
691	NOTCONNECTED

CVDAs returned by the INQUIRE NETNAME|TERMINAL DEVICE command

CVDA sequence

BATCHLU	191
BIPROG	160
BISYNCH	128
CDRDLPRT	24
CONTNLU	189
HARDCOPY	32
INTACTLU	190
ISCMMCONV	209
LUCMODGRP	210
LUCSESS	211
LUTYPE4	193
LUTYPE6	192
MAGTAPE	20
RESSYS	208
SDLC	176
SEQDISK	18
SYSTEM3	161
SYSTEM7	2
SYS370	164
SYS7BSCA	166
TCONSOLE	8
TELETYPE	34
TTCAM	80
TWX3335	33
T1050	36
T1053	74
T2260L	65
T2260R	72
T2265	76
T2740	40
T2741BCD	43
T2741COR	42
T2770	130
T2780	132
T2980	134
T3275R	146
T3277L	153
T3277R	145
T3284L	155
T3284R	147
T3286L	156
T3286R	148
T3600BI	138
T3601	177
T3614	178
T3650ATT	186
T3650PIPE	184
T3650USER	187
T3653HOST	185
T3735	136
T3740	137
T3780	133
T3790	180
T3790SCSP	182
T3790UP	181
T7770	1
VIDEOTERM	64

Numeric sequence

1	T7770
2	SYSTEM7
8	TCONSOLE
18	SEQDISK
20	MAGTAPE
24	CDRDLPRT
32	HARDCOPY
34	TELETYPE
33	TWX3335
36	T1050
40	T2740
42	T2741COR
43	T2741BCD
64	VIDEOTERM
65	T2260L
72	T2260R
74	T1053
76	T2265
80	TTCAM
128	BISYNCH
130	T2770
132	T2780
133	T3780
134	T2980
136	T3735
137	T3740
138	T3600BI
145	T3277R
146	T3275R
147	T3284R
148	T3286R
153	T3277L
155	T3284L
156	T3286L
160	BIPROG
161	SYSTEM3
164	SYS370
166	SYS7BSCA
176	SDLC
177	T3601
178	T3614
180	T3790
181	T3790UP
182	T3790SCSP
184	T3650PIPE
185	T3653HOST
186	T3650ATT
187	T3650USER
189	CONTNLU
190	INTACTLU
191	BATCHLU
192	LUTYPE6
193	LUTYPE4
208	RESSYS
209	ISCMMCONV
210	LUCMODGRP
211	LUCSESS

Appendix B. EXEC interface block (EIB) response and function codes

Response codes of EXEC CICS commands

After the execution of an EXEC CICS command, fields EIBRESP and EIBRCODE are set to indicate whether the command executed successfully, or whether a CICS condition was raised.

Each possible value of EIBRESP relates directly to a specific condition, no matter which command caused the condition to be raised. This is not true for EIBRCODE values: both the value and the byte of EIBRCODE in which it is set depend on which command was issued.

The following sections list the conditions that are applicable to the EXEC CICS commands described in this book, their corresponding RESP values (decimal), the associated EIBRCODE values (hexadecimal), and the transaction abend codes (if any).

EXEC CICS CREATE, DISCARD, INQUIRE, PERFORM, and SET commands

The first word of EIBRCODE for these commands is always set equal to the hexadecimal equivalent of the RESP value; the remaining bytes are set to X'00'.

Condition	RESP Value	EIBRCODE (Byte 3)	Abend code
DSNNOTFOUND	93	5D	AEX1
DUPREC	14	0E	AEIN
END	83	53	AEXK
FILENOTFOUND	12	0C	AEIL
ILLOGIC	21	15	AEIU
INVREQ	16	10	AEIP
IOERR	17	11	AEIQ
JIDERR	43	2B	AEYG
LENGERR	22	16	AEIV
MODELIDERR	95	5F	AEX3
NOSPACE	18	12	AEIR
NOSTG	42	2A	-
NOTAUTH	70	46	AEY7
NOTFND	13	0D	AEIM
PARTNERIDERR	97	61	AEX5
PGMIDERR	27	1B	AEI0
PROFILEIDERR	98	62	AEX6
QIDERR	44	2C	AEYH
SYSBUSY	59	3B	-
SYSIDERR	53	35	AEYQ
TASKIDERR	91	5B	AEXX
TCIDERR	92	5C	AEX0
TERMIDERR	11	0B	AEIK
TRANSIDERR	28	1C	AEI1
USERIDERR	69	45	AEYX

EXEC CICS DISABLE, ENABLE, and EXTRACT EXIT commands

Conditions that can be raised by the ENABLE, DISABLE, and EXTRACT EXIT commands are INVEXITREQ and NOTAUTH. There are no conditions associated with the RESYNC command.

Condition	RESP Value	EIBRCODE (Byte 3)	Abend code
INVEXITREQ	63	80	AEY0
NOTAUTH	70	46	AEY7

Function codes of EXEC CICS commands

The function code (field EIBFN) is a hexadecimal value that identifies the command most recently issued by a task. The format of the EIBFN field is as follows:

```
ASM     CL2
COBOL   PIC X(2)
PL/I    CHAR (2)
C       CHAR variable name(2);
```

The function codes of the commands described in this book are listed below. For information about other function codes, see the *CICS Problem Determination Guide*.

Command	Code
ACQUIRE TERMINAL	86 02
COLLECT STATISTICS	70 08
CREATE CONNECTION	30 0E
CREATE FILE	30 14
CREATE LSRPOOL	30 16
CREATE MAPSET	30 04
CREATE PARTITIONSET	30 06
CREATE PARTNER	30 18
CREATE PROFILE	30 0A
CREATE PROGRAM	30 02
CREATE SESSIONS	30 12
CREATE TERMINAL	30 10
CREATE TRANCLASS	30 1A
CREATE TRANSACTION	30 08
CREATE TYPETERM	30 0C
DISCARD AUTINSTMODEL	42 10
DISCARD FILE	4C 10
DISCARD PARTNER	44 10
DISCARD PROFILE	46 10
DISCARD PROGRAM	4E 10
DISCARD TRANCLASS	5E 18
DISCARD TRANSACTION	50 10
INQUIRE AUTINSTMODEL	42 02
INQUIRE AUTOINSTALL	68 12
INQUIRE CONNECTION	58 02
INQUIRE DELETSHIPPED	68 22
INQUIRE DSNAME	7A 02
INQUIRE DUMPDS	66 02
INQUIRE EXITPROGRAM	88 02
INQUIRE FILE	4C 02
INQUIRE IRC	6E 02
INQUIRE JOURNALNUM	60 02
INQUIRE MODENAME	5A 02
INQUIRE MONITOR	70 12
INQUIRE NETNAME	52 16
INQUIRE NETNAME	52 06*
INQUIRE PARTNER	44 02
INQUIRE PROFILE	46 02
INQUIRE PROGRAM	4E 02
INQUIRE REQID	8A 02
INQUIRE STATISTICS	70 02
INQUIRE STORAGE	5E 08
INQUIRE SYSDUMPCODE	66 22
INQUIRE SYSTEM	54 02
INQUIRE TASK	5E 02

Command	Code
INQUIRE TCLASS	5E 12
INQUIRE TDQUEUE	5C 02
INQUIRE TERMINAL	52 12
INQUIRE TERMINAL	52 02*
INQUIRE TRACEDEST	78 02
INQUIRE TRACEFLAG	78 12
INQUIRE TRACETYPE	78 22
INQUIRE TRANCLASS	5E 1A
INQUIRE TRANDUMPCODE	66 12
INQUIRE TRANSACTION	50 02
INQUIRE TSQUEUE	80 02
INQUIRE VTAM	68 02
PERFORM DUMP	7E 04
PERFORM DELETSHIPPED	68 26
PERFORM RESETTIME	72 02
PERFORM SECURITY	64 02
PERFORM SHUTDOWN	76 02
PERFORM STATISTICS	70 06
SET AUTOINSTALL	68 14
SET CONNECTION	58 04
SET DELETSHIPPED	68 24
SET DSNAME	7A 04
SET DUMPDS	66 04
SET FILE	4C 04
SET IRC	6E 04
SET JOURNALNUM	60 04
SET MODENAME	5A 04
SET MONITOR	70 14
SET NETNAME	52 08
SET PROGRAM	4E 04
SET STATISTICS	70 04
SET SYSDUMPCODE	66 24
SET SYSTEM	54 04
SET TASK	5E 04
SET TCLASS	5E 14
SET TDQUEUE	5C 04
SET TERMINAL	52 14
SET TERMINAL	52 04*
SET TRACEDEST	78 04
SET TRACEFLAG	78 14
SET TRACETYPE	78 24
SET TRANCLASS	5E 1C
SET TRANDUMPCODE	66 14
SET TRANSACTION	50 04
SET VTAM	68 04

Code	Command
30 02	CREATE PROGRAM
30 04	CREATE MAPSET
30 06	CREATE PARTITIONSET
30 08	CREATE TRANSACTION
30 10	CREATE TERMINAL
30 12	CREATE SESSIONS
30 14	CREATE FILE
30 16	CREATE LSRPOOL
30 18	CREATE PARTNER
30 0A	CREATE PROFILE
30 0C	CREATE TYPETERM
30 0E	CREATE CONNECTION
30 1A	CREATE TRANCLASS
42 02	INQUIRE AUTINSTMODEL
42 10	DISCARD AUTINSTMODEL
44 02	INQUIRE PARTNER
44 10	DISCARD PARTNER
46 02	INQUIRE PROFILE
46 10	DISCARD PROFILE
4C 02	INQUIRE FILE
4C 04	SET FILE
4C 10	DISCARD FILE
4E 02	INQUIRE PROGRAM
4E 04	SET PROGRAM
4E 10	DISCARD PROGRAM
50 02	INQUIRE TRANSACTION
50 04	SET TRANSACTION
50 10	DISCARD TRANSACTION
52 02*	INQUIRE TERMINAL
52 04*	SET TERMINAL
52 06*	INQUIRE NETNAME
52 08	SET NETNAME
52 12	INQUIRE TERMINAL
52 14	SET TERMINAL
52 16	INQUIRE NETNAME
54 02	INQUIRE SYSTEM
54 04	SET SYSTEM
58 02	INQUIRE CONNECTION
58 04	SET CONNECTION
5A 02	INQUIRE MODENAME
5A 04	SET MODENAME
5C 02	INQUIRE TDQUEUE
5C 04	SET TDQUEUE
5E 02	INQUIRE TASK
5E 04	SET TASK
5E 08	INQUIRE STORAGE
5E 1A	INQUIRE TRANCLASS
5E 1C	SET TRANCLASS
5E 12	INQUIRE TCLASS
5E 14	SET TCLASS
5E 18	DISCARD TRANCLASS
60 02	INQUIRE JOURNALNUM
60 04	SET JOURNALNUM
64 02	PERFORM SECURITY
66 02	INQUIRE DUMPDS
66 04	SET DUMPDS
66 12	INQUIRE TRANDUMPCODE
66 14	SET TRANDUMPCODE
66 22	INQUIRE SYSDUMPCODE
66 24	SET SYSDUMPCODE

Code	Command
68 02	INQUIRE VTAM
68 04	SET VTAM
68 12	INQUIRE AUTOINSTALL
68 14	SET AUTOINSTALL
68 22	INQUIRE DELETSHIPPED
68 24	SET DELETSHIPPED
68 26	PERFORM DELETSHIPPED
6E 02	INQUIRE IRC
6E 04	SET IRC
70 02	INQUIRE STATISTICS
70 04	SET STATISTICS
70 06	PERFORM STATISTICS
70 08	COLLECT STATISTICS
70 12	INQUIRE MONITOR
70 14	SET MONITOR
72 02	PERFORM RESETTIME
76 02	PERFORM SHUTDOWN
78 02	INQUIRE TRACEDEST
78 04	SET TRACEDEST
78 12	INQUIRE TRACEFLAG
78 14	SET TRACEFLAG
78 22	INQUIRE TRACETYPE
78 24	SET TRACETYPE
7A 02	INQUIRE DSNAME
7A 04	SET DSNAME
7E 04	PERFORM DUMP
80 02	INQUIRE TSQUEUE
86 02	ACQUIRE TERMINAL
88 02	INQUIRE EXITPROGRAM
8A 02	INQUIRE REQID

Note: Entries marked with an asterisk (*) are function codes for programs translated prior to CICS/VSE 2.2.

Appendix C. EXEC CICS CREATE RESP2 values

Most of the RESP2 values issued by the EXEC CICS CREATE command are associated with a message that is written to transient data queue CSMT. The RESP2 values and the corresponding message numbers are shown in Table 6 below. For this command, the fullword EIBRESP2 field is regarded as a structure containing two halfwords. The low-order halfword always contains an error number. The high-order halfword sometimes contains another number to help you to identify the error. Sometimes this number is the offset *n* in the ATTRIBUTES string at which the error was detected. Sometimes it is the keyword number *k* for which the error was detected. For a list of the keyword numbers, see pages Table 7 on page 216, Table 8 on page 216, and Table 9 on page 218.

Table 6 (Page 1 of 5). RESP2 values corresponding to messages

RESP2	Msgid	Description or message
		Codes caused by syntactical errors
n,400	DFHCA5211	A misplaced delimiter occurs in ATTRIBUTES. The invalid delimiter is at offset *n* in the ATTRIBUTES string.
n,401	DFHCA5204	A keyword specified within ATTRIBUTES is invalid. The invalid keyword is at offset *n* in the ATTRIBUTES string.
n,402	DFHCA5212, DFHCA5213	A keyword within ATTRIBUTES cannot be uniquely identified from its abbreviation. The invalid keyword is at offset *n* in the ATTRIBUTES string.
k,403	DFHCA5501	A required keyword is omitted. The omitted keyword has code *k* in Table 7, Table 8, and Table 9.
404	DFHCA5529	A required keyword is omitted. The omitted keyword must be selected from two mutually exclusive keywords, as specified in the associated message.
k,405	DFHCA5504	One specified keyword requires another one to be specified. The omitted keyword has code k in Table 7, Table 8, and Table 9.
k,406	DFHCA5206	A keyword occurs more than once within ATTRIBUTES. The duplicate keyword has code *k* in Table 7, Table 8, and Table 9.
k,407	DFHCA5503 DFHCA5506	Conflicting keywords are specified. The keyword causing the conflict has code *k* in Table 7, Table 8, and Table 9.
k,410	DFHCA5210 DFHCA5444 DFHCA5519 DFHCA5521 DFHCA5522 DFHCA5526 DFHCA5528 DFHCA5532 DFHCA5544	An invalid operand is supplied for a keyword within ATTRIBUTES. The keyword in error has code *k* in Table 7, Table 8, and Table 9.
k,411	DFHCA5207	An operand is supplied for a keyword that does not need one. The keyword in error has code *k* in Table 7, Table 8, and Table 9.
k,412	DFHCA5205	A required operand for a keyword within ATTRIBUTES is omitted. The keyword in error has code *k* in Table 7, Table 8, and Table 9.
k,413	DFHCA5517	The operands of two or more keywords conflict with one another. The first conflicting keyword detected has code *k* in Table 7, Table 8, and Table 9.
k,414	DFHCA5507	The value of the operand of a keyword within ATTRIBUTES is too small. The keyword in error has code *k* in Table 7, Table 8, and Table 9.
k,415	DFHCA5513	In the pair of values specified as the operand of a keyword within ATTRIBUTES, the second value must not exceed the first. The keyword in error has code *k* in Table 7, Table 8, and Table 9.

Table 6 (Page 2 of 5). RESP2 values corresponding to messages

RESP2	Msgid	Description or message
k,416	DFHCA5509	An invalid operand is supplied for a keyword within ATTRIBUTES. The value of the operand must be different from the name of the resource. The keyword in error has code *k* in Table 7, Table 8, and Table 9.
417	DFHCA5523 DFHCA5535	The specified resource cannot be created with this command. The resource name is reserved for CICS use.
418	DFHCA5527	CICS internal programs (whose names begin with DFH) cannot be given attributes that specify remote execution.
k,419	DFHCA5217	A closing parenthesis has been omitted from a DESCRIPTION keyword within ATTRIBUTES. The keyword in error (DESCRIPTION) has code *k* in Table 7, Table 8, and Table 9.
	Codes caused by errors deleting existing resources	
500	DFHAM4803 DFHAM4842 DFHZC5913	Install failed because the resource is currently in use.
501	DFHAM4841	Install failed because definition of *restype resname* is in use by task no. *taskno* (transaction id. *tranid*).
501	DFHZC5980	Resource *resource* is in use by task *taskid* Transaction *tranid*
502	DFHZC6304	Deletion of remote terminal *termid* failed because it is in use by another transaction.
503	DFHZC5915	Deletion of *restype id* failed. It needs to be set out of service.
504	DFHZC5998	Install specified a resource that cannot be replaced.
505	DFHZC5916	Deletion of terminal *termid* failed. It has pending DFHZCP activity.
505	DFHZC5918	Deletion of terminal *termid* Console *consname* failed. It has pending DFHZCP activity.
506	DFHZC5914	Deletion of terminal *termid* found another deletion of it in progress.
506	DFHZC5937	Deletion of modename *modename* found another deletion of it in progress.
507	DFHZC5902	Deletion of terminal *termid* failed. BMS Paging session still active.
508	DFHZC5917	Deletion of terminal *termid* failed. Error message writer still active.
509	DFHZC5904	Deletion of terminal *termid* failed. CEDF is still active.
510	DFHZC5941	Install for terminal *termid* failed. Console *consname* has a conversation outstanding.
511	DFHZC5907	Deletion of remote shipped terminal failed for connection *cccc*.
512	DFHZC5925	Deletion of connection *cccc* failed. Its AID-Chains are not empty
514	DFHZC5938	Deletion of modename *modename* failed. Unable to delete session(s).
515	DFHZC5951	Deletion of connection *ssss* failed. Unable to delete sessions.
516	DFHZC5945	Deletion of sessions *ssss* failed. Connection *cccc* is defined to IRC.
517	DFHZC5952	Deletion of terminal *termid* failed. It needs to be SET RELEASED.
518	DFHZC5969	Deletion of dependent modename(s) failed for connection *modename*.
519	DFHZC5974	Deletion of pool *pppp* failed. Unable to delete pool entries.
520	DFHZC5979	Deletion of pool *pppp* failed. It still has session *termid*.
520	DFHZC5982	Deletion of pool *pppp* failed. Pool entry is in use for *termid*.
521	DFHZC5958	Install failed for *xxxx*. This is the name of the local system, which must not be replaced.
522	DFHZC5940	Install for terminal *termid* failed. Error console cannot be deleted.
523	DFHZC5989	Deletion of resource *resource* failed. Remote deletion in connection *cccc* failed.

Table 6 (Page 3 of 5). RESP2 values corresponding to messages

RESP2	Msgid	Description or message
524	DFHZC5943	MRO connection *conname* cannot be deleted because IRC is open.
		Codes caused by errors in installing the new resource
600	DFHTO6000	The definition for TERMINAL *termdef* refers to an undefined TYPETERM *termtype*.
600	DFHTO6001	The definition for pooled TERMINAL *termdef* refers to an undefined TYPETERM *termtype*.
601	DFHTO6002	The definition for SESSIONs *sesdef* refers to an undefined CONNECTION *condef*.
601	DFHZC5911	Install for resource *resource* failed. Connection *cccc* not found.
601	DFHZC5932	Install for modename *modename* failed. Connection *cccc* not found.
602	DFHZC5962	Install for resource *resource* failed. Modename parameter not found.
603	DFHZC5906	Install failed because *xxxx* is not a permitted value for a terminal or connection name.
604	DFHZC5933	Install for modename *modename* failed. Connection *cccc* is not valid here.
607	DFHAM4870	Install failed for program *progname* - language RPG is no longer supported under VSE.
620	DFHZC5912	Install for terminal *termid* failed. It is incompatible with connection *cccc*.
620	DFHZC5949	Install for sessions *ssss* failed. It is incompatible with connection *cccc*.
621	DFHZC5900	System *sysid* has shipped definitions but connection *cccc* is not known to this system.
622	DFHZC5921	Install of terminal *termid* failed. VTAM support not loaded.
622	DFHZC5988	Install for resource *resource* failed. VTAM support not generated.
623	DFHZC5909	Install of resource *resource* failed. Call to DFHIRP *irp_function Return_code* did not succeed, See DFHIRSDS for return code.
624	DFHZC5931	Install for modename *modename* failed. Maximum number of APPC sessions would have been exceeded.
625	DFHZC5973	Install for sessions *ssss* failed. Max session-count reached for modename *modename*.
627	DFHZC5934	Install for modename *modename* failed. Single-session connection *cccc* is already in use.
628	DFHZC5936	Install for modename *modename* failed. Connection *cccc* has active modegroup *xxxx*.
629	DFHZC5939	Install for *name* failed. Duplicate session- or modegroup-name for connection *sysid*.
630	DFHZC5946	Install for sessions *ssss* failed. Connection *cccc* is defined to IRC.
631	DFHZC5948	Install for sessions *ssss* failed. Connection *cccc* is not suitable for IRC.
632	DFHZC5954	Install for resource *resource* failed. Unable to install sessions component.
633	DFHZC5963	*operation* RUSIZE *xxxx* from terminal *termid* was greater than TYPETERM RUSIZE *yyyy*.
634	DFHZC5967	Install for modename *modename* failed. Unable to install sessions.
635	DFHZC5968	Unable to install LU Services Manager for modename *modename*.
636	DFHZC5981	Pool *pppp* not found.
637	DFHZC5985	Install for resource *resource* failed. Unable to install connection component.
638	DFHTO6003	TERMINAL *termdef* specifies CONSNAME but refers to TYPETERM *termtype* which does not specify DEVICE=CONSOLE.
639	DFHTO6004	TERMINAL *termdef* does not specify CONSNAME but refers to TYPETERM *termtype* which specifies DEVICE=CONSOLE.

Table 6 (Page 4 of 5). RESP2 values corresponding to messages

RESP2	Msgid	Description or message
640	DFHTO6005	PRINTER or ALTPRINTER for TERMINAL *termdef* is invalid for the DEVICE specified in TYPETERM *termtype*.
641	DFHTO6006	PRINTERCOPY or ALTPRINTERCOPY for TERMINAL *termdef* is invalid for the DEVICE specified in TYPETERM *termtype*.
642	DFHTO6007	AUTINSTMODEL YES|ONLY for TERMINAL *termdef* is invalid for the DEVICE specified in TYPETERM *termtype*.
644	DFHTO6009	The definition for SESSIONs *sesdef* refers to CONNECTION *condef* which specifies a different PROTOCOL.
645	DFHTO6010	The definition for SESSIONs *sesdef* must specify PROTOCOL LU61 as it refers to an MRO CONNECTION *condef*.
646	DFHTO6011	SESSIONs *sesdef* must specify both SENDCOUNT and RECEIVECOUNT as it refers to an MRO CONNECTION *condef*.
647	DFHTO6013	No SESSIONs definition refers to CONNECTION *condef*.
648	DFHTO6014	POOL is required for TERMINAL *termdef* as it refers to TYPETERM *typedef* which specifies SESSIONTYPE=PIPELINE.
649	DFHTO6015	TRANSACTION for TERMINAL *termdef* is invalid for the DEVICE specified in TYPETERM *typedef*.
650	DFHTO6016	The MRO CONNECTION *condef* is referenced by more than one SESSIONs definition, including *sesdef*.
651	DFHTO6017	REMOTESYSTEM for TERMINAL *termid* is invalid for the DEVICE specified in TYPETERM *typeterm*.
652	DFHTO6018	TERMINAL *termid* refers to TYPETERM *typeterm* which has an invalid ALTSCREEN.
653	DFHTO6020	SESSIONS *sesdef* refers to single-session CONNECTION *condef* but has an invalid MAXIMUM option specified.
655	DFHTO6025	The definition for LU6.1 SESSIONs *sesdef* specifies a send or receive count with no prefix.
656	DFHZC6301	Install for *tttt* failed. Duplicate netname *netname* for resource *rrrr* found.
657	DFHZC6302	Install for connection *cccc* failed. Duplicate netname *netname* for resource *rrrr* found.
658	DFHZC6303	Install for *tttt* failed. Duplicate netname *netname* found.
660	DFHZC6331	Install for connection *tttt* failed. Non-VTAM terminal with same name already exists.
660	DFHZC6332	Install for terminal *tttt* failed. Non-VTAM terminal with same name already exists.
661	DFHZC5950	Install for terminal *termid* failed. Console *consname* already exists.
664	DFHZC6330	Install for *tttt* failed. LDCLIST parameter *ldclist* not found.
665	DFHZC6333	INSTALL for modename *modename* failed. Zero sessions specified.
666	DFHZC6361	Resource cannot be installed with specified userid because of a security error.
667	DFHZC6362	Install for terminal *portname* with userid *userid* failed because the preset userid has been revoked.
668	DFHZC6363	Install for terminal *portname* with userid *userid* failed because the preset userid's group access has been revoked.
669	DFHZC6364	Install for terminal *portname* with userid *userid* failed because the ESM returned an unrecognized response.
670	DFHZC6365	Install for terminal *portname* with userid *userid* failed because the external security manager is inactive.
671	DFHZC6366	Install for terminal *portname* with userid *userid* failed because the userid is not authorized to access this CICS system.
672	DFHZC6367	Install for terminal *termid* with userid *userid* failed because the SECLABEL check failed.
673	DFHZC6368	Install for terminal *portname* with userid *userid* failed because the external security manager is quiesced.

Table 6 (Page 5 of 5). RESP2 values corresponding to messages

RESP2	Msgid	Description or message
674	DFHZC6369	Install for terminal *portname* failed because national language *langcode* is invalid.
675	DFHZC6370	Install for terminal *portname* failed because national language *langcode* is unavailable.
676	DFHZC6371	Install for terminal *portname* with userid *userid* failed because the userid is not authorized to use this portname.
		Codes caused by CICS internal logic errors
900	DFHTO6012	The catalog dataset is not available. RDO function is restricted.
901	DFHAM4872	Unable to connect to CICS global catalog (DFHGCD).
902	DFHAM4873	Unable to disconnect the CICS global catalog (DFHGCD).
903	DFHZC6209	Invalid ZC catalog request code *xxxx*.
904	DFHZC6212	Level mismatch with catalog record. DFHBS *xxx*.
905	DFHZC5901	Install failed because sufficient storage could not be obtained.
906	DFHZC6200	Could not obtain DWE storage.
907	DFHZC6203	Unable to obtain DWE action-list storage.
908	DFHZC6214	Unable to obtain recovery record storage.
909	DFHZC5995	Resource type code *xxxx* subtype *yyyy* not recognised with associated bind image.
950	DFHZC6202	Pattern *pattern* not valid for builder.
951	DFHZC6204	Illegal subpattern definition *pattern*.
952	DFHZC6205	Illegal subpattern definition *pattern*.
953	DFHZC6206	Pattern *pattern* not valid for destroy.
954	DFHZC6207	Catalog key too long or zero. Pattern *pattern*.
955	DFHZC6213	Recovery record abandoned. Key is *key*.
956	DFHZC6341	Loop or ABEND has been detected in *inmodule* by module *bymodule*.

Table 7. Keywords associated with keyword numbers. CREATE CONNECTION through CREATE MAPSET.

Keyword number	EXEC CICS CREATE command names			
	CONNECTION	**FILE**	**LSRPOOL**	**MAPSET**
1 1	CONNECTION	FILE	LSRPOOL	MAPSET
5	NETNAME	RESSECNUM		RSL
6	INDSYS	DSNAME	MAXKEYLENGTH	DESCRIPTION
7	SECURITYNAME	RECORDSIZE	SHARELIMIT	
8	BINDPASSWORD	KEYLENGTH	STRINGS	
9		JOURNAL	DATA512	
10	REMOTESYSTEM	REMOTESYSTEM	DATA1K	
11	REMOTENAME	REMOTENAME	DATA2K	
12	DESCRIPTION	PASSWORD	DATA4K	
13	QUEUELIMIT	LSRPOOLID	DATA8K	
14	MAXQTIME	STRINGS	DATA12K	
15		DATABUFFERS	DATA16K	
16		INDEXBUFFERS	DATA20K	
17		FWDRECOVLOG	DATA24K	
18		DESCRIPTION	DATA28K	
19		NSRGROUP	DATA32K	
20		MAXNUMRECS	LSRPOOLID	
21		CATNAME	DESCRIPTION	
22			INDEX512	
23			INDEX1K	
24			INDEX2K	
25			INDEX4K	
26			INDEX8K	
27	REMOTESYSNET		INDEX12K	
28			INDEX16K	
29			INDEX20K	
30			INDEX24K	
31			INDEX28K	
32			INDEX32K	
97	INSERVICE	STATUS		STATUS
98	AUTOCONNECT	RECOVERY		
99	PROTOCOL	OPENTIME		
100	ACCESSMETHOD			RESIDENT
101	SINGLESESS	ADD		USAGE
102	DATASTREAM	BROWSE		USESVACOPY
103	RECORDFORMAT	DELETE		
104	ATTACHSEC	READ		
105	BINDSECURITY	UPDATE		
106	CONNTYPE	JNLSYNCREAD		
107	PSRECOVERY	JNLSYNCWRITE		
108		JNLREAD		
109		JNLUPDATE		
110	USEDEFLTUSER	JNLADD		
111		DSNSHARING		
112		RECORDFORMAT		
113		TABLE		
114				
115		SHR4ACCESS		
116				

Note:

1 Keyword number 1 always refers to the first operand of the CREATE command; that is, the resource being created.

Table 8 (Page 1 of 2). Keywords associated with keyword numbers. CREATE PARTITIONSET through CREATE SESSIONS.

Keyword number	EXEC CICS CREATE command names				
	PARTITIONSET	**PARTNER**	**PROFILE**	**PROGRAM**	**SESSIONS**
1 1	PARTITIONSET	PARTNER	PROFILE	PROGRAM	SESSIONS
5	RSL	NETNAME	MODENAME	RSL	CONNECTION
6	DESCRIPTION	DESCRIPTION	JOURNAL	DESCRIPTION	SESSNAME
7		NETWORK	NEPCLASS	REMOTESYSTEM	NETNAMEQ
8		PROFILE	RTIMOUT	REMOTENAME	MODENAME
9		TPNAME	DESCRIPTION	TRANSID	MAXIMUM
10		XTPNAME			
11					RECEIVEPFX
12					RECEIVECOUNT

Table 8 (Page 2 of 2). Keywords associated with keyword numbers. CREATE PARTITIONSET through CREATE SESSIONS.

Keyword number	EXEC CICS CREATE command names				
	PARTITIONSET	**PARTNER**	**PROFILE**	**PROGRAM**	**SESSIONS**
13					SENDPFX
14					SENDCOUNT
15					OPERID
16					OPERPRIORITY
17					OPERRSL
18					OPERSECURITY
19					USERID
20					SENDSIZE
21					RECEIVESIZE
22					TRANSACTION
23					SESSPRIORITY
24					USERAREALEN
25					IOAREALEN
27					NEPCLASS
28					DESCRIPTION
97	STATUS			STATUS	INSERVICE
98			SCRNSIZE	LANGUAGE	AUTOCONNECT
99			MSGJRNL	RELOAD	BUILDCHAIN
100	RESIDENT		MSGINTEG	RESIDENT	PROTOCOL
101	USAGE		ONEWTE	USAGE	RELREQ
102	USESVACOPY		PROTECT	USESVACOPY	DISCREQ
103			DVSUPRT	CEDF	RECOVOPTION
104			INBFMH	DATALOCATION	RECOVNOTIFY
105			RAQ	EXECKEY	
106			LOGREC		
107			PRINTERCOMP	EXECUTIONSET	
108			CHAINCONTROL		
109			UCTRAN		

Note:

1 Keyword number 1 always refers to the first operand of the CREATE command; that is, the resource being created.

Table 9 (Page 1 of 2). Keywords associated with keyword numbers. CREATE TERMINAL through CREATE TYPETERM.

Keyword number	EXEC CICS CREATE command names			
	TERMINAL	**TRANCLASS**	**TRANSACTION**	**TYPETERM**
1 1	TERMINAL	TRANCLASS	TRANSACTION	TYPETERM
5		MAXACTIVE	RSL	DEVICE
6	AUTINSTNAME	DESCRIPTION	PROGRAM	TERMMODEL
7	TYPETERM	PURGETHRESH	TWASIZE	SESSIONTYPE
8	NETNAME		PROFILE	PRINTERTYPE
9			PARTITIONSET	LDCLIST
10	REMOTESYSTEM		REMOTESYSTEM	DEFSCREEN
11	REMOTENAME		REMOTENAME	
12	MODENAME		PRIORITY	ALTSCREEN
13	PRINTER		TCLASS	
14	ALTPRINTER		TASKREQ	CGCSGID
15	OPERID		XTRANID	
16	OPERPRIORITY		DTIMOUT	SENDSIZE
17	OPERRSL		TRANSEC	RECEIVESIZE
18	OPERSECURITY		TRPROF	LOGMODE
19	USERID		PRIMEDSIZE	PAGESIZE
20	POOL		ALIAS	
21	TASKLIMIT		DESCRIPTION	ALTPAGE
22	TRANSACTION		TPNAME	
23	TERMPRIORITY		XTPNAME	ALTSUFFIX
24	SPOOLTO		TRANCLASS	USERAREALEN
25	SPOOLDEST		RUNAWAY	IOAREALEN
26	SECURITYNAME			
27	BINDPASSWORD			NEPCLASS
28	DESCRIPTION			DESCRIPTION
29	NATLANG			
30	CONSNAME			
31	SPOOLPRTTO			
33	REMOTESYSNET			
97	INSERVICE		STATUS	
98	PRINTERCOPY		LOCALQ	AUTOCONNECT
99	ALTPRINTCOPY		INDOUBT	SHIPPABLE
100	AUTINSTMODEL		RESTART	APLKYBD
101			SPURGE	APLTEXT
102	ATTACHSEC		TPURGE	AUDIBLEALARM
103	BINDSECURITY		DUMP	COLOR
104	USEDFLTUSER		EXTSEC	COPY
105			RESSEC	DUALCASEKYBD
106			TRACE	EXTENDEDDS
107			DYNAMIC	HILIGHT
108			CMDSEC	KATAKANA
109			TASKDATALOC	LIGHTPEN
110			TASKDATAKEY	MSRCONTROL
111			STORAGECLEAR	OBFORMAT
112			SHUTDOWN	PARTITIONS
113				PRINTADAPTER
114			ACTION	PROGSYMBOLS
115			WAIT	VALIDATION
116				FORMFEED
117	PRINTEDMSG			HORIZFORM
118	PRINTIMMED			VERTICALFORM
119				TEXTKYBD
120				TEXTPRINT
121				QUERY
122				OUTLINE
123				SOSI
124				BACKTRANS
125				ASCII
126				BRACKET
127				FMHPARM
128				OBOPERID
129				AUTOPAGE
130				ERRLASTLINE
131				ERRINTENSIFY

Table 9 (Page 2 of 2). Keywords associated with keyword numbers. CREATE TERMINAL through CREATE TYPETERM.

Keyword number	EXEC CICS CREATE command names			
	TERMINAL	**TRANCLASS**	**TRANSACTION**	**TYPETERM**
132				ERRCOLOR
133				ERRHILIGHT
134				ATI
135				CREATESESS
136				RELREQ
137				DISCREQ
138				SIGNOFF
139				ROUTEDMSGS
140				LOGONMSG
141				BUILDCHAIN
142				UCTRAN
143				TTI
144				RECOVOPTION
145				RECOVNOTIFY
146				XRFSIGNOFF

Note:

1 Keyword number 1 always refers to the first operand of the CREATE command; that is, the resource being created.

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