

# System Programming Reference

Version 4 Release 1



# System Programming Reference

Version 4 Release 1

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

#### Second edition (April 1997)

This edition applies to Version 4 Release 1 of the IBM licensed program Customer Information Control System/Enterprise Systems Architecture (CICS/ESA), program number 5655-018, and to all subsequent versions, releases, and modifications until otherwise indicated in new editions. Consult the latest edition of the applicable IBM system bibliography for current information on this product.

This is the second edition of the System Programming Reference for CICS/ESA 4.1. It is based on the first edition, SC33-1171-00, which is now obsolete. Changes from the first edition are marked by the '+' sign to the left of the changes. The vertical lines in the left-hand margins indicate changes made between the CICS/ESA 3.3 edition and the CICS/ESA 4.1 first edition.

The CICS/ESA 3.3 edition remains applicable and current for users of CICS/ESA 3.3.

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## **Programming interface information**

This book is intended to help you use the CICS system programming commands. This book primarily documents General-use Programming Interface and Associated Guidance Information provided by CICS.

General-use programming interfaces allow the customer to write programs that obtain the services of CICS.

However, this book also documents Product-sensitive Programming Interface and Associated Guidance Information provided by CICS.

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 MVS
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 MVS/ESA
 MVS/SP

 RACF
 RMF

 System/390
 VTAM

## **Preface**

#### What this book is about

This book describes the CICS/ESA system programming interface; it contains **reference** information needed to prepare COBOL, C/370, PL/I, and assembler-language application programs, using CICS commands, to be executed under CICS. **Guidance** information is in the CICS/ESA Application Programming Guide. For information about debugging CICS applications, see the CICS/ESA 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/ESA Application Programming Reference manual and the CICS/ESA 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

- VTAM refers to ACF/VTAM.
- The term 'SP' indicates those commands that require the special translator option 'SP'.
   It also indicates those commands that are subject to command security checking. The SP commands are all the INQUIRE, SET, COLLECT, and PERFORM commands, together with the DISABLE PROGRAM, ENABLE PROGRAM, EXTRACT EXIT, and RESYNC ENTRYNAME commands.
- MB equals 1 048 576 bytes.
- · KB equals 1024 bytes.

#### Determining if a publication is current

IBM regularly updates its publications with new and changed information. When first published, both hardcopy and BookManager softcopy versions of a publication are in step, but subsequent updates will probably be available in softcopy before they are available in hardcopy.

For CICS books, these softcopy updates appear regularly on the *Transaction Processing and Data Collection Kit* CD-ROM, SK2T-0730-xx. Each reissue of the collection kit is indicated by an updated order number suffix (the -xx part). For example, collection kit SK2T-0730-06 is more up-to-date than SK2T-0730-05. The collection kit is also clearly dated on the cover.

Here's how to determine if you are looking at the most current copy of a publication:

• A publication with a higher suffix number is more recent than one with a lower suffix number. For example, the publication with order number SC33-0667-02 is more recent than the publication with order number SC33-0667-01. (Note that suffix numbers are

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- updated as a product moves from release to release, as well as for hardcopy updates within a given release.)
- · When the softcopy version of a publication is updated for a new collection kit the order number it shares with the hardcopy version does not change. Also, the date in the edition notice remains that of the original publication. To compare softcopy with hardcopy, and softcopy with softcopy (on two editions of the collection kit, for example), check the last two characters of the publication's filename. The higher the number, the more recent the publication. For example, DFHPF104 is more recent than DFHPF103. Next to the publication titles in the CD-ROM booklet and the readme files, asterisks indicate publications that are new or changed.
- Updates to the softcopy are clearly marked by revision codes (usually a "#" character) to the left of the changes.

## **Bibliography**

## CICS/ESA 4.1 library

Evaluation and planning		
Release Guide	GC33-1161	April 1997
Migration Guide	GC33-1162	April 1997
General		
CICS Family: Library Guide	GC33-1226	April 1995
Master Index	SC33-1187	October 1994
User's Handbook	SX33-1188	April 1997
Glossary (softcopy only)	GC33-1189	n/a
Administration		
Installation Guide	GC33-1163	April 1997
System Definition Guide	SC33-1164	April 1997
Customization Guide	SC33-1165	April 1997
Resource Definition Guide	SC33-1166	April 1997
Operations and Utilities Guide	SC33-1167	April 1997
CICS-Supplied Transactions	SC33-1168	April 1997
Programming		
Application Programming Guide	SC33-1169	October 1994
Application Programming Reference	SC33-1170	April 1997
System Programming Reference	SC33-1171	April 1997
Sample Applications Guide	SC33-1173	October 1994
Distributed Transaction Programming Guide	SC33-1174	October 1994
Front End Programming Interface User's Guide	SC33-1175	October 1994
Diagnosis		
Problem Determination Guide	SC33-1176	October 1994
Messages and Codes	GC33-1177	April 1997
Diagnosis Handbook	LX33-6093	October 1994
Diagnosis Reference	LY33-6082	April 1997
Data Areas	LY33-6083	April 1997
Supplementary Data Areas	LY33-6081	October 1994
Closely-Connected Program Interface	LY33-6084	November 1996
Communication		
Intercommunication Guide	SC33-1181	April 1997
Server Support for CICS Clients	SC33-1591	February 1996
CICS Family: Inter-product Communication	SC33-0824	October 1996
CICS Family: Communicating from CICS on System/390	SC33-1697	October 1996
Special topics		
Recovery and Restart Guide	SC33-1182	October 1994
Performance Guide	SC33-1183	October 1994
CICS-IMS Database Control Guide	SC33-1184	October 1994
CICS-RACF Security Guide	SC33-1185	October 1994
Shared Data Tables Guide	SC33-1186	October 1994
External CICS Interface	SC33-1390	April 1997
CICS ONC RPC Feature for MVS/ESA Guide	SC33-1119	February 1996
CICS Web Interface Guide	SC33-1892	November 1996

The book that you are reading was republished in hardcopy format in April 1997 to incorporate updated information previously available only in softcopy. The right-hand column in the above table indicates the latest hardcopy editions of the CICS/ESA books available in April 1997. A book with a date earlier than April 1997 remains the current edition for CICS/ESA 4.1. Note that it is possible that other books in the library will be updated after April 1997.

When a new order is placed for the CICS/ESA 4.1 product, the books shipped with that order will be the latest hardcopy editions.

The style of IBM covers changes periodically. Books in this library have more than one style of cover.

For information about the softcopy books, see "Determining if a publication is current" on page vii. The softcopy books are regularly updated to include the latest information.

## Other CICS books

- CICS Application Migration Aid Guide, SC33-0768
- CICS Application Programming Primer (VS COBOL II), SC33-0674
- CICS/ESA Facilities and Planning Guide for CICS/ESA Version 3 Release 3, SC33-0654
- CICS/ESA XRF Guide for CICS/ESA Version 3 Release 3, SC33-0661
- CICS Family: API Structure, SC33-1007
- CICS Family: General Information, GC33-0155
- IBM CICS Transaction Affinities Utility MVS/ESA, SC33-1159

#### **CICS Clients**

- CICS Clients: Administration, SC33-1436
- CICS Family: Client/Server Programming, SC33-1435

#### Books from related libraries

You may also need to refer to the following IBM publications:

#### MVS/Enterprise Systems Architecture (MVS/ESA)

Short Title	Version 3 book	Version 4 book
Authorized Assembler Programming Reference	MVS/ESA System Programming Library: Application Development Macro Reference, GC28-1857	MVS/ESA Application Development Reference: Services for Authorized Assembler Language Programs Volume 1, GC28-1647
Authorized Assembler Programming Reference Volume 2	_	MVS/ESA Application Development Reference: Services for Authorized Assembler Language Programs Volume 2, GC28-1648
Authorized Assembler Programming Reference Volume 3	_	MVS/ESA Application Development Reference: Services for Authorized Assembler Language Programs Volume 3, GC28-1649
Authorized Assembler Programming Reference Volume 4		MVS/ESA Application Development Reference: Services for Authorized Assembler Language Programs Volume 4, GC28-1650
JCL Reference	MVS/ESA JCL Reference, GC28-1829	MVS/ESA JCL Reference, GC28-1654
JCL User's Guide	MVS/ESA JCL User's Guide, GC28-1830	MVS/ESA JCL User's Guide, GC28-1653
System Commands	MVS/ESA Operations: System Commands, GC28-1826	MVS/ESA System Commands, GC28-1626

## Other publications

- VTAM Programming, SC23-0115
- IMS Database Administration Guide, SC26-4281
- IMS Messages and Codes manual, SC26-4290
- IMS Utilities Reference manual, SC26-4284
- IMS System Administration Guide, SC26-4282
- An Introduction to the IBM 3270 Information Display System, GA27-2739
- MVS/DFP System Programming Reference, SC26-4567.
- MVS ESA Planning: Problem Determination and Recovery, GC28-1629

## **Summary of changes**

# + Changes for this second CICS/ESA 4.1 + edition

- + This book is the second edition of the System Programming
- + Reference for CICS/ESA 4.1. Changes that were made for
- + the first edition are still indicated by vertical bars to the left of
- + the changes. Changes made for this second edition are
- + indicated by the '+' symbol to the left of the changes. Users
- + of the first edition can therefore see what has changed since
- + that first edition was published. Softcopy versions of this
- + book use both these revision indicators and use the '#'
- + symbol to show further changes since this second hardcopy
- + edition of the book was published.

## Changes for the first CICS/ESA 4.1 edition

| This edition is based on the CICS/ESA 3.3 System | Programming Reference manual, SC33-0670.

| For CICS/ESA 4.1, the following changes have been made:

- Transfer of the SPOOLCLOSE, SPOOLOPEN INPUT, SPOOLOPEN OUTPUT, SPOOLREAD, and SPOOLWRITE command descriptions to the CICS/ESA Application Programming Reference manual
- Removal of storage-cushion size options from INQUIRE SYSTEM and SET SYSTEM commands, and addition of new options
- Addition of INQUIRE STORAGE command
- Addition of PSDINTERVAL, PSDINTHRS, PSDINTMINS, and PSDINTSECS options to INQUIRE VTAM and SET VTAM commands
- Addition of INQUIRE DELETSHIPPED, PERFORM DELETESHIPPED, and SET DELETSHIPPED commands
- Addition of RELATED and LOCAL options to the INQUIRE SYSDUMPCODE, SET SYSDUMPCODE, INQUIRE TRDUMPCODE, and SET TRDUMPCODE commands
- Addition of INQUIRE EXITPROGRAM and INQUIRE REQID commands
- Addition of CICSSTATUS, GMMLENGTH, GMMTEXT, STARTUP, and STARTUPDATE options to the INQUIRE SYSTEM command
- Addition of ASCII, AUTOCONNECT, DATASTREAM, and POOLTERMID options to the INQUIRE TERMINAL command
- Addition of GMMLENGTH and GMMTEXT options to the SET SYSTEM command
- Addition of CMDSEC, DTB, DTIMEOUT, DUMPING, ISOLATE, PRIORITY, PROFILE, PROGRAM, PURGEABILITY, REMOTENAME, REMOTESYSTEM,

RESSEC, ROUTING, RTIMEOUT, RUNAWAY, SCRNSIZE, STORAGECLEAR, TASKDATAKEY, TASKDATALOC, TCLASS, TRANCLASS, TRACING, TRANPRIORITY, TRPROF, and TWASIZE options to the INQUIRE TASK command

- Change to the operation of the PURGETYPE option of the SET TASK and SET TERMINAL commands
- Addition of the ATIUSERID option to the INQUIRE and SET TDQUEUE command
- Addition of RUNAWAY, RUNAWAYTYPE, SHUTDOWN, STORAGECLEAR, TCLASS, and TRANCLASS options to the INQUIRE TRANSACTION command
- Addition of RUNAWAY, RUNAWAYTYPE, SHUTDOWN, TCLASS, and TRANCLASS options to the SET TRANSACTION command
- Addition of DISCARD, INQUIRE, and SET TRANCLASS commands
- Addition of PROGAUTOINST, PROGAUTOCTLG, and PROGAUTOEXIT options to the INQUIRE and SET SYSTEM commands
- Addition of program manager (PG), user interface (US), transaction manager (XM), and security manager (XS) identifiers to INQUIRE and SET TRACETYPE commands
- Addition of FEPI, POOL, TARGET, and NODE options to the COLLECT STATISTICS command
- Addition of FEPI option to the PERFORM STATISTICS RECORD command
- Addition of CONVERSEST, FREQUENCY, FREQUENCYHRS, FREQUENCYMIN, FREQUENCYSEC, SUBSYSTEMID, SYNCPOINTST, and TIME options to the INQUIRE MONITOR command
- Addition of CONVERSEST, FREQUENCY,
- + FREQUENCYHRS, FREQUENCYMIN,
- + FREQUENCYSEC, and SYNCPOINTST options to the
- + SET MONITOR command.

In addition, many editorial changes have been made to clarify the information in this manual.

## Changes for the CICS/ESA 3.3 edition

The main changes for CICS/ESA 3.3 are summarized below.

The command INQUIRE TSQUEUE with the following options: LOCATION, NUMITEMS, FLENGTH, MAXITEMLEN, and MINITEMLEN, has been introduced. The following new options have been introduced:

- BACKUPTYPE for INQUIRE DSNAME
- · MAXNUMRECS, TABLE for INQUIRE FILE

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- EXECKEY, EXECUTIONSET, REMOTENAME, REMOTESYSTEM, TRANSID for INQUIRE PROGRAM
- CDSASIZE, CSCS, ECDSASIZE, ECSCS, ERDSASIZE, ERSCS, EUDSASIZE, EUSCS, STOREPROTECT, UDSASIZE, USCS for INQUIRE SYSTEM
- ALTPAGEHT, ALTPAGEWD, ALTPRINTER, ALTPRTCOPYST, ALTSCRNHT, ALTSCRNWD, ALTSUFFIX, APLKYBDST, APLTEXTST, AUDALARMST, BACKTRANST, COLORST, COPYST, DEFPAGEHT, DEFPAGEWD, DEFSCRNHT, DEFSCRNWD, DISCREQST, DUALCASEST, EXTENDEDDSST, FMHPARMST, FORMFEEDST, HILIGHTST, HFORMST, KATAKANAST, LIGHTPENST, MSRCONTROLST, OBFORMATST, OBOPERIDST, OUTLINEST, PAGEHT, PAGEWD, PARTITIONSST, PRINTADAPTST, PRINTER, PROGSYMBOLST, PRTCOPYST, QUERYST, RELREQST, SCRNHT, SCRNWD, SOSIST, TEXTKYBDST, TEXTPRINTST, UCTRANST, VALIDATIONST, VFORMST, for INQUIRE TERMINAL or NETNAME
- TASKDATAKEY for INQUIRE TRANSACTION
- MAXNUMRECS, TABLE for SET FILE
- **EXECUTIONSET for SET PROGRAM**
- CSCS, ECSCS, ERSCS, EUSCS, USCS for SET SYSTEM
- ALTPRINTER, ALTPRTCOPYST, DISCREQST, OBFORMATST, PRINTER, PRTCOPYST, RELREQST, **UCTRANST for SET TERMINAL**

## Changes for the CICS/ESA 3.2.1 edition

The main changes for CICS/ESA 3.2.1 are summarized below.

Changes have been made to security, and the INQUIRE and SET commands for SYSTEM and TRANSACTION.

The new EXEC CICS DISCARD command is documented.

New INQUIRE commands for the following resources have been introduced:

- AUTINSTMODEL
- PARTNER
- PROFILE

The following new options have been introduced:

- TASKDATALOC for INQUIRE TRANSACTION
- DATALOCATION and COBOLTYPE for INQUIRE **PROGRAM**
- LINKEDITMODE for ENABLE PROGRAM
- ALL RESETNOW for PERFORM STATISTICS RECORD
- RECORDNOW and RESETNOW for SET STATISTICS
- LASTRESET for COLLECT STATISTICS
- CONNSTATUS for INQUIRE CONNECTION
- CONNSTATUS for SET CONNECTION
- JOURNALNUM for INQUIRE FILE
- STARTUP and XRFSTATUS for INQUIRE SYSTEM
- NEXTTRANSID. TCAMCONTROL, and USERNAME for INQUIRE TERMINAL or NETNAME
- NEXTTRANSID and TCAMCONTROL for SET TERMINAL
- PROFILE and TPROF for INQUIRE TRANSACTION.

There are changes to the language for SESSIONTYPE in INQUIRE TERMINAL and SET TERMINAL.

## Part 1. Introduction

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## System programming commands

This book describes the CICS system programming interface (SPI) commands. These commands are for managing the CICS system and its resources, in contrast to the application programming interface (API) commands, with which you implement end-user applications. The API is described in a companion manual to this one, the CICS/ESA Application Programming Reference manual. A third manual, the CICS/ESA Application Programming Guide, contains general information that applies to both groups of commands.

SPI commands either retrieve information about the system + and its resources, or modify them. They fall into three broad + categories:

- + Commands that retrieve information about a CICS
- + resource or system element:
- + The INQUIRE commands
- COLLECT STATISTICS
- + Commands that modify the status or definition of the
- + system or a resource, or invoke a system process:
- The SET commands
- The CREATE commands
- The DISCARD commands
- + The PERFORM commands
- + ACQUIRE TERMINAL
- + Commands that modify or expand system execution by
- + means of exits:
- DISABLE PROGRAM
- + ENABLE PROGRAM
- + EXTRACT EXIT
- + RESYNC ENTRYNAME

Together, these commands provide you with a command-level equivalent to the function of the master terminal transaction (CEMT)¹ and the trace control transaction (CETR), and an alternative to the CEDA transaction for defining resources. This means that you can write transactions for administering the running CICS system. You could, for example, provide some functions of the master terminal command for a group of users without giving them authority to use CEMT.

System programming commands are supported in the same way as application programming commands. They can be used in programs written in any CICS-supported language, and they are recognized by the command interpreter (CECI),

the execution diagnostic facility (CEDF), and the CICS translator.

- + However, there are some differences between SPI and API + commands:
- + You cannot function ship SPI commands by naming a
- remote resource or, generally, by specifying the SYSID
  - option. They are executed in the CICS region in which
- the issuing program is running. If the command
- specifies a remote resource (one owned by another
- + region), CICS uses the local (partial) definition to
- + process the request. Consequently, if you want to use
- or change a resource definition in a remote region, you
   must cause your SPI command to be executed in that
- + region, either by transaction routing or by distributed
- # program link. Shared temporary storage queues, where
- the DFHTST TYPE=REMOTE entry is provided, are an
- + exception.
- + Additional security checking is available for SPI
- + commands, as explained on page 4.
- + Programs containing SPI commands must be translated
- with the SP translator option, as explained in "Security
- + checking" on page 11.
- + There are also special considerations that apply to certain
- + groups of commands. These notes begin on page 13.

## + How this book is organized

- + The next section in this chapter explains how SPI commands + are written, including:
- + Command format
- + Syntax diagrams
- Argument types and values
- + Data formats
- + Language-specific notes
- + The third section contains general information that applies to + all SPI commands:
- + Exception conditions
- Response codes (RESP and RESP2)
- Security checking
- + Specifics for these groups of commands follow in the final + section:
- Inquiries and browsing

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<sup>1</sup> 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 Customization Guide for releases prior to CICS/ESA Version 3.

<sup>+</sup> You cannot use DPL to link to the CICS master terminal program, DFHEMTA. The addresses passed as parameters to DFHEMTA are valid

<sup>+</sup> only in the region that issues the EXEC CICS LINK command, which means you cannot route a DFHEMTA request to a remote CICS

<sup>+</sup> system. The same restriction also applies to the programmable interface to the RDO transaction, CEDA, invoked through program

<sup>+</sup> DFHEDAP.

- + SET commands
- + CREATE commands
- + DISCARD commands
- + Exit-related commands
- + You should read this material even if you already know how
- + to write CICS commands. It begins on page 10.
- + Part 2 of this book describes the SPI commands individually,
- + in alphabetical order. Descriptions begin with a brief
- + statement of what the command does, followed by a syntax
- + diagram and general information about usage. Command
- + options are described next, also in alphabetical order. A list
- + of the exception conditions that can arise during execution of
- to the exception conditions that can alice daming exception
- + the command follows and, in some cases, there are also
- + examples of usage.

## **Command format**

SPI commands are written in the same way as API commands. They begin with the words **EXECUTE CICS** 

- + (usually abbreviated EXEC CICS), followed by the command
- + name, a verb or verb-and-option combination such as:
- + INQUIRE FILE
- + PERFORM SHUTDOWN
- + SET SYSTEM
- + Options that indicate details of what you want to do follow
- + the command name. The order of the options is unimportant
- + except when the first one is part of the command name (the
- + FILE in INQUIRE FILE, for example).
- + SPI commands are translated into the language of the
- + program by the same CICS translator that converts API
- + commands, and you can mix the two categories of
- + commands in the same program. However, you must specify
- + the translator option SP when SPI commands are present, or
- + the translator will not recognize them. This feature allows an
- + installation to limit use of the SPI at compile time. Other
- + security features restrict its use at execution time; these are
- + described in "Security checking" on page 11.
- + The EXEC CICS that begins a command tells the translator
- + when to begin translating. In high-level languages, you must
- + also tell the translator when to stop, by putting a terminator
- + at the end of the command. In COBOL, the terminator is
- + END-EXEC. In C/370 and PL/I, it is a semi-colon. You do
- + not need one in assembler, because the translator assumes

- + that the command ends on the current line unless a
- + continuation character is present. So a command that looks
- + like this in assembler:
- + EXEC CICS SET FILE (TAXPGM) OPEN
- + becomes
- + EXEC CICS SET FILE (TAXPGM) OPEN END-EXEC
- + in COBOL, and
- + EXEC CICS SET FILE (TAXPGM) OPEN;
- + in C/370 or PL/I.
- + For more information about translating the commands, see
- + the CICS/ESA Application Programming Guide for translator
- + options, and the CICS/ESA System Definition Guide for the
- + job control language.

## + CICS syntax notation and conventions + used in this book

- + In the CICS books, CICS commands are presented in a + standard way.
- + Each command has a syntax diagram to show you what + options there are.
- + The diagram tells you what you can put between the EXEC
- + CICS that begins a command and the terminator that ends it.
- + It summarizes what you can do with the particular command,
- + and indicates relationships between different options and,
- + sometimes, different values of an option.
- + Note: The diagrams and some of the examples omit the
- + initial EXEC CICS and the language-dependent terminator,
- + even though you must use them in your code. The diagrams + also omit options that you can use in any command:
- + NOHANDLE
- + RESP
- + RESP2
- + SYSEIB
- + which have the same meaning in SPI commands as in API
- + commands. (See the CICS/ESA Application Programming
- + Guide for basic information about these options, and
- + "Exception conditions" on page 10 for additional SPI details.)
- + You interpret the syntax diagram by following the arrows
- + from left to right. The conventions are:

‡[	Symbol	Action
‡ + ‡	A B C	A set of alternatives—one of which you <b>must</b> code.
‡ + +	A B C	A set of alternatives—one of which you <i>must</i> code. You <i>may</i> code more than one of them, in any sequence.
‡ + + ‡	► A – B – C – C – C – C – C – C – C – C – C	A set of alternatives—one of which you <i>may</i> code.
‡ + + ‡	-ABC-	A set of alternatives — any number (including none) of which you may code once, in any sequence.
‡ + ‡	<b>→</b>	Alternatives where <b>A</b> is the default.
‡ + + +	Name   Name   Name:   Name:   Name   Name	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).

- + Figure 1 shows an example. It indicates that INQUIRE
- + STORAGE requires you to specify either the ADDRESS
- + option or the NUMELEMENTS option (but not both). If, and
- + only if, you choose ADDRESS, you can specify ELEMENT,
- + FLENGTH, both, or neither. If you choose NUMELEMENTS,
- + you can specify ELEMENTLIST, LENGTHLIST, or TASK in
- + any combination (including none).
- + A list of the exception conditions that can occur on the
- + command appears at the bottom of the diagram. In this
- + case, the possibilities are the NOTAUTH and TASKIDERR
- + conditions.

## + Summary of format rules

- + Here is a summary of the format rules for coding CICS + commands:
- Follow the conventions of the language in which you are
- coding for general format (the column in which the
- command starts, the columns available to it, embedded
- comments, embedded blanks, and so on).
- Note: The translator is not sensitive to blanks between
- option names and option values or the parentheses that
- separate them, so you can use them or not, as you
- wish, even in assembler.
- Start your command with EXEC CICS or EXECUTE
- CICS and end it with the terminator required by the
- program language (see "Command format" on page 4).

- If a command does not fit on a line, or you wish to break
- it into multiple lines, use the conventions of the
- language. In assembler, use a continuation character on
- all but the last line.
- Select the options you wish to use from the syntax
- diagram, observing the rules expressed in the diagram
- and the option text for required options and consistent
- combinations.
- Code punctuation and upper case letters as shown in
- the diagram (you can use mixed case or lowercase for
- keywords shown in uppercase if you prefer).
- Substitute your own text for lowercase letters, following
- the conventions of the language in which you are
- coding.

## + Argument values

- + The data associated with an option is called its **argument**.
- + Five different types appear in the syntax diagrams:
- data-area
- data-value
- ptr-ref (for pointer-reference)
- ptr-value (pointer-value)
- cvda (CICS-value data area)

#### + Data-areas and data-values

- + Data-areas and data-values are the basic argument types.
- + The difference between them is the direction in which
- + information flows when a task executes a command. A
- + data-value is always, and exclusively, a sender. it conveys
- + data to CICS that CICS uses to process the command. A
- + data-area is a receiver, CICS uses it to return information to + the caller. For example, in the command:
- EXEC CICS INQUIRE PROGRAM (TAXPGM)
- USECOUNT (UCNT) END-EXEC
- + PROGRAM is a sender option and TAXPGM is a data-value;
- + it tells CICS where to find the name of the program you are
- + inquiring about. USECOUNT is a receiver option, and UCNT
- + is a data-area: CICS returns the information you requested
- + (the use count for this program) there.
- + In general, you can use any area (variable) for a data-area, + provided that:
- The data type (format) is correct. The area must be
- long enough and, in high-level languages, the associated
- variable must be defined to have the correct length and
- internal representation. The data types that CICS uses
- are discussed in "Data types" on page 8.
- The program logic allows the value to be changed (CICS
- stores into data-areas).
- CICS re-entrancy rules allow the value to be changed.
- CICS loads only one copy of any given program, no
- matter how many tasks are using it. To prevent tasks

```
-ADDRESS(ptr-value)
  ►► INQUIRE STORAGE—
                        NUMELEMENTS(data-area)— elist | llist | task |
+
+
   elist:
+
       -ELEMENTLIST(ptr-ref)
+
   llist:
+
+
      LENGTHLIST(ptr-ref)
+
+
   task:
      LTASK(data-value)
   Conditions: NOTAUTH, TASKIDERR
```

+ Figure 1. Syntax diagram for the INQUIRE STORAGE command

- executing the same program from interfering with one
   another, CICS keeps a separate copy of program areas
   that may change during execution (sometimes called
- + "working storage") for each task. This means that any
- + area that may be modified, including data-area
- + arguments to CICS commands, must reside either in
- + such an area of the program or in storage outside the
- + program which the application design allows the program
- + to modify.
- + Some of this storage is allocated automatically; this
- + category includes the WORKING-STORAGE section in
- COBOL programs, AUTOMATIC storage in PL/I and
- + C/370, and areas appended to the DFHEISTG DSECT
- + in assembler. It can also be allocated explicitly with a
- + CICS GETMAIN command or a language facility such as
- + a PL/I ALLOCATE statement, in this or a preceding
- + program. This category includes the LINKAGE section
- + in COBOL, BASED and CONTROLLED storage in PL/I,
- + and other DSECTs in assembler. See the CICS/ESA
- + Application Programming Guide for more detail about
- Application i regramming duide for more detail about
- CICS re-entrancy rules.
- + The program that issues the command has write access
- + to the area. CICS changes the content of data-areas
- + and, therefore, you cannot use storage that you are not
- + allowed to change.
- + Write access is affected by the storage protection key in
- + which the program is running, and by the transaction
- + isolation status of its task. See the discussion of these
- + subjects in the CICS/ESA Application Programming
- + Guide and the CICS/ESA System Definition Guide, and
- + the TRANISOLATE option of a TRANSACTION definition
- + in the CICS/ESA Resource Definition Guide.
- + The MVS/ESA restrictions on addressing mode that
- + apply to all CICS commands are observed. These are
- + enforced automatically in high-level languages but, in
- + mode, and the primary address space must be the home

assembler, the program must be in primary addressing

- address space. All arguments for options must reside in
- + the primary address space.
- + Note: CICS does not always preserve access registers
- across CICS commands or macro invocations. If your
- program uses access registers, it should save them
- + before invoking a CICS service, and restore them before
- + reusing them.
- + Any area that can be used for a data-area can also be used
- + for a data-value. In addition, you can use areas not allowed
- + for data-areas, because CICS never changes a data-value.
- + In particular, you can use:
  - Constants, including literals. In the example above, for
- + instance, you could use a literal instead of a variable for
  - the program name:
- + EXEC CICS SET TDQUEUE ('TAX')
  - TRIGGERLEVEL(1) END-EXEC
- When you use a numeric literal in a command, the
- translator will ensure a constant of the correct type and
- length, provided the literal is capable of being to
- converted to such a constant, as in TRIGGERLEVEL
- above. In COBOL and assembler, the translator also
- + ensures character literals of the correct length, padding
- with blanks if the literal is shorter than what the
- + argument requires. In C/370 and PL/I, however, you
- must do this yourself:
- EXEC CICS SET TDQUEUE ('TAX ')
- TRIGGERLEVEL(1);
- Other program areas not in "working storage," such as
  - static storage in PL/I.
- + Areas to which your program has read but not write
- access (the link-pack area, for example).
- + Note: Sometimes an option is used both to send and
- + receive information, although this usage occurs more often in
- + API than SPI commands. When it does, the argument must
- + be a data-area, because CICS stores into it.

## + Pointer arguments

- + A pointer-reference (abbreviated ptr-ref in the diagrams) is a
- + special case of a data-area. It also is a receiver field, but
- + CICS uses it to return a pointer to the data requested, rather
- + than the data itself. That is, CICS stores the location
- + (address) of the data in the argument you provide.
- + A pointer-value (abbreviated **ptr-value**) is the pointer
- + counterpart of a data-value. That is, you send information to
- + CICS in a pointer-value, but you provide the address of the
- + data (a pointer to it), rather than the data itself.
- + The rules listed for data-areas therefore apply to
- + pointer-references, and those for data-values to
- + pointer-values. Each language provides a type definition for
- + pointers, and facilities for expressing address literals that can
- + be used for pointer-values; internally, pointers are stored in
- + fullword binary form. See the FREEMAIN command in the
- + CICS/ESA Application Programming Reference for more
- + information about the distinction between data and pointers.

#### + CICS-value data areas (CVDAs)

- + A CVDA (CICS-value data area) is still another special case:
- + it is an argument to which CICS has assigned a specific and
- + limited set of meaningful values. These values are named,
- + both to make them intuitive and easy to remember and to
- + keep the interface between user programs and CICS
- + symbolic, so that version and platform changes do not
- + require program modifications.
- + Some CVDAs send information to CICS. A sender CVDA is
- + a special case of a data-value, and the rules for data-values
- + apply. Others return information from CICS, and you must
- + use the rules for data-areas. If there is any question about
- + the direction in which the information is flowing, you can tell
- + from the verb used in the option description. Specifies
- + means that you are sending information to CICS (that is,
- + data-value rules apply); returns indicates that CICS will return
- + information in the argument (data-area rules apply).
- + CICS provides the code that converts CVDA value names to
- + the corresponding numeric representations. (Internally,
- + CVDAs are stored as fullword binary numbers, and you must
- + always provide a fullword binary area for options that receive
- + CVDA values.)
- +One way to send a CVDA value is simply to name the
- + appropriate value (the name of the option is implied in the
- + name of the value). For example:
- + EXEC CICS SET PROGRAM (TAXPGM)
- + DPLSUBSET END-EXEC
- + sets the EXECUTIONSET option value to DPLSUBSET.
- + EXECUTIONSET determines the set of commands which the

- + program is allowed to use. It has two possible values:
- + DPLSUBSET, which restricts a program to the commands
- + allowed in a program invoked by a distributed program link,
- + and FULLAPI, which does not restrict the command set.
- + The alternative is to use the CICS-provided DFHVALUE
- + function, which relates the internal representation to the
- +value name. For example, this code is equivalent to the
- + COBOL statement above:
- + MOVE DFHVALUE(DPLSUBSET) TO TAXAPI.
- + EXEC CICS SET PROGRAM (TAXPGM)
- + EXECUTIONSET(TAXAPI) END-EXEC.
- + This technique is easier to use when program logic is + complex.
- + You also use DFHVALUE when your program needs to
- + interpret a value returned as a CVDA. For example, if you
- + needed to perform logic based on the EXECUTIONSET
- + value, you would write something like this:
- + EXEC CICS INQUIRE PROGRAM (TAXPGM)
- EXECUTIONSET (TAXAPI) END-EXEC.
- + IF TAXAPI = DFHVALUE(FULLAPI) PERFORM STND-INIT
- + ELSE PERFORM REMOTE-INIT.
- + "Examples" on page 60 lists all of the CVDA value names
- + with corresponding numeric values. These are for reference
- + only, however; you should use value names and DFHVALUE
- + in your code, to keep it version- and platform-independent.

## + CVDA examples

- + Here are examples in all the CICS-supported languages
- + which show the use of CVDAs and the DFHVALUE function.
- + In each case, the code provided:
- Tests whether the file named PAYROLL is closed.
- + If so, changes the UPDATE and DELETE option values
- for the file to UPDATABLE and NOTDELETABLE
- respectively (so that records can be updated and read,
- + but not deleted). Note that the UPDATE option is set by
- + using the DFHVALUE function, and that the DELETE
- + option is set by specifying the value name. These
- + methods are equivalent; either could have been done
- either wav.
- + The absence of other options indicates that those values
- + are to remain unchanged. This information could also
- + have been expressed by specifying the options with a
- + null values, as explained in "SET commands" on
- + page 15.
- + Returns to CICS.
- + Only the code and definitions related to this part of each
- + program are shown.

#### + COBOL version

```
WORKING-STORAGE SECTION.
    01 FILE-STATUS-INFO.
+
+
        02 UOPST
                                 PIC S9(8) COMP.
                                 PIC S9(8) COMP.
+
        02 UUPD
+
        02 INFILE
                                 PIC X(8).
+
+
    CICS-REQUESTS.
        MOVE 'PAYROLL ' TO INFILE.
+
        EXEC CICS INQUIRE FILE(INFILE)
+
                  OPENSTATUS (UOPST) END-EXEC.
+
        IF UOPST = DFHVALUE(CLOSED)
            MOVE DFHVALUE(UPDATABLE) TO UUPD
            EXEC CICS SET FILE(INFILE)
                       UPDATE (UUPD)
                       NOTDELETABLE END-EXEC.
        EXEC CICS RETURN.
```

#### + C version

```
#define INFILE
                      "PAYROLL "
   main()
+
+
     long int uopst.
                           /* OPENSTATUS value
+
+
     long int uupd;
                           /* UPDATE value
+
     EXEC CICS ADDRESS EIB(dfheiptr);
     EXEC CICS INQUIRE FILE(INFILE)
                        OPENSTATUS (uopst);
     if( uopst == DFHVALUE(CLOSED) )
      { uupd = DFHVALUE(UPDATABLE);
+
        EXEC CICS SET FILE(INFILE)
                      UPDATE (uupd)
                      NOTDELETABLE; }
     EXEC CICS RETURN;
    }
```

#### + PL/I version

```
DCL (UOPST, UUPD) FIXED BIN(31), /*OPEN, UPD STATUS*/
        INFILE CHAR(8);
                                     /*FILE NAME
+
+
+
        INFILE='PAYROLL ';
        EXEC CICS INQUIRE FILE(INFILE)
+
                  OPENSTATUS (UOPST):
        IF UOPST = DFHVALUE(CLOSED) THEN DO;
            UUPD = DFHVALUE(UPDATABLE);
            EXEC CICS SET FILE(INFILE)
                         UPDATE (UUPD)
                         NOTDELETABLE; END;
        EXEC CICS RETURN;
```

#### + Assembler-language version

```
DFHEISTG
+
   UOPST
+
             DS
                   F
                            *OPEN STATUS
+
   UUPD
             DS
                   F
                            *UPDATE STATUS
+
   INFILE
             DS
                   CL8
                            *FILE NAME
+
             MVC INFILE, = CL8 'PAYROLL '
+
+
             EXEC CICS INQUIRE FILE(INFILE)
                                                       χ
+
                        OPENSTATUS (UOPST)
                   UOPST,DFHVALUE(CLOSED)
+
             CLC
+
             BNE
                   OPENLAB
                   UUPD, DFHVALUE (UPDATABLE)
+
             MVC
             EXEC CICS SET FILE(INFILE)
+
                                                       χ
+
                        UPDATE (UUPD)
                                                       χ
+
                        NOTDELETABLE
   OPENLAB EXEC CICS RETURN
```

## + Data types

- + For most arguments, CICS uses one of four data types + (formats):
- Fullword binary (four bytes)
- + Halfword binary (two bytes)
- + Packed decimal (variable number of bytes)
- + Character string (variable number of bytes)
- + The first three are all used for numeric data, but they differ in
- + length and internal format; the last is for text. The names
- + used in this book are those used in assembler language.
- + Data-areas and data-values may require any of these
- + formats. The option text tells you which one to use. CVDAs
- + are always fullword binary. Pointers are also stored in this
- + form, although you generally define them explicitly as
- + pointers or addresses. There are a few exceptions to these
- + types, including the component identifier arguments in the
- + INQUIRE and SET TRACETYPE commands, which are bit
- + strings, options where the user determines the data format,
- + and options for which CICS requires a specific structure.
- + and options for which clos requires a specific structure
- + These exceptions are rare in the SPI, however, and are
- + always noted in the option description text.
- + The data types are the same regardless of the language of
- + the program issuing the command. However, the way you
- + define data of a particular type varies with the language.
- + The rules are summarized in the language sections that
- + follow, but there are other considerations unique to each
- + language. You should refer to the material for the language
- + you are using in the CICS/ESA Application Programming
- + Guide if you are not familiar with it.

## + COBOL argument values

- + In COBOL, you can use any data name of the correct data
- + type for any argument. For a data-value, you can also use a
- + constant that can be converted to the correct type. The
- + ADDRESS special register can be used for both
- + pointer-references and pointer-values, and the LENGTH
- + special register can be used for length arguments that take a
- + data-value.
- + The table that follows indicates how to define the correct
- + data type.

	Data type	COBOL definition
+	Halfword binary	PIC S9(4) COMP
+	Fullword binary (including CVDA)	PIC S9(8) COMP
+	Pointer	USAGE IS POINTER
+	Character string (n characters long)	PIC X(n)
+	Packed decimal (n decimal digits)	PIC S9(n) COMP-3

## +C/370 argument values

- + In C/370, you can use any data reference of the correct data
- + type for a data-area, data-value, or CVDA, provided the
- + reference is to contiguous storage. In addition, for a
- + data-value, you can use any C/370 expression that can be
- + converted to the correct data type. The table below shows
- + how to define the correct data type.

+	Data type	C/370 definition
+	Halfword binary	short int
+	Fullword binary (including CVDA)	long int
+	Character string (n characters long)	unsigned char[n]
+	Packed decimal	Not used—see note

- Note: Packed decimal arguments are not supported in C/370.
- Whenever there is an option that takes such an argument, there
- + are other options that convey or return the same information in
- a format supported by C/370.
- + Pointer-reference and pointer-value arguments can be any
- + C/370 pointer reference, and pointer-values can also be any
- + C/370 expression that can be converted to an address.
- + CICS calling sequences pass arguments by reference (the
- + MVS convention), rather than by value (the C/370
- + convention). Ordinarily, the translator makes the necessary
- + adjustments, but there are some situations in which you need
- + to prefix your argument with an ampersand (&). See the
- + C/370 discussion in the CICS/ESA Application Programming
- + Guide for details on arguments and other aspects of writing
- + CICS programs in C/370.

## + PL/I argument values

- + In PL/I, an argument can be any PL/I data reference of the
- + correct data type, provided the reference is to connected
- + storage. In addition, a data-value, a pointer-value, or sender
- + CVDA can be any PL/I expression that can be converted to
- + the required type, including one containing built-in functions
- + like ADDR or LENGTH. The table below shows how to
- + define the correct data type:

+	Data type	PL/I definition
+	Halfword binary	FIXED BIN(15)
+	Fullword binary (including CVDA)	FIXED BIN(31)
+	Pointer	POINTER
+	Character string (n characters long)	CHAR(n)
+	Packed decimal (n decimal digits)	FIXED DEC(n,0)

- + PL/I requires that the data type, precision, length and
- + alignment attributes of a variable passed in a CALL
- + statement match those of the corresponding argument on the
- + ENTRY statement for the called procedure. If the attributes
- + do not match, the PL/I compiler substitutes a dummy variable
- + for the one specified in the CALL.
- + The translator generates ENTRY statements when it
- + translates your CICS commands to PL/I CALLs and, if there
- + is a mismatch between the ENTRY statement specification
- + for an argument and the variable you specify, CICS gets a
- + dummy variable instead of yours. Although the compiler
- + issues a warning message when it makes such a
- + substitution, it is easy to miss the message, and the
- + execution results are almost never what was intended. This
- + occurs even if there is no difference in the way the compiler
- + implements a particular attribute value.
- + The ENTRY statements that the translator generates specify
- + data type, precision, and length, using the values shown in
- + the table above. Therefore, to prevent the compiler from
- + substituting dummy variables, you must specify these + attributes explicitly for variables used in CICS commands
- + unless they happen to match the defaults. (Defaults come
- + from a DEFAULT statement if you have used one, and from
- + the compiler defaults otherwise.)
- + In contrast, the generated ENTRY statements do not specify
- + the alignment attribute, and therefore the defaults apply.
- + This means that alignment agreement between an argument
- + in a CICS option and the ENTRY statement occurs only if the
- + argument has default alignment, and happens automatically if + you do not override PL/I's defaults.
- + Defaults at an installation can change and, therefore, the
- + safest policy is to specify data type, length, and precision
- + explicitly for variables used in CICS commands, and to omit
- + the alignment specification.
- + If you use variable-length character strings, you need to be
- + aware of another aspect of PL/I. PL/I prefixes character
- + strings defined as VARYING with a two-byte length field. If

- + you name such a string as a data-value, the data CICS
- + receives starts with this length prefix—usually an unintended
- + result. (The length sent to CICS is whatever you specify in
- + the associated length option or, if you omit it, the maximum
- + length for the string plus two for the length prefix.) Similarly,
- + if you name the string as a data-area, CICS stores the
- + information requested starting at the length prefix. CICS
- + does not prefix character data with length, and so this also is
- + usually unintended.

## + Assembler-language argument values

- + In assembler language, an argument calling for a data-area,
- + data-value, or CVDA can be any relocatable expression that
- + refers to data of the correct type, including register forms
- + such as 20(0,11), and forms that use the macro-replacement
- + facilities. You can use literal constants, such as =F'1' or
- +=AL2(100), for data-values and sender CVDAs, but you
- + should not use them—or any other storage that is not to be
- + modified—for receiver arguments.
- + Pointer arguments, in contrast, are conveyed through a
- + general register in CICS assembler programs and, therefore,
- + they must be absolute expressions. For a pointer-value, you
- + specify the number of the register that contains the address
- + of the data (loading the register first if it doesn't already point
- + to it). For a pointer-reference, you specify the register in
- + which CICS is to return the address of the data. For
- + example, after execution of:
- + EXEC CICS INQUIRE TASK LIST
- + LISTSIZE(LISTLEN)
- + SET (9)
- + the address of the task list is in register 9.

#### + 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/370. 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.

- <sup>‡</sup> APAR PQ06624
- added this sentence

# 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

- + CICS defines a null value for most types of data. CICS sets
- + receiver option values to the null value corresponding to the
- + data type for the option if the option does not apply in a
- + particular situation, and you can use them in sender options
- + to indicate that you want no change to an option value. (See
- + the "Inquiry commands" on page 13 and "SET commands"
- + on page 15 for more about these uses.)
- + The null value for each data type is listed below:

+	Data type	Null value
+	Character string (n characters long)	n blanks (X'40')
+	Halfword binary	-1 (X'FFFF')
+	Fullword binary	-1 (X'FFFFFFFF')
+	Pointer (address)	X'FF000000'
+	CVDA (in receiver option)	DFHVALUE(NOTAPPLIC) (-1 or X'FFFFFFFF')
+	CVDA (in sender option)	DFHVALUE(IGNORE) (-1 or X'FFFFFFFF')

## + Exception conditions

- + CICS does not distinguish between SPI and API commands
- + in the flow of control after it processes a command. You
- + should read the material on this subject in the CICS/ESA
- + Application Programming Guide if you are not familiar with it,
- + because the information that follows is only a summary.
- + A program that issues a CICS command regains control at
- + the point following the command if any of the following are + true:
- + The command executes normally
- + You specify NOHANDLE or RESP in the command (you
- + can specify these options in any command)
- + An exception occurs for which an IGNORE CONDITION
- command has been issued
- + If an exception occurs for which a HANDLE CONDITION
- + command is active, control goes to the point specified in the
- + HANDLE command. Otherwise, CICS takes its default action
- + for the exception. Except where specifically noted, this
- + action is an abend. The abend codes associated with each
- + exception condition are listed in Appendix B, "EXEC

+ interface block (EIB) response and function codes" on + page 213.

## + RESP and RESP2 options

- + CICS sets a primary and sometimes a secondary response
- + code when it completes a command, and provides options
- + for you to inspect them. The primary code returned by the
- + RESP option is the general result—either NORMAL, meaning
- + that the command executed successfully, or the name of an
- + exception condition such as NOTAUTH (not authorized) or
- + INVREQ (invalid request). The secondary code, returned by
- + RESP2, provides a finer level of detail.
- + RESP values are similar to CVDAs in that there is a limited
- + set of values, each of which is named, and CICS translates
- + the value name to its numeric equivalent. "CVDA values for
- + the DEVICE option" on page 211 lists the correspondence,
- + but you should use the value names in your code to keep it
- + version- and platform-independent.
- + For example, here is code from a program that initializes for
- + an application. It opens and enables a file, and then checks
- + to ensure that the operation was successful before
- + continuing:
- + EXEC CICS SET FILE ('TAXFILE ') OPEN ENABLED
- + RESP(RC) END-EXEC.
- + IF RC = DFHVALUE(NORMAL) PERFORM MAIN-RTN
- + ELSE IF RC = DFHVALUE(NOTAUTH)
- + PERFORM SECURITY-WARNING
- + ELSE PERFORM ERR-RTN.
- + Many exception conditions can have multiple causes. If you
- + need to know the exact cause, you use the RESP2 option,
- + which you can specify whenever you have specified RESP.
- + For example, if you wanted to distinguish a failure because
- + the file was remote from other failures in the example above,
- + you could add the RESP2 option to the SET FILE statement:
- + EXEC CICS SET FILE ('TAXFILE ') OPEN ENABLED + RESP(RC) RESP2(RC2) END-EXEC
- + and then test explicitly for a remote file:
- + IF RC2 = 1 . . .
- + RESP2 values are numeric and predefined by CICS, like
- + RESP values, but they are not named; you use the numeric
- + values, as shown in the example. They are unique for a
- + specific command, and the RESP2 value implies the RESP
- + value, so that you do not need to test both. They are not
- + unique across commands, however, as RESP values are.
- + Both are fullword binary values, defined in the same way as
- + a CVDA in the same language:
- + COBOL PIC S9(8) COMP + C/370 long int + PL/I FIXED BIN(31)
- +Assembler F

## + Security checking

- +CICS uses an external security manager, such as RACF, to
- + perform security checking. The facilities CICS provides are
- + summarized in this section, but you will need to refer to other
- + manuals for full information. The CICS/ESA CICS-RACF
- + Security Guide is the most comprehensive reference; it
- + describes in detail how CICS uses RACF facilities to
- + implement security. System and resource definition options
- + that govern security are described in the CICS/ESA System
- + Definition Guide and the CICS/ESA Resource Definition
- + Guide, respectively, and the CICS/ESA Customization Guide
- + contains general information on CICS security.
- + Four types of security checks govern whether a particular
- + SPI command is executed:
- Transaction
- + Command
- + Surrogate
- + Resource
- + CICS performs these checks if, and only if, the SEC system
- + initialization parameter has a value of YES.
- + The transaction check occurs first, at task attach time, when
- + CICS ensures that the user initiating the task has authority to
- + use the transaction that is to be executed. This check is
- + governed by the XTRAN system initialization parameter as
- + well as SEC; it is skipped if the XTRAN value is NO. The
- + remaining checks occur as necessary when commands are + issued.
- + Command checking verifies that the user is authorized to
- + use SPI commands. It is governed by the XCMD and
- + CMDSEC system initialization parameters, and the CMDSEC
- + option in the definition of the TRANSACTION being
- + executed, and occurs if the XCMD value is not NO and either
- + the CMDSEC value for the TRANSACTION is YES or for the
- + SIT is ALWAYS. If the user is not authorized, CICS rejects
- + the command with a RESP value of NOTAUTH and a
- + RESP2 value of 100. SPI commands are the ones described
- + in this book, and are the same ones that require the SP
- + option for translation (see page 4).
- + If the command associates a user to a resource, a surrogate
- + check may follow the command check. This check ensures
- + that the user of the task issuing the command has authority
- +to act as a surrogate for the user named in the command. It
- + occurs only if the XUSER system initialization parameter is
- + YES, and applies only to these command-option
- + combinations:
- + SET TDQUEUE with ATIUSERID
- + CREATE CONNECTION with SECURITYNAME
- + CREATE SESSIONS with USERID
- + CREATE TERMINAL with USERID
- + CICS returns a RESP2 value of 102 if the check fails.
- + (Additional checks on the assigned user occur on SET
- + TDQUEUE ATIUSERID, as detailed in the description of that + command.)

- + The final check is the resource check, to verify that the user
- + has authority to use the resource in the way required by the
- + command. Resource checking is controlled by the RESSEC
- + option in the TRANSACTION being executed, the RESSEC
- + system initialization parameter, and a system initialization
- + parameter specific to the resource type:
- XDCT for transient data queues
- XFCT for files
- XJCT for journals
- XPCT for transactions
- XPPT for programs, map sets, partition sets, exits
- XTST for temporary storage queues
- + Resource checking occurs only if the applicable
- + resource-type system initialization system initialization
- + parameter has a value other than NO and either the
- + RESSEC option in the TRANSACTION is YES or the
- + RESSEC system initialization parameter is ALWAYS. For
- + commands other than INQUIRE NEXT, CICS rejects the
- + command with the NOTAUTH condition and a RESP2 value
- + of 101 if a resource check fails. During a browse, however,
- + CICS simply skips resources that would fail the resource
- + check on an ordinary INQUIRE (see "Rules for browsing" on
- + page 15 for details).
- + The resources that can be protected in this way, and the SPI
- + commands that require access authority, are shown in the
- + table that follows. The letter in parentheses after the
- + command indicates whether the user needs read (R), update
- + (U) or alter (A) authority to the resource.

+ + + +	Resource (system initialization parameter)	Commands
+ + + +	Exits (XPPT option)	DISABLE PROGRAM (U) ENABLE PROGRAM (U) EXTRACT EXIT (R) INQUIRE EXITPROGRAM (R)
+ + + + +	Files (XFCT option)	COLLECT STATISTICS FILE (R) CREATE FILE (A) DISCARD FILE (A) INQUIRE FILE (R) SET FILE (U)
+ + + + + + + + + + + +	Journals (XJCT option) COLLECT STATISTICS JOURNALNUM (R) INQUIRE JOURNALNUM (R) SET JOURNALNUM (U)	
+ + + + + + + +	Programs Map sets Partition sets (XPPT option)	COLLECT STATISTICS PROGRAM (R) CREATE MAPSET (A) CREATE PARTITIONSET (A) CREATE PROGRAM (A) DISCARD PROGRAM (A) INQUIRE PROGRAM (R) SET PROGRAM (U)
++++	Temporary storage queues (XTST option)	INQUIRE TSQUEUE (R)
+ + + + + + + +	Transactions (XPCT option)	COLLECT STATISTICS TRANSACTION (R) CREATE TRANSACTION (A) DISCARD TRANSACTION (A) INQUIRE TRANSACTION (R) INQUIRE REQID TRANSID (R) SET TRANSACTION (U)
+ + + + + + + + + + + + + + + + + + + +	Transaction classes (XPCT option)	COLLECT STATISTICS TCLASS (R) COLLECT STATISTICS TRANCLASS (R) CREATE TRANCLASS (A) DISCARD TRANCLASS (A) INQUIRE TCLASS (R) INQUIRE TRANCLASS (R) SET TCLASS (U) SET TRANCLASS (U)
+ + + + +	Transient data queues (XDCT option)	COLLECT STATISTICS TDQUEUE (R) DISCARD TDQUEUE (A) INQUIRE TDQUEUE (R) SET TDQUEUE (U)

#### + 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 QUERY SECURITY command. This is not an
- + SPI command and does not access any resources, and so
- + never raises a NOTAUTH condition. It is described in the
- + CICS/ESA Application Programming Reference manual.

## + Inquiry commands

- + The system programming commands allow you to inquire
- + about the definition and status of most of the resources
- + defined to CICS, and about many elements of the CICS
- + system as well. The resources about which you can inquire
- + are:
- + Autoinstall terminal models (AUTINSTMODEL)
- + Connections (CONNECTION)
- + Exits (EXITPROGRAM)
- + External data sets (DSNAME)
- + Files (FILE)
- Journals (JOURNALNUM)
- Log streams (STREAMNAME)
- + Map sets (PROGRAM)
- + Partition sets (PROGRAM)
- + Partners (PARTNER)
- + Profiles (PROFILE)
- + Programs (PROGRAM)
- + Session groups (MODENAME)
- + System dump codes (SYSDUMPCODE)
- + Temporary storage queues (TSQUEUE)
- + Terminals (TERMINAL, NETNAME)
- + Transaction dump codes (TRANDUMPCODE)
- + Transactions (TRANSACTION)
- + Transaction classes (TCLASS, TRANCLASS)
- + Transient data queues (TDQUEUE)
- + For most resource types, the options in the INQUIRE
- + command correspond to specific elements in the definition of
- + that resource. Such options usually have the same or similar
- + names in the INQUIRE command and in the resource
- + definition. Where they do not, the option text in this manual
- + notes the corresponding definition option. Consequently, if
- + you need additional information about the meaning of an
- + option value, it is often helpful to refer to the definition of the
- + resource in the CICS/ESA Resource Definition Guide.
- + The system elements about which you can inquire are:
- + Autoinstall for terminals (AUTOINSTALL)
- + Dump data sets (DUMPDS)
- + Interregion communication (IRC)
- + Monitor (MONITOR)
- + Requests (REQID)
- + Shipped terminal status (DELETSHIPPED)
- + Statistics (STATISTICS)
- + Storage (STORAGE)

- + System status (SYSTEM)
- + Tasks (TASK, TASK LIST)
- + Tracing (TRACEDEST, TRACEFLAG, TRACETYPE)
- VTAM
- + Most of these elements correspond to system initialization
- + parameters. If you need more information about them, see
- + the system initialization table (SIT) discussion in the
- + CICS/ESA System Definition Guide.
- + Certain considerations apply to all of the inquiry commands,
- + which are principally the INQUIREs, but also include
- + COLLECT STATISTICS and EXTRACT EXIT.
- + Exception conditions: CICS returns no information
- when an exception condition occurs; data-areas named
- + in receiver options are unchanged.
- + Exclusive control: A task inquiring about a resource,
- system setting, or system component does not get
- + exclusive control of the object of the inquiry. The
- + information returned may be changed by another task or
- + system event at any time.
- # 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.
- + Browsing: Resources defined in the first (resource) list
- can be retrieved sequentially, as explained in "Browsing
- + resource definitions."
- + Inapplicable options: If you specify a receiver option
- + that does not apply to the resource about which you are
- + inquiring, CICS generally returns the appropriate "null
- + value," as defined in "Null values" on page 10. (In a few
- + cases, an exception is raised; these cases are noted in
- the command descriptions.)
- + For example, if you include BLOCKFORMAT in an
- INQUIRE TDQUEUE command that specifies an
- intrapartition transient data queue, CICS returns the
- + value NOTAPPLIC to the CVDA you provide, because
- BLOCKFORMAT is valid for extrapartition queues only.

## **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 those in
- + the first list in "Inquiry commands," plus requests (REQIDs).

## 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.
- You also omit options that send information to CICS,
- other than the resource type. (INQUIRE
- EXITPROGRAM is an exception to this rule; you can
- limit the browse by supplying additional information on
- the START, as explained in the descriptions of these
- commands.)

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, map sets, and partition sets
  - 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 of a browse, you issue the INQUIRE command repetitively with another new option, NEXT. CICS + returns one resource definition for each INQUIRE NEXT. 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.
- A few options, such as the CONNECTION option on INQUIRE MODENAME, change their roles in a browse. These differences also are noted in the commands to which they apply.

You repeat the INQUIRE NEXT command until you have seen the resource definitions you want or have exhausted the definitions. After you have retrieved the last of them, CICS raises the END condition on subsequent INQUIRE NEXTs, leaving any data-areas you provided 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.

#### 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.

```
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 RESPCODE = DFHRESP(NORMAL)

IF OPENSTAT = DFHVALUE(OPEN)

CALL RCVY-RTN USING RCVRSTAT FWDSTAT

END-IF

ELSE CALL ERROR-RTN END-IF

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:

 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 task can browse more than one type of resource at the same time, but can have only one browse in progress for a particular resource type.
- A SYNCPOINT command does not end a browse or affect your position in it.
- 4. Resource definitions are not locked during a browse, and another task may change the definitions while you are inquiring on them.
- 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.
- 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 in a task for which resource security
- + checking is in effect, CICS returns only those definitions that the user is authorized to see. The others are skipped without any indication.

## **Exception conditions for browsing**

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:

#### **END**

RESP2 values:

2 INQUIRE NEXT has been issued, but there are no more resource definitions of the type being browsed.

#### **ILLOGIC**

RESP2 values:

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.

#### **SET commands**

You can change most of the system elements and resource definitions about which you can inquire, although in general you cannot change as many option values as you can retrieve. Changes are made with a SET command naming the resource or system element.

Like the INQUIRE commands, SET commands follow some general rules:

- Exceptions: When a SET command results in an exception condition, CICS makes as few of the requested changes as possible. To establish which, if any, changes have been made, you can issue the corresponding INQUIRE command.
- Permanence: If you change a system setting or resource definition element that is ordinarily recorded in the CICS global catalog, the change is also recorded in the catalog and thus preserved over a warm or emergency restart. If the information is not ordinarily recorded, it lasts only for the current execution of CICS. In a cold or initial start, the catalog information is discarded and all effects of earlier SET commands are lost.
- Recoverability: SET commands are not recoverable.
   Their effects are not backed out if the task that issued them abends or issues a SYNCPOINT ROLLBACK command. Consequently, SET commands do not lock resources, and you do not need to precede a SET with the corresponding INQUIRE command.
- "No change" values: Except where there is a default value for an option, CICS does not change the value associated with an option that you omit. However, there is a second way to indicate that you want no change. If you specify the null value in a sender option that is not required, CICS leaves the option value unchanged. Although you can get the same effect by omitting the option if there is no default, the ability to specify a "no

change" value allows you to vary the options in a command as well as the option values, simplifying your code in some situations.

For example, suppose you needed to change many different combinations of options, depending on the outcome of some calculations. Your code might look something like this:

IF ... MOVE DFHVALUE(NOTDELETABLE) TO DEL ELSE MOVE DFHVALUE(IGNORE) TO DEL. IF ... MOVE 2 TO POOL ELSE MOVE -1 TO POOL. IF ... MOVE 'TAXID.MASTER' to DSN ELSE MOVE SPACES TO DSN. EXEC CICS SET FILE('TAXMSTR ') DELETE(DEL) LSRPOOLID(POOL) DSNAME(DSN) END-EXEC.

See "Null values" on page 10 for more about null values.

**Note:** There are a few options, such as the NEXTTRANSID option in a SET TERMINAL command, for which blanks (the null value for a character field) are a meaningful value. For these options, there is no null value, and you must omit the option if you do not want to change its value; these cases are noted in the option descriptions.

## 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 or initial start, and you cannot refer to 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 was already installed, the new definition replaces the old one, and an implicit discard of the old resource occurs as well. In this case, most restrictions that would apply to a DISCARD command naming the same 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, because DEFINE screens are preformatted 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/ESA Resource Definition Guide).

**Note:** Abbreviations can change from release to release, and thus full spellings are safest.

- The attribute string is not converted to uppercase, in contrast to inputs to CEDA and the DFHCSDUP utility. Attribute names are recognized regardless whether you use upper, lower or mixed case, as are value names assigned by CICS (those shown in uppercase letters in the syntax diagram). However, other character values—resource names and message text, for example—are taken as is, so that you need to supply them in the intended case.
- The argument value, if any, also 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 uppercase. 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*.

**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/ESA Resource Definition Guide* for specific rules about the argument values.

 You can separate attributes by one or more blanks for readability, but a blank is 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 not keying a value for it 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/370, as
  explained in "Argument lengths" on page 10.

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 217 lists the RESP2 values that apply.

## Discarding resource definitions

The DISCARD command deletes the definition of a resource

- + installed in the local CICS system, so that the system no
- + longer has access to the resource, or makes a model
- + ineligible for use as a model. It reverses the effect of the
- + installation of the resource, which can occur at system
- + startup, through a subsequent CREATE command or CEDA
- + transaction, or by an automatic installation process.

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

Autoinstall models for terminals

- Connections
  - Files
- + Journals

**Partners** 

**Profiles** 

Programs, map sets, and partition sets

- + Terminals
  - Transaction classes
  - Transactions
- Transient data queues

You cannot discard a resource that is currently in use. For example, you cannot discard a PROFILE definition if some installed TRANSACTION definition still 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).

- + Some DISCARD commands cause a syncpoint on behalf of
- + the issuing task, as the CREATE commands do. For these
- + commands, the discussion of syncpoint considerations on
- + page 16 applies.

DISCARD commands 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 thus are lost on a
- + cold or initial start.

#### + Exit-related commands

- + In CICS, an exit is installation-supplied code that is invoked
- + either at specific, CICS-defined points within CICS system
- + code, or by an application request that uses the exit
- + mechanism (such as a DB2 or IMS request). There are two
- + types: global user exits and task-related user exits. Global
- + user exits are always invoked at CICS-defined points in
- + system code; task-related exits can be invoked both ways.
- + The CICS/ESA Customization Guide lists the points in CICS
- + code at which global exits may be invoked, describes how
- + code at which global exits may be invoked, describes now
- + and when task-related exits are driven, and gives full details
- + for programming exits.
- + Five SPI commands are related to exits:
- + ENABLE PROGRAM
- + DISABLE PROGRAM
- + EXTRACT EXIT
- + RESYNC ENTRYNAME
- + INQUIRE EXITPROGRAM
- + You can use them in any language supported by CICS, even
- + though the exit itself must be coded in assembler.

## + Defining exits

- + The only way to define an exit in CICS—that is, to install it
- + so that the code gets executed—is to issue the ENABLE
- + PROGRAM command.
- + Similarly, the only way to delete the definition is to issue the
- + corresponding DISABLE PROGRAM EXITALL command or
- + shut down the system. Exit definitions last only for the
- + current execution of CICS. They are not recorded in
- + keypoints, the CICS global catalog, or the CSD file, and
- + therefore do not survive a shutdown of any kind.
- + ENABLE and DISABLE PROGRAM commands affect only
- + the CICS region in which they are issued. Even if CICS

- + system code or exit program code is shared among several
- + executing CICS regions, the exit must be defined and
- + deleted separately in each region that uses it.
- + Moreover, these commands are not recoverable; their effects
- + are not backed out if the task that issued them fails or issues
- + a SYNCPOINT ROLLBACK command.

#### + Exit names

- + The code that an exit executes is contained in one or more
- + ordinary load modules (a module may be used both by an
- + exit and a user transaction, in fact). You identify the first
- + module to be executed in an exit by naming it in the
- + PROGRAM option of the ENABLE PROGRAM command that
- + creates the exit. The exit can execute other modules as
- + well, but you tell CICS where to start, just as you name only
- + the first program to be executed in a TRANSACTION
- + definition.
- + Exits are named by the ENTRYNAME value in the initial
- + ENABLE PROGRAM command, not the PROGRAM value,
- + although you can omit the ENTRYNAME option and allow its
- + value to default to the PROGRAM value. Exit names must
- + be unique, however, and if a program is used first by more
- + than one exit, only one of them can be named by default in
- + this way. Moreover, even when an exit and its first program
- + have the same name, they are separate entities of different + types.
- + Because of this default (and some history), CICS requires
- + that you always identify an exit in the same way that you did
- + in the ENABLE PROGRAM command that created it—that is,
- + by coding (or omitting) the same PROGRAM and
- + ENTRYNAME values. RESYNC ENTRYNAME is an
- + exception; you specify the exit name in the ENTRYNAME
- + option, regardless of whether you used ENTRYNAME or
- + PROGRAM to assign the name initially. Also, in the
- + INQUIRE EXITPROGRAM command, the option that names
- + the initial program is EXITPROGRAM rather than
- + PROGRAM.
- + Like modules invoked by user transactions, load modules
- + used by exits must be defined as PROGRAM resources,
- + either explicitly or by autoinstallation, and they must have an
- + ENABLESTATUS value of ENABLED at the time of
- + invocation. In addition, the initial program for an exit must be
- + in ENABLED status at the time of the ENABLE PROGRAM
- + command that creates the exit. However, the
- + ENABLESTATUS of a program is independent of any exits
- + that use it, and it is not affected by ENABLE and DISABLE
- + PROGRAM commands that refer to it.

# Part 2. System commands

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## **Command information layout**

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

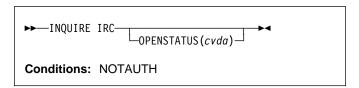
#### **Function**

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:



#### **Description**

Provides an expanded description of the command.

#### **Options**

Describes the semantics of the command.

#### **Conditions**

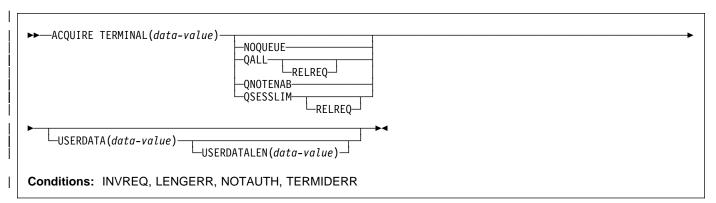
Describes the circumstances under which each condition can be raised.

#### **Examples**

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

## **ACQUIRE TERMINAL**

| Acquire a session with a terminal.



## Description

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 AIRDELAY 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 TYPETERM definition associated with the terminal.

#### TERMINAL(data-value)

is the 4-character identifier of the terminal with which CICS is to acquire a session.

#### **ACQUIRE TERMINAL**

#### **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/ESA Application Programming Reference 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:

- The terminal is a remote terminal.
- The terminal is LU6.1, APPC, IRC or a non-VTAM device.
- 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
- NOQUEUE and QNOTENAB options are invalid for a logged-on device.

#### LENGERR

RESP2 value:

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.

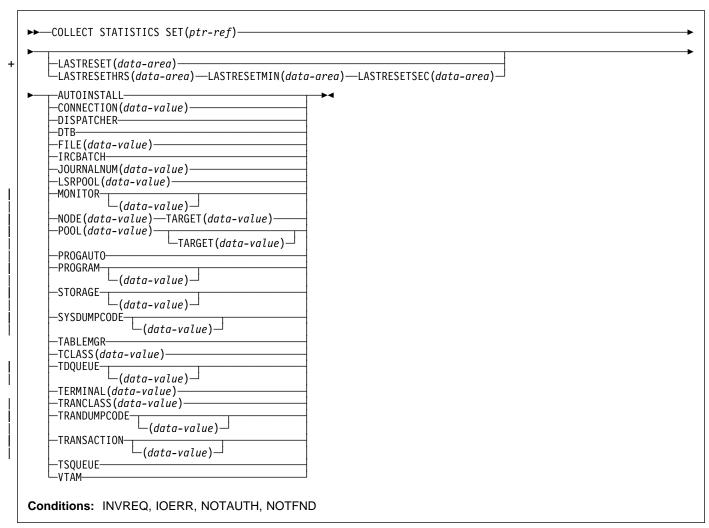
#### **TERMIDERR**

RESP2 value:

The terminal cannot be found.

# **COLLECT STATISTICS**

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



# Description

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 SMF 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 1 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.

### **COLLECT STATISTICS**

Table 1. Statistics and resource types  Resource type Global Specific				
Resource type	statistics	statistics		
AUTOINSTALL	DFHA04DS	=		
CONNECTION	-	DFHA14DS		
DISPATCHER	DFHDSGDS	-		
DTB	DFHA05DS	-		
FEPI CONNECTION	-	DFHA23DS		
FEPI POOL	-	DFHA22DS		
FEPI TARGET	-	DFHA24DS		
FILE	-	DFHA17DS		
IRCBATCH	DFHA19DS	-		
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 following libraries:

ASSEMBLER CICS410.SDFHMAC COBOL CICS410.SDFHCOB PL/I CICS410.SDFHPL1

**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/ESA 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(data-value)

requests statistics for a file; data-value is the 8-character identifier of the file (from its FILE definition).

### **IRCBATCH**

requests global statistics on the IRC batch function.

### 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 Ohhmmss+, 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 1–8, 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/ESA 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/ESA 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/ESA 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 0–10, 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 TERMINAL definition).

### TRANCLASS(data-value)

requests statistics for a transaction class; data-value is the 8-character name of the class from the TRANCLASS 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.

#### VTAN

requests global statistics on VTAM.

### **Conditions**

#### INVRFQ

RESP2 value:

4 The TCLASS value was not in the range 1–10, or the LSRPOOL value was not in the range 1–8.

### **COLLECT STATISTICS**

#### **IOERR**

RESP2 value:

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/ESA 4.1 to produce information about a CICS/ESA system. The reports include a CICS and MVS storage analysis that can be used as an aid to specifying the DSA LIMIT parameters.

See the CICS/ESA Performance Guide for information on installing and operating the DFH0STAT application. The source code for the application can be found in CICS410.SDFHSAMP.

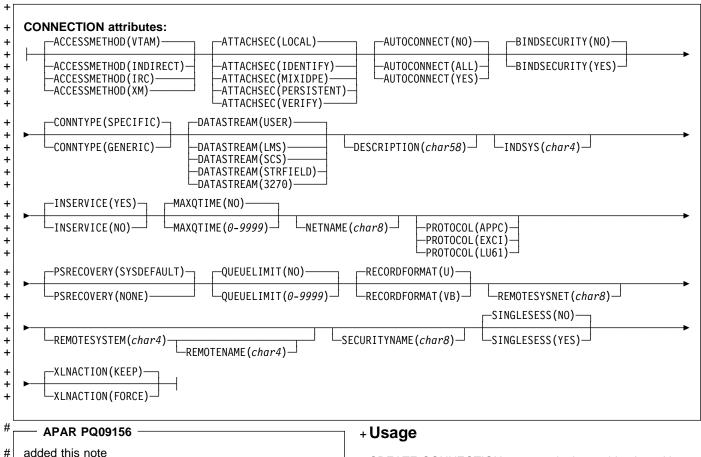
### + CREATE CONNECTION

- APAR PQ02462
- added EXEC CICS CREATE to CICS 4.1

# + Function

+ Define a CONNECTION in the local CICS region.

```
►►—CREATE CONNECTION(data-value)
                                       -ATTRIBUTES(data-value)—ATTRLEN(data-value)
                                       -COMPLETE-
                                       -DISCARD-
+
   Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH
```



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

- + 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 16
- + for other general rules about CREATE commands.
- + To create a new CONNECTION, you issue a series of
- + commands in this order:

### **CREATE CONNECTION**

- + 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,
- $\mbox{+}\mbox{ between the initial and final CREATE CONNECTIONs), you}$
- + 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 16 for general rules for specifying attributes,
- + and the CONNECTION chapter in the CICS/ESA
- + 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.

### + 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 217 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.

- + 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.

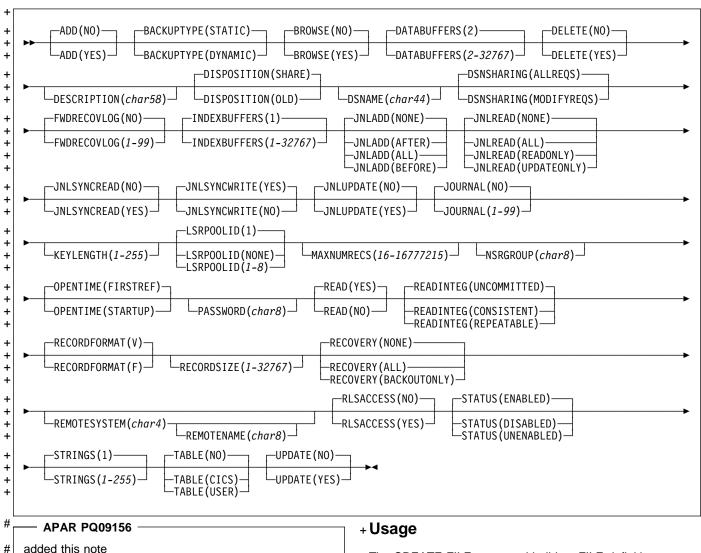
# + CREATE FILE

```
+ APAR PQ02462 -- added EXEC CICS CREATE to CICS 4.1
```

# + Function

+ 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)--- .

- + 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.

### **CREATE FILE**

- + 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 16 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 16 for general rules for
- + specifying attributes, and the FILE chapter in the
- + CICS/ESA 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(data-value)

- + specifies the 8-character name of the FILE 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 217 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.

- + 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

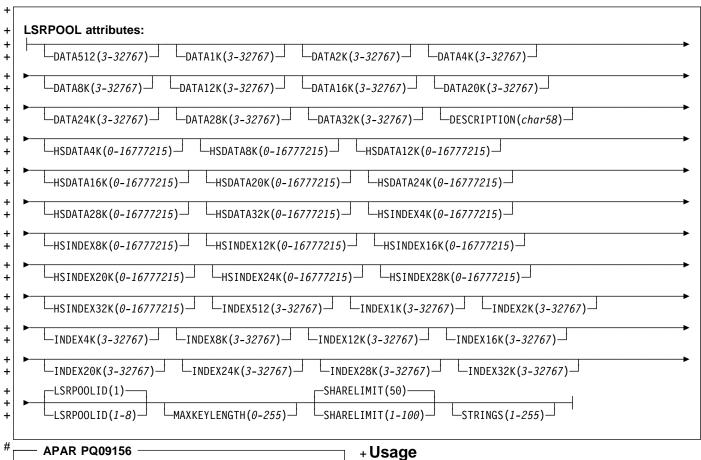
- APAR PQ02462 -

added EXEC CICS CREATE to CICS 4.1

# + Function

+ Define an LSR pool in the local CICS region.

```
►►—CREATE LSRPOOL(data-value)—ATTRIBUTES(data-value)—ATTRLEN(data-value)—►◀
Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH
```



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

added this note

- + 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 the LSRPOOLID value
- + governs.)

### **CREATE LSRPOOL**

- + 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 16
- + 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 16 for general rules
- + for specifying attributes, and the LSRPOOL chapter in
- + the CICS/ESA 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 217 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.

- + RESP2 values:
- + 100 The user associated with the issuing task is not
- authorized to use this command.

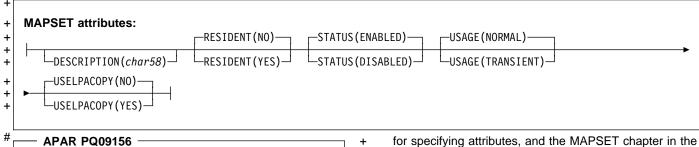
# + CREATE MAPSET

```
- APAR PQ02462
added EXEC CICS CREATE to CICS 4.1
```

# + Function

+ Define a map set in the local CICS region.

```
►► CREATE MAPSET(data-value) — ATTRIBUTES(data-value) — ATTRLEN(data-value) — ►◀
Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH
```



+

# added this note # Note to COBOL programmers: In the syntax above, you

must use --- ATTRIBUTES (data-area)--- instead of # --- ATTRIBUTES (data-value)--- .

# + Usage

- + 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 16
- + 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 16 for general rules

- CICS/ESA 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:
- The command cannot be executed because an + earlier CONNECTION or TERMINAL pool
- definition has not yet been completed.

# + INVREQ

+

+

- **RESP2** values:
- + 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 217 for
- information on RESP2 values.

# **CREATE MAPSET**

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

# + LENGERR

- RESP2 values:
- The length you have specified in ATTRLEN is
- negative.

- 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

# + CREATE PARTITIONSET

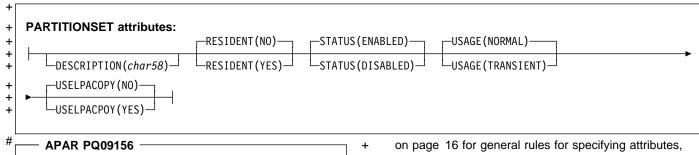
```
+ APAR PQ02462
+ added EXEC CICS CREATE to CICS 4.1
```

# + Function

+ Define a partition set in the local CICS region.

```
+ Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH

+ Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH
```



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

# + Usage

added this note

#

- + 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 16
- + 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"

- + and the PARTITIONSET chapter in the CICS/ESA
- + 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:
- 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 PARTITIONSET**

+		CREATE RESP2 values" on page 217 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:

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.

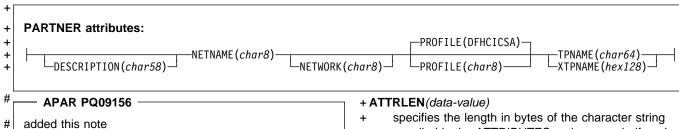
# + CREATE PARTNER

+ APAR PQ02462 + added EXEC CICS CREATE to CICS 4.1

# + Function

+ 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)--- .

# + Usage

- + 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 16
- + 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 16 for general rules
- + for specifying attributes, and the PARTNER chapter in
- + the CICS/ESA Resource Definition Guide for details
- about specific attributes.

- 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:

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 217 for
information on RESP2 values.

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.

# **CREATE PARTNER**

- + NOTAUTH
- RESP2 values:

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

# + CREATE PROFILE

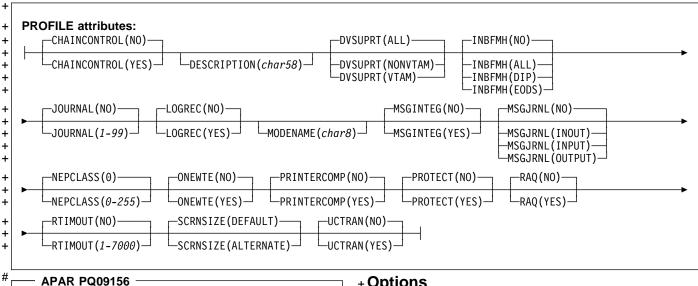
```
- APAR PQ02462
```

added EXEC CICS CREATE to CICS 4.1

# + Function

+ Define a transaction PROFILE in the local CICS region.

```
►►—CREATE PROFILE(data-value)——ATTRIBUTES(data-value)—ATTRLEN(data-value)——►◀
Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH
```



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

# + Usage

added this note

#

- + 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 16
- + 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 16 for general rules
- for specifying attributes, and the PROFILE chapter in the
- CICS/ESA 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.

# **CREATE PROFILE**

# + 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 217 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.

- + RESP2 values:
- + 100 The user associated with the issuing task is not
- authorized to use this command.

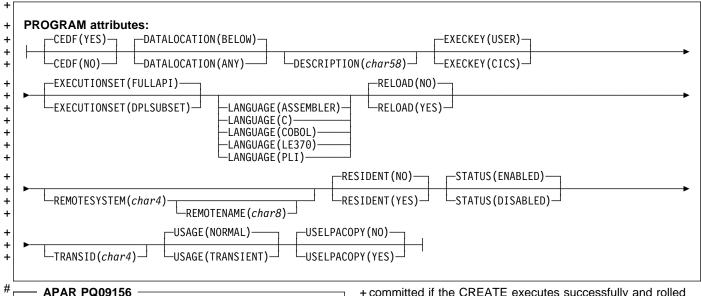
# + CREATE PROGRAM

```
- APAR PQ02462 -
added EXEC CICS CREATE to CICS 4.1
```

# + Function

+ Define a PROGRAM in the local CICS region.

```
►►—CREATE PROGRAM(data-value)——ATTRIBUTES(data-value)—ATTRLEN(data-value)——►◀
Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH
```



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

# + Usage

#

- + 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.

added this note

- + 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 16
- + 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 16 for general rules
- for specifying attributes, and the PROGRAM chapter in
- the CICS/ESA 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.

# **CREATE PROGRAM**

### + PROGRAM(data-value)

- specifies the 8-character name of the PROGRAM
- definition to be added to the CICS region.

# + Conditions

#### + ILLOGIC

- RESP2 values:
- The command cannot be executed because an
- earlier CONNECTION or TERMINAL pool
- definition has not yet been completed.

### + INVREQ

- RESP2 values:
- 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 217 for
- information on RESP2 values.
- 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:
- The length you have specified in ATTRLEN is
- negative.

- 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.

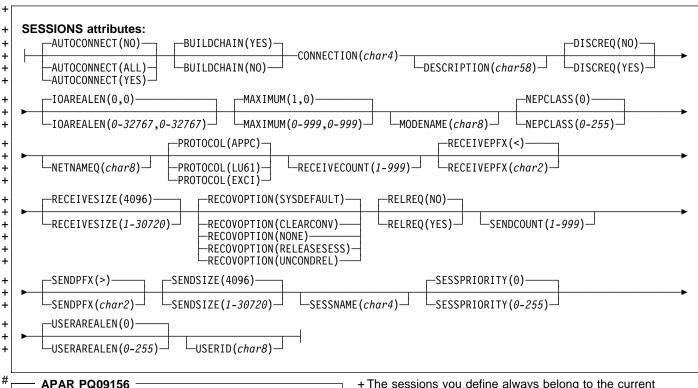
# + CREATE SESSIONS

```
- APAR PQ02462
added EXEC CICS CREATE to CICS 4.1
```

# + Function

+ Add a session group to the CONNECTION definition being created.

```
►►—CREATE SESSIONS(data-value)——ATTRIBUTES(data-value)—ATTRLEN(data-value)—►◄
Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH
```



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

# + Usage

added this note

#

- + 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 16 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 16 for
- general rules for specifying attributes, and the

### **CREATE SESSIONS**

- + SESSIONS chapter in the CICS/ESA 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 217 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.

- + 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

```
- APAR PQ02462
added EXEC CICS CREATE to CICS 4.1
```

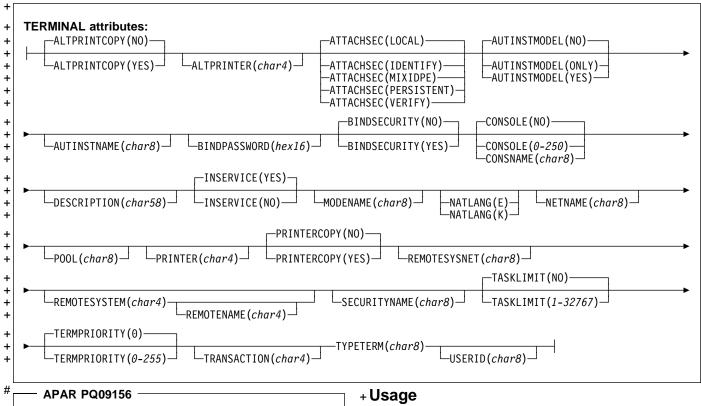
# + Function

#

added this note

+ Define a TERMINAL in the local CICS region.

```
-CREATE TERMINAL(data-value)-
                                      -ATTRIBUTES(data-value)--ATTRLEN(data-value)-
                                      -COMPLETE-
                                      -DISCARD-
+
   Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH
```



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

- + 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.

### **CREATE TERMINAL**

- + 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 16 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 16 for general rules
- for specifying attributes, and the TERMINAL chapter in
- the CICS/ESA 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:
- The command cannot be executed because an
- earlier CONNECTION or TERMINAL pool
- definition has not yet been completed.

### + INVREQ

- RESP2 values:
- 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 217 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.

- 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.

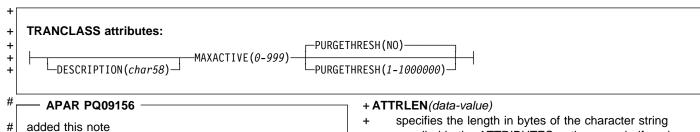
# + CREATE TRANCLASS

```
+ APAR PQ02462
+ added EXEC CICS CREATE to CICS 4.1
```

# + Function

+ 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)--- .

# + Usage

- + 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 16
- + 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 16 for
- + general rules for specifying attributes, and the
- + TRANCLASS chapter in the CICS/ESA Resource
- + Definition Guide for details about specific attributes.

- 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:

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
 t 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 217 for
 information on RESP2 values.
 The command was executed in a program defin

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:

t 1 The length you have specified in ATTRLEN is negative.

# **CREATE TRANCLASS**

- + NOTAUTH
- RESP2 values:

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

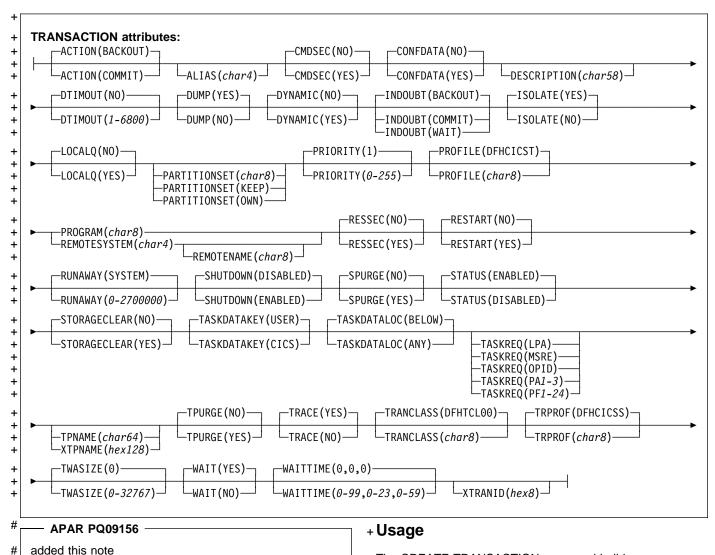
# + CREATE TRANSACTION

```
+ APAR PQ02462
+ added EXEC CICS CREATE to CICS 4.1
```

# + Function

+ Define a TRANSACTION in the local CICS region.

```
+ + CONDITION (data-value) ——ATTRIBUTES (data-value) —ATTRLEN (data-value) — → 
+ Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH
```



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

- + 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.

### **CREATE TRANSACTION**

- + 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 16
- + 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 16 for general rules for specifying attributes,
- and the TRANSACTION chapter in the CICS/ESA
- 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:
- The command cannot be executed because an
- earlier CONNECTION or TERMINAL pool
- definition has not yet been completed.

#### + INVREQ

- RESP2 values:
- 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 217 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:
- 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

- APAR PQ02462

added EXEC CICS CREATE to CICS 4.1

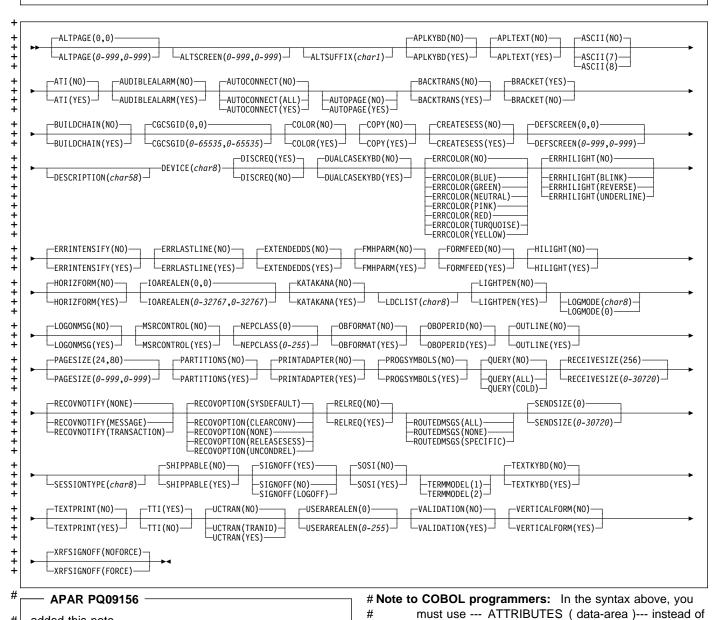
# + Function

#

added this note

+ Define a terminal type in the local CICS region.

►►—CREATE TYPETERM(data-value)—ATTRIBUTES(data-value)—ATTRLEN(data-value)—►◄ Conditions: ILLOGIC, INVREQ, LENGERR, NOTAUTH



--- ATTRIBUTES ( data-value)--- .

### **CREATE TYPETERM**

# + Usage

- + 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 16
- + 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 16 for general rules
- for specifying attributes, and the TYPETERM chapter in
- + the CICS/ESA 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:
- 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 217 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.

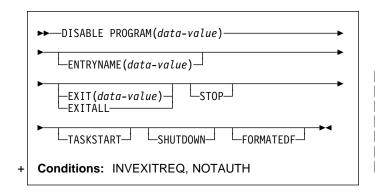
#### + LENGERR

- + RESP2 values:
- + 1 The length you have specified in ATTRLEN is
- + negative.

- + 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 user exit.



# | Description

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

| You use it to:

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

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

- ENTRYNAME and PROGRAM identify the exit to be disabled, and you must use exactly the same combination of values that you did in the ENABLE command that defined the exit.
- 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 at the points specified.
- STOP reverses the effect of START, making the exit unavailable for execution.
- · EXITALL deletes the definition entirely, reversing the effect of the ENABLE PROGRAM that created the exit. Work areas and the load module associated with the exit may be deleted as well.

For programming information about CICS exits, see the CICS/ESA Customization Guide; you should also see the general discussion of commands that modify exits in | "Exit-related commands" on page 18.

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 whose status is to be changed. If you omit ENTRYNAME, CICS assumes that the name of the exit 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.

# EXIT(data-value) (global user exits only)

specifies the name of the global user exit point from which this exit is to be dissociated. It causes CICS to stop invoking the exit 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/ESA Customization Guide.

### **EXITALL**

causes CICS to discard the definition of the exit. For a global user exit, EXITALL dissociates the exit 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 and if the ENTRY option was not specified in the ENABLE command that defined the exit. If the exit owns a global work area, the work area is released as soon as no other exits are sharing it.

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

# FORMATEDF (task-related user exits only)

indicates that the exit 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 when ENTRYNAME is not specified; see the ENTRYNAME option.

# SHUTDOWN (task-related user exits only)

indicates that the exit should not be invoked at CICS shutdown. You can reinstate invocation at shutdown with an ENABLE command specifying SHUTDOWN.

### **DISABLE PROGRAM**

### **STOP**

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

### TASKSTART (task-related user exits only)

indicates that the exit 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 identified by the PROGRAM value

is not defined as an exit.

- 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 has been suspended temporarily because of a request for a CICS service within the exit. 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 has already terminated abnormally. In this case, the use count of the associated load module remains greater than zero. The exit cannot be dissociated from any exit + point, and the load module cannot be deleted from virtual storage. The exit 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 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. 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. If the load module EP3 is not in use, it will be deleted.

### **DISCARD AUTINSTMODEL**

Remove a terminal autoinstall model definition.

►► DISCARD AUTINSTMODEL(data-value) → ◄

Conditions: INVREQ, MODELIDERR, NOTAUTH

# **Description**

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 "Discarding resource definitions" on page 17 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.
- 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.

▶► DISCARD FILE(data-value) →►

Conditions: FILENOTFOUND, INVREQ, NOTAUTH

# **Description**

The DISCARD FILE command removes the definition of a file from the executing CICS system, so that the system no longer has access to the file. That is, it revokes the earlier installation 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 "Discarding resource definitions" on page 17 for general information about discards.

# **Options**

### FILE(data-value)

specifies the 8-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.

# **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.

▶► DISCARD PARTNER(data-value) → ►

Conditions: INVREQ, NOTAUTH, PARTNERIDERR

# **Description**

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 of a PARTNER resource definition of the same name.

See "Discarding resource definitions" on page 17 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.

▶► DISCARD PROFILE(data-value) → ◀

Conditions: INVREQ, NOTAUTH, PROFILEIDERR

# Description

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 resource definition of the same name. You cannot discard a profile while any installed TRANSACTION definitions point to it.

See "Discarding resource definitions" on page 17 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.
- 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:

The profile cannot be found.

# **DISCARD PROGRAM**

Remove a program, map set, or partition set definition.

▶►—DISCARD PROGRAM(data-value)—►◀

Conditions: INVREQ, NOTAUTH, PGMIDERR

# **DISCARD TRANCLASS**

Remove a transaction class definition.

▶► DISCARD TRANCLASS(data-value) → ◄

Conditions: INVREQ, NOTAUTH, TCIDERR

# **Description**

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 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 "Discarding resource definitions" on page 17 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.

# | Description

| The DISCARD TRANCLASS command removes the | definition of a transaction class from the executing CICS | system.

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

| See "Discarding resource definitions" on page 17 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 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.

►► DISCARD TRANSACTION(data-value) → ◄

Conditions: INVREQ, NOTAUTH, TRANSIDERR

# **Description**

The DISCARD TRANSACTION command removes the definition of a transaction from the executing CICS system. That is, it revokes the earlier installation 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 "Discarding resource definitions" on page 17 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:

- The transaction cannot be discarded because its name begins with C.
- 12 The transaction definition is currently in use.
- 13 The transaction is a SIT parameter.
- 14 The transaction is scheduled to run at a future time (in use by an interval control element).
- 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.

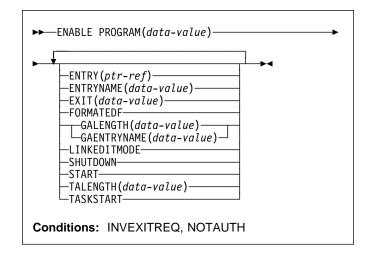
#### **TRANSIDERR**

RESP2 values:

The transaction cannot be found.

### **ENABLE PROGRAM**

| Enable a user exit to allow it to be invoked.



# | Description

The initial ENABLE PROGRAM command for an exit:

- Defines it as an exit to the executing CICS system and names it
- Sets the initial execution status (whether it is available for execution and the points at which it is executed)
- Allocates work areas
- Loads the associated load module if necessary and establishes the entry point within it for the exit.

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 53 for the correspondence between options on the two commands.

For programming information about exits in CICS, see the CICS/ESA Customization Guide; you should also see the general discussion of commands that modify exits in "Exit-related commands" on page 18.

# **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 exit 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/ESA 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 is not in the load library, or has been disabled, or is defined as remote, or 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 -

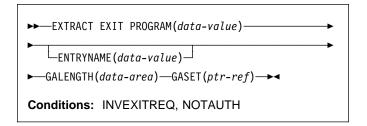
EXEC CICS ENABLE PROGRAM('EP9')
TALENGTH(750) ENTRYNAME('RM1') GALENGTH(200)

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 global work area.



## **Description**

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 213.

X'800200' The exit is not enabled.

X'800400' The exit has no global work area.

### INQUIRE AUTINSTMODEL

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 an autoinstall model is installed.

►►—INQUIRE AUTINSTMODEL(data-value)—►◄

Conditions: END, ILLOGIC, MODELIDERR, NOTAUTH

## Description

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

## **Browsing**

You can also browse through all of the 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 13 for general information about browsing, syntax, exception conditions, and examples.

## **Options**

#### AUTINSTMODEL(data-value)

specifies the 8-character identifier of the autoinstall model about which you are inquiring.

### **Conditions**

#### **END**

**RESP2** values:

There are no more resource definitions of this 2 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:

The model specified cannot be found.

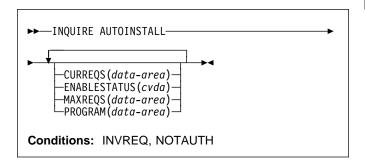
### **NOTAUTH**

RESP2 values:

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

### INQUIRE AUTOINSTALL

Retrieve autoinstall values.



## **Description**

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.

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

## **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 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 autoinstall process. This is either the CICS-supplied default autoinstall program, DFHZATDX, or a user-written program.

### **Conditions**

#### **INVREQ**

**RESP2** values:

1 VTAM is not in use in this system.

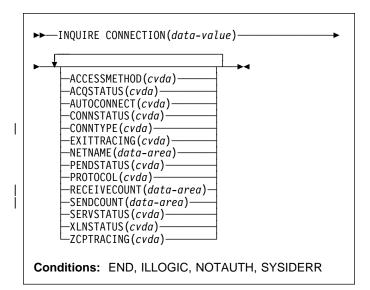
#### **NOTAUTH**

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.



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

# **Description**

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 between two CICS regions on the same MVS image or within the same MVS/ESA sysplex.
  - 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 MVS, for example an MVS batch or TSO program. An EXCI connection connects the client program to a CICS region running in the same MVS image or within the same MVS/ESA sysplex.
- 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 MVS/ESA sysplexes 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 CONNECTION definitions installed in your system by using the browse options (START, NEXT and END) on INQUIRE CONNECTION commands. See "Browsing resource definitions" on page 13 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 CONNECTION definition.

IRC The connection is used for multiregion operation (MRO), and has been defined to use DFHIRP for communication. If the CONNSTATUS is ACQUIRED, the MRO partner is running on the same MVS image. If the CONNSTATUS is RELEASED, the MRO partner may not be on the same MVS image; if not, the XCF access method will be used when the connection becomes ACQUIRED.

### **VTAM**

The connection is used for intersystem communication (ISC).

- XCF The connection is used for multiregion operation (MRO), and communication uses the cross-system coupling facility (XCF) of MVS/ESA. XCF is used for MRO links between CICS regions on different MVS images within an MVS sysplex. It is selected dynamically by CICS for such links when the access method is defined as IRC or XM in the CONNECTION definition.
- The connection is used for multiregion operation (MRO) and has been defined to use MVS cross-memory (XM) services for communication. If the CONNSTATUS is ACQUIRED, the MRO partner is running on the same MVS image. If the CONNSTATUS is RELEASED, the MRO partner may not be on the same MVS image; if not, the XCF access method will be used when the connection becomes ACQUIRED.

### 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 CONNECTION

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 CONNECTION 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 SESSIONS definition, which allows AUTOCONNECT(ALL).

#### **AUTOCONN**

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

#### **NONAUTOCONN**

AUTOCONNECT(NO) has been specified for the CONNECTION 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 CONNECTION 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 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/ESA External CICS Interface manual for more information about EXCI connections.

#### EXITTRACING(cvda) (VTAM only)

returns a CVDA value indicating whether the terminal exit program is tracing the sessions associated with this connection. CVDA values are:

#### **EXITTRACE**

Tracing is on.

### **NOEXITTRACE**

Tracing is off.

#### **NOTAPPLIC**

The connection is not LU6.1 or APPC.

### **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 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 option in its system initialization table (SIT)).

For a SPECIFIC EXCI connection, NETNAME is the name of the client program which 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 (as specified in the SIT APPLID option) 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/ESA 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/ESA 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:

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.

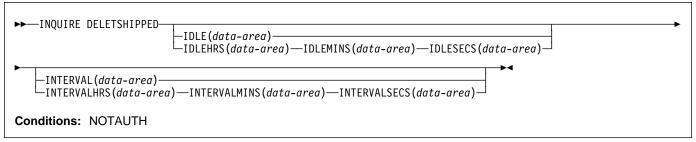
### **SYSIDERR**

RESP2 values:

The connection cannot be found.

### INQUIRE DELETSHIPPED

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



## Description

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**

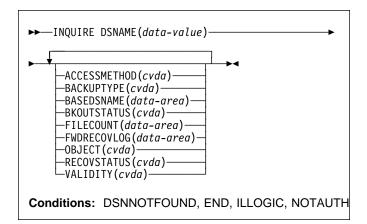
#### **NOTAUTH**

**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.



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

## Description

The INQUIRE DSNAME command returns information about the object associated with a FILE resource definition, which can be a BDAM 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 DSN option on the associated JCL DD 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 13 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:

#### **BDAM**

The access method is BDAM.

#### **VSAM**

The access method is VSAM.

### BACKUPTYPE(cvda) (VSAM only)

returns a CVDA value identifying the type of backup used for this data set. CVDA values are:

#### **DYNAMIC**

The data set is eligible for "backup while open" (BWO) processing; that is, a data set manager with the required function can take a backup of the data set while it is open for output. The data set can also be backed up while it is closed.

#### NOTAPPLIC

This is a VSAM path.

#### STATIC

All CICS files open for output against this data set must be closed before a data set manager (such as DFHSM or DFDSS)<sup>2</sup> can take a backup copy.

#### UNDETERMINED

The backup type is not known because no files associated with this data set have been opened.

### 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. When the object is a VSAM data set, this option returns the same value as the DSNAME option.

If the access method is BDAM, 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/ESA 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.

<sup>2</sup> Data Facility Hierarchical Storage Manager (DFHSM) and Data Facility Data Set Services (DFDSS) are IBM licensed programs for data set backup and recovery operations.

#### **INQUIRE DSNAME**

#### **NOTAPPLIC**

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

### **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 DD statement specified in the DDNAME 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 BDAM 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.

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:

The data set cannot be found.

### **END**

RESP2 values:

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.

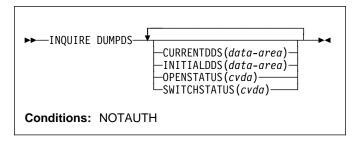
### **NOTAUTH**

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.



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

## **Description**

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**

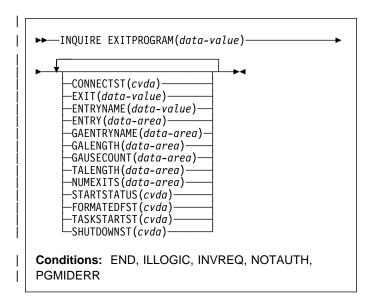
### **NOTAUTH**

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.



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

## □ Description

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

### CONNECTST(cvda)

returns a CVDA value indicating the state of the connection between the exit and the external resource manager that it supports. This option applies only to the task-related user exits that connect CICS to DBCTL or to DB2. It enables you to determine whether the specified exit has connected to its resource manager, so that CICS tasks can safely issue API requests to the resource manager.

To inquire about the connection to DBCTL, use an EXITPROGRAM value of DFHDBAT and an ENTRYNAME value of DBCTL.

To inquire about the connection to DB2, use an EXITPROGRAM value of DSN2EXT1, with an ENTRYNAME of DSNCSQL, DSNCCMD, or DSNCIFC.

CVDA values are:

#### CONNECTED

The task-related user exit is connected to its external resource manager subsystem, and API requests can be issued.

#### **NOTAPPLIC**

The exit is not a DBCTL or DB2 task-related user exit.

#### NOTCONNECTED

The task-related user exit is not connected to its external resource manager subsystem, and therefore API requests cannot be issued.

If the DBCTL or DB2 task-related user exits are not enabled, the INQUIRE command returns PGMIDERR. This also indicates that CICS is not connected to one of these resource manager subsystems.

Note: To determine whether DB2 or DBCTL is available, use CONNECTST rather than STARTSTATUS, because the task-related user exit can be started without having succeeded in making its database manager available to CICS.

### 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 Conditions

#### | END

RESP2 values:

There are no more resource definitions of this type.

### | ILLOGIC

RESP2 values:

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.

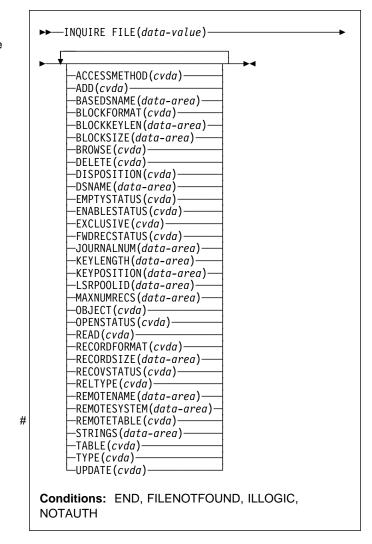
### **PGMIDERR**

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.



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

# Description

The INQUIRE FILE command returns information about a FILE resource definition. When the file is associated with a VSAM or BDAM 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 BDAM, the object is a single MVS BDAM 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, TDQUEUE, and VOLUME 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 "Command format" on page 4.

- + 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 13 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:

**BDAM** 

The access method is BDAM.

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) (BDAM 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) (BDAM only)

returns a fullword binary field indicating the physical block key length for the file.

### BLOCKSIZE(data-area) (BDAM 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.

### 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.

#### **DISPOSITION**(cvda)

returns a CVDA value indicating the value of the DISPOSITION option for the file (from the DISPOSITION option in the FILE definition or the JCL DD statement to which it points). CVDA values are:

OLD Disposition is OLD.

SHARE

Disposition is SHARE.

#### **DSNAME**(data-area)

returns the 44-character name of the BDAM 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 an EXEC CICS SET FILE ENABLED command or its CEMT equivalent before it can be accessed by application programs.

### DISABLING

A request to disable 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) (BDAM 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(data-value)

specifies the 8-character name of the file about which you are inquiring.

### 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 FILE 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 FILE definition). Journal numbers are
- between 1 and 99; '1' identifies the system log. A value
- of zero indicates no journal activity for this file
- (JOURNAL(NO) in the file 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 BDAM 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 1-8. 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 FILE 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 BDAM 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) (BDAM 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:

BLK Relative block addressing is being used.

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.

---- APAR PQ18025 -

# added REMOTETABLE

### # 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.

### 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.

#### **INQUIRE FILE**

### 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:

There are no more resource definitions of this type.

#### **FILENOTFOUND**

**RESP2** values:

1 The file cannot be found.

### **ILLOGIC**

RESP2 values:

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.

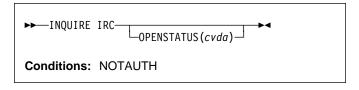
### **NOTAUTH**

**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.



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

## Description

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 CICS region to communicate with another CICS region using any of the multiregion operation (MRO) facilities (IRC, XM, or XCF).

## **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**

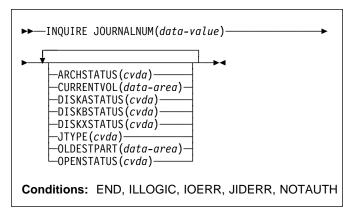
### **NOTAUTH**

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.



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

## **Description**

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 13 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

### INQUIRE JOURNALNUM

a JOUROPT value of AUTOARCH, 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.

### **CURRENTVOL**(data-area)

returns the 6-character identifier of the volume that is currently being written. CURRENTVOL applies to tape journals only; for other journals, this value is blanks.

#### **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.

## DISKXSTATUS(cvda)

returns a CVDA value indicating the status of the extra ('X') data set of a journal consisting of two disk data

- + sets. The CVDA values are the same as for the
- DISKBSTATUS option.

#### JOURNALNUM(data-value)

specifies the number 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.

SMF The journal data is written to an SMF data set.

#### 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.

### OLDESTPART(data-area)

returns a fullword binary field giving the serial number of the first volume in the cycle or series associated with this journal. OLDESTPART applies to tape journals

+ only; for other types, the value returned is -1.

### 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:

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).
- 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.

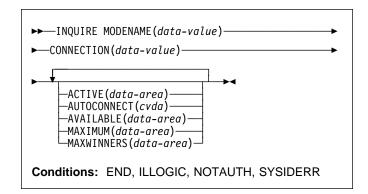
#### **NOTAUTH**

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.



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

## Description

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 13 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:

There are no more resource definitions of this type.

#### ILLOGIC

RESP2 values:

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.

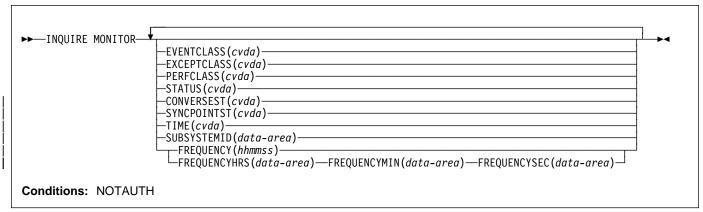
### **SYSIDERR**

**RESP2** values:

- The connection cannot be found.
- 2 The modename within the connection cannot be found
- The connection specified on an INQUIRE MODENAME NEXT cannot be found.

### **INQUIRE MONITOR**

Retrieve the status of CICS monitoring.



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

## **Description**

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 EVENTCLASS, EXCEPTCLASS, and PERFCLASS options). See the SET MONITOR command on page 166 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.

### **EVENTCLASS**(cvda)

returns a CVDA value indicating whether the SYSEVENT class of monitoring data is recorded when monitoring is active. CVDA values are:

#### **EVENT**

SYSEVENT data is recorded.

**NOEVENT** 

SYSEVENT data is not recorded.

#### 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) which 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).

#### **INQUIRE MONITOR**

### 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.

### SUBSYSTEMID(data-area)

returns the 4-character name used as the subsystem identification in SYSEVENT class records. For information on the SYSEVENT class of monitoring data and the subsystem identification, see the CICS/ESA Performance Guide. For information on how to specify the subsystem identification, see the MNSUBSYS parameter in the CICS/ESA Resource Definition Guide.

### 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/ESA 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**

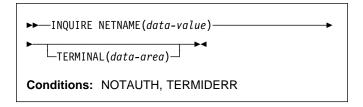
#### **NOTAUTH**

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.



## **Description**

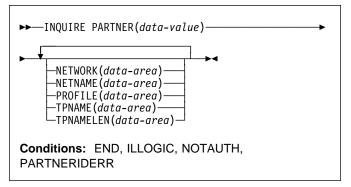
The INQUIRE NETNAME command returns information about a particular terminal or session, just as the INQUIRE TERMINAL command does. The primary difference is that you identify the terminal by its VTAM network identifier, instead of its CICS terminal identifier. Consequently, the roles of the NETNAME and 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 114 for the options and conditions that apply to the INQUIRE NETNAME command.

### **INQUIRE PARTNER**

Retrieve information about a partner.



## Description

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 13 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:

There are no more resource definitions of this type.

### | ILLOGIC

RESP2 values:

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.

▶►—INQUIRE PROFILE(data-value)—►◀

**Conditions:** END, ILLOGIC, NOTAUTH, PROFILEIDERR

## Description

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 13 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:

There are no more resource definitions of this type.

#### | ILLOGIC

RESP2 values:

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.

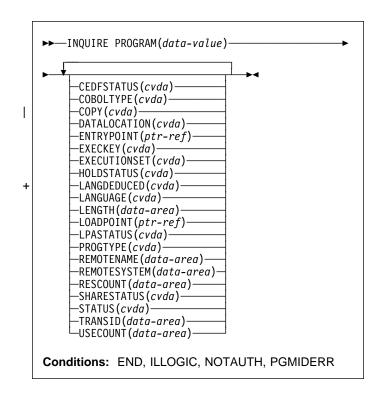
#### **PROFILEIDERR**

RESP2 values:

1 The profile cannot be found.

### **INQUIRE PROGRAM**

Retrieve information about a program, map set, or partition set



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

## **Description**

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 13 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 in which the module is written, if it is a COBOL program. The type is determined by inspecting the load module. CVDA values are:

### COBOL

The module is an OS/VS COBOL program.

### COBOLII

The module is a VS COBOL II program.

### **NOTAPPLIC**

COBOL type does not apply, because the module 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 libraries in the DFHRPL concatenation 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. (See the ISOLATEST option of the INQUIRE TASK and INQUIRE TRANSACTION commands, the STOREPROTECT and TRANISOLATE options of the INQUIRE SYSTEM command, and the general discussion of storage protection in the CICS/ESA 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 (that is,
- # the module is loaded), or the defined language from the
- + resource definition if not. CVDA values are:
- + ASSEMBLER
- + The language is assembler.
- + C The language is C/370.
- + COBOL
- The language is VS COBOL II or COBOL/370.
- + LE370
- The module, whatever its language, was compiled
- + to run in the LE/370 environment.
- + 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.

### LANGUAGE(cvda) (programs only)

- # returns a CVDA value indicating the language that is defined on the program resource definition. CVDA
- defined on the program resource definition. CVDA values are:

### **ASSEMBLER**

The language is assembler.

C The language is C/370.

#### COBOL

The language is VS COBOL II or COBOL/370.

#### LE370

The module, whatever its language, was compiled to run in the LE/370 environment.

#### **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, a null pointer (X'FF000000') is returned.

### LPASTATUS(cvda)

returns a CVDA value indicating whether the module resided in the link pack area when it was last used. CVDA values are:

LPA The copy used was in the link pack area (LPA) or the extended link pack area (ELPA).

#### **NOTAPPLIC**

The module has not been used or is a remote program.

### NOTLPA

The copy used was in CICS dynamic storage.

#### 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 PROGRAM 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

### **INQUIRE PROGRAM**

REMOTESYSTEM value in the PROGRAM 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)

I

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 libraries named on the DFHRPL DD statement.

#### **SHARED**

The LPA 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.

#### 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:

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.

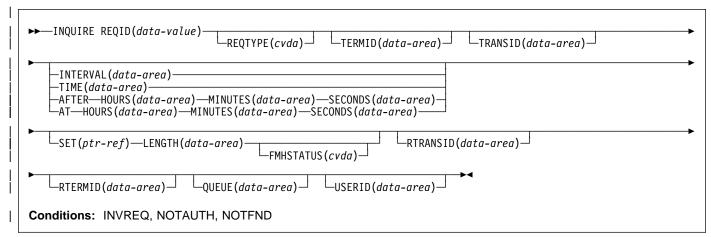
#### **PGMIDERR**

RESP2 values:

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.



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

## Description

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 13 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.

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:

- An I/O error occurred while an attempt was made to read data from temporary storage for the SET, QUEUE, RTERMID or RTRANSID option.
- 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.

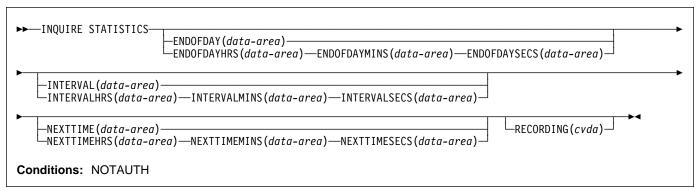
## | NOTFND

RESP2 values:

The REQID cannot be found.

### **INQUIRE STATISTICS**

Retrieve statistics information.



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

## **Description**

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 system management facility (SMF) 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/ESA Performance Guide contains more detail

- + about CICS statistics, and the SET STATISTICS command
- + on page 172 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)

- # controls the recording of interval statistics. End-of-day
- # statistics, requested statistics and unsolicited 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 144, or by a CEMT PERFORM STATISTICS transaction.)

CVDA values for the RECORDING option are:

OFF switches off the recording of interval statistics.

ON switches on the recording of interval statistics.

# **Conditions**

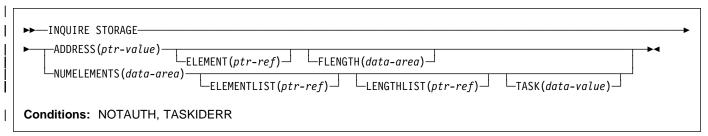
### **NOTAUTH**

RESP2 values:

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

### **INQUIRE STORAGE**

| Retrieve information about task storage.



# Description

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.

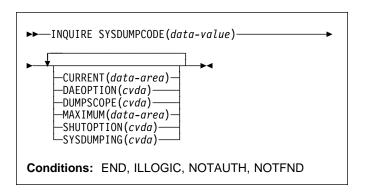
#### | TASKIDERR

RESP2 values:

- 1 The task number does not exist.
- The task number designates a system task, not a user task.

### INQUIRE SYSDUMPCODE

+ Retrieve information about a system dump table entry.



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

# Description

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 13 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

### INQUIRE SYSDUMPCODE

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 MVS suppressed it.

#### **DAEOPTION**

returns a CVDA value identifying whether a dump produced for this dump code is eligible for subsequent suppression by the MVS Dump Analysis and Elimination (DAE) component. CVDA values are:

DAE The dump is eligible for DAE suppression.

#### **NODAE**

#

#

#

#

#

#

#

#

The dump is not eligible for DAE suppression—if CICS determines that a dump should be written, MVS will not suppress it. (However, be aware of the SUPPRESS and SUPPRESSALL options in the ADYSETxx parmlib member. These are controlled by the VRADAE and VRANODAE keys in the SDWA. They may lead to dump suppression even though NODAE is set here. For information about DAE, SUPPRESS, and SUPPRESSALL, see the MVS ESA Planning: Problem Determination and Recovery manual.

#### **DUMPSCOPE**(cvda)

returns a CVDA value indicating whether a request for a dump with this dump code should cause an SDUMP (system dump) request to be sent to related MVS images.

A related image is one that contains a CICS region doing work on behalf of your CICS region—specifically, a region that has one or more tasks doing work under the same APPC token as a task in your region.

The sending of SDUMP requests occurs only when the table entry for this code specifies a dump (that is, the SYSDUMPING value is SYSDUMP), and only in a sysplex environment executing under MVS/ESA 5.1 and the MVS workload manager.

CVDA values are:

LOCAL

SDUMP requests are not to be sent.

**RELATED** 

SDUMP requests are to be sent.

### 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

# APAR PQ01620 changed this sentence

# 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 177). MVS may also be allowed to suppress the dump if appropriate (the DAE option). 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 SYSDUMPCODE value.

### **Conditions**

#### **END**

RESP2 values:

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.

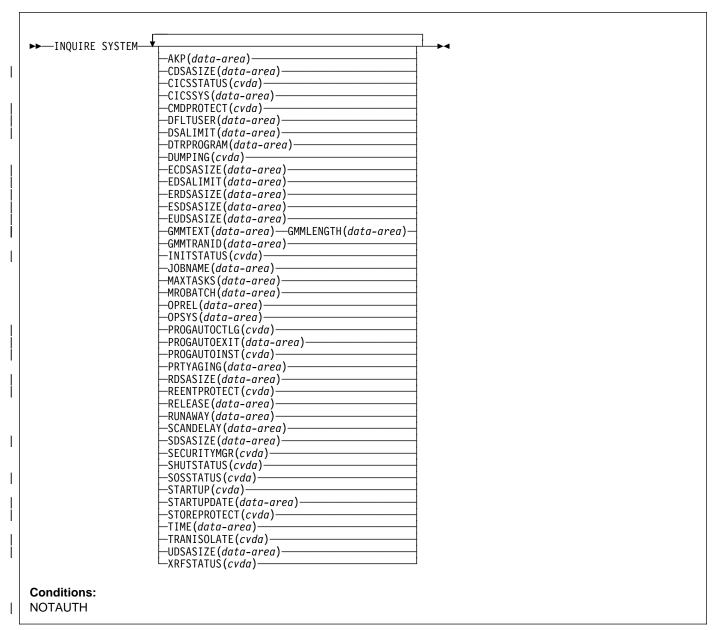
### **NOTFND**

**RESP2** values:

1 The named dump code cannot be found.

### **INQUIRE SYSTEM**

Retrieve CICS system information.



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

# **Description**

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 MVS release levels, and still others return information determined solely by the current state of the system. Table 2 on page 100 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/ESA System Definition Guide is a good source of additional information. For state options, the CICS/ESA Customization Guide is the primary source.

Table 2. INQUIRE SYSTEM options

Option	Origin
AKP	AKPFREQ in SIT
CDSASIZE	System state
CICSSTATUS	System state
CICSSYS	System state
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 catalogued procedure
MAXTASKS	MXT in SIT
MROBATCH	MROBTCH in SIT
OPREL	MVS system code
OPSYS	MVS 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
TRANISOLATE	TRANISO in SIT and hardware
UDSASIZE	System state
XRFSTATUS	XRF in SIT and system state

| Note: The CSCS, ECSCS, ERSCS, EUSCS, and USCS | options, each of which returned the size of the storage | "cushion" for a particular dynamic storage area, are obsolete | in CICS/ESA 4.1. The translator accepts them and gives a | warning. At run-time, the data areas provided are left | unchanged.

# **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 calculated and managed by CICS automatically, within the overall limit for dynamic storage areas that reside below the 16MB boundary (the DSALIMIT option value).

### 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 "X" represents MVS/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 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 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 calculated and managed by CICS automatically, within the overall limit for dynamic storage areas that reside above 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 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/ESA Customization Guide for more information about CICS initialization.

### JOBNAME(data-area)

returns the 8-character MVS 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/ESA 4.1 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. The value returned is 10 times the formal release number (the version number is not represented). For example, MVS/ESA Version 3 Release 2.1 would produce a value of 21.

# OPSYS(data-area)

returns a 1-character value identifying the operating system under which CICS is running. A value of "X" represents MVS/ESA.

#### **INQUIRE SYSTEM**

### | 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 catalogued 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

١

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 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. MVS 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, "0330" represents CICS/ESA Version 3 Release 3, and "0410" represents CICS/ESA Version 4 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 132).

### 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 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 (such as RACF) 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 100). 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 option in the system initialization table), 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."

### TRANISOLATE(cvda)

returns a CVDA value indicating whether transaction isolation is active or not. For it to be active, both transaction isolation and storage protection must be requested (the TRANISO and STGPROT options in the SIT), and it must be supported by the hardware. CVDA values are:

#### ACTIVE

Transaction isolation is active.

#### **INACTIVE**

Transaction isolation is not active.

#### **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 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 in the system initialization table).

#### **PRIMARY**

CICS started as the active region.

### **TAKEOVER**

CICS started as the alternate region.

# **Conditions**

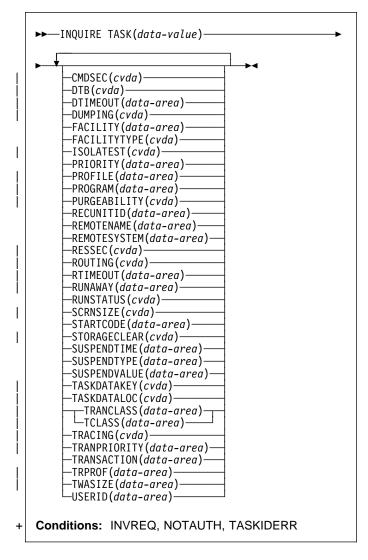
## **NOTAUTH**

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.



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

# For more information about device properties, see the #TYPETERM chapter in the CICS/ESA Resource Definition # Guide.

# Description

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 102

- + and the CICS/ESA Resource Definition Guide for more
- + information).

### | 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.

#### ISOLATEST(cvda)

returns a CVDA value indicating whether the task is defined as isolated or not. Isolation limits the access, for both read and write, of user-key programs to task storage. A program executing in user key on behalf of an isolated task can access the task storage of only that task, and this storage cannot be accessed by programs executing in user key on behalf of other tasks. Isolation does not affect access by CICS-key programs and does not apply to storage with the SHARED attribute or any other nontask storage.

The value of ISOLATEST is taken from the definition of the TRANSACTION the task is executing when the task is created. For a task defined as isolated to execute isolated, transaction isolation for the system must also be active (see the TRANISOLATE option of the INQUIRE SYSTEM command on page 103). CVDA values are:

#### **ISOLATE**

The task is defined as isolated.

#### NOISOLATE

The task is defined as not isolated.

# 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).

### 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.

### **INQUIRE TASK**

The PURGEABILITY value is set initially by the SPURGE option in the definition of the 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. Unit-of-recovery values are used to synchronize recovery operations among CICS and other resource managers, such as IMS and DB2.

#### 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 TRANSACTION 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 TRANSACTION 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 102,
- and the CICS/ESA Resource Definition Guide for more
- information).

### 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 TRANSACTION 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 PROFILE definition associated with the 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 screen size applies.

The SCRNSIZE value is set by the same-named option in the PROFILE definition associated with the 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/ESA 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/ESA 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 a TRANSACTION resource definition in the CICS/ESA 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 0 to 10. If the task does not belong to such a class, the value returned is zero. (See the TRANCLASS option.)

#### **INQUIRE TASK**

### 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/ESA Problem Determination Guide and the description of the CETR transaction in the CICS/ESA 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 TRANSACTION being executed. (See the PRIORITY option of this command also.)

### 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.

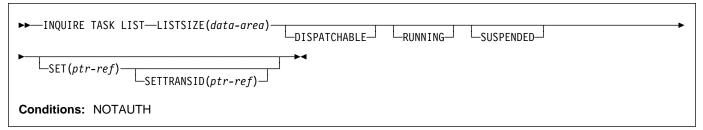
### **TASKIDERR**

**RESP2** values:

- 1 The task cannot be found.
- The task is executing a type of transaction which is not subject to this command.

### **INQUIRE TASK LIST**

Retrieve a list of user tasks.



# **Description**

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**

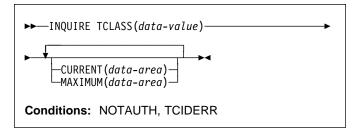
### **NOTAUTH**

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.



# **Description**

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 127, 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 0–10.

### **Conditions**

#### **NOTAUTH**

RESP2 values:

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

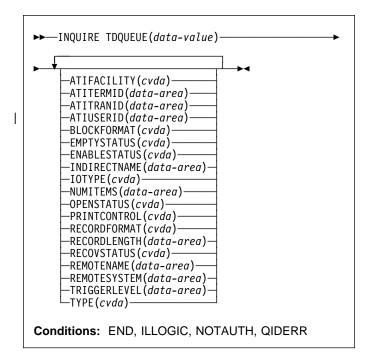
#### **TCIDERR**

RESP2 values:

1 The named task class cannot be found.

# **INQUIRE TDQUEUE**

Retrieve information about a transient data queue.



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

# **Description**

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 an MVS 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 "Command format" on page 4, 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 13 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

#### **INQUIRE TDQUEUE**

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 gueue was defined for INPUT, OUTPUT, or READBACK. CVDA values are:

### INPUT

The queue is defined for input and will be read

#### **NOTAPPLIC**

The queue is not open or is not an extrapartition

#### 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 gueue 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:

There are no more resource definitions of this type.

#### | ILLOGIC

**RESP2** values:

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.

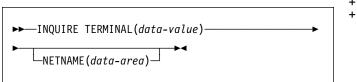
#### **QIDERR**

**RESP2** values:

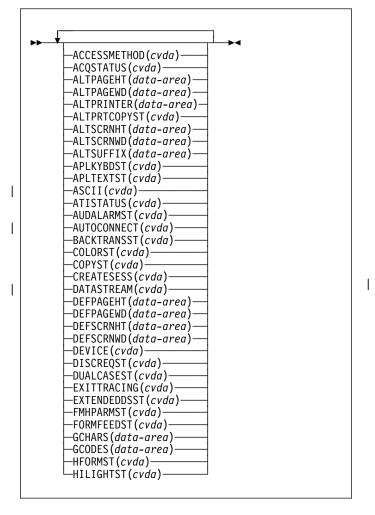
1 The named queue cannot be found.

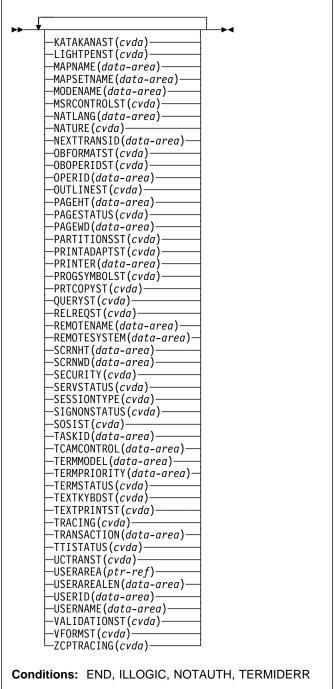
## **INQUIRE TERMINAL**

Retrieve information about a terminal or session.



The following options apply to both the INQUIRE TERMINAL and the INQUIRE NETNAME command.





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

# For more information about device properties, see the #TYPETERM chapter in the CICS/ESA Resource Definition # Guide.

# **Description**

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 a TERMINAL resource definition and the TYPETERM definition to which it points. 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/ESA Resource Definition Guide for more information about 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 13 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:

**BGAM** 

The access method is BGAM.

**BSAM** 

The access method is BSAM.

**BTAM** 

The access method is BTAM.

#### **CONSOLE**

The terminal is an operating system console, accessed through MVS console support facilities.

- + NOTAPPLIC
- The terminal is an MRO session.

**TCAM** 

The access method is TCAM (DCB interface).

**TCAMSNA** 

The access method is TCAM (ACB interface).

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.

#### **INQUIRE TERMINAL**

### 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 TERMINAL 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.

# - APAR PQ03859

**NOTAPPLIC** #

#

# The terminal is not a VTAM terminal, or is a # remote terminal, a surrogate terminal, or a model # definition.

added the next CVDA value.

### 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.

#### 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.

### 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

### 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 TYPETERM definition (when you are inquiring about a terminal) or ALLCONN in the SESSIONS 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 TYPETERM definition (in an inquiry about a terminal) or AUTOCONN in the SESSIONS 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.

### **DEFPAGEWD**(data-area)

returns a halfword binary field giving the width (in characters) of the default page size. (The corresponding option in the TYPETERM definition is PAGESIZE.) See also the ALTPAGEWD and PAGEWD options.

### **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.

### **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.

### **DEVICE(cvda)**

returns a CVDA value identifying the terminal or session type. CVDA values for this option are listed in "CVDA values for the DEVICE option" on page 211.

### 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.

## EXITTRACING(cvda) (VTAM only)

returns a CVDA value indicating whether this terminal will be traced when CICS VTAM exit tracing is active (see the TCEXITSTATUS option in the INQUIRE TRACEFLAG command, on page 126). CVDA values are:

#### **INQUIRE TERMINAL**

#### **EXITTRACE**

The terminal will be traced.

#### **NOEXITTRACE**

The terminal will not be traced.

#### **NOTAPPLIC**

- The terminal is not a VTAM terminal, or is a
- remote terminal, a surrogate terminal, or a model
- definition.

### EXTENDEDDSST(cvda)

returns a CVDA value indicating whether the terminal supports the 3270 extended data stream. The terminal has this support if the TYPETERM 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 TYPETERM 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/ESA 4.1 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/ESA 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 SESSIONS 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 TERMINAL 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/ESA Application Programming Reference manual. Possible values are:

E English

K Katakana

#### blank

No value specified

### 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 85.

### **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 TERMINAL or SESSIONS 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.

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/ESA CICS-RACF Security Guide.

- APAR PQ01572

added the following note

- 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.

### 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.

### 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.

### # - APAR PQ03859 # added the next CVDA value.

#### **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 global catalog 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. See also the DEFSCRNHT and ALTSCRNHT options.

**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 current width of the terminal screen (in characters). See the DEFSCRNWD and ALTSCRNWD options.

**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 TERMINAL or SESSIONS 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.

#### 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.

### TCAMCONTROL(data-area) (TCAM only)

returns a 1-character TCAM control byte giving which segment of a message has passed between CICS and TCAM.

The meanings are:

- 00 Null
- 40 Intermediate part of message
- F1 First part of message
- F2 Last part of message
- F3 Whole message
- F4 Intermediate part of message, end of record
- F5 First part of message, end of record
- F6 Last part of message, end of record
- F7 Whole message, end of record
- FE TCAM is not active
- FF Not applicable (non-TCAM 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** 

ı

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 TYPETERM definition associated with the terminal; there is also an UCTRAN option in a PROFILE 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 PROFILE 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**

#### | FND

**RESP2** values:

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.

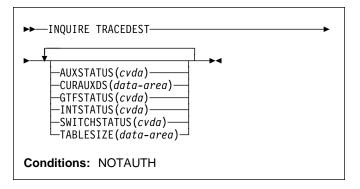
### **TERMIDERR**

RESP2 values:

1 The named terminal cannot be found.

### INQUIRE TRACEDEST

Retrieve information about tracing.



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

# **Description**

The INQUIRE TRACEDEST command tells you where CICS trace entries are currently being written. There are three possible destinations, which can be used in any combination: the CICS internal trace table, the auxiliary trace data set, and the MVS Generalized Trace Facility (GTF). 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.

# GTFSTATUS(cvda)

returns a CVDA value indicating whether GTF tracing is active, that is, whether CICS is directing trace entries to the MVS Generalized Trace Facility (GTF). CVDA values are:

#### **GTFSTART**

GTF tracing is active.

#### **GTFSTOP**

GTF tracing is not active.

Note: In order to record trace entries on GTF, CICS must be initialized with GTF support (in the GTFTR system initialization option), GTF tracing must be started (with a SET TRACEDEST GTFSTART command or equivalent), and GTF trace must be started in MVS with the TRACE=USR option. If either of the first two conditions is not met, GTFSTATUS will be GTFSTOP. However, GTFSTATUS can be GTFSTART without the third condition; in this case, no entries are written to GTF, but there is no other error indication.

### 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**

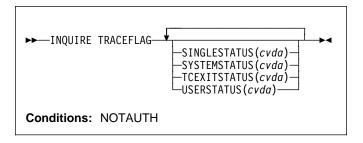
### **NOTAUTH**

**RESP2** values:

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

### **INQUIRE TRACEFLAG**

Retrieve information about trace flags.



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

# Description

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/ESA 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

#### **INQUIRE TRACETYPE**

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.

### TCEXITSTATUS(cvda) (VTAM only)

- returns a CVDA value indicating which invocations of the
- CICS VTAM exits are being traced.
- Two types of exit activity can be traced: invocations
- associated with particular terminals that have been
- designated for VTAM exit tracing ("terminal-specific"
- activity) and invocations not related to any particular
- terminal ("nonterminal-specific" activity).

CVDA values are:

**NOTAPPLIC** 

VTAM is not installed in the system.

**TCEXITALL** 

All exit activity is being traced.

**TCEXITNONE** 

No exit activity is being traced.

#### **TCEXITSYSTEM**

- Nonterminal-specific activity is being traced, but
- terminal-specific activity is not.

### 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**

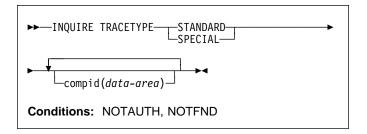
### **NOTAUTH**

**RESP2** values:

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

### INQUIRE TRACETYPE

Retrieve information about CICS system tracing.



# **Description**

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/ESA 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
ВМ		Basic mapping support
CP	CPI	Common programming
		interface

I	DC DD DI DM DS DU EI FC GC IC IS JC	DIRMGR  DOMAINMGR DISPATCHER DUMP  GLOBALCATLG	Dump control Directory manager Batch data interchange Domain manager Dispatch manager Dump manager EXEC interface File control and DL/I CICS global catalog manager Interval control Intersystem communication Journal control
	KC KE LC LD LM ME MN	KERNEL LOCALCATLG LOADER LOCKMGR MESSAGE MONITOR	Task control Kernel CICS local catalog manager Program load manager Lock manager Message manager Monitoring manager
	PA PC	PARAMGR	Parameter manager Program control
l	PG SC	PROGMGR	Program manager Storage control
	SM SP	STORAGE	Storage manager Syncpoint manager
ST SZ TC TD TI TR TS		STATISTICS	Statistics manager Front-end programming interface
			Terminal control Transient data
	TI TR	TIMER TRACE	Timer manager Trace manager Temporary storage User exit interface
 	US XM XS	USER TRANMGR SECURITY	User interface Transaction manager 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.

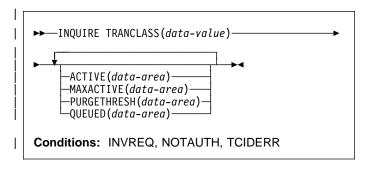
#### **NOTFND**

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.



# | Description

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 13 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).

#### INQUIRE TRANDUMPCODE

### 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 two-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.

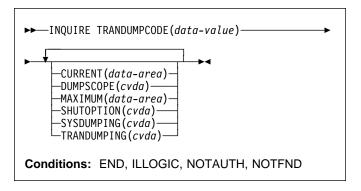
#### TCIDERR

RESP2 values:

1 The transaction class cannot be found.

### INQUIRE TRANDUMPCODE

Retrieve information about a transaction dump code.



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

# Description

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 (an MVS SDUMP), forwarding an SDUMP

+ request to related MVS images, 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 13 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.

### DUMPSCOPE(cvda)

returns a CVDA value indicating whether a request for a dump with this dump code should cause an SDUMP (system dump) request to be sent to related MVS images.

A related image is one which contains a CICS region doing work on behalf of the task that caused the dump request–specifically, a region that has a task doing work under the same APPC token as the task causing the dump.

The sending of SDUMP requests occurs only when the table entry for this code specifies a system dump (that is, the SYSDUMPING value is SYSDUMP), and only in a sysplex environment executing under MVS/ESA 5.1 and the MVS workload manager.

CVDA values are:

LOCAL

SDUMP requests are not to be sent.

**RELATED** 

SDUMP requests are to be sent.

#### 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 this code is received. A value of 999 means

# APAR PQ01620 changed this sentence

# 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:

There are no more resource definitions of this type.

#### ILLOGIC

**RESP2** values:

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.

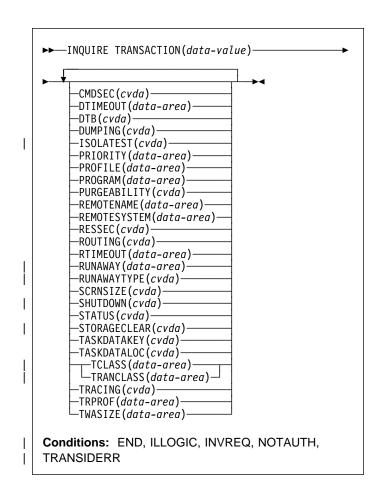
#### **NOTFND**

RESP2 values:

1 The dump code cannot be found.

### **INQUIRE TRANSACTION**

Retrieve information about a TRANSACTION definition.



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

# For more information about device properties, see the # TYPETERM chapter in the CICS/ESA Resource Definition # Guide.

# Description

The INQUIRE TRANSACTION command retrieves information about a particular transaction installed in your CICS system.

Most of the values come from the TRANSACTION resource definition, but a few come from the PROFILE definition to which it points (these are noted in the descriptions). See the CICS/ESA 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 13 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 be taken.

This value applies only to abend dumps and has no effect on DUMP TRANSACTION commands.

#### | ISOLATEST(cvda)

returns a CVDA value indicating whether a task executing this transaction should run isolated when isolation is active in the system.

Isolation limits the access, for both read and write, of user-key programs to task storage. A program executing in user key on behalf of an isolated task can access the task storage of only that task, and this storage cannot be accessed by programs executing in user key on behalf of other tasks. Isolation does not affect access by CICS-key programs and does not apply to storage with the SHARED attribute or any other non-task storage.

Isolation must be turned on for the system as well as the transaction in order for a task to run isolated. (See the TRANISOLATE option of the INQUIRE SYSTEM command.) CVDA values are:

### ISOLATE

Tasks should run isolated.

#### NOISOLATE

Tasks should not run isolated.

#### 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 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:

#### INQUIRE TRANSACTION

#### **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/ESA 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 PROFILE definition (see the PROFILE option).

### 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 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.

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.

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 0 to 10. In this release, transaction classes have 8-character names, specified by the TRANCLASS value in the definition (see that option in 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:

There are no more resource definitions of this type.

#### | ILLOGIC

RESP2 values:

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.

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

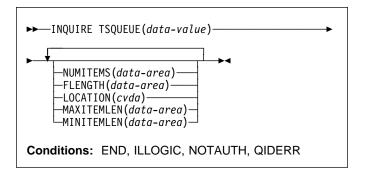
#### **TRANSIDERR**

RESP2 values:

The transaction could not be found.

## **INQUIRE TSQUEUE**

Retrieve information about a temporary storage queue.



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

# **Description**

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 13 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 MVS 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/ESA 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:

There are no more resource definitions of this type.

### **ILLOGIC**

RESP2 values:

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.

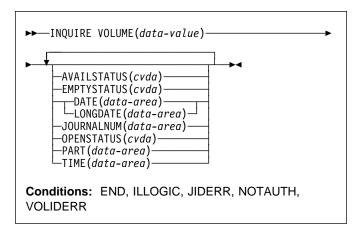
#### **QIDERR**

**RESP2** values:

1 The temporary storage queue cannot be found.

## **INQUIRE VOLUME**

Retrieve information about a journal tape volume.



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

# **Description**

The INQUIRE VOLUME command retrieves information about a tape volume that belongs to a CICS journal. It applies only to standard-labeled tapes.

# **Browsing**

You can also browse through all of the volumes in your tape journals by using the browse options (START, NEXT and END) on INQUIRE VOLUME commands, and you can browse selectively by specifying a JOURNALNUM value on your INQUIRE VOLUME NEXT commands.

The JOURNALNUM option both specifies and returns information in a volume browse. Here is how the value specified governs the browse:

- If JOURNALNUM is not specified, or the value is outside the valid range of 1 through 99, the browse continues from the current position (journal and volume); in the first INQUIRE NEXT, this is the first volume of the first tape journal.
- If the JOURNALNUM value is the same as was returned on the previous INQUIRE NEXT, the browse also continues from the current position, giving the next volume in that journal if there is one, or the first volume in the next tape journal if not.
- If the JOURNALNUM value is different from that on the previous INQUIRE NEXT and specifies a tape journal, the first volume in the indicated journal is returned. If the value is in range (1 through 99) but specifies a journal that does not exist or is not a tape journal, the JIDERR condition is raised.

# **Options**

#### AVAILSTATUS(cvda)

returns a CVDA value identifying the availability of the volume. CVDA values are:

#### **FCLOSE**

The volume is unavailable because of a failure on close.

## **FINPUT**

The volume is unavailable because of a failure during input.

#### **FOPEN**

The volume is unavailable because of a failure on open.

# **FOUTPUT**

The volume is unavailable because of a failure during output.

### **NOWRITE**

The volume cannot be written to.

OK The volume can be written.

### DATE(data-area)

returns the date on which the earliest data in the volume was written for the journal to which it belongs. The date is a 5-character value in Julian form, "yyddd". If no data has been written, "00000" is returned.

### **EMPTYSTATUS**(cvda)

returns a CVDA value identifying whether the volume is empty or not. CVDA values are:

# **EMPTY**

The volume does not contain data for the journal to which it belongs.

#### **NOTEMPTY**

The volume contains data for the journal to which it belongs.

### JOURNALNUM(data-area)

returns a halfword binary field giving the number of the journal to which the volume about which you are inquiring belongs. A value of 1 identifies the system log.

### LONGDATE(data-area)

returns the same date as the DATE option, but as a 7-character string that contains the full four-digit year, in the form "yyyyddd".

#### **OPENSTATUS**(cvda)

returns a CVDA value indicating whether the volume is open or closed. CVDA values are:

### CLOSED

The volume is closed.

#### **OPEN**

The volume is open.

### **OPENING**

The volume is in the process of opening.

### PART(data-area)

returns a fullword binary field giving the sequence number of this volume in a series of volumes.

### TIME(data-area)

returns a 6-character value, in the format "hhmmss", giving the time at which the earliest data in the volume was written for the journal to which it belongs. If no data has been written, "000000" is returned.

### VOLUME(data-value)

specifies the 6-character volume serial number of the volume about which you are inquiring.

# **Conditions**

#### | END

RESP2 values:

There are no more resource definitions of this type.

### | ILLOGIC

RESP2 values:

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.

### **JIDERR**

RESP2 values:

3 The journal specified with the NEXT option 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.

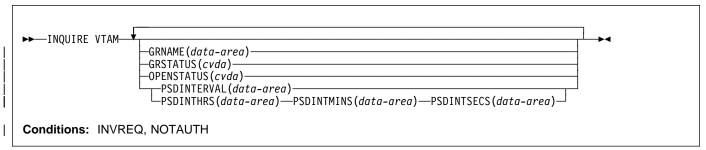
#### **VOLIDERR**

RESP2 values:

1 The volume cannot be found.

## **INQUIRE VTAM**

Retrieve information about the connection between CICS and VTAM.



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

# **Description**

The INQUIRE VTAM command returns information about type and state of the connection between VTAM and your CICS system.

# **Options**

#### GRNAME(data-area)

returns the 8-character generic resource group name under which this CICS region requests registration to VTAM, if it is using the generic resources facility of VTAM. Blanks are returned if the system was initialized without a request for registration.

#### GRSTATUS(cvda)

returns a CVDA value indicating the status of generic resource registration. All of the values except NOTAPPLIC indicate that CICS has been initialized to use the generic resource function (that is, that a nonblank GRNAME value was specified). CVDA values are:

#### **DEREGERROR**

Deregistration was attempted but was unsuccessful, and there has been no attempt to re-register.

#### **DEREGISTERED**

Deregistration was successfully accomplished.

### **NOTAPPLIC**

CICS is not using the generic resource feature; GRNAME is not set or is set to blanks.

#### REGERROR

Registration was attempted but was unsuccessful, and there has been no attempt to deregister.

#### REGISTERED

Registration was successful and there has been no attempt to deregister.

#### UNAVAILABLE

VTAM does not support the generic resource function.

#### **UNREGISTERED**

CICS is using the generic resource function but no attempt, as yet, has been made to register.

#### **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/ESA 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, and may indicate that the VTAM in use is
- + not at the level that supports persistent sessions.)

#### 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.

►► PERFORM DELETSHIPPED ►►

Conditions: NOTAUTH

# **Description**

- + 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/ESA
- + Intercommunication Guide and CICS/ESA Resource
- + Definition Guide manuals.

# **Conditions**

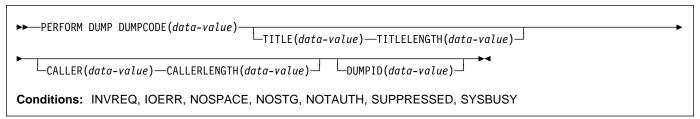
### NOTAUTH

**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.



# Description

- + The PERFORM DUMP command requests a system dump
- + (an MVS SDUMP) of the CICS region 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, whether the request is propagated for related CICS
- + regions in a sysplex environment, 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/ESA Problem Determination
- + Guide for general information about the system dump table.
- Todado for gorioral information about the eyetem dump table
- + While an MVS 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 CICS/ESA Messages and Codes manual lists
- + all CICS messages and also the additional 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)

- + specifies 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:

- GICS is not authorized by MVS to take dumps.
  - 10 An error occurred during system dumping.
- + 12 MVS cannot process the dump because there is no dump data set or because it is full.
- 13 An error occurred in the CICS routine that issues
- MVS 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.

## **SYSBUSY**

RESP2 values:

+ 11 The MVS dump routine is busy. Retry the+ command.

## PERFORM RESETTIME

Reset date and time.

►►—PERFORM RESETTIME—►◄

Conditions: INVREQ, NOTAUTH

# **Description**

- + The PERFORM RESETTIME command resets the CICS date
- + and time from the MVS system date and time.

# **Conditions**

## **INVREQ**

RESP2 values:

1 There is no clock in the system.

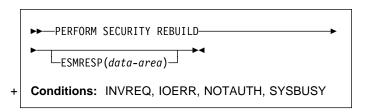
### **NOTAUTH**

RESP2 values:

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

## PERFORM SECURITY REBUILD

+ Refresh security information.



# **Description**

- + 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.
- + When the ESM is RACF at a release level below Version
- +2.1, PERFORM SECURITY REBUILD causes the in-memory
- + copies of CICS resource profiles to be rebuilt, so that they
- + are entirely current. If a large number of RACF profiles must
- + be rebuilt, the process can take several minutes. During this
- + time, any CICS task that requires a security check in order to
- + continue must wait until the rebuild is completed, and the
- performance of other CICS tasks can be severely affected.
- + With RACF Version 2.1, the refresh process is automatic;
- + PERFORM SECURITY REBUILD is not required, and has no
- + effect if issued.
- + If your CICS uses another ESM, the effect of this command
- + depends on the particular ESM.

# **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.
- When the ESM is RACF and the command completes
- normally (a RESP code value of NORMAL), a RESP2
- code of 0 indicates that the profiles have been
- refreshed. A RESP2 code of 4 means that no action
- was required, because RACF was at Version 2.1 or
- greater, in which profiles are refreshed automatically.

# **Conditions**

# **INVREQ**

**RESP2** values:

- No ESM is installed, or the ESM is inactive.
- The ESM is temporarily inactive and cannot
- perform the action requested.

#### **IOERR**

RESP2 values:

Error returned from ESM. The return code is in ESMRESP, if the option was used.

#### **NOTAUTH**

**RESP2** values:

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

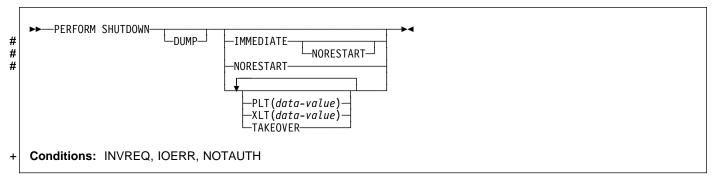
#### **SYSBUSY**

RESP2 values:

A security rebuild is currently in progress.

## PERFORM SHUTDOWN

Shut down the CICS system.



# **Description**

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/ESA Customization Guide contains more
- + information about PLTs and steps in the shutdown process.

# **Options**

### DUMP

- + specifies that an MVS SDUMP of the CICS region
- + should be taken as part of the shutdown process. In a
- + sysplex environment, dumps of related regions also will
- + be taken, if the system dump table entry for the dump
- + code SHUTDOWN, which governs this dump, specifies
- + them.

### **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.

### **# NORESTART**

- # specifies that this CICS region should not be restarted
- # (by MVS automatic restart manager) after the CICS
- # region has completed shutting down.
- # This option applies to immediate shutdowns only. If you
- # specify NORESTART without IMMEDIATE, CICS

- # performs an immediate shutdown as if you specified the
- # command as PERFORM SHUTDOWN IMMEDIATE
- # NORESTART.

#### 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.

#### **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 is not
- + present; no new transactions are accepted during an
- + immediate shutdown. 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**

### PERFORM STATISTICS RECORD

#### **INVREQ**

**RESP2** values:

- + 1 A normal shutdown was requested when
- + shutdown was already in progress.
- The XLT cannot be found.
- The PLT cannot be found.
  - 4 XRF is not in effect.

#### **IOERR**

**RESP2** values:

+ 13 The request for an MVS SDUMP failed.

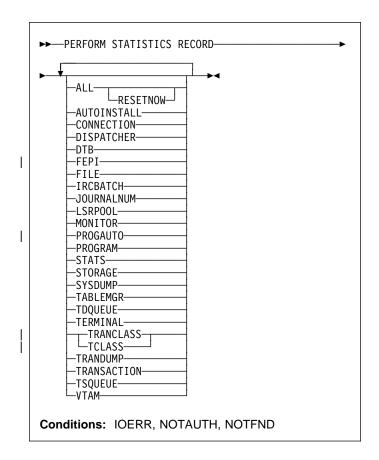
#### **NOTAUTH**

RESP2 values:

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

## PERFORM STATISTICS RECORD

Record statistics immediately.



# **Description**

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 SMF 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 172.)
- + 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/ESA 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 and DL/I data bases
- + installed in your system.

#### + IRCBATCH

- + records global statistics on the IRC batch function
- + (shared use of DL/I data bases through interregion
- + communication).

#### + 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/ESA 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.

## PERFORM STATISTICS RECORD

# **Conditions**

#### **IOERR**

RESP2 values:

- 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**

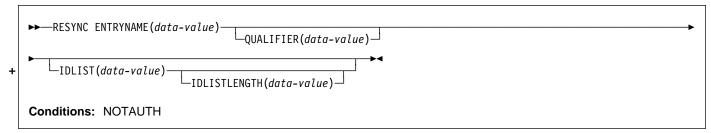
RESP2 values:

- 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
т		
	1	AUTOINSTALL
	2	CONNECTION
+	3	DISPATCHER
	5	DTB
	6	FILE
	7	IRCBATCH
+	8	JOURNALNUM
	10	LSRPOOL
	11	MONITOR
	12	PROGRAM
	13	STATS
	14	STORAGE
	15	SYSDUMP
+	16	TABLEMGR
	18	TCLASS,
	10	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.



# **Description**

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. See the CICS/ESA Customization Guide for full details about resynchronization invocations of task-related user exits.

# **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

### **SET AUTOINSTALL**

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

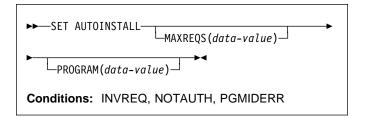
#### **NOTAUTH**

RESP2 values:

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

## **SET AUTOINSTALL**

Change autoinstall values.



# Description

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 or the
- CICS-supplied default, DFHZATDX.
- + **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
- + PROGRAM definitions or by autoinstall when some other
- + autoinstall program is in force. 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 and DFHZATD) cannot be found.

# **NOTAUTH**

RESP2 values:

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

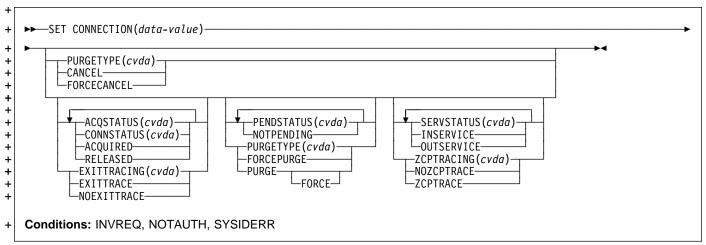
# **PGMIDERR**

RESP2 values:

The program name cannot be found.

### SET CONNECTION

+ Change the definition or status of a connection or cancel work associated with it.



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

# **Description**

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 between two CICS regions on the same MVS image or within the same MVS/ESA sysplex.
- 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 MVS, for example an MVS batch or TSO program. An EXCI connection connects the client program to a CICS region running in the same MVS image or within the same MVS/ESA sysplex.
  - 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 MVS/ESA sysplexes 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/ESA Intercommunication Guide for more information
- + about ISC and MRO connections, and the CICS/ESA
- + External CICS Interface 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).

## EXITTRACING(cvda) (VTAM only)

specifies whether sessions on this connection are to be traced when CICS is tracing terminal-specific invocations of its VTAM exits (see the TCEXITSTATUS option of the SET TRACEFLAG command). CVDA values are:

#### **EXITTRACE**

Sessions are to be traced.

#### **NOEXITTRACE**

Sessions are not to be traced.

### 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/ESA 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 179 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 186 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 3
- on page 152 lists AIDs that require FORCECANCEL.

### **SET CONNECTION**

+	Table 3. Transactions for which AIDs require FORCECANCEL		
+	Remote delete AIDs	CRMD	
1	Remote scheduler AIDs	CRSR	
1	LU6.2 service manager 1 AIDs	CLS1	
1	LU6.2 service manager 2 AIDs	CLS2	
1	LU6.2 service manager 3 AIDs	CLS3	
1	Remote schedule PURGE AIDs	CRSQ	
1	Resource manager resync AIDs	CRSY	
ı	Autoinstall terminal delete AIDs	CATD	
1	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

#### CVDA values are:

#### CANCEL

AIDs for this connection are to be canceled. except those for the transactions in Table 3.

#### **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.
- + 12 EXITTRACING has an invalid CVDA value.
- + 13 ZCPTRACING has an invalid CVDA value.
- + 14 EXITTRACING or ZCPTRACING was specified for
   + a non-VTAM connection or VTAM is not installed.
- + 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).
- + **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.

#### **NOTAUTH**

RESP2 values:

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

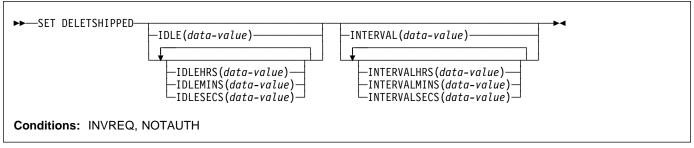
#### **SYSIDERR**

**RESP2** values:

+ 9 The connection could not be found.

## **SET DELETSHIPPED**

+ Change the system settings that control automatic deletion of shipped terminal definitions.



# Description

- + 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/ESA Intercommunication Guide and CICS/ESA
- + Resource Definition Guide manuals.
- + 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
- **Ohhmmss+**, 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 "Ohhmmss+". 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.

#### 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.

#### 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.

#### INTERVAL(data-value)

+

- specifies, as a 4-byte packed decimal value in the form
- "Ohhmmss+", 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 139.
- 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.

### 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.

### 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.

# **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.

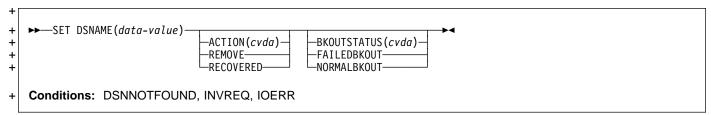
### **NOTAUTH**

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.



+

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

# Description

- + 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. You can also ask CICS to update the
- + VSAM catalog to reflect recovery if the data set is eligible for
- + backup-while-open (BWO) processing.
- + For either of these functions:
- + At least one FILE definition must point to the data set,
- + through the DSNAME option in the definition or the
- + DSNAME value on the associated JCL DD 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 BDAM 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).
- + To determine whether a data set meets the conditions for
- + this command, you can use the INQUIRE DSNAME
- + command to determine the backout status, BWO-eligibility
- + 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:

#### **RECOVERED**

CICS is to update the backup-while-open (BWO) attributes of the data set in the VSAM catalog to indicate that the data set does not require (or no longer requires) recovery.

This action may be required for data sets eligible for BWO if recovery processing has left the catalog showing a down-level version of the data set, because subsequent attempts to open a file pointing to this data set will fail. (See the discussion of "callable services" in the MVS/Data Facilities Product 3.2 System Programming Reference manual for further information.)

In addition to the requirements noted earlier, the data set must be:

- Eligible for backout-while-open processing (BWO)
- Known to the System-Managed Storage (SMS) subsystem
- · Located on SMS-managed DASD.

Moreover, the DFP, DFHSM and DFDSS components of your MVS system must support BWO.

## **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.

**Removing temporary data sets**: If you have an application that creates temporary data sets, it is most important that you remove the associated data set name blocks when the data sets are no

longer needed. Data set name blocks are not
removed when a data set is closed, or when CICS
is shut down (they are removed automatically only
during a cold start). If not removed, unwanted
data set name blocks can use up excessive
amounts of dynamic storage, leading to a
short-on-storage condition. See "Examples" for an

illustration of how you can identify and remove

unwanted data set name blocks.

#### 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 BDAM 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.
- REMOVE was specified for a data set in use by another INQUIRE or SET DSNAME command, or by CICS file control processing.

- + 14 One of the MVS components required for BWO is
   + down-level.
- + **16** RECOVERED was specified for a data set not opened during this CICS session.
- + 17 RECOVERED was specified for a BDAM data set+ or a VSAM path.
- 18 RECOVERED was specified for a data set to which an open file refers.
- + 19 RECOVERED was specified for a data set not eligible for BWO processing.

#### **IOERR**

RESP2 values:

+ 20 RECOVERED was specified, but an error occurred
 + accessing the VSAM catalog. Ensure that the data set is on an SMS-managed DASD and is known to the SMS subsystem.

#### **NOTAUTH**

**RESP2** values:

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

# + Examples

- + It is possible in CICS to create VSAM data sets online for
- + temporary use, and which are dynamically allocated by CICS
- + file control. Typically, this involves re-using the same file
- + control entry and setting the new temporary data set name
- + each time you need to use a new data set. This practice can
- + lead to a large number of data set name blocks occupying
- + CICS dynamic storage. These can only be removed by a
- $+\,\mathsf{SET}\,\,\mathsf{DSNAME}(...)\,\,\mathsf{REMOVE}\,\,\mathsf{command},\,\mathsf{or}\,\,\mathsf{by}\,\,\mathsf{a}\,\,\mathsf{cold}\,\,\mathsf{start}\,\,\mathsf{of}$
- +CICS.
- + Ideally, an application that creates and uses a temporary
- + data set should explicitly delete the DSN block when it no
- + longer needs the data set. This involves two actions:
- + 1. Breaking the association between the CICS file and the
- data set by issuing an EXEC CICS SET FILE(...)
- + CLOSED DISABLED command, followed by an EXEC
- + CICS SET FILE command to set the DSNAME operand
- + to a null value.
- + 2. Removing the data set name block by issuing an EXEC
- CICS SET DSNAME(...) REMOVE command.
- + To set the DSNAME to null you must code the CICS
- + commands as shown in the following examples to ensure
- + they translate and compile correctly.

#### + Assembler example

```
+ *
           Remove DSN block from CICS storage
+ *ASM XOPTS(SP)
+ DFHEISTG DSECT
+ TEMPDSN DS
                 CL44
+ REMOVE
          CSECT
           PRINT GEN
+ *
            Find name of temporary data set if not known
           EXEC CICS INQUIRE FILE('TEMPFILE') DSNAME(TEMPDSN)
+
+*
            Close file temporary file and set DSN to null
           EXEC CICS SET FILE('TEMPFILE') CLOSED DISABLED
+
           EXEC CICS SET FILE('TEMPFILE') DSNAME(=X'00')
+ *
            Remove DSN block from storage
           EXEC CICS SET DSNAME(TEMPDSN) REMOVE
+
+ *
+ *
            Return and end
+ *
+ RETURN
                 0Η
           DS
           EXEC CICS RETURN
           END
```

#### + PL/I example

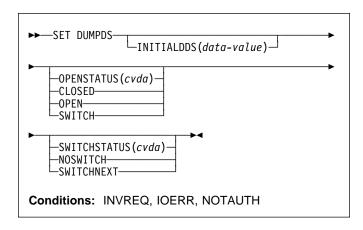
```
+ *PROCESS XOPTS(SP);
+ REMOVE: PROC OPTIONS (MAIN);
+ DCL PLIXOPT STATIC EXTERNAL CHAR(10) VAR INIT('NOSTAE');
+ DCL TEMPDSN CHAR(44);
+/*
+/*
            Find name of temporary data set if not known */
          EXEC CICS INQUIRE FILE ('TEMPFILE') DSNAME (TEMPDSN);
+
+ */
            Close file temporary file and set DSN to null */
          EXEC CICS SET FILE('TEMPFILE') CLOSED DISABLED;
+
+
          EXEC CICS SET FILE('TEMPFILE') DSNAME('00'X);
+/*
            Remove DSN block from storage
          EXEC CICS SET DSNAME (TEMPDSN) REMOVE
+/*
+/*
               Return and end
+/*
+
          EXEC CICS RETURN;
          END:
```

### + COBOL example

```
CBL XOPTS(SP)
+
         IDENTIFICATION DIVISION.
+
        PROGRAM-ID. REMOVE.
+
        ENVIRONMENT DIVISION.
+
        DATA DIVISION.
        WORKING-STORAGE SECTION.
+
        77 TEMPDSN
                                 PIC X(44).
+
        PROCEDURE DIVISION.
+
           Find name of temporary data set if not known
+
            EXEC CICS INQUIRE FILE('TEMPFILE') DSNAME(TEMPDSN)
+
                  END-EXEC.
+
           Close file temporary file and set DSN to null
            EXEC CICS SET FILE('TEMPFILE') CLOSED DISABLED
+
                  END-EXEC.
             EXEC CICS SET FILE('TEMPFILE') DSNAME(LOW-VALUES)
+
                  END-EXEC.
+
           Remove DSN block from storage
            EXEC CICS SET DSNAME(TEMPDSN) REMOVE END-EXEC.
           Return and end
             EXEC CICS RETURN END-EXEC.
```

### **SET DUMPDS**

+ Change the status of the transaction dump data sets.



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

# Description

- + 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 option.
- + 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

GOBACK.

- + option. (See the CICS/ESA System Definition Guide for
- + a description of this option.)

#### 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 option, described in the
- + CICS/ESA 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

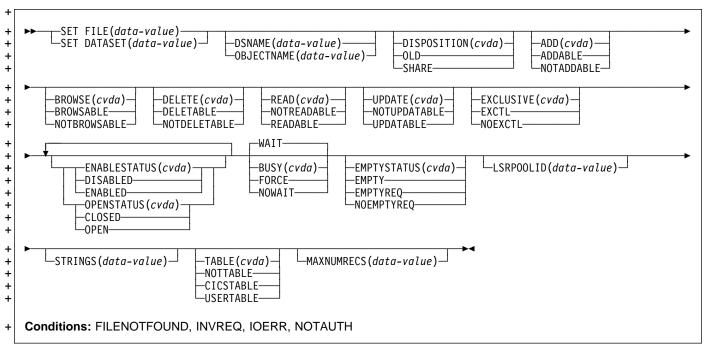
EXEC CICS SET DUMPDS

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.



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.

# **Description**

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 used the
  - file 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
 + 179 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.

### **DISPOSITION**(cvda)

- + specifies the operating system disposition value for the
- + data set to which this file refers. If there is a JCL DD statement for this file, the disposition value there takes precedence over the value in the FILE definition, so that changing it has no effect during the current execution of CICS. CVDA values are:

OLD The disposition value is to be OLD.

# SHARE

The disposition value is to be SHARE.

#### **DSNAME**(data-value)

- + specifies the 44-character name of the VSAM object or
- + BDAM data set associated with this FILE definition.
- + CICS allocates this data set dynamically when the file is
- + opened if there is no JCL DD statement for the file. If
- there is a DD 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 156).
- + **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:

#### + EMPTY

+

#

+

+

#

+

specifies the same value as EMPTYREQ and is retained only for compatibility. Use EMPTYREQ instead in new applications. This does not apply to files operating in RLS mode.

#### **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. You cannot specify the EMPTYREQ option on the EXEC CICS SET FILE command for files that are opened in RLS mode.

#### 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 page 160).

### **ENABLED**

The file is to be available.

#### EXCLUSIVE(cvda) (BDAM 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(data-value)

- + specifies the 8-character name of the file whose
- + definition or status is to be changed.

# 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 1-8. 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 page 160).

#### **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:

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.
  - 8 DISPOSITION has an invalid CVDA value.
  - 9 EMPTYSTATUS has an invalid CVDA value.
- 10 LSRPOOLID was specified for a non-VSAM file.
- The LSRPOOLID value is out of range. 11
  - 12 READ has an invalid CVDA value.
- The STRINGS value is out of range, or the file is 13 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.
  - OPENSTATUS has an invalid CVDA value. 16
    - 17 ENABLESTATUS has an invalid CVDA value.
    - 19 DELETE was specified for a non-VSAM file.
- 20 EMPTYSTATUS was specified for a non-VSAM
- 21 CLOSED or DISABLED has been specified + without NOWAIT by a task that has issued one or # more recoverable requests within the current unit #
  - 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-BDAM 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.

- + 34 MAXNUMRECS was specified for a non-VSAM+ file.
- + 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.

#### **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')

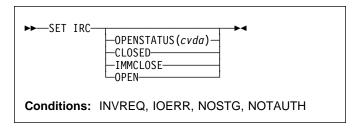
WAIT
CLOSED
DISABLED
DELETABLE
LSRPOOLID(7)
STRINGS(50)

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.



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

# **Description**

- + 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/ESA 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
 + begun.

#### **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
  - 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.
- + 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 CICS storage is insufficient for the request.
- + 10 MVS storage is insufficient (SVC block request
- + rejected).
- + 11 MVS storage is insufficient (SUBSYS block
- request rejected).

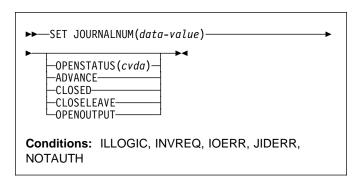
### **NOTAUTH**

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.



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

# **Description**

- + 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 or the
- + CICS/ESA Resource Definition Guide for more information
- + about journal types.
- + SET JOURNALNUM commands apply to the system log
- + (Journal 1) as well as installation-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 an SMF 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.
- Thust be done for the journal to be used in

### **Conditions**

#### **ILLOGIC**

RESP2 values:

ADVANCE is specified for a journal that is not open.

#### **INVREQ**

**RESP2** values:

- 2 OPENSTATUS has an invalid CVDA value.
- 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.

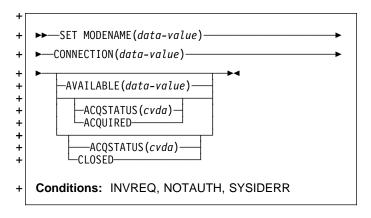
#### **NOTAUTH**

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.



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

# + Description

- + 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 SESSIONS definition, rather
- + than the name of the SESSIONS 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 SESSIONS 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 SESSIONS definition).

# MODENAME(data-value)

- + specifies the 8-character MODENAME value of the
- + group of sessions that you are modifying (from its
- + SESSIONS 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.

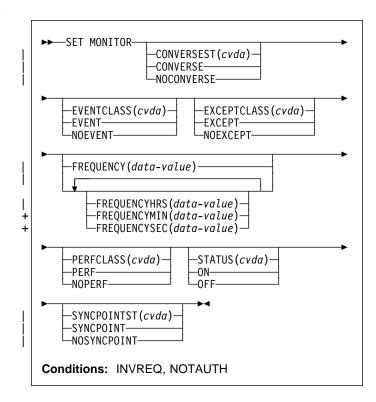
#### **SYSIDERR**

RESP2 values:

- 1 The connection cannot be found.
- The MODENAME within the connection cannot be
- + found.

### **SET MONITOR**

Change CICS monitoring options.



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

# **Description**

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 three types of data for each individual task:

- SYSEVENT data (elapsed time, obtained through MVS timing facilities)
- Performance data (types and counts of CICS commands, timings, etc.)
- Exception data (waiting for a VSAM string, for example)

Three additional switches determine which of these classes of monitor data are recorded (written out to the SMF data set). SYSEVENT data is recorded only if the EVENTCLASS option setting is EVENT, exception data 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. SYSEVENT class data is + written at end of task. 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:
  - SYSEVENT data not already written is lost for the rest of the task.
  - 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.

# EVENTCLASS(cvda)

- specifies whether the SYSEVENT class of monitoring
- data is to be recorded when monitoring is active. CVDA values are:

#### **EVENT**

SYSEVENT data is to be recorded.

#### NOEVENT

SYSEVENT data is not to be recorded.

# 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:

#### **SET MONITOR**

- + 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).

#### FREQUENCYMIN(data-value)

- + specifies the minutes component of the frequency
- + interval, in fullword binary form (see the FREQUENCY
- + option).

# FREQUENCYSEC(data-value)

- + specifies the seconds component of the frequency
- + interval, in fullword binary form (see the FREQUENCY
- + option).

#### 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.
- 4 EVENTCLASS 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.

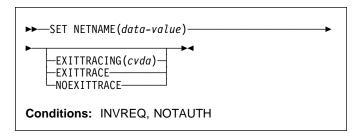
#### **NOTAUTH**

RESP2 values:

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

#### **SET NETNAME**

+ Change the tracing of a VTAM terminal.



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

# **Description**

- + The SET NETNAME command allows you to control CICS
- + VTAM exit tracing for a particular VTAM terminal (or
- + session). You can specify any VTAM terminal or session,
- + including one not yet installed in CICS, so that you can trace
- + the autoinstall process as well as other operations.

# **Options**

# EXITTRACING(cvda)

- + specifies whether this terminal (or session) should be
- + traced when CICS is tracing terminal-specific invocations
- + of its VTAM exits. (You can turn exit tracing on and off
- + with a SET TRACEFLAG TCEXITSTATUS command or
- + the CICS-supplied transaction CETR.) CVDA values are:

#### **EXITTRACE**

The terminal is to be traced.

#### **NOEXITTRACE**

+ The terminal is not to be traced.

#### **NETNAME**(data-value)

- + specifies the 8-character VTAM network identifier of the
- + terminal or session for which you are specifying tracing.

# **Conditions**

# **INVREQ**

**RESP2** values:

- 27 EXITTRACING has an invalid CVDA value.
- 29 The terminal is not a VTAM terminal.

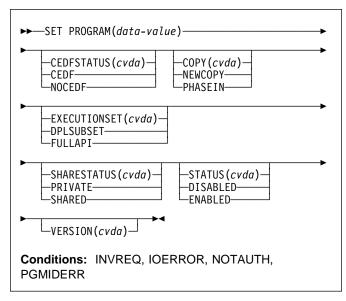
#### **NOTAUTH**

**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.



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

# **Description**

- + 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

#### NOCEDF

No EDF screens are displayed.

termination screens appear.

You cannot specify CEDFSTATUS for a remote program.

#### **SET PROGRAM**

# COPY(cvda)

- specifies that a new copy of the program is to be used
- the next time the module is requested. 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 link-pack
- area, the LPA copy satisfies this requirement.
- Otherwise, CICS searches the concatenated DFHRPL
- libraries, 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 the concatenated libraries named on the DFHRPL DD statement.

#### SHARED

The link-pack 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 the DFHRPL
- libraries to the link-pack area 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.
- You have specified an option that is invalid for a 17 +
- 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:

The program, map set, or partition set cannot be found.

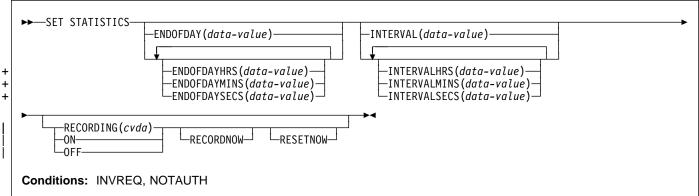
# **Examples**

```
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 DFHRPL libraries. Any copies of PROGA with a
- + non-zero 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.



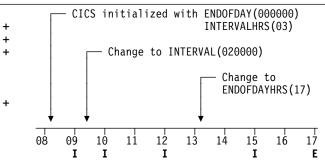
For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.

# Description

- + 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 system management facility
- + (SMF) 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/ESA 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
- "Ohhmmss+", 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 to record the interval statistics.
- # End-of-day statistics, requested statistics and unsolicited
- # statistics are always recorded, specifies whether interval
- # statistics are to be 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 144, or by a CEMT PERFORM STATISTICS
- + transaction.) CVDA values are:

OFF switches off the recording of interval statistics.

ON switches on the recording of interval statistics.

#### **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/ESA 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:

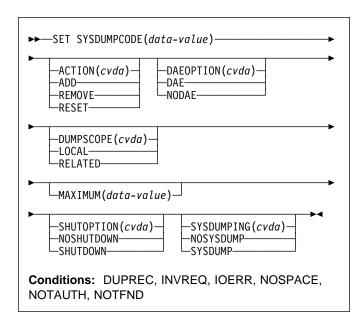
- t 1 The INTERVAL value is out of range.
- 2 The ENDOFDAY value is out of range.
  - 3 RECORDING has an invalid CVDA value.
- 4 The INTERVALHRS value is out of range.
  - **5** The INTERVALMINS value is out of range.
- 6 The INTERVALSECS value is out of range.
  - 7 More than one of the interval values has been used and the combination either exceeds 24 hours or is less than 1 minute.
- + **8** The ENDOFDAYHRS value is out of range.
- 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.



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

# **Description**

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 (an MVS SDUMP),
- + initiating requests for SDUMPs of related CICS regions, 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 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/ESA 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.
- 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.)

#### DAEOPTION

specifies whether a dump produced for this dump code is eligible for suppression by the MVS Dump Analysis and Elimination (DAE) component. CVDA values are:

DAE The dump is eligible for DAE suppression.

#### NODAE

#

#

#

#

#

#

#

#

#

The dump is not eligible for DAE suppression—if CICS determines that a dump should be written, MVS will not suppress it. (However, be aware of the SUPPRESS and SUPPRESSALL options in the ADYSETxx parmlib member. These are controlled by the VRADAE and VRANODAE keys in the SDWA. They may lead to dump suppression even though NODAE is set here. For information about DAE, SUPPRESS, and SUPPRESSALL, see the MVS ESA Planning: Problem Determination and Recovery manual.

- When SET SYSDUMPCODE ADD is specified, if you do
- not also specify DAEOPTION, it will default to
- NODAE—regardless of the setting of the SIT DAE
- parameter.

#### **DUMPSCOPE**(cvda)

- specifies whether a request for a dump with this dump
- code should cause CICS to initiate requests for +
- SDUMPs (system dumps) of "related" CICS regions.
- A related CICS region is one in the same sysplex,
- connected by MRO/XCF and doing work on behalf of +
- your CICS region—specifically, a region that has one or
- more tasks doing work under the same APPC token as
- a task in your region.
- This propagation of SDUMP requests occurs only when +
- the table entry for this code also specifies a
- SYSDUMPING value of SYSDUMP, and only in a
- sysplex environment executing under MVS/ESA 5.1 and
- the MVS workload manager.
- If you specify RELATED in other systems, this will cause +
- an exception condition.

CVDA values are:

LOCAL

+ SDUMP requests are not to be sent.

**RELATED** 

- SDUMP requests are to be sent.
- LOCAL is the default for entries you add, if you do not
- + specify a DUMPSCOPE value.

#### 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). MVS may also be allowed to suppress the dump if appropriate, depending on the DAEOPTION value.

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.
- + 13 DUMPSCOPE has an invalid CVDA value.
- 14 RELATED requires MVS/ESA 5.1.
- + 15 DAEOPTION has an invalid CVDA value.

#### **IOERR**

RESP2 values:

- + 11 An error occurred updating the CICS catalog. The
- entry is changed for the current run, but is not
- recorded for restarts.

#### **NOSPACE**

**RESP2** values:

- + 12 The CICS catalog 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.

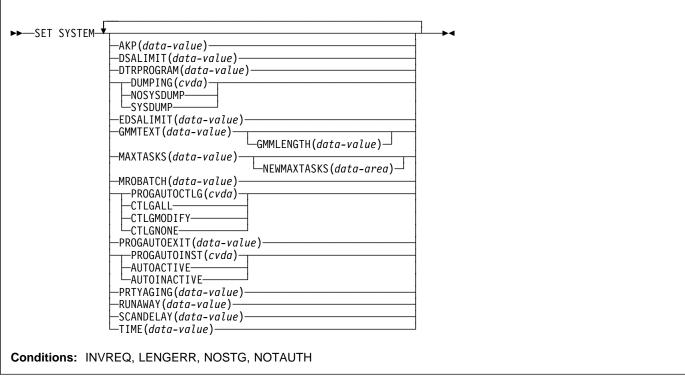
#### NOTFND

RESP2 values:

The dump code cannot be found.

#### **SET SYSTEM**

+ Change CICS system option values.



#### Notes:

- 1. For more information about the use of CVDAs, see "CICS-value data areas (CVDAs)" on page 7.
- The CSCS, ECSCS, USCS, EUSCS, and ERSCS options, each of which returned the size of the storage
- + "cushion" for a particular dynamic storage area, are
- obsolete in CICS/ESA 4.1. To maintain object compatibility, they are accepted at run-time but ignored.
- + The translator also accepts them, but issues a warning
- + message.

# **Description**

| 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/ESA System Definition
- + Guide. System initialization parameters that correspond to
- + those in this command have the same or similar names,
- + except where noted, and Table 2 on page 100 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 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/ESA 4.1 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:

#### CTI GAL

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 132).
- + 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

#### **SET SYSTEM**

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
- + option 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.
- There is insufficient MVS storage to allocateDSALIMIT.
- 23 There is insufficient MVS 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

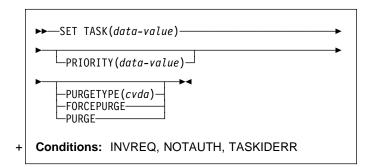
**RESP2** values:

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

#### **SET TASK**

# **Function**

+ Purge a task or change its priority.



# **Description**

- + 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.

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

# **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.
- 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 the definition of the TRANSACTION it is
   executing 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.

#### **NOTAUTH**

RESP2 values:

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

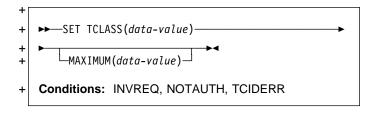
#### **TASKIDERR**

**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.



# + Description

- + 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 194, 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 can be in the range 0 through
- + 999. (This value corresponds to the MAXACTIVE value
- + in a SET TRANCLASS command. See the description
- + of this option on page 194 for a description of what
- + happens when you change the MAXACTIVE limit.)

#### + TCLASS(data-value)

- + specifies, as a fullword binary value, the number of the
- + task class that you are changing. It must be in the
- + range 0-10.

# + Conditions

#### + INVREQ

- + RESP2 values:
- + 2 The MAXIMUM value is not in the range 0-999.

#### + NOTAUTH

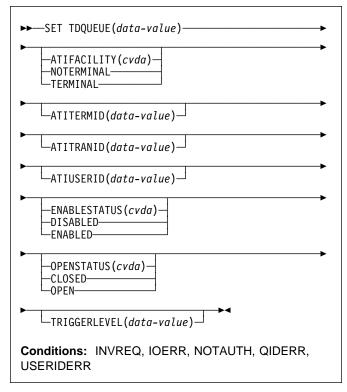
- + RESP2 values:
- + 100 The user associated with the issuing task is not
- authorized to use this command.

#### +TCIDERR

- + RESP2 values:
- The transaction class cannot be found.

# **SET TDQUEUE**

+ Change the attributes of a transient data queue.



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

# **Description**

- + 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 an MVS 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. When the ESM is RACF, this means that
- + the user associated with the task must be defined as a
- + RACF surrogate for the user 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 gueue 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
- . cot

# **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.

# **Conditions**

#### **INVREQ**

#### RESP2 values:

- TRIGGERLEVEL was specified for an extrapartition queue.
- 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.

#### **SET TDQUEUE**

- 9 OPENSTATUS was specified for an intrapartition
- 10 ENABLESTATUS has an invalid CVDA value.
  - 11 DISABLED was specified for a queue beginning with "C".
- 12 The queue is remote.
- The queue is indirect. 13
- OPENSTATUS was specified for a DISABLED 15
- queue.
- OPENSTATUS was specified, but the JCL 16
- DDNAME to which the queue definition points was
- - 19 ATIUSERID was specified for an extrapartition queue.
- The ESM interface is not initialized. 20
  - 21 CICS has received an unknown response from the
- 22 The ESM did not respond.

#### **IOERR**

RESP2 values:

- An error occurred opening or closing the data set associated with the queue.
- 17 The queue cannot be set CLOSED because there
- is no space in the associated data set.

#### **NOTAUTH**

RESP2 values:

- The user named in the ATIUSERID option is not authorized.
- 24 The user named in ATIUSERID has been revoked.
- During SECLABEL processing by the external security manager, an error occurred. For information about security labels, see the Resource Access Control Facility (RACF) Security Administrator's Guide.
  - 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**

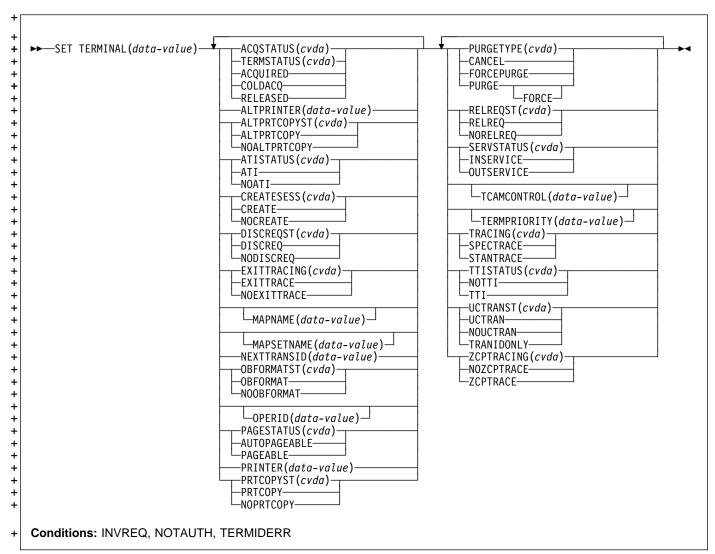
RESP2 values:

- The user named in ATIUSERID is not known to 28
- the ESM.

# **SET TERMINAL**

Change the definition or status of a terminal or cancel work associated with it.

# + APAR PQ01572 -- added OPERID to EXEC CICS SET TERMINAL



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

# **Description**

- + 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 the NEXTTRANSID and TRACING
- + options are allowed in some situations (see these options for
- + more information).
- + 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 page187).

#### **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 TERMINAL definition in the CICS/ESA Resource
- Definition Guide for full details.

#### - APAR PQ03859

#

#

#

#

#

#

added the following note.

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 reguest 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. +

# + EXITTRACING(cvda) (VTAM only)

- specifies whether this terminal is to be traced when +
- CICS is tracing terminal-specific invocations of its VTAM
- exits (see the TCEXITSTATUS option of the SET +
- TRACEFLAG command). CVDA values are:

#### **EXITTRACE**

This terminal is to be traced.

#### **NOEXITTRACE**

This terminal is not to be traced.

# + MAPNAME(data-value)

+

- specifies the 7-character name of the map which is to be +
  - remembered 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 system when the currently executing +
- transaction terminates, unless the map name is +
- superseded by a subsequent SEND MAP command.
- The MAPNAME option can be used to restore a map
- name which was returned to the application 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-value)

- specifies the 8-character name of the mapset which is to
  - be remembered 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 system 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 which was returned to the application 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.
- + 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.

- added OPERID to EXEC CICS SET TERMINAL

#### + 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 TERMINAL definition in the CICS/ESA
- Resource Definition Guide for full details.

# — APAR PQ03859

added the following note.

**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). CVDA values

#### **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

#### **SET TERMINAL**

- sessions, but not for non-VTAM terminals or APPC
- 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 179 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/ESA
- 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 91.)
- 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 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 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.

# + TCAMCONTROL(data-value) (TCAM only)

- specifies the current value of the position field in the
- TCAM work area for the terminal. When used, this field +
- indicates whether the work currently being handled is a +
- whole message or the first, an intermediate, or the last
- segment of a message, and, for input, whether the data

contains a record delimiter. The presence or absence of

the letter 'C' in the OPTCD value of the DFHTCT

+

- + TYPE=SDSCI macro for the terminal determines whether
- + the position field is used or not. (See the discussion of
- + TCAM devices in the CICS/ESA Resource Definition
- + Guide.)

The value must be expressed as a single hexadecimal character. The meanings are:

- + 00 Null (no change)
  - 40 Intermediate part of message
  - F1 First part of message
  - F2 Last part of message
  - F3 Whole message
  - F4 Intermediate part of message, end of record
  - F5 First part of message, end of record
  - F6 Last part of message, end of record
  - F7 Whole message, end of record.

#### 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.

#### **SET TERMINAL**

# APAR PN81733 added this paragraph

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.
- 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.
- 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).

#### + 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:

- 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.
- The ATISTATUS or TTISTATUS value specified 5 would result in NOATI and NOTTI.
  - 6 CREATESESS was specified for non-VTAM terminal.
  - 7 CREATESESS has an invalid CVDA value.
  - PAGESTATUS has an invalid CVDA value. 9
- OUTSERVICE has been specified for the principal 11
  - 13 SERVSTATUS has an invalid CVDA value.
- The TERMPRIORITY value is out of range. 15

- NOTTI has been specified for the principal facility. 17
- 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.
- PURGE was specified, but the task at the terminal 26 is NOTPURGEABLE.
- 27 EXITTRACING has an invalid CVDA value.
- ZCPTRACING has an invalid CVDA value. 28
- 29 EXITTRACING or 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 TERMINAL definition).
- 35 TCAMCONTROL was specified for a non-TCAM terminal
- The TCAMCONTROL value is invalid. 36
- 37 Automatic signon failed: the terminal was not placed in service.
  - 38 OBFORMATST has an invalid CVDA value.
  - RELREQST has an invalid CVDA value. 39
  - DISCREQST has an invalid CVDA value. 40
  - 41 ALTPRTCOPYST has an invalid CVDA value.
  - PRTCOPYST has an invalid CVDA value. 42
  - 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.
- OBFORMATST was specified for a console or 46
- 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 of a type supported by BMS.

# **NOTAUTH**

**RESP2** values:

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

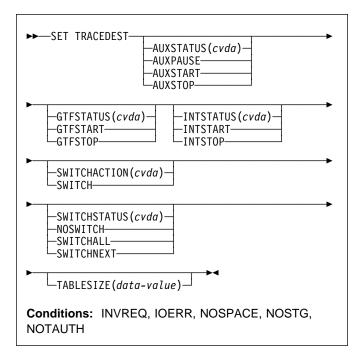
#### **TERMIDERR**

**RESP2** values:

+ 23 The terminal cannot be found.

# **SET TRACEDEST**

+ Change tracing options.



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

# **Description**

- + CICS can write trace entries to three possible destinations:
- + the CICS internal trace table, the auxiliary trace data set, and
- + the MVS Generalized Trace Facility (GTF). 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 values at
- + CICS startup. These are: INTSTATUS and TRTABSZ (for
- + internal tracing), AUXTR and AUXTRSW (auxiliary tracing),
- + and GTFSTATUS (GTF tracing). See the CICS/ESA System
- + Definition Guide for more information about these values.

# **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

#### SET TRACEDEST

- 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.

#### GTFSTATUS(cvda)

- specifies whether trace entries are to be sent to the
- MVS Generalized Tracing Facility (GTF). CVDA values are:

#### **GTFSTART**

Entries are to be sent.

#### **GTFSTOP**

- Entries are not to be sent.
- + Note: A value of GTFSTART is necessary but not
- sufficient for recording CICS trace entries on GTF. In
- addition, CICS must be initialized with GTF support (the
- GTFTR system initialization option), and GTF must be
- started in MVS with the TRACE=USR option.

#### 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,
- obtains a new table of the requested size, and frees the
- old one. 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 maximum size is
- determined by the storage available for the new table.

# **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.
- GTFSTATUS has an invalid CVDA value. 5
- 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.
  - **9** There is insufficient space for a GTF trace buffer.

#### **NOTAUTH**

RESP2 values:

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

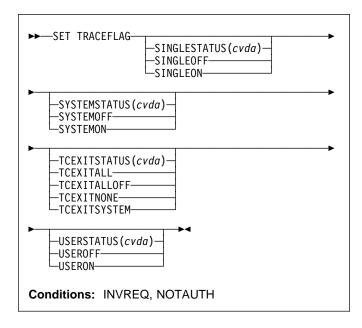
# **Examples**

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.



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

# Description

- + The SET TRACEFLAG command allows you to change the
- + flags that control the creation of trace entries in CICS. (See
- + the CICS/ESA 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 nonexception 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.

#### SET TRACEFLAG

#### 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.

# TCEXITSTATUS(cvda) (VTAM only)

- specifies which invocations of the CICS VTAM exits are
- to be traced.
- Two types of exit activity can be traced: invocations
- associated with particular terminals that have been
- designated for VTAM exit tracing ("terminal-specific"
- activity), and invocations not related to any particular
- terminal ("nonterminal specific" activity). You can trace
- both types or nonterminal specific activity only.

CVDA values are:

#### **TCEXITALL**

All exit activity is to be traced. +

#### **TCEXITALLOFF**

Terminal-specific activity is not to be traced. The status of nonterminal specific tracing is to remain

unchanged.

# **TCEXITNONE**

No exit activity is to be traced.

#### **TCEXITSYSTEM**

Non-terminal specific activity is to be traced, but

terminal-specific activity is not.

# **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:

- SYSTEMSTATUS has an invalid CVDA value.
- 2 USERSTATUS has an invalid CVDA value.
- 3 SINGLESTATUS has an invalid CVDA value.
- 4 TCEXITSTATUS has an invalid CVDA value.
- 5 TCEXITSTATUS is specified but VTAM is not
- installed.

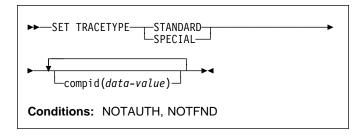
#### NOTAUTH

**RESP2** values:

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

# **SET TRACETYPE**

+ Change the tracing levels of CICS components.



# **Description**

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/ESA 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.

AΡ	APPLICATION	Application
BF		Built-in functions
ВМ		Basic mapping support

СР	CPI	Common programming interface
DC		Dump control
DD	DIRMGR	Directory manager
DI	Dir title of t	Batch data interchange
DM	DOMAINMGR	Domain manager
DS	DISPATCHER	Dispatch manager
DU	DUMP	Dump manager
FI	50	EXEC interface
FC		File control and DL/I
GC	GLOBALCATLG	CICS global catalog manager
IC	OLOD/ (LO/ (1 LO	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
SC		Storage control
SM	STORAGE	Storage manager
SP		Syncpoint manager
ST	STATISTICS	Statistics manager
SZ		Front-end programming
Τ0		interface
TC		Terminal control
TD	TIMED	Transient data
TI	TIMER	Timer manager
TR	TRACE	Trace manager
TS		Temporary storage User exit interface
UE US	LICED	
XM	USER TRANMGR	User interface
XIVI	SECURITY	Transaction manager
۸٥	SECURIT	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 Conditions

#### NOTAUTH

RESP2 values:

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

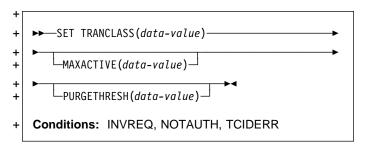
#### **NOTFND**

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.



# + Description

- + 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

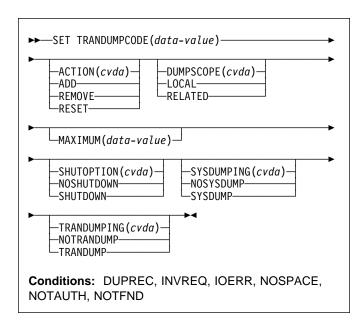
- **RESP2 values:**
- **100** The user associated with the issuing task is not
- authorized to use this command.

#### + TCIDERR

- RESP2 values:
- The transaction class cannot be found.

# **SET TRANDUMPCODE**

+ Change an entry in the transaction dump table.



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

# **Description**

- + 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 (an MVS SDUMP), initiating requests for
- + SDUMPs of related CICS regions, 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 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
- + 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/ESA 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.)

#### DUMPSCOPE(cvda)

- specifies whether a request for a dump with this dump
- + code should cause CICS to initiate requests for
- SDUMPs (system dumps) of "related" CICS regions.
- + A related CICS region is one in the same sysplex,
- + connected by MRO/XCF and doing work on behalf of the
- + task that caused the dump request-specifically, a region
- + that has a task doing work under the same APPC token
  - as this task.
- + This propagation of SDUMP requests occurs only when
- + the table entry for this code also specifies a
- + SYSDUMPING value of SYSDUMP, and only in a
- + sysplex environment executing under MVS/ESA 5.1 and
- the MVS workload manager. In other systems,
- + specifying RELATED will cause an exception condition.

CVDA values are:

#### LOCAL

+

SDUMP requests are not to be sent.

# RELATED

- SDUMP requests are to be sent.
- + LOCAL is the default for entries you add, if you do not
- + specify a DUMPSCOPE value.

#### 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
- + 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:

#### **SET TRANDUMPCODE**

#### **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 (an MVS 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:

- 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.
- Both MAXIMUM and SHUTDOWN are specified. 8
- The dump code is invalid. 9
  - 13 DUMPSCOPE has an invalid CVDA value.
- 14 RELATED requires MVS/ESA 5.1.

#### **IOERR**

**RESP2** values:

- An error occurred updating the CICS catalog. The
- entry is changed for the current run, but is not
- recorded for restarts. +

#### **NOSPACE**

**RESP2** values:

- The CICS catalog 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**

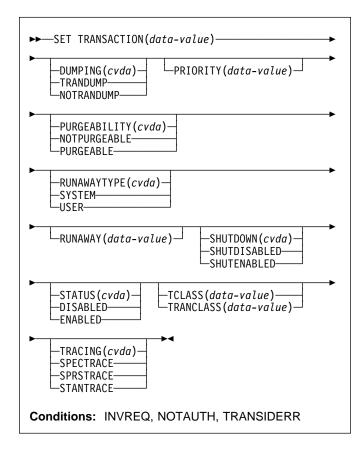
RESP2 values:

The dump code cannot be found.

# **SET TRANSACTION**

#### **Function**

+ Change a TRANSACTION definition.



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

# Description

- + 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.
- + 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.)

#### **SET TRANSACTION**

#### **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 transaction
- + class to which the transaction is to belong. When
- + executed under CICS/ESA 4.1, 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 00–10. (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/ESA 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 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.

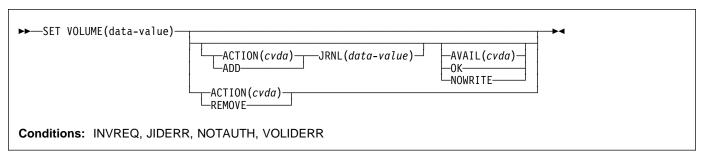
#### **TRANSIDERR**

RESP2 values:

1 The transaction cannot be found.

# **SET VOLUME**

+ Change the status of a journal tape volume.



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

# Description

- $+\,\mbox{The SET VOLUME}$  command can be used to add a volume
- + to a journal, to remove a volume, or to change the availability
- + of a volume. It applies only to tape journals using
- + standard-labeled tapes.

# **Options**

#### ACTION(cvda)

specifies an action to be taken with this volume. CVDA values are:

+ ADD The volume is to be added to the journal specified+ in the JOURNALNUM option.

#### **REMOVE**

- + The volume is to be removed from the journal to + which it belongs. You cannot remove a volume + that is open.
  - AVAILSTATUS(cvda)

specifies the availability of the volume. CVDA values are:

# NOWRITE

- + The volume cannot be written. The volume must + be both closed and non-empty if you specify this
- + value. See the OPENSTATUS and
- + EMPTYSTATUS options of the INQUIRE
- VOLUME command for more information.
- OK The volume can be written.
- + You can specify availability for either a volume that is
- + already part of a journal or a volume that you are
- + adding. If you do not specify availability in an ADD
- + command, OK is assumed.

#### JOURNALNUM(data-value)

- + specifies, as a halfword binary value, the number of the
- + journal to which the volume belongs. Journal numbers

- + must be in the range 1–99. A value of 1 identifies the
- system log.
- + The journal number is required when you add a volume
- + to a journal, but is ignored otherwise, because CICS
- + keeps track of volume assignments to journals.

#### VOLUME(data-value)

- + specifies the 6-character volume serial number of the
  - volume that you are changing.

# **Conditions**

#### **INVREQ**

RESP2 values:

- 3 AVAILSTATUS has an invalid CVDA value.
- 4 ACTION has an invalid CVDA value.
- 5 ADD has been specified with no JOURNALNUM.
- 4 ADD has been specified for a volume already
   4 assigned to a journal.
- REMOVE has been specified for a volume that isnot closed.
- + 8 NOWRITE has been specified for a volume that is+ either empty or not closed.
- + 9 ADD has been specified for a journal that is not a+ tape journal.
- + 10 ADD has been specified for a journal not defined+ to use standard-labeled tapes.

#### **JIDERR**

**RESP2** values:

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.

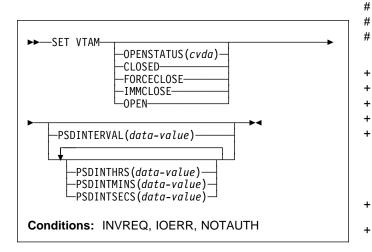
#### **VOLIDERR**

RESP2 values:

+ 1 The volume is not assigned to any journal.

# **SET VTAM**

+ Modify the CICS VTAM connection.



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

# Description

- + 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.

# - APAR PQ13599

added this paragraph

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/ESA Recovery and Restart Guide for a description of normal shutdown), and is restarted with the system initialization START option 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.

#### **APAR PQ01573** -

added this paragraph

- If CICS is using VTAM multi-node persistent sessions,
- + and VTAM has been restarted after an abend, opening
- + the VTAM ACB causes CICS to restore the persistent
- + sessions that VTAM has retained. However, CICS does
- + not restore APPC synclevel 2 sessions, which are
- + unbound.

#### | 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 option PSDINT (see the CICS/ESA System
- + Definition Guide for more about this option). 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.
- + If VTAM is below the level that supports persistent
  - sessions (Version 3.4.1), VTAM rejects the PSD request.
- + CICS then sets the PSDINT system option value to zero
  - and returns an INVREQ condition, but goes on to
- + continue any other processing you requested. The
- + INVREQ occurs when the value is passed to VTAM,
- + which may be later than the command that set it, as
- + explained above. Consequently, you can get this
- + condition on a command that does not specify a PSD
- + interval.

+

#

#

#

#

#

#

- + 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 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.
- The PSDINTHRS value is out of range.
- The PSDINTMINS value is out of range.
- The PSDINTSECS value is out of range.
- + 8 A PSDINTERVAL value > 0 was specified in an+ XRF-eligible system.
- + 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.
- Your OPEN request did not complete because
   another task subsequently requested a close of
   the VTAM connection.

- 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.

+

# **SET VTAM**

# | IOERR RESP2 values: 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 VTAM FDBK2 code in RESP2: you can look up these errors in the VTAM Programming manual, under ACB OPEN and CLOSE return codes. | 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 appendix 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

This appendix consists of three tables. The first, beginning below, is in character sequence of the CVDA values. The second, beginning on page 207, is in numeric sequence. The third, beginning on page 211, 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	
AUTONACTIVE	631	
AUTOPAGEABLE	80	
AUTOSTART	618	
AUXILIARY	247	
AUXPAUSE AUXSTART	313	
AUXSTART	312 314	
AVAILABLE	95	
BACKOUT	95 192	
BACKTRANS	397	
BASE	10	
DAGE	10	

CVDA	Value
BASESPACE	664
BDAM	2
BEGINSESSION BELOW	510 159
BGAM	63
BLK	47
BLOCKED	16
BROWSABLE	39
BSAM BTAM	61 62
BUSY	612
C	149
CANCEL	526
CD CANCELLED	624 491
CEDF	370
CICS	660
CICSDATAKEY	379
CICSEXECKEY CICSTABLE	381
CLEAR	101 640
CLOSED	19
CLOSELEAVE	261
CLOSEREQUEST	22
CLOSING   CMDPROT	21 673
CMDSECNO	205
CMDSECYES	207
COBOL	151
COBOLII COLDACQ	375 72
COLDQUERY	433
COLDSTART	266
COLOR	399
COMMIT CONFFREE	208 82
CONFRECEIVE	83
CONFSEND	84
CONNECTED	690
CONSOLE	66
CONTROLSHUT CONVERSE	623 600
CONVIDLE	518
COPY	401
CREATE	67
CTLGALL CTLGMODIFY	632 633
CTLGNONE	634
CTRLABLE	56
CURRENT	260
DAE DATA	684 508
DATASTREAM	543
DEC	46
DEFAULT	198
DEFRESP1 DEFRESP1OR2	497 528
DEFRESP2	498
DEFRESP3	499
DELAY	637
DELETABLE DELETEFAIL	43 520
DELETERALL	520

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CVDA	Value	CVDA	Value
DEREGERROR	679	INACTIVE	378
DEREGISTERED	678	INBOUND	547
DEST	235	INDIRECT	122
DISABLED	24	INITCOMPLETE	628
DISABLING	25	INOUT	532
DISCARDFAIL	513	INPUT	226
DISCREQ	444	INSERVICE	73
DISK1	252	INSTALLED	550
DISK2	253	INSTALLFAIL	512
DISK2PAUSE	254	INTRA	222
DISPATCHABLE	228	INTSTART	310
DPLSUBSET	383	INTSTOP	311
DS3270	615	INVALID	359
DUALCASE	403	, IRC	121
DYNAMIC	178	ISOLATE	658
EB	490	KATAKANA	415
EMERGENCY	268	KEYED	8
EMPTY	210	KSDS	6
EMPTYREQ	31	LE370	377
ENABLED	23	LIC	493
ESDS	5	LIGHTPEN	417
EVENT	334	LOCAL	605
EXCEPT	332	LOG	54
EXCEPTRESP	523	LOGICAL	216
EXCI	650	LOGTERM	269
EXCTL	48	LOSE	544
EXITTRACE	362	LPA	165
EXTENDEDDS	405	LUP	541
EXTRA	221	LUSTAT	525
EXTSECURITY	194	LUW	246
FAILEDBKOUT FAILINGBKOUT	357 358	LU61 MAIN	125 248
FCLOSE	273	MAP	155
FINALQUIESCE	183	MAPSET	155
FINPUT	270	MCHCTL	241
FIRSTINIT	625	MDT	506
FIRSTQUIESCE	182	MODEL	370
FIXED	12	MORE	492
FMH	502	MSRCONTROL	419
FMHPARM	385	NEGATIVE	530
FOPEN	272	NEWCOPY	167
FORCE	342	NEWSESSION	485
FORCECLOSE	351	NOALARM	500
FORCECLOSING	353	NOALTPRTCOPY	447
FORCEPURGE	237	NOAPLKYBD	392
FORMATEDF	606	NOAPLTEXT	394
FORMATTED	542	NOATI	76
FORMFEED	407	NOAUDALARM	396
FOUTPUT	271	NOAUTOARCH	263
FREE	85	NOBACKTRANS	398
FREEING	94	NOCEDF	371
FULL	212	NOCLEAR	641
FULLAPI	384	NOCMDPROT	674
FWDRECOVABLE	354	NOCOLOR	400
GENERIC	651	NOCONV	556
GMT	604	NOCONVERSE	601
GOINGOUT	172	NOCOPY	402
GTFSTART	317	NOCREATE	68
GTFSTOP	318	NOCTL	223
HEX	45	NODAE	685
HFORM	409	NODISCREQ	445
HILIGHT	413	NODUALCASE	404
HOLD	163	NOEMPTYREQ	32
IGNORE	1	NOEVERT	335
IMMCLOSE	350 353	NOEXCEPT	333
IMMCLOSING	352	NOEXCTL	49

	CVDA	Value	CVDA	Value
	NOEXITTRACE	363	NOTREADY	259
	NOEXTENDEDDS	406	NOTRECOVABLE	30
	NOFMH	503	NOTREQUIRED	667
	NOFMHPARM	386	NOTSOS	669
	NOFORMATEDF	607	NOTTABLE	100
	NOFORMFEED	408	NOTTI	78
	NOHFORM	410	NOTUPDATABLE	38
	NOHILIGHT NOHOLD	414 164	NOUCTRAN NOVALIDATION	451 441
ı	NOISOLATE	657	NOVACIDATION	412
1	NOKATAKANA	416	NOWAIT	341
	NOLIGHTPEN	418	NOWRITE	275
	NOLOG	55	NOZCPTRACE	365
	NOMDT	507	OBFORMAT	421
	NOMSGJRNL	531	OBOPERID	387
	NOMSRCONTROL	420	OBTAINING	96
	NONAUTOCONN	171	OFF	200
ı	NONCICS	661	OK	274
	NONE NOOBFORMAT	496 422	OLD OLDCOPY	26 162
	NOOBOPERID	388	OLDSESSION	486
	NOOUTLINE	424	ON	201
	NOPARTITIONS	426	OPEN	18
	NOPERF	331	OPENING	20
	NOPRESETSEC	243	OPENOUTPUT	257
	NOPRINTADAPT	428	OUTLINE	423
	NOPROGSYMBOL	430	OUTPUT	227
	NOPRTCOPY	449	OUTSERVICE	74
	NOQUERY	432	PAGEABLE	79
ı	NOREENTPROT	681	PARTITIONS	425
	NORELREQ	443	PARTITIONSET PATH	156 11
	NORMALBKOUT NORMALRESP	356 522	PENDBEGIN	558
	NOSECURITY	196	PENDDATA	560
	NOSHUTDOWN	289	PENDFREE	86
	NOSOSI	435	PENDING	126
	NOSTSN	487	PENDPASS	565
	NOSWITCH	285	PENDRECEIVE	87
- [	NOSYSCONNECT	654	PENDRELEASE	562
	NOSYNCPOINT	603	PENDSTART	561
	NOSYSDUMP	185	PENDSTSN	557
	NOTALTERABLE	42 53	PENDUNSOL PERF	564
	NOTALTERABLE NOTAPPLIC	53 1	PHASEIN	330 168
ı	NOTASKSTART	608	PHYSICAL	215
'	NOTBROWSABLE	40	PLI	152
1	NOTBUSY	613	PL1	152
•	NOTCDEB	495	POSITIVE	529
	NOTCONNECTED	691	POST	636
	NOTCTRLABLE	57	PRESETSEC	242
	NOTDEFINED	659	PRIMARY	110
	NOTDELETABLE	44	PRINTADAPT	427
	NOTEMPTY NOTERMINAL	211 214	PRIVATE PROGRAM	174 154
	NOTEXTKYBD	437	PROGRAM PROGSYMBOL	429
	NOTEXTRIBD	437	PROTECTED	504
	NOTEWDRCVBLE	361	PRTCOPY	448
	NOTINBOUND	546	PURGE	236
	NOTINIT	376	PURGEABLE	160
	NOTINSTALLED	551	READABLE	35
	NOTKEYED	9	READBACK	209
	NOTLPA	166	READONLY	275
	NOTPENDING	127	READY	258
	NOTPURGEABLE	161	RECEIVE	88
	NOTRANDUMP NOTREADABLE	187 36	RECOVERABLE RECOVERED	29 277
	NOTREADABLE	30	KECOVEKED	211

CVDA	Value	CVDA	Value
REENTPROT	680	SYSDUMP	184
REGERROR	677	SYSTEM	643
REGISTERED	670	SYSTEMOFF	320
RELATED	675	SYSTEMON	319
RELEASE	563	TAKEOVER	111
RELEASED	70	TAPE1	250
RELEASING	549	TAPE2	251
RELREQ	442	TASK	233
REMOTE	4	TASKSTART	611
REMOVE	276	TCAM	64
# REMTABLE	103	TCAMSNA	65
REQUIRED	666	TCEXITALL	366
RESET	290	TCEXITALLOFF	369
# RESSECINT	203	TCEXITACEOLI	368
RESSECNO	202	TCEXITIONE	367
RESSECTES	202	TERM	234
REVERTED	264		234
		TERMINAL	_
ROLLBACK	89	TEXTKYBD	436
ROUTE	638	TEXTPRINT	438
RRDS	7	THIRDINIT	627
RTR	527	TIMEOUT	511
RU	494	TPS55M2	552
RUNNING	229	TPS55M3	553
SCS	614	TPS55M4	554
SECONDINIT	626	TPS55M5	555
SEND	90	TRANDUMP	186
SESSION	372	TRANIDONLY	452
SESSIONFAIL	517	TTI	77
SESSIONLOST	516	T3278M2	533
SETFAIL	514	T3278M3	534
SHARE	27	T3278M4	535
SHARED	173	T3278M5	536
SHUTDOWN	288	T3279M2	537
SHUTDISABLED	645	T3279M3	538
SHUTENABLED	644	T3279M4	539
SIGNEDOFF	245	T3279M5	540
SIGNEDON	244	UCTRAN	450
SINGLEOFF	324	UNAVAILABLE	672
SINGLEON	323	UNBLOCKED	17
SMF	255	UNDEFINED	14
SOS	668	UNDETERMINED	355
SOSI	434	UNENABLED	33
SPECIFIC	652	UNPROTECTED	505
SPECTRACE	177	UNREGISTERED	671
SPRSTRACE	175	UNSOLDATA	521
STANDBY	629	UPDATABLE	37
STANTRACE	176	USER	642
START	635	USERDATAKEY	380
STARTED	609	USEREXECKEY	382
STARTUP	180	USEROFF	322
STATIC	179	USERON	321
STOPPED	610	USERTABLE	102
STSN	509	VALID	360
STSNSET	488	VALIDATION	440
STSNTEST	489	VARIABLE	13
SUBSPACE	663	VFORM	411
SURROGATE	371	VSAM	3
SUSPENDED	231	VTAM	60
SWITCH	188	WAIT	340
SWITCHALL	287	WARMSTART	340 267
SWITCHALL	225	WIN	545
SWITCHNEXT	225	XCF	545 665
		•	
SYNCFREE	91 92	XM	123
SYNCRECEIVE		XNOTDONE	144
SYNCSEND	93	XOK	143
SYSCONNECT	653	ZCPTRACE	364

		. Value	CVDA
CVDAs a	nd numeric values in numer	iC 69	ACQUIRED
sequence	•	70	RELEASED
•		71	ACQUIRING
Value	CVDA	72	COLDACQ
1	NOTAPPLIC	73	INSERVICE
1	IGNORE	74	OUTSERVICE
2	BDAM	75	ATI
3	VSAM	76	NOATI
4	REMOTE	77	TTI
5	ESDS	78	NOTTI
6	KSDS	79	PAGEABLE
7	RRDS KEYED	80 81	AUTOPAGEABLE ALLOCATED
8 9	NOTKEYED	82	CONFFREE
10	BASE	83	CONFRECEIVE
11	PATH	84	CONFSEND
12	FIXED	85	FREE
13	VARIABLE	86	PENDFREE
14	UNDEFINED	87	PENDRECEIVE
16	BLOCKED	88	RECEIVE
17	UNBLOCKED	89	ROLLBACK
18	OPEN	90	SEND
19	CLOSED	91	SYNCFREE
20	OPENING	92	SYNCRECEIVE
21	CLOSING	93	SYNCSEND FREEING
22 23	CLOSEREQUEST	94 95	AVAILABLE
23 24	ENABLED DISABLED	96	OBTAINING
25	DISABLING	100	NOTTABLE
26	OLD	101	CICSTABLE
27	SHARE	102	USERTABLE
29	RECOVERABLE	# 103	REMTABLE
30	NOTRECOVABLE	110	PRIMARY
31	EMPTYREQ	111	TAKEOVER
32	NOEMPTYREQ	121	IRC
33	UNENABLED	122	INDIRECT
35	READABLE	123	XM
36	NOTREADABLE	124 125	APPC
37 38	UPDATABLE NOTUPDATABLE	126	LU61 PENDING
39	BROWSABLE	127	NOTPENDING
40	NOTBROWSABLE	143	XOK
41	ADDABLE	144	XNOTDONE
42	NOTADDABLE	149	С
43	DELETABLE	150	ASSEMBLER
44	NOTDELETABLE	151	COBOL
45	HEX	152	PLI
46	DEC	152	PL1
47	BLK	154	PROGRAM
48	EXCTL	155	MAP
49	NOEXCTL	156	PARTITIONSET
52	ALTERABLE	158 159	ANY BELOW
53 54	NOTALTERABLE LOG	160	PURGEABLE
55 55	NOLOG	161	NOTPURGEABLE
56	CTRLABLE	162	OLDCOPY
57	NOTCTRLABLE	163	HOLD
60	VTAM	164	NOHOLD
61	BSAM	165	LPA
62	BTAM	166	NOTLPA
63	BGAM	167	NEWCOPY
64	TCAM	168	PHASEIN
65	TCAMSNA	169	ALLCONN
66	CONSOLE	170	AUTOCONN
67	CREATE	171 172	NONAUTOCONN
68	NOCREATE	172	GOINGOUT

Value	CVDA	Valu	e CVDA
173	SHARED	257	OPENOUTPUT
174	PRIVATE	258	READY
175	SPRSTRACE	259	NOTREADY
176	STANTRACE	260	CURRENT
177	SPECTRACE	261	CLOSELEAVE
178	DYNAMIC	262	AUTOARCH
179	STATIC	263	NOAUTOARCH
180	STARTUP	264	REVERTED
181	ACTIVE	265	ADVANCE
182	FIRSTQUIESCE	266	COLDSTART
183	FINALQUIESCE	267	WARMSTART
184	SYSDUMP	268	EMERGENCY
185	NOSYSDUMP	269	LOGTERM
186	TRANDUMP	270	FINPUT
187	NOTRANDUMP	271	FOUTPUT
188	SWITCH	272	FOPEN
192	BACKOUT	273	FCLOSE
194	EXTSECURITY	274	OK
196	NOSECURITY	275	READONLY
197	ALTERNATE	276	REMOVE
198	DEFAULT	277	RECOVERED
200	OFF	285	NOSWITCH
201	ON	286	SWITCHNEXT
202	RESSECNO	287	SWITCHALL
# 203	RESSECINT	288	SHUTDOWN
204	RESSECYES	289	NOSHUTDOWN
205	CMDSECNO	290	RESET
207	CMDSECYES	291	ADD
208	COMMIT	310	INTSTART
209	READBACK	311	INTSTOP
210	EMPTY	312	AUXSTART
211	NOTEMPTY	313	AUXPAUSE
212	FULL	314	AUXSTOP
213	TERMINAL	317	GTFSTART
214	NOTERMINAL	318	GTFSTOP
215	PHYSICAL	319	SYSTEMON
216	LOGICAL	320	SYSTEMOFF
221	EXTRA	321	USERON
222	INTRA	322	USEROFF
223	NOCTL	323	SINGLEON
224	ASACTL	324	SINGLEOFF
225	SWITCHING	330	PERF
226	INPUT	331	NOPERF
227	OUTPUT	332	EXCEPT
228	DISPATCHABLE	333	NOEXCEPT
229	RUNNING	334	EVENT
231	SUSPENDED	335	NOEVENT
233	TASK	340	WAIT
234	TERM	341	NOWAIT
235	DEST	342	FORCE
236	PURGE	350	IMMCLOSE
237	FORCEPURGE	351	FORCECLOSE
241	MCHCTL	352	IMMCLOSING
242	PRESETSEC	353	FORCECLOSING
243	NOPRESETSEC	354	FWDRECOVABLE
244	SIGNEDON	355	UNDETERMINED
245	SIGNEDOFF	356	NORMALBKOUT
246	LUW	357	FAILEDBKOUT
247	AUXILIARY	358	FAILINGBKOUT
248	MAIN	359	INVALID
250	TAPE1	360	VALID
251	TAPE2	361	NOTFWDRCVBLE
252	DISK1	362	EXITTRACE
253	DISK2	363	NOEXITTRACE
254 255	DISK2PAUSE SMF	364 365	ZCPTRACE NOZCPTRACE
200	SIVIF	305	NOZOFIRACE

Value	CVDA	Value	e CVDA
366	TCEXITALL	432	NOQUERY
367	TCEXITSYSTEM	433	COLDQUERY
368	TCEXITNONE	434	SOSI
369	TCEXITALLOFF	435	NOSOSI
370	MODEL	436	TEXTKYBD
370	CEDF	437	NOTEXTKYBD
371	SURROGATE	438	TEXTPRINT
371 372	NOCEDF SESSION	439 440	NOTEXTPRINT VALIDATION
373	APPCSINGLE	441	NOVALIDATION
374	APPCPARALLEL	442	RELREQ
375	COBOLII	443	NORELREQ
376	NOTINIT	444	DISCREQ
377	LE370	445	NODISCREQ
378	INACTIVE	446	ALTPRTCOPY
379	CICSDATAKEY	447	NOALTPRTCOPY
380	USERDATAKEY	448	PRTCOPY
381	CICSEXECKEY USEREXECKEY	449 450	NOPRTCOPY UCTRAN
382 383	DPLSUBSET	450	NOUCTRAN
384	FULLAPI	452	TRANIDONLY
385	FMHPARM	485	NEWSESSION
386	NOFMHPARM	486	OLDSESSION
387	OBOPERID	487	NOSTSN
388	NOOBOPERID	488	STSNSET
391	APLKYBD	489	STSNTEST
392	NOAPLKYBD	490	EB
393	APLTEXT	491	CD
394	NOAPLTEXT	492	MORE
395 396	AUDALARM NOAUDALARM	493 494	LIC RU
397	BACKTRANS	494	NOTCDEB
398	NOBACKTRANS	496	NONE
399	COLOR	497	DEFRESP1
400	NOCOLOR	498	DEFRESP2
401	COPY	499	DEFRESP3
402	NOCOPY	500	NOALARM
403	DUALCASE	501	ALARM
404	NODUALCASE	502	FMH
405	EXTENDEDDS NOEXTENDEDDS	503	NOFMH
406 407	FORMFEED	504 505	PROTECTED UNPROTECTED
407	NOFORMFEED	506	MDT
409	HFORM	507	NOMDT
410	NOHFORM	508	DATA
411	VFORM	509	STSN
412	NOVFORM	510	BEGINSESSION
413	HILIGHT	511	TIMEOUT
414	NOHILIGHT	512	INSTALLFAIL
415	KATAKANA	513	DISCARDFAIL
416	NOKATAKANA	514	SETFAIL ACQFAIL
417 418	LIGHTPEN NOLIGHTPEN	515 516	SESSIONLOST
419	MSRCONTROL	517	SESSIONFAIL
420	NOMSRCONTROL	518	CONVIDLE
421	OBFORMAT	519	ADDFAIL
422	NOOBFORMAT	520	DELETEFAIL
423	OUTLINE	521	UNSOLDATA
424	NOOUTLINE	522	NORMALRESP
425	PARTITIONS	523	EXCEPTRESP
426	NOPARTITIONS	524	ATTENTION
427	PRINTADAPT	525	LUSTAT
428 429	NOPRINTADAPT PROGSYMBOL	526 527	CANCEL RTR
430	NOPROGSYMBOL	528	DEFRESP1OR2
431	ALLQUERY	529	POSITIVE
		020	. 332

Value	CVDA	Value	CVDA
530	NEGATIVE	635	START
531	NOMSGJRNL	636	POST
532	INOUT	637	DELAY
533	T3278M2	638	ROUTE
534	T3278M3	640	CLEAR
535	T3278M4	j 641	NOCLEAR
536	T3278M5	i 642	USER
537	T3279M2	643	SYSTEM
538	T3279M3	644	SHUTENABLED
539	T3279M4	645	SHUTDISABLED
540	T3279M5	650	EXCI
541	LUP	651	GENERIC
542	FORMATTED	652	SPECIFIC
543	DATASTREAM	653	SYSCONNECT
544	LOSE	654	NOSYSCONNECT
545	WIN	657	NOISOLATE
546	NOTINBOUND	658	ISOLATE
547	INBOUND	659	NOTDEFINED
549	RELEASING	660	CICS
550	INSTALLED	661	NONCICS
551	NOTINSTALLED	663	SUBSPACE
552	TPS55M2	664	BASESPACE
553	TPS55M3	665	XCF
554	TPS55M4	666	REQUIRED
555	TPS55M5	667	NOTREQUIRED
556	NOCONV	668	SOS
557	PENDSTSN	669	NOTSOS
558 550	PENDBEGIN	670	REGISTERED
559 560	APPLICATION PENDDATA	671   672	UNREGISTERED UNAVAILABLE
561	PENDSTART	675	RELATED
562	PENDRELEASE	677	REGERROR
563	RELEASE	678	DEREGISTERED
564	PENDUNSOL	679	DEREGERROR
565	PENDPASS	684	DAE
600	CONVERSE	685	NODAE
601	NOCONVERSE	690	CONNECTED
602	SYNCPOINT	691	NOTCONNECTED
603	NOSYNCPOINT		
604	GMT		
605	LOCAL		
606	FORMATEDF		
607	NOFORMATEDF		
608	NOTASKSTART		
609	STARTED		
610	STOPPED		
611	TASKSTART		
612	BUSY NOTBUSY		
613   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		

## +CVDA values for the DEVICE option

#### **CVDA** sequence **BATCHLU** 191 **BIPROG** 160 **BISYNCH** 128 **CDRDLPRT** 24 CONTNLU 189 **HARDCOPY** 32 INTACTLU 190 ISCMMCONV 209 210 LUCMODGRP **LUCSESS** 211 LUTYPE4 193 LUTYPE6 192 MAGTAPE 20 208 RESSYS SDLC 176 **SEQDISK** 18 SYSTEM3 161 SYSTEM7 2 SYS370 164 SYS7BSCA 166 **TCONSOLE** 8 **TELETYPE** 34 80 TTCAM 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

Numeric seq	uence
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 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
VOLIDERR	71	47	AEXV

# 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/ESA Problem Determination Guide.

Command	Code
ACQUIRE TERMINAL COLLECT STATISTICS + CREATE CONNECTION + CREATE FILE + CREATE LSRPOOL	86 02 70 08 30 0E 30 14 30 16
+ CREATE MAPSET + CREATE PARTITIONSET + CREATE PARTNER + CREATE PROFILE + CREATE PROGRAM	30 04 30 06 30 18 30 0A 30 02
+ CREATE SESSIONS + CREATE TERMINAL + CREATE TRANCLASS + CREATE TRANSACTION + CREATE TYPETERM	30 12 30 10 30 1A 30 08 30 0C
DISCARD AUTINSTMODEL DISCARD FILE DISCARD PARTNER DISCARD PROFILE DISCARD PROGRAM	42 10 4C 10 44 10 46 10 4E 10
DISCARD TRANCLASS DISCARD TRANSACTION INQUIRE AUTINSTMODEL INQUIRE AUTOINSTALL INQUIRE CONNECTION	5E 18 50 10 42 02 68 12 58 02
INQUIRE DSNAME INQUIRE DUMPDS INQUIRE EXITPROGRAM INQUIRE FILE INQUIRE IRC	7A 02 66 02 88 02 4C 02 6E 02

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Command	Code	Code	Command
INQUIRE JOURNALNUM INQUIRE MODENAME INQUIRE MONITOR INQUIRE NETNAME INQUIRE NETNAME	60 02 5A 02 70 12 52 16 52 06	42 02 42 10 44 02 44 10 46 02	INQUIRE AUTINSTMODEL DISCARD AUTINSTMODEL INQUIRE PARTNER DISCARD PARTNER INQUIRE PROFILE
INQUIRE PARTNER INQUIRE PROFILE INQUIRE PROGRAM INQUIRE REQID INQUIRE STATISTICS	44 02 46 02 4E 02 8A 02 70 02	46 10 4C 02 4C 04 4C 10 4E 02	DISCARD PROFILE INQUIRE FILE SET FILE DISCARD FILE INQUIRE PROGRAM
INQUIRE STORAGE INQUIRE SYSDUMPCODE INQUIRE SYSTEM INQUIRE TASK INQUIRE TCLASS	5E 08 66 22 54 02 5E 02 5E 12	4E 04 4E 10 50 02 50 04 50 10	SET PROGRAM DISCARD PROGRAM INQUIRE TRANSACTION SET TRANSACTION DISCARD TRANSACTION
INQUIRE TDQUEUE INQUIRE TERMINAL INQUIRE TERMINAL INQUIRE TRACEDEST INQUIRE TRACEFLAG	5C 02 52 12 52 02 78 02 78 12	52 02 52 04 52 06 52 08 52 12	INQUIRE TERMINAL SET TERMINAL INQUIRE NETNAME SET NETNAME INQUIRE TERMINAL
INQUIRE TRACETYPE INQUIRE TRANCLASS INQUIRE TRANDUMPCODE INQUIRE TRANSACTION INQUIRE TSQUEUE	78 22 5E 1A 66 12 50 02 80 02	52 14 52 16 54 02 54 04 58 02	SET TERMINAL INQUIRE NETNAME INQUIRE SYSTEM SET SYSTEM INQUIRE CONNECTION
INQUIRE VOLUME INQUIRE VTAM PERFORM DUMP PERFORM RESETTIME PERFORM SECURITY	62 02 68 02 7E 04 72 02 64 02	58 04 5A 02 5A 04 5C 02 5C 04	SET CONNECTION INQUIRE MODENAME SET MODENAME INQUIRE TDQUEUE SET TDQUEUE
PERFORM SHUTDOWN PERFORM STATISTICS SET AUTOINSTALL SET CONNECTION SET DSNAME	76 02 70 06 68 14 58 04 7A 04	5E 02 5E 04 5E 08 5E 1A 5E 1C	INQUIRE TASK SET TASK INQUIRE STORAGE INQUIRE TRANCLASS SET TRANCLASS
SET DUMPDS SET FILE SET IRC SET JOURNALNUM SET MODENAME	66 04 4C 04 6E 04 60 04 5A 04	5E 12 5E 14 5E 18 60 02 60 04	INQUIRE TCLASS SET TCLASS DISCARD TRANCLASS INQUIRE JOURNALNUM SET JOURNALNUM
SET MONITOR SET NETNAME SET PROGRAM SET STATISTICS SET SYSDUMPCODE	70 14 52 08 4E 04 70 04 66 24	62 02 62 04 64 02 66 02 66 04	INQUIRE VOLUME SET VOLUME PERFORM SECURITY INQUIRE DUMPDS SET DUMPDS
SET SYSTEM SET TASK SET TCLASS SET TDQUEUE SET TERMINAL	54 04 5E 04 5E 14 5C 04 52 14	66 12 66 14 66 22 66 24 68 02	INQUIRE TRANDUMPCODE SET TRANDUMPCODE INQUIRE SYSDUMPCODE SET SYSDUMPCODE INQUIRE VTAM
SET TERMINAL SET TRACEDEST SET TRACEFLAG SET TRACETYPE SET TRANCLASS	52 04 78 04 78 14 78 24 5E 1C	68 04 68 12 68 14 6E 02 6E 04	SET VTAM INQUIRE AUTOINSTALL SET AUTOINSTALL INQUIRE IRC SET IRC
SET TRANDUMPCODE SET TRANSACTION SET VOLUME SET VTAM	66 14 50 04 62 04 68 04	70 02 70 04 70 06 70 08 70 12	INQUIRE STATISTICS SET STATISTICS PERFORM STATISTICS COLLECT STATISTICS INQUIRE MONITOR

Code	Command	78 24	SET TRACETYPE
70 14	SET MONITOR	7A 02	INQUIRE DSNAME
72 02	PERFORM RESETTIME	7A 04	SET DSNAME
76 02	PERFORM SHUTDOWN	7E 04	PERFORM DUMP
78 02	INQUIRE TRACEDEST	80 02	INQUIRE TSQUEUE
78 04	SET TRACEDEST	86 02	ACQUIRE TERMINAL
78 12	INQUIRE TRACEFLAG	88 02	INQUIRE EXITPROGRAM
78 14	SET TRACEFLAG	8A 02	INQUIRE REQID
78 22	INQUIRE TRACETYPE		

# 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 4 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 5 on page 221, Table 6 on page 222, and Table 7 on page 223.

Table 4 (Page	1	of 4).	RESP2 values corresponding to re	nessages
---------------	---	--------	----------------------------------	----------

able 4 (Page RESP2	1 of 4). RES	SP2 values corresponding to messages  Description or message
	Codes cause	d by syntactical errors
<i>n</i> ,400	DFHCA5211	A misplaced delimiter occurs in ATTRIBUTES. The invalid delimiter is at offset <i>n</i> in the ATTRIBUTES string.
<i>n</i> ,401	DFHCA5204	A keyword specified within ATTRIBUTES is invalid. The invalid keyword is at offset <i>n</i> in the ATTRIBUTES string.
n,402		A keyword within ATTRIBUTES cannot be uniquely identified from its abbreviation. The invalid keyword is at offset <i>n</i> in the ATTRIBUTES string.
<i>k</i> ,403	DFHCA5501	A required keyword is omitted. The omitted keyword has code <i>k</i> in Table 5, Table 6, and Table 7.
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 5, Table 6, and Table 7.
k,406	DFHCA5206	A keyword occurs more than once within ATTRIBUTES. The duplicate keyword has code <i>k</i> in Table 5, Table 6, and Table 7.
<i>k</i> ,407		Conflicting keywords are specified. The keyword causing the conflict has code <i>k</i> in Table 5, Table 6, and Table 7.
<i>k</i> ,410	DFHCA5519 DFHCA5521	An invalid operand is supplied for a keyword within ATTRIBUTES. The keyword in error has code <i>k</i> in Table 5, Table 6, and Table 7.
<i>k</i> ,411	DFHCA5207	An operand is supplied for a keyword that does not need one. The keyword in error has code <i>k</i> in Table 5, Table 6, and Table 7.

Table 4 (Page RESP2	1 of 4). RES Msqid	SP2 values corresponding to messages  Description or message
k,412		A required operand for a keyword
		within ATTRIBUTES is omitted. The
		keyword in error has code k in
<i>k</i> ,413	DEUC AEE 17	Table 5, Table 6, and Table 7.
K,413	DEHCASSIT	The operands of two or more keywords conflict with one another.
		The first conflicting keyword detected
		has code k in Table 5, Table 6, and
6.44.4	DELICATEON	Table 7.
<i>k</i> ,414	DFHCA5507	The value of the operand of a keyword within ATTRIBUTES is too small. The
		keyword in error has code <i>k</i> in
		Table 5, Table 6, and Table 7.
<i>k</i> ,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 5, Table 6,
	DELIGATE 00	and Table 7.
<i>k</i> ,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 <i>k</i> in
417	DEHCA5523	Table 5, Table 6, and Table 7. The specified resource cannot be
717		created with this command. The
		resource name is reserved for CICS
440	DELICATEON	USE.
418	DFHCA5527	CICS internal programs (whose names begin with DFH) cannot be given
		attributes that specify remote
	551101-01-	execution.
<i>k</i> ,419	DFHCA5217	A closing parenthesis has been omitted from a DESCRIPTION
		keyword within ATTRIBUTES. The
		keyword in error (DESCRIPTION) has
		code <i>k</i> in Table 5, Table 6, and
		Table 7.
	•	ors deleting existing resources
500		Install failed because the resource is
	DFHAM4842 DFHAM4834	currently in use.
	DFHAM4896	
	DFHZC5913	
501	DFHAM4841	Install failed because definition of
		restype resname is in use by task no. taskno (transaction id. tranid).
501	DFHZC5980	Resource <i>resource</i> 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 <i>restype id</i> failed. It needs
		to be set out of service.
504		Install specified a resource that cannot be replaced
	DI 11200330	be replaced.

DFHZC5916 Deletion of terminal termid failed. It has pending DFHZCP activity.

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, -	,	SP2 values corresponding to messages		,	6P2 values corresponding to messages
RESP2	Msgid	Description or message	RESP2	Msgid	Description or message
505	DFHZC5918	Deletion of terminal <i>termid</i> Console <i>consname</i> failed. It has pending	602		Install for resource <i>resource</i> failed.  Modename parameter not found.
		DFHZCP activity.	603	DFHZC5906	Install failed because xxxx is not a
506	DFHZC5914	Deletion of terminal <i>termid</i> found another deletion of it in progress.			permitted value for a terminal or connection name.
506	DFHZC5937	Deletion of modename modename	604	DFHZC5933	Install for modename modename
		found another deletion of it in progress.			failed. Connection <i>cccc</i> is not valid here.
507	DEH7C5902	Deletion of terminal <i>termid</i> failed.	607	DEHAM4870	Install failed for program <i>progname</i> -
007	D1 11200002	BMS Paging session still active.	001	D1 11/10/1-070	language RPG is not supported under
508	DFH7C5917	Deletion of terminal <i>termid</i> failed.			MVS.
000	D111200017	Error message writer still active.	620	DFHZC5912	Install for terminal <i>termid</i> failed. It is
509	DFHZC5904	Deletion of terminal <i>termid</i> failed.	020	D111200012	incompatible with connection <i>cccc</i> .
		CEDF is still active.	620	DFHZC5949	Install for sessions ssss failed. It is
510	DFHZC5941	Install for terminal termid failed.			incompatible with connection cccc.
		Console consname has a conversation	621	DFHZC5900	System sysid has shipped definitions
		outstanding.			but connection <i>cccc</i> is not known to
511	DFHZC5907	Deletion of remote shipped terminal			this system.
		failed for connection cccc.	622	DFHZC5921	Install of terminal termid failed. VTAM
512	DFHZC5925	Deletion of connection cccc failed. Its			support not loaded.
		AID-Chains are not empty	622	DFHZC5988	Install for resource resource failed.
513	DFHZC5929	Deletion of connection cccc failed. It			VTAM support not generated.
		is in use by <i>n</i> indirect connections.	623	DFHZC5909	Install of resource resource failed.
514	DFHZC5938	Deletion of modename modename			Call to DFHIRP irp_function
		failed. Unable to delete session(s).			Return_code did not succeed, See
515	DFHZC5951	Deletion of connection ssss failed.			DFHIRSDS for return code.
		Unable to delete sessions.	624	DFHZC5931	Install for modename modename
516	DFHZC5945	Deletion of sessions ssss failed.			failed. Maximum number of APPC
5.17	DEL 1705050	Connection <i>cccc</i> is defined to IRC.	225	DELIZO5070	sessions would have been exceeded.
517	DFHZC5952	Deletion of terminal <i>termid</i> failed. It	625	DFHZC5973	Install for sessions ssss failed. Max
540	DELIZO5000	needs to be SET RELEASED.			session-count reached for modename
518	DFHZC5969	Deletion of dependent modename(s)	000	DELIZOFOFF	modename.
519	DEUZCE074	failed for connection <i>modername</i> .	626	DFHZC5955	SESNUMB greater than DLTHRED in
519	DFHZC3974	Deletion of pool <i>pppp</i> failed. Unable to delete pool entries.	627	DEH2C5034	the SIT ( <i>nnnn</i> ). Install for modename <i>modename</i>
520	DEH7C5979	Deletion of pool <i>pppp</i> failed. It still has	021	DF112C3934	failed. Single-session connection <i>cccc</i>
320	DI 112000110	session <i>termid</i> .			is already in use.
520	DFHZC5982	Deletion of pool <i>pppp</i> failed. Pool	628	DFHZC5936	Install for modename modename
		entry is in use for <i>termid</i> .			failed. Connection cccc has active
521	DFHZC5958	Install failed for xxxx. This is the			modegroup xxxx.
		name of the local system, which must	629	DFHZC5939	Install for <i>name</i> failed. Duplicate
		not be replaced.			session- or modegroup-name for
522	DFHZC5940	Install for terminal termid failed. Error			connection sysid.
		console cannot be deleted.	630	DFHZC5946	Install for sessions ssss failed.
523	DFHZC5989	Deletion of resource resource failed.			Connection cccc is defined to IRC.
		Remote deletion in connection cccc	631	DFHZC5948	Install for sessions ssss failed.
		failed.			Connection <i>cccc</i> is not suitable for
524	DFHZC5943	MRO connection <i>conname</i> cannot be			IRC.
		deleted because IRC is open.	632	DFHZC5954	Install for resource resource failed.
Codes ca	used by erro	rs in installing the new resource	200	DEL 1705000	Unable to install sessions component.
	•	-	633	DFHZC5963	operation RUSIZE xxxx from terminal
600	DFH106000	The definition for TERMINAL termdef			termid was greater than TYPETERM
		refers to an undefined TYPETERM	004	DELIZOFOCZ	RUSIZE yyyy.
600	DELITO6004	termtype.	634	DFHZC5967	Install for modename modename
600	DFH106001	The definition for pooled TERMINAL termdef refers to an undefined	625	DEUZCEOGO	failed. Unable to install sessions.
			635	DFHZC3900	Unable to install LU Services Manager for modename <i>modename</i> .
601	DEHTO6002	TYPETERM <i>termtype</i> . The definition for SESSIONs <i>sesdef</i>	636	DEH7C5981	Pool <i>pppp</i> not found.
001	J1111 00002	refers to an undefined CONNECTION	637		Install for resource resource failed.
		condef.	037	DI 11203903	Unable to install connection
601	DFH7C5911	Install for resource resource failed.			component.
001	DI 11200911	Connection <i>cccc</i> not found.	638	DEHTO6003	TERMINAL <i>termdef</i> specifies
601	DFHZC5932	Install for modename <i>modename</i>	330	2	CONSOLE but refers to TYPETERM
001		failed. Connection <i>cccc</i> not found.			termtype which does not specify
					DEVICE=CONSOLE.

Table 4 (Page	3 of 4). RES	SP2 values corresponding to messages	Table 4 (Page	3 of 4). RES	SP2 values corresponding to messages
RESP2	Msgid	Description or message	RESP2	Msgid	Description or message
639	DFHTO6004	TERMINAL termdef does not specify CONSOLE but refers to TYPETERM termtype which specifies	660	DFHZC6331	Install for connection <i>ttt</i> failed.  Non-VTAM terminal with same name already exists.
640	DFHTO6005	DEVICE=CONSOLE. PRINTER or ALTPRINTER for TERMINAL termdef is invalid for the	660	DFHZC6332	Install for terminal <i>tttt</i> failed.  Non-VTAM terminal with same name already exists.
		DEVICE specified in TYPETERM termtype.	661	DFHZC5950	Install for terminal <i>termid</i> failed.  Console <i>consname</i> already exists.
641	DFHTO6006	PRINTERCOPY or ALTPRINTERCOPY for TERMINAL termdef is invalid for the DEVICE	662	DFHZC6310	Install for terminal <i>termid</i> failed. Console <i>consname</i> must be defined by ID not name.
642	DFHTO6007	specified in TYPETERM termtype. AUTINSTMODEL YES ONLY for TERMINAL termdef is invalid for the	663		Install for terminal <i>termid</i> failed. Console ID <i>conslid</i> does not map to a console name known to MVS.
		DEVICE specified in TYPETERM termtype.	664	DFHZC6330	Install for <i>tttt</i> failed. LDCLIST parameter <i>Idclist</i> not found.
643 644	DFHTO6008 DFHTO6009	The definition for SESSIONs sesdef	665	DFHZC6333	INSTALL for modename <i>modename</i> failed. Zero sessions specified.
	DELITO6040	refers to CONNECTION condef which specifies a different PROTOCOL.	666		Resource cannot be installed with specified userid because of a security
645	DFH106010	The definition for SESSIONs sesdef must specify PROTOCOL LU61 as it refers to an MRO CONNECTION	667	DFHZC6362	error. Install for terminal <i>portname</i> with userid <i>userid</i> failed because the preset
646	DFHTO6011	condef. SESSIONs sesdef must specify both SENDCOUNT and RECEIVECOUNT as it refers to an MRO CONNECTION condef.	668	DFHZC6363	userid has been revoked. Install for terminal portname with userid userid failed because the preset userid's group access has been revoked.
647	DFHTO6013	No SESSIONs definition refers to CONNECTION condef.	669	DFHZC6364	Install for terminal <i>portname</i> with userid <i>userid</i> failed because the ESM
648	DFHTO6014	POOL is required for TERMINAL termdef as it refers to TYPETERM typedef which specifies SESSIONTYPE=PIPELINE.	670	DFHZC6365	returned an unrecognized response. Install for terminal <i>portname</i> with userid <i>userid</i> failed because the external security manager is inactive.
649	DFHTO6015	TRANSACTION for TERMINAL termdef is invalid for the DEVICE specified in TYPETERM typedef.	671	DFHZC6366	Install for terminal <i>portname</i> with userid <i>userid</i> failed because the userid is not authorized to access this CICS
650	DFHTO6016	The MRO CONNECTION condef is referenced by more than one SESSIONs definition, including sesdef.	672	DFHZC6367	system. Install for terminal <i>termid</i> with userid <i>userid</i> failed because the SECLABEL
651	DFHTO6017	REMOTESYSTEM for TERMINAL termid is invalid for the DEVICE specified in TYPETERM typeterm.	673	DFHZC6368	check failed. Install for terminal portname with userid userid failed because the
652	DFHTO6018	TERMINAL <i>termid</i> refers to TYPETERM <i>typeterm</i> which has an invalid ALTSCREEN.	674	DFHZC6369	external security manager is quiesced. Install for terminal <i>portname</i> failed because national language <i>langcode</i> is
653	DFHTO6020	SESSIONS sesdef refers to single-session CONNECTION condef but has an invalid MAXIMUM option specified.	675	DFHZC6370	invalid. Install for terminal <i>portname</i> failed because national language <i>langcode</i> is unavailable.
654	DFHTO6023	Connection definition @BCH detected. Batch shared database connections are not supported.	676	DFHZC6371	Install for terminal <i>portname</i> with userid <i>userid</i> failed because the userid is not authorized to use this portname.
655	DFHTO6025	The definition for LU6.1 SESSIONs sesdef specifies a send or receive count with no prefix.	677		Install for <i>type(id)</i> has failed. It would make a loop of connection definitions.
656	DFHZC6301	Install for tttt failed. Duplicate	Cod	es caused by	CICS internal logic errors
		netname <i>netname</i> for resource <i>rrrr</i> found.	900	DFHTO6012	The catalog dataset is not available. RDO function is restricted.
657	DFHZC6302	Install for connection <i>cccc</i> failed.  Duplicate netname <i>netname</i> for resource <i>rrrr</i> found.	901 902		Unable to connect to CICS catalog. Unable to disconnect the CICS catalog.
658	DFHZC6303	Install for <i>tttt</i> failed. Duplicate netname <i>netname</i> found.	903 904		Invalid ZC catalog request code xxxx. Level mismatch with catalog record. DFHBS xxx.

Table 4 (Page 4 of 4). RESP2 values corresponding to messages RESP2 Msgid Description or message 905 DFHAM4898 Install failed because sufficient storage DFHZC5901 could not be obtained. 906 DFHZC6200 Could not obtain DWE storage. 907 DFHZC6203 Unable to obtain DWE action-list storage. DFHZC6214 Unable to obtain recovery record 908 storage. 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 956 DFHZC6341 Loop or ABEND has been detected in inmodule by module bymodule.

Table 5 (Page 1 of 2). Keywords associated with keyword numbers. CREATE CONNECTION through CREATE MAPSET.

Keyword number EXEC CICS CREATE command names

number	Neywords associated wi		CICS CREATE command		I JL I.
Hamber	CONNECTION	FILE	Oldo Gillari E dominiana	LSRPOOL	MAPSET
1 1	CONNECTION	FILE		LSRPOOL	MAPSET
5	NETNAME	(RESSECNUM) #		20.11 002	(RSL) #
6	INDSYS	DSNAME		MAXKEYLENGTH	DESCRIPTION
7	SECURITYNAME	RECORDSIZE		SHARELIMIT	DECORUIT HOIL
8	(BINDPASSWORD) #			STRINGS	
9	(BINDI AGGWOND)	JOURNAL		DATA512	
10	REMOTESYSTEM	REMOTESYSTEM		DATA312 DATA1K	
11	REMOTENAME			DATAIK DATA2K	
	-	REMOTENAME			
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				DESCRIPTION	
22				INDEX512	
23				INDEX1K	
24				INDEX2K	
25				INDEX4K	
26				INDEX8K	
27	REMOTESYSNET			INDEX12K	
28				INDEX16K	
29				INDEX20K	
30				INDEX24K	
31				INDEX28K	
32				INDEX32K	
33				HSDATA4K	
34				HSDATA8K	
35				HSDATA12K	
36				HSDATA16K	
37				HSDATA20K	
38				HSDATA24K	
39				HSDATA28K	
40				HSDATA32K	
41				HSINDEX4K	
42				HSINDEX8K	
43				HSINDEX12K	
44				HSINDEX16K	
45				HSINDEX20K	
46				HSINDEX24K	
47				HSINDEX28K	
48				HSINDEX32K	
97	INSERVICE	STATUS			STATUS
98	AUTOCONNECT	RECOVERY			
99	PROTOCOL	OPENTIME			
100	ACCESSMETHOD	DISPOSITION			RESIDENT
101	SINGLESESS	ADD			USAGE
102	DATASTREAM	BROWSE			USELPACOPY
103	RECORDFORMAT	DELETE			3322.7.001 1
103	ATTACHSEC	READ			
105	BINDSECURITY	UPDATE			
106	CONNTYPE	JNLSYNCREAD			
107	PSRECOVERY	JNLSYNCWRITE			
107	· SILLOUVEINI	JNLREAD			
109		JNLUPDATE			
110	USEDFLTUSER	JNLADD			
111	COLDI LI OOLIK	DSNSHARING			
		_0.10.1/111110			

<sup>#</sup> Keywords in parentheses, such as (RSL), are obsolete but are retained for cross-release compatibility.

Table 5 (Page 2 of 2). Keywords associated with keyword numbers. CREATE CONNECTION through CREATE MAPSET.

Keyword number	umber EXEC CICS CREATE command names			
•	CONNECTION	FILE	LSRPOOL	MAPSET
112		RECORDFORMAT		
113		TABLE		
114		BACKUPTYPE		
115		RLSACCESS		
116		READINTEG		

Note:

Table 6. 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	
1	0	XTPNAME				
1	1				RECEIVEPFX	
1	2				RECEIVECOUNT	
1	3				SENDPFX	
1	4				SENDCOUNT	
1	5				(OPERID) #	
1	6				(OPERPRIORITY) #	
	7				(OPERRSL) #	
1	8				(OPERSECURITY) #	
1	9				USERID	
	0				SENDSIZE	
	1				RECEIVESIZE	
	2				(TRANSACTION) #	
	3				SESSPRIORITY	
	4				USERAREALEN	
	5				IOAREALEN	
	7				NEPCLASS	
	8				DESCRIPTION	
-	7 STATUS			STATUS	(INSERVICE) #	
	8		SCRNSIZE	LANGUAGE	AUTOCONNECT	
	9		MSGJRNL	RELOAD	BUILDCHAIN	
10			MSGINTEG	RESIDENT	PROTOCOL	
10			ONEWTE	USAGE	RELREQ	
10			PROTECT	USELPACOPY	DISCREQ	
10			DVSUPRT	CEDF	RECOVOPTION	
10			INBFMH	DATALOCATION	(RECOVNOTIFY) #	
10			RAQ	EXECKEY		
10			LOGREC			
10			PRINTERCOMP	EXECUTIONSET		
10			CHAINCONTROL			
10	9		UCTRAN			

Note:

<sup>1</sup> Keyword number 1 always refers to the first operand of the CREATE command; that is, the resource being created.

<sup>1</sup> Keyword number 1 always refers to the first operand of the CREATE command; that is, the resource being created.

<sup>#</sup> Keywords in parentheses, such as (RSL), are obsolete but are retained for cross-release compatibility.

Table 7 (Page 1 of 2). Keywords associated with keyword numbers. CREATE TERMINAL through CREATE TYPETERM.

Keyword number	TERMINAL	CICS CREATE commo 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	
9	CONSOLE		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			TRANCLASS	USERAREALEN
25			RUNAWAY	IOAREALEN
26	SECURITYNAME		WAITTIME	
27	BINDPASSWORD			NEPCLASS
28	DESCRIPTION			DESCRIPTION
29	NATLANG			
30	CONSNAME			
33	REMOTESYSNET		0747110	
97	INSERVICE		STATUS	41.T0000NNIF0T
98	PRINTERCOPY		LOCALQ	AUTOCONNECT
99	ALTPRINTCOPY		INDOUBT	SHIPPABLE
100	AUTINSTMODEL		RESTART	APLKYBD
101 102	ATTACHEC		SPURGE	APLTEXT
103	ATTACHSEC BINDSECURITY		TPURGE DUMP	AUDIBLEALARM COLOR
103	USEDFLTUSER		EXTSEC	COPY
105	OSEDIETOSEK		RESSEC	DUALCASEKYBD
106			TRACE	EXTENDEDDS
107			DYNAMIC	HILIGHT
108			CMDSEC	KATAKANA
109			TASKDATALOC	LIGHTPEN
110			TASKDATAKEY	MSRCONTROL
111			STORAGECLEAR	OBFORMAT
112			SHUTDOWN	PARTITIONS
113			ISOLATE	PRINTADAPTER
114			CONFDATA	PROGSYMBOLS
115				VALIDATION
116				FORMFEED
117				HORIZFORM
118				VERTICALFORM
119				TEXTKYBD
120				TEXTPRINT
121				QUERY
122				OUTLINE
123				SOSI
124				BACKTRANS
125				ASCII
126				BRACKET
127				FMHPARM
128				OBOPERID

<sup>#</sup> Keywords in parentheses, such as (RSL), are obsolete but are retained for cross-release compatibility.

Table 7 (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
129				AUTOPAGE
130				ERRLASTLINE
131				ERRINTENSIFY
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:

<sup>1</sup> Keyword number 1 always refers to the first operand of the CREATE command; that is, the resource being created.

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