

CICS Exceptional Conditions

Whenever you issue an EXEC CICS command there is the potential for something to go wrong. This type of event is called an Exceptional Condition.

Exceptional Conditions are a normal occurrence, and in most cases we can predict they will occur and write code in our programs to deal with them. So, for example, when we add a new record to a file we would anticipate that a Duplicate Record situation might occur.

In the CICS Application Programmers Reference (Chapter 2) is an alphabetical list of every available CICS command. For each command a section is included called 'Conditions'. This is a list of every Exceptional Condition that could occur during execution of that command.

In theory a programmer would write code for every Exceptional Conditional that could occur. This is, however, unnecessary and impractical because the vast majority of conditions will never occur. We do, however, commonly write code to deal with Conditions that may occur.

Note that when an Exceptional Condition does occur that the programmer has not dealt with an ABEND (abnormal End) will occur. A list of common ABEND codes is at the end of this description.

To deal with an Exceptional Condition in your code use the following:

```
EXEC CICS HANDLE CONDITION condition-name(paragraph-to-transfer-to)  
  
END-EXEC.
```

Note that one HANDLE CONDITION statement can accommodate multiple conditions, just continue the list of condition name and corresponding paragraph names.

This statement is read as following:

If *condition-name* occurs during execution of this program then branch (GO TO) to *paragraph-to-transfer-to*.

In the majority of cases the HANDLE CONDITION statement is placed at the start of the Procedure Division.

EXAMPLE

EXEC CICS HANDLE CONDITION MAPFAIL(100-FIRST-TIME)

NOTFND(500-RECORD-NOT-FOUND)

END-EXEC.

Exceptional Condition keywords can be located in the Application Programmers Reference, and common keywords will be discussed when commands are introduced in class.

Code	Condition
AEI0	PGMIDERR
AEI1	TRANSIDERR
AEI2	ENDDATA
AEI3	INVTREQ
AEI8	TSIOERR
AEI9	MAPFAIL
AEIA	ERROR
AEID	EOF
AEIE	EOS
AEIG	INBFMH
AEIH	ENDINPT
AEII	NONVAL
AEIJ	NOSTART
AEIK	TERMIDERR
AEIL	FILENOTFOUND
AEIM	NOTFND
AEIN	DUPREC
AEIO	DUPKEY
AEIP	INVREQ
AEIQ	IOERR
AEIR	NOSPACE
AEIS	NOTOPEN
AEIT	ENDFILE
AEIU	ILLOGIC
AEIV	LENGERR
AEIW	QZERO
AEIZ	ITEMERR
AEXL	DISABLED
AEY0	INVEXITREQ
AEY1	INTPARTNSET
AEY2	INVPARTN
AEY3	PARTNFAIL
AEYA	INVERRTERM
AEYB	INVMPSZ
AEYC	IGREQID
AEYE	INVLDC
AEYH	QIDERR
AEYJ	DSSTAT
AEYK	SELNERR
AEYM	UNEXPIN
AEYN	NOPASSBKRD
AEYO	NOPASSBKWR
AEYP	SEGIDERR
AEYQ	SYSIDERR
AEYR	ISCINVREQ
AEYT	ENVDEFERR
AEYU	IGREQCD
AEYV	SESSIONERR
AEYX	USERIDERROR
AEYY	NOTALLOC
AEYZ	CBIDERR