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Identification

Errors detected by the GIOC Interface Module
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Purpose

This document describes the standard error return mechanism used throughout the GIOC Interface Module (GIM). In addition, a catalog of possible error conditions for each DIM user interface to the GIM is detailed.

Discussion

Most calls to the GIM include the possibility of an error being detected. Many of these errors are user caused but one should not overlook inevitable machine failures or buffer space exhausted. The general strategy followed by a GIM module detecting an error is to set an error number in a return status word and return to the module's immediate caller. If the caller is also a GIM module, the error return word is usually tested for any errors being set. If an error is set, the caller immediately returns to its caller. This testing and returning technique is repeated until control reaches the DIM caller who may then test and dispatch on the error bits.

In order for the above-mentioned technique to work properly, all GIM modules zero the error return word upon entry. Thus, the DIM user may expect to have the error return word set to zero upon every call to the GIM. An error detected in the GIM will result in a certain number being set. It is the DIM user's responsibility to test and dispatch on the error codes after every GIM call. The following tables relate which number the user may have returned for each call to the GIM. It is assumed that the error return word is declared as fixed bin(17) in all calls.

<u>Symbolic Name</u>	<u>Number</u>	<u>Meaning</u>
CCTNF	1	CCT not found
BADCHN	2	wrong channel
NOPTR	3	bad data ptr
BTALLY	4	transfer loop discovered
BADDR	5	bad address in transfer

<u>Symbolic Name</u>	<u>Number</u>	<u>Meaning</u>
NOLIST	6	no DCW list defined
BADARG	7	argument out of bounds
BADDVX	8	device index out of bounds
GIOCNF	9	GIOC not found
SYSERR	10	system or hardware error
WRKEXH	11	work space exhausted
BADSEQ	12	call out of sequence
STALST	13	device status may have been lost