HEclear

VOID HEclear( )

|  |  |
| --- | --- |
| Purpose | Clears all information on reported errors from the error stack. |
| Return value | None. |
| Description | HEpush creates an error stack. HEclear is then used to clear this stack after all errors are processed or when desired. |

HEprint/heprntf/heprnt

VOID HEprint(FILE \**stream*, int32 *level*)

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| --- | --- | --- |
| stream | IN: | Stream to print error message to |
| level | IN: | Level of error stack to print |
| Purpose | Prints information to the error stack. | | |
| Return value | None.  Fortran function returns 0 (zero) on success or -1 on failure. | | |
| Description | If level is 0, all of the errors currently on the error stack are printed. Output from this function is sent to the file pointed to by stream. | | |
|  | The following information is printed: the ASCII description of the error, the reporting routine, the reporting routine as source file name, and the line at which the error was reported. If the programmer has supplied extra information by means of HEreport, this information is printed as well. | | |
|  | The FORTRAN-77 routine heprnt uses one less parameter than the C routine because it doesn't allow the user to specify the print stream. Instead, it always prints to stdout. | | |
|  | The FORTRAN-77 routine heprntf is available on all platforms; heprnt is not supported on Microsoft Windows platforms. | | |
|  | The heprntf parameter filename is the name of the file to which error output is to be written. If the value of filename is an empty string (’’), error output will be written to standard output, stdout. | | |
| FORTRAN | integer function heprntf(filename, level) | | |
|  | character\*(\*) filename | | |
|  | integer level | | |
|  |  | | |
|  | integer function heprnt(level) | | |
|  | integer level | | |

HEpush

VOID HEpush(int16 *error\_code*, char \**funct\_name*, char \**file\_name*, intn *line*)

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| --- | --- | --- |
| error\_code | IN: | HDF error code corresponding to the error |
| func\_name | IN: | Name of function in which the error occurred |
| file\_name | IN: | Name of file in which the error occurred |
| line | IN: | Line number in the file that error occurred |
| Purpose | Pushes a new error onto the error stack. | | |
| Return value | None. | | |
| Description | HEpush pushes the file name, function name, line number, and generic description of the error onto the error stack. HEreport can then be used to give a more case-specific description of the error. | | |
|  | If the stack is full, the error will be ignored. HEpush assumes that the character strings func\_name and file\_name are in semi-permanent storage, so only pointers to the strings are saved. | | |

HEreport

VOID HEreport(char \**format*, ... )

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| --- | --- | --- |
| format | IN: | Output string specification |
| Purpose | Adds a text string to the description of the most-recently-reported error (only one text string per error). | | |
| Return value | None | | |
| Description | HEpush places on the error stack the file name, function name, line number, and a generic description of the error type. HEreport can then be used to give a more case-specific description of the error. Only one additional annotation can be attached to each error report. | | |
|  | The format argument must conform to the string specification requirements of printf. | | |

HEstring/hestringf

const char \*HEstring(hdf\_err\_code\_t *error\_code*)

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| --- | --- | --- |
| error\_code | IN: | HDF error code |
| Purpose | Returns the error message associated with specified error code. | | |
| Return value | Returns a pointer to a string associated with the error code, if successful. | | |
| Description | Returns a text description of the given error code. These strings are statically declared and should not be deallocated from memory (using the free routine) by the user. If a defined text description cannot be found a generic default message is returned. | | |
| FORTRAN | integer function hestringf(error\_code, error\_message) | | |
|  | integer error\_code | | |
|  | character\*(\*) error\_message | | |

HEvalue

int16 HEvalue(int32 *level*)

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| --- | --- | --- |
| level | IN: | Level of the error stack to be returned |
| Purpose | Returns an error code from the specified level of the error stack. | | |
| Return value | The error code if successful or DFE\_NONE otherwise. | | |
| Description | HEvalue returns the error code at the top of the stack, when level is 1. Refer to Table 1B of Section 1 in this reference manual for a complete list of HDF4 error codes. | | |