

## **h5check**

Version: 2.0.1

### **Syntax:**

`h5check [options] file`

### **Purpose:**

Verifies that an HDF5 file is encoded according to the HDF5 File Format Specification.

### **Motivation:**

`h5check` is a validation tool designed to verify that an HDF5 file is encoded according to the [HDF5 File Format Specification](#). The purpose is to ensure data model integrity and long-term compatibility between evolving versions of the HDF5 Library.

Note that `h5check` is designed and implemented without any use of the HDF5 Library.

### **Description:**

Given a file, `h5check` scans through the encoded content, verifying it against the defined library format. If it finds any non-compliance, `h5check` prints the error and the reason behind the non-compliance; if possible, it continues the scanning. If `h5check` does not find any non-compliance, it prints an approval statement upon completion.

By default, the file is verified against the latest version of the file format; as of this writing, that is the format recognized by the HDF5 Release 1.8.x series. A format version can be explicitly specified with the `-fn` (or `--format=n`) option. For example, `-f16` (or `--format=16`) would specify verification against the format recognized by the HDF5 Release 1.6.x series.

### **Options:**

|  |  |
|--|--|
| <code>-h</code> or <code>--help</code>       | Print a usage message and exit.  |
| <code>-V</code> or <code>--version</code>    | Print version number and exit.   |
| <code>-vn</code> or <code>--verbose=n</code> | Set verbose mode:  |
| <code>n=0</code>                             | Terse      Indicate only whether file is compliant.                    |
| <code>n=1</code>                             | Default    Print progress and all errors found.                        |
| <code>n=2</code>                             | Verbose    Print all known information, usually for debugging.         |
| <code>-e</code> or <code>--external</code>   | Validate external links existing in the file.                          |
| <code>-fn</code> or <code>--format=n</code>  | Set library release version against which the file is to be validated: |
| <code>n=16</code>                            | Validate according to release 1.6.x series.                            |

`n=18`

Validate according to release 1.8.x series.  
(*Default*)

`-oa` or `--object=a`

Check object header, where *a* is the address of the object header to be validated.

**Exit Status:**

- 0 Succeeded.
- 1 Command failures such as argument errors.
- 2 Format compliance errors found.