

H5A_ITERATE

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H5A_ITERATE

Calls a user's function for each attribute on an object

Signature:

```
herr_t H5Aiterate
(
    hid_t          loc_id,
    unsigned      *idx,
    H5A_operator_t op,
    void          *op_data
)

herr_t H5Aiterate
(
    hid_t          obj_id,
    H5_index_t     idx_type,
    H5_iter_order_t order,
    hsize_t       *n,
    H5A_operator2_t op,
    void          *op_data
)
```

Description:

H5A_ITERATE is a macro that is mapped to either [H5A_ITERATE1](#) or [H5A_ITERATE2](#), depending on the needs of the application.

Such macros are provided to facilitate application compatibility. For example:

- The H5A_ITERATE macro will be mapped to H5A_ITERATE1 and will use the H5A_ITERATE1 syntax (first signature above) if an application is coded for HDF5 Release 1.6.x.
- The H5A_ITERATE macro mapped to H5A_ITERATE2 and will use the H5A_ITERATE2 syntax (second signature above) if an application is coded for HDF5 Release 1.8.x.

Macro use and mappings are fully described in [API Compatibility Macros in HDF5](#); we urge you to read that document closely.

When both the HDF5 library and the application are built and installed with no specific compatibility flags, `H5A_ITERATE` is mapped to the most recent version of the function, currently `H5A_ITERATE2`. If the library and/or application is compiled for Release 1.6 emulation, `H5A_ITERATE` will be mapped to `H5A_ITERATE1`. Function-specific flags are available to override these settings on a function-by-function basis when the application is compiled.

Specific compile-time compatibility flags and the resulting mappings are as follows:

| Compatibility setting | H5Aiterate mapping |
|---------------------------------------|---------------------------|
| Global settings | |
| No compatibility flag | <code>H5A_ITERATE2</code> |
| Enable deprecated symbols | <code>H5A_ITERATE2</code> |
| Disable deprecated symbols | <code>H5A_ITERATE2</code> |
| Emulate Release 1.6 interface | <code>H5A_ITERATE1</code> |
| Function-level macros | |
| <code>H5Aiterate_vers = 2</code> | <code>H5A_ITERATE2</code> |
| <code>H5Aiterate_vers = 1</code> | <code>H5A_ITERATE1</code> |

Interface history: Signature [1] above is the original `H5Aiterate` interface and the only interface available prior to HDF5 Release 1.8.0. This signature and the corresponding function are now deprecated but will remain directly callable as `H5A_ITERATE1`.

Signature [2] above was introduced with HDF5 Release 1.8.0 and is the recommended and default interface. It is directly callable as `H5A_ITERATE2`.

See [API Compatibility Macros in HDF5](#) for circumstances under which either of these functions might not be available in an installed instance of the HDF5 library.

History:

| Release | Change |
|---------|--|
| 1.8.0 | The function <code>H5Aiterate</code> renamed to <code>H5Aiterate1</code> and deprecated in this release. The macro <code>H5Aiterate</code> and the functions <code>H5Aiterate2</code> and <code>H5Aiterate_by_name</code> introduced in this release. |

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