

H5P_GET_LAYOUT

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H5P_GET_LAYOUT

Returns the layout of the raw data for a dataset

Procedure:

H5P_GET_LAYOUT (plist)

Signature:

H5D_layout_t H5Pget_layout(hid_t plist)

Fortran90 Interface: h5pget_layout_f

```
SUBROUTINE h5pget_layout_f (prp_id, layout, hdferr)
  IMPLICIT NONE
  INTEGER(HID_T), INTENT(IN) :: prp_id ! Property list identifier
  INTEGER, INTENT(OUT) :: layout      ! Type of storage layout for raw data
                                     ! possible values are:
                                     !   H5D_COMPACT_F
                                     !   H5D_CONTIGUOUS_F
                                     !   H5D_CHUNKED_F
                                     !   H5D_VIRTUAL_F
  INTEGER, INTENT(OUT) :: hdferr      ! Error code
                                     ! 0 on success and -1 on failure
END SUBROUTINE h5pget_layout_f
```

Parameters:

*hid_t*plist IN: Identifier for property list to query

Description:

H5P_GET_LAYOUT returns the layout of the raw data for a dataset. This function is only valid for dataset creation property lists.

Note that a compact storage layout may affect writing data to the dataset with parallel applications. See note in H5D_WRITE documentation for details.

Returns:

Returns the layout type (a non-negative value) of a dataset creation property list if successful. Valid return values are:

H5D_COMPACT: Raw data is stored in the object header in the file.

H5D_CONTIGUOUS: Raw data is stored separately from the object header in one contiguous chunk in the file.

H5D_CHUNKED: Raw data is stored separately from the object header in chunks in separate locations in the file.

H5D_VIRTUAL: Raw data is drawn from multiple datasets in different files.

Otherwise, returns a negative value indicating failure.

Example:

examples / h5_extend.c [121:125]

1.10/master

HDF5/hdf5

```
prop = H5Dget_create_plist (dataset);

if (H5D_CHUNKED == H5Pget_layout (prop))
    rank_chunk = H5Pget_chunk (prop, rank, chunk_dimsr);
```

History:

Release	Change
1.10.0	H5D_VIRTUAL and H5D_VIRTUAL_F added in this release.

--- Last Modified: August 07, 2019 | 11:31 AM