

# H5P\_GET\_CLASS

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# H5P\_GET\_CLASS

Returns the property list class identifier for a property list

## Procedure:

H5P\_GET\_CLASS ( plist )

## Signature:

```
hid_t H5Pget_class ( hid_t plist )
```

Fortran90 Interface: h5pget\_class\_f

```
SUBROUTINE h5pget_class_f(prp_id, classtype, hdferr)
  IMPLICIT NONE
  INTEGER(HID_T), INTENT(IN) :: prp_id ! Property list identifier
  INTEGER, INTENT(OUT) :: classtype ! The type of the property list
  ! to be created
  INTEGER, INTENT(OUT) :: hdferr ! Error code
  ! 0 on success and -1 on failure
END SUBROUTINE h5pget_class_f
```

## Parameters:

*hid\_t*plist      IN: Identifier of property list to query

## Description:

H5P\_GET\_CLASS returns the property list class identifier for the property list identified by the `plist` parameter.

Note that H5P\_GET\_CLASS returns a value of `hid_t` type, an internal HDF5 identifier, rather than directly returning a property list class. That identifier can then be used with either H5P\_EQUAL or H5P\_GET\_CLASS\_NAME to determine which predefined HDF5 property list class H5P\_GET\_CLASS has returned.

A full list of valid predefined property list classes appears in the description of H5P\_CREATE.

Determining the HDF5 property list class name with H5P\_EQUAL requires a series of H5P\_EQUAL calls in an if-else sequence. An iterative sequence of H5P\_EQUAL calls can compare the identifier returned by H5P\_GET\_CLASS to members of the list of valid property list class names. A pseudo-code snippet might read as follows:

```
plist_class_id = H5Pget_class (dsetA_plist);

if H5Pequal (plist_class_id, H5P_OBJECT_CREATE) = TRUE;
    [ H5P_OBJECT_CREATE is the property list class ]
    [ returned by H5Pget_class. ]

else if H5Pequal (plist_class_id, H5P_DATASET_CREATE) = TRUE;
    [ H5P_DATASET_CREATE is the property list class. ]

else if H5Pequal (plist_class_id, H5P_DATASET_XFER) = TRUE;
    [ H5P_DATASET_XFER is the property list class. ]

.
. [ Continuing the iteration until a match is found. ]
.
```

H5P\_GET\_CLASS\_NAME returns the property list class name directly as a string:

```
plist_class_id = H5Pget_class (dsetA_plist);
plist_class_name = H5Pget_class_name (plist_class_id)
```

Note that frequent use of H5P\_GET\_CLASS\_NAME can become a performance problem in a high-performance environment. The H5P\_EQUAL approach is generally much faster.

#### Returns:

Returns a property list class identifier if successful. Otherwise returns a negative value.

#### Example:

Coming Soon!

#### History:

Release	Change
1.8.15	Updated the Fortran subroutine.
1.6.0	Return type changed in this release.