H5P_SET_DXPL_MPIO

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H5P_SET_DXPL_MPIO

Sets data transfer mode

Procedure:

H5P_SET_DXPL_MPIO (dxpl_id, xfer_mode)

Signature:

```
herr_t H5Pset_dxpl_mpio(
                    hid_t dxpl_id,
                    H5FD_mpio_xfer_t xfer_mode
    )
```

```
Fortran90 Interface:

SUBROUTINE h5pset_dxpl_mpio_f(prp_id, data_xfer_mode, hdferr)
  IMPLICIT NONE
  INTEGER(HID_T), INTENT(IN) :: prp_id  ! Property list identifier
  INTEGER, INTENT(IN) :: data_xfer_mode ! Data transfer mode
                                        ! Possible values are:
                                        !    H5FD_MPIO_INDEPENDENT_F
                                        !    H5FD_MPIO_COLLECTIVE_F
  INTEGER, INTENT(OUT) :: hdferr        ! Error code
                                        ! 0 on success and -1 on failure
END SUBROUTINE h5pset_dxpl_mpio_f
```

Parameters:

hid_t `dxpl_id`	IN: Data transfer property list identifier
H5FD_mpio_xfer_t `xfer_mode`	IN: Transfer mode

Description:

H5P_SET_DXPL_MPIO sets the data transfer property list `dxpl_id` to use transfer mode `xfer_mode`. The property list can then be used to control the I/O transfer mode during data I/O operations.

Valid transfer modes are as follows:

H5FD_MPIO_INDEPENDENT Use independent I/O access (default)

H5FD_MPIO_COLLECTIVE Use collective I/O access

Returns:

Returns a non-negative value if successful. Otherwise returns a negative value.

Example:

examples / ph5example.c [581:584] 1.10/master HDFFV/hdf5

```
/* set up the collective transfer properties list */
    xfer_plist = H5Pcreate (H5P_DATASET_XFER);
    assert(xfer_plist != FAIL);
    ret=H5Pset_dxpl_mpio(xfer_plist, H5FD_MPIO_COLLECTIVE);
```

fortran / examples / ph5example.f90 [106:117] 1.10/master HDFFV/hdf5

```
CALL h5pcreate_f(H5P_DATASET_XFER_F, plist_id, error)
     CALL h5pset_dxpl_mpio_f(plist_id, H5FD_MPIO_COLLECTIVE_F, error)
     !
     ! For independent write use
     ! CALL h5pset_dxpl_mpio_f(plist_id, H5FD_MPIO_INDEPENDENT_F, error)
     !

     !
     ! Write the dataset collectively.
     !
     CALL h5dwrite_f(dset_id, H5T_NATIVE_INTEGER, data, dimsfi, error, &
                     xfer_prp = plist_id)
```

History:

Release	Change
1.4.0	Function introduced in this release.

--- Last Modified: August 09, 2019 | 01:36 PM