H5LR_READ_REGION

H5LR_READ_REGION

Retrieves raw data pointed to by a region reference to an application buffer.

Procedure:

H5LR_READ_REGION(loc_id, ref, mem_type, num_elem, buf)

Signature:

```
herr_t H5LRread_region( hid_t loc_id, const hdset_reg_ref_t *ref, hid_t mem_type, size_t *num_elem, void
*buf )
```

```
SUBROUTINE H5LRread_region_f(loc_id, ref, dtype, numelem, buf, error)

  IMPLICIT NONE

  INTEGER(hid_t), INTENT(IN) :: loc_id       ! File identifier for the HDF5 file containing the dataset
with
                                             !  the referenced region or an object identifier for any
object
                                             !  in that file
  TYPE(hdset_reg_ref_t_f), INTENT(IN) :: ref ! Region reference specifying data to be read in
  INTEGER(hid_t), INTENT(IN) :: dtype        ! Memory datatype of data read from referenced region into the

                                             !  application buffer
  INTEGER(size_t), INTENT(INOUT) :: numelem  ! Number of elements to be read into buffer buf
  TYPE(C_PTR), INTENT(OUT) :: buf            ! Buffer in which data is returned to the application
  INTEGER, INTENT(OUT) :: error              ! Error code:
                                             !  0 on success and -1 on failure
END SUBROUTINE H5LRread_region_f
```

Parameters:

hid_t loc_id	IN: File identifier for the HDF5 file containing the dataset with the referenced region or an object identifier for any object in that file
const hdset_reg_ref_t *ref	IN: Region reference specifying data to be read in
hid_t mem_type	IN: Memory datatype of data read from referenced region into the application buffer
size_t *num_elem	IN/OUT: Number of elements to be read into buffer buf
void *buf	OUT: Buffer in which data is returned to the application

Description:

H5LRread_region reads data pointed to by the region reference ref into the buffer buf.

num_elem specifies the number of elements to be read into buf. When the size of the reference region is unknown, H5LRread_region can be called with buf set to NULL; the number of elements in the referenced region will be returned in num_elem.

The buffer buf must be big enough to hold num_elem elements of type mem_type. For example, if data is read from the referenced region into an integer buffer, mem_type should be H5T_NATIVE_INT and the buffer must be at least sizeof(int) * num_elem bytes in size. This buffer must be allocated by the application.

Returns:

Returns a non-negative value if successful; otherwise returns a negative value.

Example:

Coming Soon!

History:

Release	Change
1.0	C function introduced in this release.
1.1	Fortran wrapper introduced in this release.

--- Last Modified: December 04, 2017 | 07:28 AM