

H5LT_READ_REGION

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H5LT_READ_REGION

Reads selected data to an application buffer.

Procedure:

H5LT_READ_REGION(file, path, block_coord, mem_type, buf)

Signature:

```
herr_t H5LTread_region( const char *file, const char *path, const hsize_t *block_coord, hid_t mem_type,  
void *buf )
```

```
SUBROUTINE H5LTread_region_f(file, path, block_coord, mem_type, buf, error)
```

```
    IMPLICIT NONE  
    CHARACTER(LEN=*) , INTENT(IN) :: file           ! Name of file  
    CHARACTER(LEN=*) , INTENT(IN) :: path           ! Full path to a dataset  
    INTEGER(hsize_t) , DIMENSION(:) , INTENT(IN) :: block_coord ! Hyperslab coordinates  
    INTEGER(hid_t) , INTENT(IN) :: mem_type         ! Memory datatype, describing the buffer  
                                                    ! the referenced data will be read into  
    TYPE(C_PTR) , INTENT(OUT) :: buf               ! Buffer containing data from  
                                                    ! the referenced region  
    INTEGER , INTENT(OUT) :: error                 ! Error code:  
                                                    ! 0 on success and -1 on failure  
END SUBROUTINE H5LTread_region_f
```

Parameters:

<code>const char *file</code>		IN: Name of file
<code>const char *path</code>		IN: Full path to a dataset
<code>const hsize_t *block_coord</code>		IN: Hyperslab coordinates
<code>hid_t mem_type</code>		IN: Memory datatype, describing the buffer the referenced data will be read into
<code>void *buf</code>		OUT: Buffer containing data from the referenced region

Description:

`H5LTread_region` reads data from a region described by the hyperslab coordinates in `block_coord`, located in the dataset specified by its absolute path `path` in a file specified by its name `file`. Data is read into a buffer `buf` of the datatype that corresponds to the HDF5 datatype specified by `mem_type`.

Buffer `block_coord` has size `2*rank` and is the coordinates of the starting point following by the coordinates of the ending point of the hyperslab. For example, to extract a rectangular hyperslab region starting at element (2,2) to element (5,4) then `block_coord` would be {2, 2, 5, 4}.

Buffer `buf` should be big enough to hold selected elements of the type that corresponds to the `mem_type` datatype.

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.

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