

# H5LR\_CREATE\_REF\_TO\_ALL

[Expand all](#) [Collapse all](#)

- [Jump to ...](#)
- [Summary](#)
- [Description](#)
- [Example](#)
- [Switch language ...](#)
- [C](#)
- [C++](#)
- [FORTRAN](#)
- [JAVA](#)

[Summary](#)  
[Description](#)  
[Example](#)  
[JAVA](#)  
[FORTRAN](#)  
[C++](#)  
[C](#)

# H5LR\_CREATE\_REF\_TO\_ALL

Creates a dataset with the region references to the data in all datasets located under a specified group in a file or creates a dataset with object references to all objects (groups or datasets) located under a specified group in a file.

## Procedure:

H5LR\_CREATE\_REF\_TO\_ALL(loc\_id, group\_path, ds\_path, index\_type, order, ref\_type)

## Signature:

```
return_type H5LRcreate_ref_to_all (hid_t loc_id, const char *group_path, const char *ds_path, H5_index_t  
index_type, H5_iter_order_t order, H5R_type_t ref_type)
```

```

SUBROUTINE H5LRcreate_ref_to_all_f(loc_id, group_path, ds_path, index_type, order, ref_type, error)

  IMPLICIT NONE

  INTEGER(hid_t), INTENT(IN) :: loc_id      ! File or group identifier
  CHARACTER(LEN=*), INTENT(IN) :: group_path ! Absolute or relative path to the group at
                                             ! which traversal starts
  CHARACTER(LEN=*), INTENT(IN) :: ds_path   ! Absolute or relative path to the dataset
                                             ! with region references to be created
  INTEGER, INTENT(IN) :: index_type         ! Index type; valid values include:
                                             !   H5_INDEX_NAME_F
                                             !   H5_INDEX_CRT_ORDER_F
  INTEGER, INTENT(IN) :: order              ! Order in which index is traversed; valid values include:
                                             !   H5_ITER_DEC_F
                                             !   H5_ITER_INC_F
                                             !   H5_ITER_NATIVE_F
  INTEGER, INTENT(IN) :: ref_type           ! Reference type; valid values include:
                                             !   H5R_DATASET_REGION_F
                                             !   H5R_OBJECT_F
  INTEGER, INTENT(OUT) :: error             ! Error code:
                                             !   0 on success and -1 on failure
END SUBROUTINE H5LRcreate_ref_to_all_f

```

### Parameters:

<i>hid_t</i> loc_id	IN: File or group identifier
<i>const char *</i> group_path	IN: Absolute or relative path to the group at which traversal starts
<i>const char *</i> ds_path	IN: Absolute or relative path to the dataset with region references to be created
<i>H5_index_t</i> index_type	IN: Index type; valid values include: H5_INDEX_NAME H5_INDEX_CRT_ORDER
<i>H5_iter_order_t</i> order	IN: Order in which index is traversed; valid values include: H5_ITER_DEC H5_ITER_INC H5_ITER_NATIVE
<i>H5R_type_t</i> ref_type	IN: Reference type; valid values include: H5R_DATASET_REGION H5R_OBJECT

### Description:

H5LRcreate\_ref\_to\_all creates a dataset with the region references to the data in all datasets located under a specified group in a file or creates a dataset with object references to all objects (groups or datasets) located under a specified group in a file.

Given a dataset path ds\_path in a file specified by the loc\_id identifier, the function H5LRcreate\_ref\_to\_all will create a contiguous one-dimensional dataset with the region references or object references depending on the value of the ref\_type parameter. When ref\_type is H5R\_DATASET\_REGION, each region reference points to all data in a dataset encountered by an internally called H5Lvisit routine, which starts at the group specified by the loc\_id and group\_path parameters. In a like manner, when ref\_type is H5R\_OBJECT, each object reference points to an object (a group or a dataset) encountered by H5Lvisit.

If ds\_path does not exist in loc\_id then the function will create the path specified by ds\_path automatically.

index\_type specifies the index to be used. Valid values include the following:

- H5\_INDEX\_NAME     Alpha-numeric index on name
- H5\_INDEX\_CRT\_ORDER   Index on creation order

order specifies the order in which objects are to be inspected along the index specified in index\_type. Valid values include the following:

- H5\_ITER\_INC     Increasing order
- H5\_ITER\_DEC     Decreasing order
- H5\_ITER\_NATIVE   Fastest available order

For more detailed information on these two parameters, see H5Lvisit.

ref\_type specifies the type of the reference to be used. Valid values include the following:

- H5R\_DATASEY\_REGION   Dataset region reference
- H5R\_OBJECT            Object reference

**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.