

UF_LIB_ask_lib_attribute_values (view source)

Defined in: `uf_lib.h`

Overview

This function provides a list of attribute values of an NX object that was previously retrieved from a library. The library is referenced by the specified `UF_CAM_db_object_t`. The values are the current values (in the library) of the specified attributes of the NX object.

The caller should use `UF_free_string_array` to free these returned arrays.

Environment

Internal and External

History

Released in V16.0

Required License(s)

gateway

```
int UF_LIB_ask_lib_attribute_values
(
    UF_CAM_db_object_t db,
    tag_t ug_object,
    int count,
    const char * * db_alias,
    char * * * values
)
```

UF_CAM_db_object_t	db	Input	- the db object to query in
tag_t	ug_object	Input	- the NX object to query about
int	count	Input	- the number of attribute to ask their values of
const char * *	db_alias	Input	- the list of attribute db aliases to ask the values of
char * * *	values	Output to <code>UF_*free*</code>	- the requested values. This is an array of strings that must be freed by calling <code>UF_free_string_array</code> .

UF_LIB_ask_libref (view source)

Defined in: `uf_lib.h`

Overview

This function provides the library reference (or libref) of the specified NX object. The libref is an attribute which is returned for every record in every record set. It is also the attribute which is used to retrieve an object from a library. An NX object will only have a libref if it was created by being retrieved from a library.

Environment

Internal and External

History

Released in V16.0

Required License(s)

gateway

```
int UF_LIB_ask_libref
(
    tag_t ug_object,
    const char ** libref
)
```

tag_t	ug_object	Input	- the desired NX object
const char **	libref	Output to UF_*free*	- the libref of the specified object

UF_LIB_ask_record_in_rset (view source)

Defined in: uf_lib.h

Overview

This function provides a record from a record set. The record is returned as an array of strings. Each element of the array is the value of an attribute of the specified record. The ith element of the array is the value of the ith attribute returned from ask_rset_map. Note that all values are returned as strings. If the value has type double or int the caller will need to convert as required by the application.

The caller should use UF_free_string_array to free these returned arrays.

Environment

Internal and External

History

Released in V16.0

Required License(s)

gateway

```
int UF_LIB_ask_record_in_rset
(
    UF_RSET_t rset,
    int record_num,
    int * count,
    const char *** values
)
```

UF_RSET_t	rset	Input	- the desired record set
int	record_num	Input	- the desired record number (0 based)

int *	count	Output	- the number of values of attributes
const char * * *	values	Output to UF_*free*	- the values of the attributes. The caller should call UF_free_string_array to free this array.

UF_LIB_ask_rset_count [\(view source\)](#)

Defined in: `uf_lib.h`

Overview

This function returns the number of records that the specified UF_RSET_t contains.

Environment

Internal and External

History

Released in V17.0

Required License(s)

gateway

```
int UF_LIB_ask_rset_count
(
    UF_RSET_t rset,
    int * count
)
```

UF_RSET_t	rset	Input	- the UF_RSET_t whose record count is desired
int *	count	Output	- the number of records in the UF_RSET_t

UF_LIB_ask_rset_map [\(view source\)](#)

Defined in: `uf_lib.h`

Overview

This function provides a description (or map) of the contents of a record set. It provides a list of the attributes that each record in the record set has as well as the type of each of those attributes. One can think of a record set as a table. The rows of the table are the individual records in the record set. The columns headings are the attributes that are found in the record set.

NOTE: Use UF_LIB_free_rset_map to free returned memory
See the [description](#)

Environment

Internal and External

See Also

UF_LIB_free_rset_map

History

Released in V16.0

Required License(s)

gateway

```
int UF_LIB_ask_rset_map
(
    UF_RSET_t rset,
    int * count,
    const char * * attr_names,
    const char * * attr_types
)
```

UF_RSET_t	rset	Input	- the record set of interest. This was returned by execute_query.
int *	count	Output	- the number of attributes in the record set.
const char * * *	attr_names	Output to UF_*free*	count - the name of the attributes in the record set.
const char * *	attr_types	Output to UF_*free*	count - the types of the attributes. The ith attr_types is the type of the ith attr_names.

UF_LIB_delete_rset (view source)

Defined in: uf_lib.h

Overview

This function deletes the specified UF_RSET_t.

Environment

Internal and External

History

Released in V17.0

Required License(s)

gateway

```
int UF_LIB_delete_rset
(
    UF_RSET_t rset
)
```

UF_RSET_t	rset	Input	- the record set to delete
-----------	------	-------	----------------------------

UF_LIB_execute_query [\(view source\)](#)

Defined in: `uf_lib.h`

Overview

This function will execute a query in a library and return a record set containing the objects in the library that satisfy the query. See the above File Description for a discussion of the query syntax. The Class Query in the Definition File is &&ed to the query specified here as a parameter. The contents of the RSET returned is determined by the RSET definition for the specified class name. This definition is found in the Definition File.

Environment

Internal and External

History

Released in V16.0

Required License(s)

gateway

```
int UF_LIB_execute_query
(
    UF_CAM_db_object_t db,
    const char * cls_name,
    const char * query,
    int * count,
    UF_RSET_t * rset
)
```

UF_CAM_db_object_t	db	Input	- the library object in which to execute the query.
const char *	cls_name	Input	- the class name
const char *	query	Input	- the query
int *	count	Output	- the number of objects satisfying the query
UF_RSET_t *	rset	Output	- the record of objects that satisfy the query

UF_LIB_execute_query_for_count [\(view source\)](#)

Defined in: `uf_lib.h`

Overview

This function will execute a query in a library and return a count of the number of objects in the library that satisfy the query. See the above File Description for a discussion of the query syntax. The Class Query in the Definition File is &&ed to the query specified here as a parameter.

Environment

Internal and External

History

Released in V16.0

Required License(s)

gateway

```
int UF_LIB_execute_query_for_count
(
    UF_CAM_db_object_t db,
    const char * cls_name,
    const char * query,
    int * count
)
```

UF_CAM_db_object_t	db	Input	- the library object in which to execute the query
const char *	cls_name	Input	- the class name
const char *	query	Input	- the query
int *	count	Output	- the number of objects in the library that satisfy the query.

UF_LIB_free_rset_map (view source)

Defined in: uf_lib.h

Overview

This function frees the memory returned from UF_LIB_ask_rset_map

Environment

Internal and External

See Also

[UF_LIB_ask_rset_map](#)

History

Released in V16.0

Required License(s)

gateway

```
int UF_LIB_free_rset_map
(
    int count,
    const char ** attr_names,
    const char * attr_types
)
```

int	count	Input	- the number of attributes in the record set.
-----	-------	-------	---

const char * *	attr_names	Input	- the name of the attributes in the record set.
const char *	attr_types	Input	- the types of the attributes. The ith attr_types is the type of the ith attr_names.

UF_LIB_merge_rsets [\(view source\)](#)

Defined in: `uf_lib.h`

Overview

This function merges the contents of two record sets. The merged record set contains the records of 'rset1' followed by the records of 'rset2'. The records appear in the same order they did in their original record sets. 'rset1' and 'rset2' are unchanged.

Environment

Internal and External

History

Released in V17.0

Required License(s)

gateway

```
int UF_LIB_merge_rsets
(
    UF_RSET_t rset1,
    UF_RSET_t rset2,
    UF_RSET_t * merged_rset
)
```

UF_RSET_t	rset1	Input	- the record set to merge
UF_RSET_t	rset2	Input	- the other record to merge
UF_RSET_t *	merged_rset	Output	- the merged record set

UF_LIB_sort_rset [\(view source\)](#)

Defined in: `uf_lib.h`

Overview

This function sorts the contents of a record set. The sort key is of the form:

```
db_alias1/{ a|d },db_alias2/{ a|d },...,db_aliasN/{ a|d }
```

where a = ascending, d = descending. For example, if Diameter and Cost are both DB Aliases that are found in the record set one could sort the set

primarily by Diameter in ascending order and then, within Diameter, sort by Cost in decreasing order with a sort key of:

Diameter/a, Cost/d

Here Diameter is the primary key. Records of the set that have the same Diameter are then sorted by Cost. The original record set is not changed.

Environment

Internal and External

History

Released in V17.0

Required License(s)

gateway

```
int UF_LIB_sort_rset
(
    UF_RSET_t rset,
    const char * sort_key,
    UF_RSET_t * sorted_rset
)
```

UF_RSET_t	rset	Input	- the record set to sort
const char *	sort_key	Input	- the sort key to sort by
UF_RSET_t *	sorted_rset	Output	- the sorted record set