UF_PROCESS_AID_ask_children_features (view source)

Defined in: uf_process_aid.h

Overview

Given a process aid feature set, this function will return its children feature set tags. This means that for a datum location feature, this function will return the datum point feature set tag. For a datum point, this function will return the certification point feature set tag

Environment

Internal and External

History

V18.0

```
int UF_PROCESS_AID_ask_children_features
(
    tag_t feature_set,
    int * num_children,
    tag_p_t * children
)
```

tag_t	**feature_set**	Input	tag of the process aid feature set
int *	**num_children**	Output	number of children features
tag_p_t *	**children**	Output to UF_*free*	tags of the children features. This array must be freed by calling UF_free

---

UF_PROCESS_AID_ask_datum_objects (view source)

Defined in: uf_process_aid.h

Overview

Given the datum feature set tag, this function returns the tags of the datum points, datum vectors and the objects involved in the datum

Environment

Internal and External

History

V18.0

```
int UF_PROCESS_AID_ask_datum_objects
(
    tag_t feature_set,
    int * num_dat_points,
    tag_p_t * datum_point,
    int * num_dat_vectors,
    tag_p_t * datum_vector,
    int * num_sets,
    int * * n_objects_in_each_set,
    tag_p_t * objects
```

)

tag_t	**feature_set**	Input	tag of the datum location feature, datum point, certification point or measurement point feature
int *	**num_dat_points**	Output	number of datum points in the given feature set
tag_p_t *	**datum_point**	Output to UF_*free*	object tags of the datum point in the given feature set. This must be freed using UF_free.
int *	**num_dat_vectors**	Output	number of datum vectors in the given feature set
tag_p_t *	**datum_vector**	Output to UF_*free*	object tags of the datum vector in the given feature set. This must be freed using UF_free.
int *	**num_sets**	Output	number of sets of objects
int * *	**n_objects_in_each_set**	Output to UF_*free*	number of objects in each set. Use UF_free to free this
tag_p_t *	**objects**	Output to UF_*free*	tags of the objects involved in the datum feature. Use the function UF_free to free this

---

UF_PROCESS_AID_ask_datums_in_part (view source)

Defined in: uf_process_aid.h

Overview

This function returns all the datum objects of the specified types in the part of assembly. This function filters the datum objects by type.

Environment

Internal and External

History

V18.0

int UF_PROCESS_AID_ask_datums_in_part
(
tag_t part_tag,
UF_PROCESS_AID_types_t feat_type,
uf_list_p_t * feature_sets
)

tag_t	**part_tag**	Input	The specified part in assembly to query
UF_PROCESS_AID_types_t	**feat_type**	Input	The datum type filter to apply to this query. If no filtering is

			desired, then input UF_PROCESS_AID_ALL_TYPES
uf_list_p_t *	**feature_sets**	Output to UF_*free*	The list containing the tags of the found process aid objects. If datum_type is UF_PROCESS_AID_ALL_TYPES, then all of the datum objects in the part will be returned. If any other filter option, then only the objects of the specified types are returned. returns NULL if no process aid object found. This parameter must be freed with UF_MODL_delete_list

---

UF_PROCESS_AID_ask_link_objects (view source)

Defined in: uf_process_aid.h

Overview

This function retrieves all the linked/extracted objects for the given object (prototype/linked/extracted/occurrence). if the objects retrieved are further linked/extracted, the function will get all those recursively.

Environment

Internal and External

History

V18.0

```
int UF_PROCESS_AID_ask_link_objects
(
    tag_t object,
    tag_p_t * linked_objects,
    int * linked_object_count
)
```

tag_t	**object**	Input	object tag
tag_p_t *	**linked_objects**	Output to UF_*free*	all the linked/extracted objects This must be freed with UF_free.
int *	**linked_object_count**	Output	number of linked/extracted objects

---

UF_PROCESS_AID_ask_parent_feature (view source)

Defined in: uf_process_aid.h

Overview

Given a process aid feature set, this function will return its parent feature set tag. This means that for a certification point, this function will return the datum point feature set tag. For a datum point, this function will return

the datum location feature set tag

Environment
Internal and External

History
V18.0

int UF_PROCESS_AID_ask_parent_feature
(
tag_t feature_set,
tag_t * parent_datum
)

tag_t	**feature_set**	Input	tag of the process aid feature set
tag_t *	**parent_datum**	Output	tag of the feature set of the parent datum

---

UF_PROCESS_AID_ask_section_of_datum (view source)

Defined in: uf_process_aid.h

Overview
Given the datum feature set tag, this function gives the array of section planes used to create the datum feature.

Environment
Internal and External

History
V18.0

int UF_PROCESS_AID_ask_section_of_datum
(
tag_t datum_feat,
int * num_sections,
tag_p_t * sec_planes
)

tag_t	**datum_feat**	Input	Tag of the Datum object Feature. Possible feature types are DATUM_LOCATION, MEASUREMENT_LOCATION & HEM_VECTOR
int *	**num_sections**	Output	Number of Section planes
tag_p_t *	**sec_planes**	Output to UF_*free*	Array of Section planes. Must free with UF_free

---

UF_PROCESS_AID_ask_source_object (view source)

Defined in: uf_process_aid.h

Overview

This function retrieves the source object for the given linked/extracted object. This will give just one level up parent/source if <is_recurse> is passed as FALSE. Set <is_recurse> to TRUE, to retrieve the source information recursively, ie. in case of the linked/extracted objects being further linked/extracted.

If any of the files are partially open or fully closed, that should be open to get the required information, and can not be opened by this function due to a file opening error, then the function will give the file name with respective returned error code. It is the responsibility of the user to open the given file before calling the function again.

Environment

Internal and External

History

V18.0

```
int UF_PROCESS_AID_ask_source_object
(
    tag_t object,
    logical is_recurse,
    tag_t * source_object,
    char * * file_to_open
)
```

tag_t	**object**	Input	linked/extracted object tag, whose source is to be retrieved
logical	**is_recurse**	Input	FALSE if required just one level up information of the source TRUE if need to search the source recursively
tag_t *	**source_object**	Output	source object tag retrieved, NULL in case of any error
char * *	**file_to_open**	Output to UF_*free*	file name, in case of opening error for this file. NULL if we were able to get the source_object. This must be freed by calling UF_free.

UF_PROCESS_AID_is_datum_object (view source)

Defined in: uf_process_aid.h

Overview

This function returns all the datum objects of specified types in the part of assembly. This function filters the datum objects by type.

Environment

Internal and External

History
V18.0

int UF_PROCESS_AID_is_datum_object
(
tag_t object,
logical * is_datum,
UF_PROCESS_AID_types_p_t datum_type,
tag_p_t feature_set_tag
)

tag_t	**object**	Input	tag of the object
logical *	**is_datum**	Output	TRUE if the body is a datum otherwise returns FALSE
UF_PROCESS_AID_types_p_t	**datum_type**	Output	type of datum object
tag_p_t	**feature_set_tag**	Output	feature set tag of the datum object

---

UF_PROCESS_AID_populate_attr_list (view source)

Defined in: uf_process_aid.h

Overview
This function gives the list of attributes for the process aid object

Environment
Internal and External

History
V18.0

int UF_PROCESS_AID_populate_attr_list
(
tag_t feature_set,
int * count,
char * * * list
)

tag_t	**feature_set**	Input	tag of the process aid feature set
int *	**count**	Output	number of attributes
char * * *	**list**	Output to UF_*free*	list of attributes. This array must be freed by calling UF_free_string_array

---