

UF\_FAM\_add\_member (view source)

Defined in: uf\_fam.h

Overview

Adds a member to a family. When all the members have been added to the family, call UF\_MODL\_update to perform an update.

Environment

Internal and External

Required License(s)

solid\_modeling

```
int UF_FAM_add_member
(
    tag_t family,
    UF_FAM_member_data_p_t member_data,
    int * member_index
)
```

tag_t	family	Input	Object identifier of the family.
UF_FAM_member_data_p_t	member_data	Input	Data for the member.
int *	member_index	Output	Index of the family member.

UF\_FAM\_ask\_attribute\_data (view source)

Defined in: uf\_fam.h

Overview

Returns the data of a family attribute.

Environment

Internal and External

See Also

UF\_FAM\_free\_attribute\_data

Required License(s)

gateway

```
int UF_FAM_ask_attribute_data
(
    tag_t attribute,
    UF_FAM_attribute_data_p_t attribute_data
)
```

tag_t	attribute	Input	Object identifier of the attribute.
UF_FAM_attribute_data_p_t	attribute_data	Output to UF_*free*	Data of the attribute. A UF_FAM_attribute_data_t structure

must must be allocated by the user.  
This routine will then fill that  
structure with data that must be  
freed by the caller by calling  
UF\_FAM\_free\_attribute\_data.

UF\_FAM\_ask\_class\_count (view source)

Defined in: uf\_fam.h

Overview

Returns the number of available family attribute classes.

Environment

Internal and External

Required License(s)

gateway

```
int UF_FAM_ask_class_count
(
    int * class_count
)
```

int *	<b>class_count</b>	Output	Number of available family attribute classes.
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UF\_FAM\_ask\_class\_data (view source)

Defined in: uf\_fam.h

Overview

Returns the data associated with a family attribute class.

Environment

Internal and External

Required License(s)

gateway

```
int UF_FAM_ask_class_data
(
    int subtype,
    UF_FAM_class_data_p_t class_data
)
```

int	<b>subtype</b>	Input	Attribute subtype of class UF_fam_attr_text_subtype: UF_fam_attr_numeric_subtype: UF_fam_attr_integer_subtype, UF_fam_attr_double_subtype, UF_fam_attr_string_subtype,
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			UF_fam_attr_part_subtype, UF_fam_attr_name_subtype, UF_fam_attr_instance_subtype, UF_fam_attr_exp_subtype, UF_fam_attr_mirror_subtype, UF_fam_attr_density_subtype, UF_fam_attr_feature_subtype,
UF_FAM_class_data_p_t	class_data	Output	Data of the attribute class.

UF\_FAM\_ask\_class\_name (view source)

Defined in: uf\_fam.h

Overview

Returns the name of a family attribute class.

Environment

Internal and External

Required License(s)

gateway

```
int UF_FAM_ask_class_name
(
    int subtype,
    char ** name
)
```

int	subtype	Input	Attribute subtype of class UF_fam_attr_text_subtype: UF_fam_attr_numeric_subtype: UF_fam_attr_integer_subtype, UF_fam_attr_double_subtype, UF_fam_attr_string_subtype, UF_fam_attr_part_subtype, UF_fam_attr_name_subtype, UF_fam_attr_instance_subtype, UF_fam_attr_exp_subtype, UF_fam_attr_mirror_subtype, UF_fam_attr_density_subtype, UF_fam_attr_feature_subtype,
char * *	name	Output to UF_*free*	Name of the attribute class. This must be freed by calling UF_free.

UF\_FAM\_ask\_family\_data (view source)

Defined in: uf\_fam.h

Overview

Returns the data of a family.

Environment

Internal and External

See Also

[UF\\_FAM\\_free\\_family\\_data](#)

Required License(s)

gateway

```
int UF_FAM_ask_family_data
(
    tag_t family,
    UF_FAM_family_data_p_t family_data
)
```

<a href="#">tag_t</a>	<b>family</b>	Input	Object identifier of the family.
<a href="#">UF_FAM_family_data_p_t</a>	<b>family_data</b>	Output to UF_*free*	Data of the family. The UF_FAM_family_data_t structure must be allocated by the user, and a pointer passed to this routine. This routine returns data in the structure which must be freed by calling UF_FAM_free_family_data.

UF\_FAM\_ask\_instance\_data [\(view source\)](#)

Defined in: `uf_fam.h`

Overview

Returns the data of a family instance.

Environment

Internal and External

Required License(s)

gateway

```
int UF_FAM_ask_instance_data
(
    tag_t instance,
    tag_t * family,
    int * member_index
)
```

<a href="#">tag_t</a>	<b>instance</b>	Input	Object identifier of the family instance.
<a href="#">tag_t *</a>	<b>family</b>	Output	Object identifier of the family.
<a href="#">int *</a>	<b>member_index</b>	Output	Index of the family member.

UF\_FAM\_ask\_member\_column\_data (view source)

Defined in: uf\_fam.h

Overview

Returns family member column data.

Environment

Internal and External

See Also

[UF\\_FAM\\_free\\_member\\_data](#)

Required License(s)

gateway

```
int UF_FAM_ask_member_column_data
(
    tag_t family,
    int attribute_index,
    UF_FAM_member_data_p_t member_data
)
```

<a href="#">tag_t</a>	<b>family</b>	Input	Object identifier of the family.
int	<b>attribute_index</b>	Input	Index of the family attribute.
<a href="#">UF_FAM_member_data_p_t</a>	<b>member_data</b>	Output to UF_*free*	Column data of the object. The UF_FAM_member_data_t structure must be allocated by the user, and a pointer passed to this routine. This routine returns data in the structure which must be freed by calling UF_FAM_free_member_data.

UF\_FAM\_ask\_member\_row\_data (view source)

Defined in: uf\_fam.h

Overview

Returns family member row data.

Environment

Internal and External

See Also

[UF\\_FAM\\_free\\_member\\_data](#)

Required License(s)

gateway

```
int UF_FAM_ask_member_row_data
(
    tag_t family,
    int member_index,
    UF_FAM_member_data_p_t member_data
)
```

tag_t	family	Input	Object identifier of the family.
int	member_index	Input	Index of the family member.
UF_FAM_member_data_p_t	member_data	Output to UF_*free*	Row data of the object. The UF_FAM_member_data_t structure must be allocated by the user, and a pointer passed to this routine. This routine returns data in the structure which must be freed by calling UF_FAM_free_member_data.

UF\_FAM\_check\_attribute\_status (view source)

Defined in: uf\_fam.h

Overview

Performs an update validity check on a family attribute object. If the attribute object is valid, 0 is returned. If any problems are found with the attribute object, an appropriate error code is returned.

Environment

Internal and External

Required License(s)

solid\_modeling

```
int UF_FAM_check_attribute_status
(
    tag_t attribute
)
```

tag_t	attribute	Input	Object identifier of the attribute.
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UF\_FAM\_check\_family\_status (view source)

Defined in: uf\_fam.h

Overview

Performs an update validity check on a family object. If the family object is valid, 0 is returned. If any problems are found with the family object, an appropriate error code is returned.

Environment

Internal and External

Required License(s)

solid\_modeling

```
int UF_FAM_check_family_status
(
    tag_t family
)
```

tag_t	family	Input	Object identifier of the family.
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UF\_FAM\_check\_member\_status (view source)

Defined in: uf\_fam.h

Overview

Performs an update validity check on a family member.  
If the family member is valid, 0 is returned. If any problems are found with the family member, an appropriate error code is returned.

Environment

Internal and External

Required License(s)

solid\_modeling

```
int UF_FAM_check_member_status
(
    tag_t family,
    int member_index
)
```

tag_t	family	Input	Object identifier of the family.
int	member_index	Input	Index of the family member.

UF\_FAM\_create\_attribute (view source)

Defined in: uf\_fam.h

Overview

Creates a family attribute.

Environment

Internal and External

Required License(s)

solid\_modeling

```
int UF_FAM_create_attribute
(
    UF_FAM_attribute_data_p_t attribute_data,
    tag_t * attribute
)
```

UF_FAM_attribute_data_p_t	attribute_data	Input	Data for the attribute.
tag_t *	attribute	Output	Object identifier of attribute.

UF\_FAM\_create\_family (view source)

Defined in: uf\_fam.h

**Overview**  
Creates a family.

**Environment**  
Internal and External

**Required License(s)**  
solid\_modeling

```
int UF_FAM_create_family
(
    UF_FAM_family_data_p_t family_data,
    tag_t * family
)
```

UF_FAM_family_data_p_t	family_data	Input	Data for the family.
tag_t *	family	Output	Object identifier of family.

UF\_FAM\_create\_instance (view source)

Defined in: uf\_fam.h

**Overview**  
Creates an instance of a family member in the work part. This effectively turns the work part into a part family member. This is unlike UF\_PART\_create\_family\_instance, which creates a new part to use instead of the work part.

May be called on the template part, which is the equivalent of applying the family member attributes to the template part. On doing this, the instance must be deleted afterwards using UF\_FAM\_delete\_instance otherwise the template part will stay as a part member of itself.

**Environment**



Internal and External

See Also

[UF\\_PART\\_create\\_family\\_instance](#)  
[UF\\_FAM\\_delete\\_instance](#)

Required License(s)

solid\_modeling

```
int UF_FAM_create_instance
(
    tag_t family,
    int member_index,
    tag_t * instance
)
```

tag_t	family	Input	Object identifier of the family.
int	member_index	Input	Index of the family member.
tag_t *	instance	Output	Object identifier of the family instance.

UF\_FAM\_delete\_instance [\(view source\)](#)

Defined in: `uf_fam.h`

Overview

Deletes a family instance.

Environment

Internal and External

Required License(s)

solid\_modeling

```
int UF_FAM_delete_instance
(
    tag_t instance
)
```

tag_t	instance	Input	Object identifier of the family instance.
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UF\_FAM\_delete\_member [\(view source\)](#)

Defined in: `uf_fam.h`

Overview

Deletes a family member.

Environment

Internal and External

Required License(s)

solid\_modeling

```
int UF_FAM_delete_member
(
    tag_t family,
    int member_index
)
```

tag_t	family	Input	Object identifier of the family.
int	member_index	Input	Index of the family member.

UF\_FAM\_edit\_attribute (view source)

Defined in: uf\_fam.h

Overview

Edits a family attribute.

Environment

Internal and External

Required License(s)

solid\_modeling

```
int UF_FAM_edit_attribute
(
    tag_t attribute,
    UF_FAM_attribute_data_p_t attribute_data
)
```

tag_t	attribute	Input	Object identifier of the attribute.
UF_FAM_attribute_data_p_t	attribute_data	Input	New data for the attribute.

UF\_FAM\_edit\_family (view source)

Defined in: uf\_fam.h

Overview

Edits the data of a family.

Environment

Internal and External

## Required License(s)

solid\_modeling

```
int UF_FAM_edit_family
(
    tag_t family,
    UF_FAM_family_data_p_t family_data
)
```

<a href="#">tag_t</a>	<b>family</b>	Input	Object identifier of the family.
<a href="#">UF_FAM_family_data_p_t</a>	<b>family_data</b>	Input	New data for the family.

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## UF\_FAM\_edit\_member [\(view source\)](#)

Defined in: `uf_fam.h`

### Overview

Edits the data of a family member. When all the editing has been done, call UF\_MODL\_update to perform an update.

### Environment

Internal and External

## Required License(s)

solid\_modeling

```
int UF_FAM_edit_member
(
    tag_t family,
    int member_index,
    UF_FAM_member_data_p_t member_data
)
```

<a href="#">tag_t</a>	<b>family</b>	Input	Object identifier of the family.
int	<b>member_index</b>	Input	Index of the family member.
<a href="#">UF_FAM_member_data_p_t</a>	<b>member_data</b>	Input	New data for the family member.

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## UF\_FAM\_evaluate\_intent\_data [\(view source\)](#)

Defined in: `uf_fam.h`

### Overview

Evaluate intent data and return indices of matching family members.

### Environment

Internal and External

Required License(s)

solid\_modeling

```
int UF_FAM_evaluate_intent_data
(
    UF_FAM_intent_data_p_t intent_data,
    int * match_count,
    int ** match_indices
)
```

UF_FAM_intent_data_p_t	intent_data	Input	Data of the intent.
int *	match_count	Output	Number of matching family members
int **	match_indices	Output to UF_*free*	Indices of matching family members

UF\_FAM\_free\_attribute\_data (view source)

Defined in: uf\_fam.h

Overview

Frees data returned from UF\_FAM\_ask\_attribute\_data.

Environment

Internal and External

See Also

[UF\\_FAM\\_ask\\_attribute\\_data](#)

Required License(s)

solid\_modeling

```
int UF_FAM_free_attribute_data
(
    UF_FAM_attribute_data_p_t attribute_data
)
```

UF_FAM_attribute_data_p_t	attribute_data	Input	Data of the attribute.
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UF\_FAM\_free\_class\_data (view source)

Defined in: uf\_fam.h

Overview

Frees data returned from UF\_FAM\_ask\_class\_data.

Environment

Internal and External

### See Also

[UF\\_FAM\\_ask\\_class\\_data](#)

### Required License(s)

solid\_modeling

```
int UF_FAM_free_class_data
(
    UF_FAM_class_data_p_t class_data
)
```

<a href="#">UF_FAM_class_data_p_t</a>	<b>class_data</b>	Input	Data of the attribute class.
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## UF\_FAM\_free\_family\_data [\(view source\)](#)

Defined in: `uf_fam.h`

### Overview

Frees data returned from `UF_FAM_ask_family_data`.

### Environment

Internal and External

### Required License(s)

solid\_modeling

```
int UF_FAM_free_family_data
(
    UF_FAM_family_data_p_t family_data
)
```

<a href="#">UF_FAM_family_data_p_t</a>	<b>family_data</b>	Input	Data of the family.
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## UF\_FAM\_free\_member\_data [\(view source\)](#)

Defined in: `uf_fam.h`

### Overview

Frees data returned from `UF_FAM_ask_member_row_data` and `UF_FAM_ask_member_column_data`.

### Environment

Internal and External

### See Also

[UF\\_FAM\\_ask\\_member\\_row\\_data](#)

[UF\\_FAM\\_ask\\_member\\_column\\_data](#)

**Required License(s)**  
solid\_modeling

```
int UF_FAM_free_member_data
(  
    UF_FAM_member_data_p_t member_data  
)
```

UF_FAM_member_data_p_t	member_data	Input	Data of the family member.
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