

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

Defined in: `uf_pd.h`

Overview

The following function will add a business process modifier to the product attribute.

Environment

Internal or External

History

Created in V19.0

Required License(s)

gateway

```
int UF_PD_add_business_process_modifier
(
    tag_t product_attribute,
    char * modifier_name
)
```

tag_t	product_attribute	Input	Product attribute in which to add modifier. Must be of type UF_smsp_product_definition_type and subtype UF_smsp_product_attribute_subtype
char *	modifier_name	Input	Knowledge Fusion (KF) name of the modifier to add.

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

Defined in: `uf_pd.h`

Overview

The following function will query the business process modifier data from the business process modifier.

Environment

Internal or External

History

Created in V19.0

Required License(s)

gateway

```
int UF_PD_ask_business_process_modifier_data
(
    tag_t business_process_modifier,
    UF_PD_business_modifier_p_t business_modifier
)
```

tag_t	business_process_modifier	Input	Business process modifier to query.
UF_PD_business_modifier_p_t	business_modifier	Output	Data of the business process modifier.

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

Defined in: `uf_pd.h`

Overview

The following function will ask the business process modifier type

The valid types are:

```
UF_PD_BUS_MODFR_STRING_TYPE = 0,  
UF_PD_BUS_MODFR_LIST_TYPE,  
UF_PD_BUS_MODFR_URL_TYPE,  
UF_PD_BUS_MODFR_REVISION_TYPE,  
UF_PD_BUS_MODFR_SAFETY_CLASS_TYPE,  
UF_PD_BUS_MODFR_CUSTOMER_VALUE_TYPE
```

Environment

Internal or External

History

Created in V19.0

Required License(s)

gateway

```
int UF_PD_ask_business_process_modifier_type  
(  
    tag_t business_process_modifier,  
    UF_PD_BUS_MODFR_type_e * type  
)
```

tag_t	business_process_modifier	Input	Business process modifier to query.
UF_PD_BUS_MODFR_type_e *	type	Output	Business process modifier type.

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

Defined in: `uf_pd.h`

Overview

The following function will query the business process modifiers from the product attribute object.

Environment

Internal or External

History

Created in V19.0

Required License(s)

gateway

```
int UF_PD_ask_business_process_modifiers
(
    tag_t product_attributes,
    tag_p_t * modifiers,
    int * num_modifiers
)
```

tag_t	product_attributes	Input	Product attribute to query. Must be of type UF_smsp_product_definition_type and subtype UF_smsp_product_attribute_subtype
tag_p_t *	modifiers	Output to UF_*free*	Array of business process modifiers applied to the product attribute.
int *	num_modifiers	Output	Number of business process modifiers in array.

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

Defined in: uf_pd.h

Overview

This function will ask the allowable geometry that can be associated to the defined product attribute

Return

Return code:
0 = No error
not 0 = Error code

Environment

Internal and External

History

Created in V18.0

Required License(s)

gateway

```
int UF_PD_ask_definition_allowable_geometry
(
    tag_t definition,
    int * num_allowable_geometry,
    char *** allowable_geom
)
```

tag_t	definition	Input	Product definition to query. Must be of type UF_smsp_product_definition_type and subtype UF_smsp_product_attribute_subtype
int *	num_allowable_geometry	Output	Number of the allowable meometry
char * * *	allowable_geom	Output to UF_*free*	Array of allowable geometry

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

Defined in: `uf_pd.h`

Overview

Queries the data from a Product Definition Attribute.

Return

Return code:

0 = No error

not 0 = Error code

Environment

Internal and External

History

Originally created in V19 - corrected naming in NX7

Required License(s)

gateway

```
int UF_PD_ask_product_attribute_data
(
    tag_t attribute,
    UF_PD_product_attribute_p_t attribute_data
)
```

tag_t	attribute	Input	Tag of the product definition object to query. Must be of type UF_smsp_product_definition_type and subtype UF_smsp_product_attribute_subtype
UF_PD_product_attribute_p_t	attribute_data	Output	Data of Product attributes

UF_PD_ask_product_attribute_data_2 [\(view source\)](#)

Defined in: `uf_pd.h`

Overview

Queries the data from a Product Definition Attribute.

Return
Return code:
0 = No error
not 0 = Error code

Environment
Internal and External

History
Originally created in V19 - corrected naming in NX7

Required License(s)
gateway

```
int UF_PD_ask_product_attribute_data_2
(
    tag_t attribute,
    UF_PD_product_attribute_2_p_t attribute_data
)
```

tag_t	attribute	Input	Tag of the product definition object to query. Must be of type UF_smsp_product_definition_type and subtype UF_smsp_product_attribute_subtype
UF_PD_product_attribute_2_p_t	attribute_data	Output	Data of Product attributes

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

Defined in: uf_pd.h

Overview
Queries the attribute value data from a Product Definition Attribute Value.

Return
Return code:
0 = No error
not 0 = Error code

Environment
Internal and External

History
Originally created in V19 - corrected naming in NX7

Required License(s)
gateway

```
int UF_PD_ask_product_attribute_value_data
(
    tag_t attribute_value,
    UF_PD_attribute_value_p_t value_data
)
```

tag_t	attribute_value	Input	Tag of the product definition object to query.
UF_PD_attribute_value_p_t	value_data	Output	Data of Product attributes

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

Defined in: `uf_pd.h`

Overview

Queries the data from a Product Definition.

Return

Return code:
0 = No error
not 0 = Error code

Environment

Internal and External

History

Originally created in V19 - corrected naming in NX7

Required License(s)

gateway

```
int UF_PD_ask_product_attributes
(
    tag_t product_definition,
    tag_p_t * product_attributess,
    int * num_product_attributes
)
```

tag_t	product_definition	Input	Tag of the product definition object to query. Must be of type UF_smsp_product_definition_type and subtype UF_smsp_product_attribute_subtype
tag_p_t *	product_attributess	Output to UF_*free*	Product attributes
int *	num_product_attributes	Output	Number of product attributes

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

Defined in: `uf_pd.h`

Overview

Queries the data from a Product Definition. Please use the function UF_PD_free_product_definition_data to free the allocated product

definition data.

Return

Return code:
0 = No error
not 0 = Error code

Environment

Internal and External

History

Created in V18.0

Required License(s)

gateway

```
int UF_PD_ask_product_definition_data
(
    tag_t product_definition,
    UF_PD_product_definition_p_t * product_definitions
)
```

tag_t	product_definition	Input	Tag of the product definition object to query. Must be of type UF_smsp_product_definition_type and subtype UF_smsp_product_attribute_subtype
UF_PD_product_definition_p_t *	product_definitions	Output to UF_*free*	Product definition data for the given object.

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

Defined in: uf_pd.h

Overview

This function will query the Product Definition that defines the Product Definition Display Instance.

Return

Return code:
0 = No error
not 0 = Error code

Environment

Internal and External

History

Created in V18.0

Required License(s)

gateway

```
int UF_PD_ask_product_definition_from_instance
(
```

```
    tag_t instance,  
    tag_t * product_definition  
)
```

tag_t	instance	Input	Product definition display instance to query.
tag_t *	product_definition	Output	Product definition defined by the instance

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

Defined in: uf_pd.h

Overview

Queries Product Definition in part

Return

Return code:
0 = No error
not 0 = Error code

Environment

Internal and External

History

Created in V19.0

Required License(s)

gateway

```
int UF_PD_ask_product_definitions  
(  
    tag_t context,  
    tag_p_t * product_definitions,  
    int * num_product_definitions  
)
```

tag_t	context	Input	Part context for the query
tag_p_t *	product_definitions	Output to UF_*free*	Array of product definition objects
int *	num_product_definitions	Output	Number of product attributes

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

Defined in: uf_pd.h

Overview

This function will query the Product Definition Display Instances for the given Product Definition.

Return

Return code:
0 = No error
not 0 = Error code

Environment

Internal and External

History

Created in V18.0

Required License(s)

gateway

```
int UF_PD_ask_product_definitions_instances
(
    tag_t product_definition,
    tag_p_t * instances,
    int * num_instances
)
```

tag_t	product_definition	Input	Product definition to query. Must be of type UF_smsp_product_definition_type and subtype UF_smsp_product_attribute_subtype
tag_p_t *	instances	Output to UF_*free*	Array of instances created from the Product Definition in the work part.
int *	num_instances	Output	Number of instances in the array.

UF_PD_ask_product_definitions_of_geometry (view source)

Defined in: uf_pd.h

Overview

Queries the product definitions associated with the specified geometry. Please note that those Product Definitions that reference more geometry than what is specified will be returned by this function.

Return

Return code:
0 = No error
not 0 = Error code

Environment

Internal and External

History

Created in V18.0

Required License(s)

gateway

```
int UF_PD_ask_product_definitions_of_geometry
(
```

```
tag_t * geometry_references,  
int num_geometry_references,  
tag_p_t * product_definitions,  
int * num_product_definitions  
)
```

tag_t *	geometry_references	Input	Geometry to cross reference with product definition objects.
int	num_geometry_references	Input	Number of tags references in geometry array.
tag_p_t *	product_definitions	Output to UF_*free*	Product definition objects referencing the specified geometry.
int *	num_product_definitions	Output	num_product_definitions Number of product definition objects in array.

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

Defined in: uf_pd.h

Overview

Creates a Product Definition Display Instance in the specified part file.

Return

Return code:
0 = No error
not 0 = Error code

Environment

Internal and External

History

Created in V18.0

Required License(s)

gateway

```
int UF_PD_create_instance  
(  
tag_t product_definition,  
UF_PD_product_definition_instance_p_t instance_definition,  
tag_t * instance  
)
```

tag_t	product_definition	Input	Tag of the product definition object to query. Must be of type UF_smsp_product_definition_type and subtype UF_smsp_product_attribute_subtype
-------	--------------------	-------	--

UF_PD_product_definition_instance_p_t	instance_definition	Input	Product definition instance data to apply to the new display.
tag_t *	instance	Output	Instance created.

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

Defined in: `uf_pd.h`

Overview

Creates a Product Definition in the work part.

Notes: In NX4, each Product Definition can only contain one product attribute. The system will raise an error if there is more than one attribute in the product definition

In NX6, following modifications are implemented -

1. As part of product definition creation, a display instance will also be created in the TOP view.
2. The system will provide a display instance for legacy product definition objects that didn't have a display instance. This display instance is visible in a view named MIGRATED_PMI.

Return

Return code:

0 = No error

not 0 = Error code

Environment

Internal and External

History

Created in V18.0, modified in release NX4.0

Required License(s)

gateway

```
int UF_PD_create_product_definition
(
    UF_PD_product_definition_p_t product_definition,
    tag_t * product_definition_created
)
```

UF_PD_product_definition_p_t	product_definition	Input	Specification for the product definition to be created in the work part. Must be of type <code>UF_smsp_product_definition_type</code> and subtype <code>UF_smsp_product_attribute_subtype</code>
tag_t *	product_definition_created	Output	Tag of the created product definition

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

Defined in: `uf_pd.h`

Overview

Frees a previously allocated business modifier structure.

Return

Return code:
0 = No error
not 0 = Error code

Environment

Internal and External

History

Created in V18.0

Required License(s)

gateway

```
int UF_PD_free_business_modifier_data
(
    UF_PD_business_modifier_p_t business_modifier
)
```

UF_PD_business_modifier_p_t	business_modifier	Input / Output	Business Modifier data for the given object.
-----------------------------	-------------------	----------------	--

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

Defined in: `uf_pd.h`

Overview

Frees a previously allocated product attribute structure.

Return

Return code:
0 = No error
not 0 = Error code

Environment

Internal and External

History

Created in V18.0

Required License(s)

gateway

```
int UF_PD_free_product_attribute_data
(
    UF_PD_product_attribute_p_t attr
```

)

UF_PD_product_attribute_p_t	attr	Input / Output	Product attribute data for the given object. Must be of type UF_smsp_product_definition_type and subtype UF_smsp_product_attribute_subtype
-----------------------------	------	----------------	--

UF_PD_free_product_attribute_data_2 (view source)

Defined in: uf_pd.h

Overview
Frees a previously allocated product attribute structure.

Return
Return code:
0 = No error
not 0 = Error code

Environment
Internal and External

Required License(s)
gateway

```
int UF_PD_free_product_attribute_data_2
(
    UF_PD_product_attribute_2_p_t attr
)
```

UF_PD_product_attribute_2_p_t	attr	Input / Output	Product attribute data for the given object.
-------------------------------	------	----------------	--

UF_PD_free_product_attribute_value_data (view source)

Defined in: uf_pd.h

Overview
Frees a previously allocated product attribute value structure.

Return
Return code:
0 = No error
not 0 = Error code

Environment
Internal and External

History
Created in V18.0

Required License(s)

gateway

```
int UF_PD_free_product_attribute_value_data
(
    UF_PD_attribute_value_p_t value_data
)
```

UF_PD_attribute_value_p_t	value_data	Input / Output	Product attribute data for the given object.
---------------------------	------------	----------------	--

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

Defined in: `uf_pd.h`

Overview

Frees a previously allocated product definition structure.

Return

Return code:
0 = No error
not 0 = Error code

Environment

Internal and External

History

Created in V18.0

Required License(s)

gateway

```
int UF_PD_free_product_definition_data
(
    UF_PD_product_definition_p_t * product_definition
)
```

UF_PD_product_definition_p_t *	product_definition	Input / Output	Product definition data for the given object. Must be of type UF_smsp_product_definition_type and subtype UF_smsp_product_attribute_subtype
--------------------------------	--------------------	----------------	---

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

Defined in: `uf_pd.h`

Overview

Initializes the data structure for product attributes. Please note that this does not guarantee the data in the structure is valid for

creation operations, but will ensure all data is initialized.

Return

Return code:
0 = No error
not 0 = Error code

Environment

Internal and External

History

Created in V19.0

Required License(s)

gateway

```
int UF_PD_init_attribute
(
    UF_PD_product_attribute_p_t attribute_data
)
```

UF_PD_product_attribute_p_t	attribute_data	Output to UF_*free*	Free using UF_free
-----------------------------	----------------	---------------------	--------------------

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

Defined in: `uf_pd.h`

Overview

Initializes the data structure for attribute values. Please note that this does not guarantee the data in the structure is valid for creation operations, but will ensure all data is initialized.

Return

Return code:
0 = No error
not 0 = Error code

Environment

Internal and External

History

Created in V19.0

Required License(s)

gateway

```
int UF_PD_init_attribute_value
(
    UF_PD_attribute_value_p_t attribute_value_data
)
```

UF_PD_attribute_value_p_t	attribute_value_data	Input / Output
---------------------------	----------------------	----------------

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

Defined in: `uf_pd.h`

Overview

Initializes the data structure for business modifier. Please note that this does not guarantee the data in the structure is valid for creation operations, but will ensure all data is initialized.

Return

Return code:

0 = No error

not 0 = Error code

Environment

Internal and External

History

Created in V19.0

Required License(s)

gateway

```
int UF_PD_init_business_modifier
(
    UF_PD_business_modifier_p_t business_modifier
)
```

<code>UF_PD_business_modifier_p_t</code>	<code>business_modifier</code>	Input / Output
--	--------------------------------	----------------

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

Defined in: `uf_pd.h`

Overview

Initializes the data structure for instance objects. Please note that this does not guarantee the data in the structure is valid for creation operations, but will ensure all data is initialized.

Return

Return code:

0 = No error

not 0 = Error code

Environment

Internal and External

History

Created in V19.0

Required License(s)

gateway


```
int UF_PD_init_instance  
(  
    UF_PD_product_definition_instance_p_t instance_data  
)
```

UF_PD_product_definition_instance_p_t	instance_data	Input / Output
---------------------------------------	---------------	----------------

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

Defined in: `uf_pd.h`

Overview

Initializes the data structure for smart model leaders. Please note that this does not guarantee the data in the structure is valid for creation operations, but will ensure all data is initialized.

Return

Return code:
0 = No error
not 0 = Error code

Environment

Internal and External

History

Created in V19.0

Required License(s)

gateway

```
int UF_PD_init_leader  
(  
    UF_PD_product_definition_leader_p_t leader_data  
)
```

UF_PD_product_definition_leader_p_t	leader_data	Input / Output
-------------------------------------	-------------	----------------

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

Defined in: `uf_pd.h`

Overview

Initializes the data structure for leader associativity points. Please note that this does not guarantee the data in the structure is valid for creation operations, but will ensure all data is initialized.

Return

Return code:
0 = No error
not 0 = Error code

Environment

Internal and External

History

Created in V19.0

Required License(s)

gateway

```
int UF_PD_init_leader_assoc_point
(
    UF_PD_product_definition_leader_assoc_pnt_p_t leader_point_data
)
```

UF_PD_product_definition_leader_assoc_pnt_p_t	leader_point_data	Input / Output
---	-------------------	----------------

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

Defined in: `uf_pd.h`

Overview

Initializes the data structure for product definitions. Please note that this does not guarantee the data in the structure is valid for creation operations, but will ensure all data is initialized.

Return

Return code:
0 = No error
not 0 = Error code

Environment

Internal and External

History

Created in V19.0

Required License(s)

gateway

```
int UF_PD_init_product_definition
(
    UF_PD_product_definition_p_t product_definition_data
)
```

UF_PD_product_definition_p_t	product_definition_data	Output to UF_*free*	Free using UF_free.
------------------------------	-------------------------	---------------------	---------------------

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

Defined in: `uf_pd.h`

Overview

This function will check the Product Definition retain status

Return

Return code:
0 = No error
not 0 = Error code

Environment

Internal and External

History

Created in V18.0

Required License(s)

gateway

```
int UF_PD_is_retained
(
    tag_t product_definition,
    logical * retained
)
```

tag_t	product_definition	Input	Product definition to query. Must be of type UF_smsp_product_definition_type and subtype UF_smsp_product_attribute_subtype
logical *	retained	Output	Object retain status

UF_PD_modify_product_attribute (view source)

Defined in: uf_pd.h

Overview

This function will modify the product attribute data defined by user

Return

Return code:
0 = No error
not 0 = Error code

Environment

Internal and External

History

Created in NX2.0

Required License(s)

gateway

```
int UF_PD_modify_product_attribute
(
    tag_t attribute,
    UF_PD_product_attribute_p_t data
```

)

tag_t	attribute	Input	Product attribute to be modified
UF_PD_product_attribute_p_t	data	Input	Product attribute data

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

Defined in: `uf_pd.h`

Overview

The following function will edit the business process modifier data from the business process modifier.

Environment

Internal or External

History

Created in V19.0

Required License(s)

gateway

```
int UF_PD_set_business_process_modifier_data
(
    tag_t business_process_modifier,
    UF_PD_business_modifier_t business_modifier
)
```

tag_t	business_process_modifier	Input	Business process modifier to query.
UF_PD_business_modifier_t	business_modifier	Input	Data of the business process modifier.

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

Defined in: `uf_pd.h`

Overview

Sets the data for a Product Definition.

Notes: In NX4, each Product Definition can only contain one product attribute. The system will raise an error if there is more than one attribute in the product definition

Return

Return code:
0 = No error
not 0 = Error code

Environment

Internal and External

History

Created in V18.0, modified in release NX4.0

Required License(s)

gateway

```
int UF_PD_set_product_definition_data
(
    tag_t product_definition,
    UF_PD_product_definition_p_t product_definition_data
)
```

tag_t	product_definition	Input	Tag of the product definition object to query.
UF_PD_product_definition_p_t	product_definition_data	Input	Product definition data for the given object. Must be of type UF_smsp_product_definition_type and subtype UF_smsp_product_attribute_subtype