UF_PS_ask_current_highest_tag (view source)

Defined in: uf_ps.h

Overview

User Function routine to determine the highest parasolid tag being used in the current session

Environment

Internal and External

History

Original release was in V18.0.4

Required License(s)

gateway

```
int UF_PS_ask_current_highest_tag
(
    tag_t * highest_tag
)
```

tag_t *	**highest_tag**	Output	The highest parasolid being used in the current session

---

UF_PS_ask_current_partition (view source)

Defined in: uf_ps.h

Overview

Return the current Parasolid partition. A partition is an area within Parasolid where geometry can be created and deleted. This function is only useful for a site with access to the Parasolid Solid Modeler. NX usually creates a new partition for each solid body that is created. Boolean operations are not allowed on bodies in different partitions.

Environment

Internal and External

History

Original release was in V15.0.

Required License(s)

gateway

```
int UF_PS_ask_current_partition
(
    tag_t * partition
)
```

tag_t *	**partition**	Output	Tag of the current Parasolid partition

UF_PS_ask_entity_partition (view source)

Defined in: uf_ps.h

Overview

Returns the Parasolid partition that a Parasolid object resides in.
This function is only useful for a site with access to the Parasolid Solid Modeler.

Environment

Internal and External

History

Original release was in V15.0.

Required License(s)

gateway

```
int UF_PS_ask_entity_partition
(
    tag_t entity,
    tag_t * partition
)
```

tag_t	**entity**	Input	Tag of the parasolid entity
tag_t *	**partition**	Output	Tag of the Parasolid partition

UF_PS_ask_journal_data (view source)

Defined in: uf_ps.h

Overview

Retrieves information pertaining to Parasolid journaling. The information that is currently returned through this command includes:
The current status of Parasolid journaling.

When Parasolid journaling is enabled, each call to a Parasolid routine and the values returned from the routine are recorded in a journal file. When Parasolid journaling is disabled, the calls to Parasolid routines are not recorded in the journal file.

The length of the Parasolid journal file name.
The name of the Parasolid journal file.

If the -jou parameter is not specified when the command to initiate the NX session is entered, the Parasolid journal file is created with a default name. Utilizing the -jou parameter to specify a journal file name enables Parasolid journaling.

Return

Return code
0 = Requested information accessed
not 0 = Unable to retrieve the requested information

Environment

Internal

See Also

See the example

Required License(s)

gateway

```
int UF_PS_ask_journal_data
(
    int * journal_state,
    char journal_name [ MAX_FSPEC_BUFSIZE ]
)
```

int *	**journal_state**	Output	Current state of Parasolid journaling
			UF_PS_DISABLED = Disabled
			UF_PS_ENABLED = Enabled

char	**journal_name [MAX_FSPEC_BUFSIZE]**	Output	Name of the Parasolid journal file.

UF_PS_ask_kernel_version (view source)

Defined in: uf_ps.h

Overview

Returns information about the version of the parasolid kernel currently running.

Environment

Internal and External

History

Original release NX2.0

Required License(s)

gateway

```
int UF_PS_ask_kernel_version
(
    UF_PS_kernel_version_t * version_data
)
```

UF_PS_kernel_version_t *	**version_data**	Input	- Pointer to a validly allocated UF_PS_kernel_version_t The results reside in that structure after the call.

UF_PS_ask_object_of_ps_tag (view source)

Defined in: uf_ps.h

Overview

Gets the NX object identifier that corresponds to a given Parasolid tag. The object identifier that is returned is always to the prototype object. If an object identifier is not found for the Parasolid tag, a NULL_TAG is returned. This function is intended to be used by sites with direct access to the Parasolid solid modeler.

Return

Return code
0 = Object identifier returned.
not 0 = Unable to find the object identifier for the
given Parasolid tag.

Environment

Internal

See Also

Refer to the example

Required License(s)

gateway

```
int UF_PS_ask_object_of_ps_tag
(
    tag_t ps_tag,
    tag_t * obj_id
)
```

tag_t	**ps_tag**	Input	The Parasolid tag to lookup
tag_t *	**obj_id**	Output	The NX object identifier that corresponds to the input Parasolid tag. NULL_TAG = Could not find an object identifier to correspond to the given Parasolid tag.

UF_PS_ask_ps_tag_of_object (view source)

Defined in: uf_ps.h

Overview

Gets the Parasolid tag that corresponds to the given object identifier. This command accepts solid body, solid edge or solid face object identifiers. When the object identifier refers to an object occurrence, the Parasolid tag that corresponds to the prototype object is returned. If a Parasolid tag is not found for the object identifier, a NULL_TAG is returned.
NOTE: This command is intended to be used by sites with direct access to the Parasolid solid modeler.

Return

Return code
0 = Parasolid tag returned.
not 0 = Unable to return the Parasolid tag for the
given object identifier.

Environment

Internal and External

See Also

See the example

Required License(s)

gateway

```
int UF_PS_ask_ps_tag_of_object
(
    tag_t obj_id,
    tag_t * ps_tag
)
```

tag_t	**obj_id**	Input	The object identifier to lookup
tag_t *	**ps_tag**	Output	The Parasolid tag that corresponds to the input object identifier. NULL_TAG = Could not find a Parasolid tag to correspond to the given object identifier.

UF_PS_ask_tags_remaining (view source)

Defined in: uf_ps.h

Overview

This function will return the number of parasolid tags that are available in the current session

Environment

Internal and External

History

Original release was in V18.0.4

Required License(s)

gateway

```
int UF_PS_ask_tags_remaining
(
    int * tags_remaining
)
```

int *	**tags_remaining**	Output	The number of parasolid tags that are available in the current session

UF_PS_create_obj_from_ps_tag (view source)

Defined in: uf_ps.h

Overview

Creates an NX object from a Parasolid tag. The Parasolid tag must be the tag of a Parasolid body. If a call is made directly to Parasolid to create a solid body and a Parasolid tag is received by the application, that tag is unknown to NX. This routine can be used to embed the Parasolid body into the NX's data model. The Parasolid object becomes part of NX's data model and the NX's tag identifying the new object is returned.

Return

Return code
0 = Object identifier returned.
not 0 = Unable to create an NX object from the given Parasolid tag.

Environment

Internal

Required License(s)

gateway

```
int UF_PS_create_obj_from_ps_tag
(
    tag_t ps_tag,
    tag_t * ug_tag
)
```

tag_t	**ps_tag**	Input	The Parasolid tag of a Parasolid body
tag_t *	**ug_tag**	Output	NX tag for Parasolid body

UF_PS_create_partition (view source)

Defined in: uf_ps.h

Overview

Creates a Parasolid partition and sets it as the current partition. A partition is an area within Parasolid where geometry can be created and deleted. This function is only useful for a site with access to the Parasolid Solid Modeler. NX usually creates a new partition for each solid body that is created. Boolean operations are not allowed on bodies in different partitions.

Environment

Internal and External

History

Original release was in V15.0.

Required License(s)

gateway

```
int UF_PS_create_partition
(
    tag_t * partition
)
```

tag_t *	**partition**	Output	Tag of the new Parasolid partition

---

UF_PS_create_ps_trimmed_curve (view source)

Defined in: uf_ps.h

Overview

Creates a Parasolid trimmed curve from an NX curve or edge object.
The input entity is not affected by this routine.

Environment

Internal and External

See Also

Refer to the example

History

Original release was in V14.0.

Required License(s)

gateway

```
int UF_PS_create_ps_trimmed_curve
(
    tag_t curve_or_edge,
    tag_t * ps_curve
)
```

tag_t	**curve_or_edge**	Input	Tag of an NX curve or edge entity
tag_t *	**ps_curve**	Output	Tag of the Parasolid trimmed curve

---

UF_PS_export_data (view source)

Defined in: uf_ps.h

Overview

Creates a Parasolid transmit file. The bodies that are input into this routine
must be NX type 70 subtype 0.

Environment

Internal and External

Required License(s)

gateway

```
int UF_PS_export_data
(
    uf_list_p_t body_list,
    char * file_name
)
```

uf_list_p_t	**body_list**	Input	List of bodies to be exported
char *	**file_name**	Input	New File name to put output into. An error is generated if the file you specify already exists. If you specify a full pathname, then the Parasolid transmit file will be created there. If you specify a simple file name, the file will be created in the directory specified by the UGII_UGSOLIDS_TMP environment variable. If this environment variable is not defined, then the transmit file will placed in the /tmp, /var/tmp or TMP directory.

UF_PS_export_linked_data (view source)

Defined in: uf_ps.h

Overview

User Function routine to export parasolid data and include attributes on the tags to link those tags to specific NX objects.

Environment

Internal and External

History

Original release was in V16.0.

Required License(s)

gateway

```
int UF_PS_export_linked_data
(
    tag_p_t tags,
    int n_tags,
    char * file_name,
    int version,
    UF_PS_link_f_p_t link_fnc,
    int * n_unexported,
    UF_PS_unexported_t * * unexported_tags
)
```

tag_p_t	**tags**	Input	Array of tags to export. Valid objects are NX solid bodies and NX curves. NX curves are exported as Parasolid wire bodies.

int	**n_tags**	Input	Count of tags in array.
char *	**file_name**	Input	File name to put output into. This file must not exist. The routine will return an error code if the file does exist.
int	**version**	Input	Version number of Parasolid If non-zero, specifies the desired version of Parasolid for the transmit file. "250" is version 25.0, "261" is version 26.1 etc. It may not be possible to go back to every previous version of Parasolid. If zero, then the current version is used.
UF_PS_link_f_p_t	**link_fnc**	Input	Reserved for Licensed Parasolid Developers. Please use NULL otherwise. Link attribute filter. This is an integer function of the form: int linkfn(tag_t ug_tag, int ps_tag); The provided function will be called for all the curves, bodies, edges and faces being exported. Objects of other types will be ignored. "ug_tag" is the NX tag of the object, and "ps_tag" is its corresponding Parasolid tag. Currently, the integer status returned is not used by NX. This allows the user to define a function to add user defined Parasolid attributes to the ps_tag. These attributes are stored in the transmit file and can be interpreted later when the file is imported. This is a way for users to add their own personalized information to Parasolid objects.
int *	**n_unexported**	Output	Count of tags not exported.
UF_PS_unexported_t * *	**unexported_tags**	Output to UF_*free*	If a NULL is passed in, then no information will be returned. If the caller passes in a UF_PS_unexported_t , then an array of UF_PS_unexported_t structures will be allocated containing the tags of the bodies that were not exported, and the reasons (fail code). The caller must free this array by calling UF_free.

UF_PS_import_data (view source)

Defined in: uf_ps.h

Overview

Import a Parasolid transmit file. This file could have been created from any application that uses Parasolid.

Environment

Internal and External

Required License(s)

gateway

```
int UF_PS_import_data
(
    char * file_name,
    uf_list_p_t * body_list
)
```

char *	**file_name**	Input	File name to get data from
uf_list_p_t *	**body_list**	Output to UF_*free*	List of bodies that were imported. This list must be freed with UF_MODL_delete_list.

UF_PS_set_current_partition (view source)

Defined in: uf_ps.h

Overview

Sets the current Parasolid partition. A partition is an area within Parasolid where geometry can be created and deleted. This function is only useful for a site with access to the Parasolid Solid Modeler. NX usually creates a new partition for each solid body that is created. Boolean operations are not allowed on bodies in different partitions.

Environment

Internal and External

History

Original release was in V15.0.

Required License(s)

gateway

```
int UF_PS_set_current_partition
(
    tag_t partition
)
```

tag_t	**partition**	Input	This Tag will be made the current Parasolid partition

UF_PS_set_journal_state (view source)

Defined in: uf_ps.h

Overview

Enables and disables Parasolid journaling. When Parasolid journaling is enabled, each call to a Parasolid routine and the values returned from that call are recorded in a journal file. The Parasolid journal file updates to record each Parasolid routine call until journaling is disabled. If Parasolid journaling is not enabled when the NX session is terminated, the journal file is deleted.

Return

Return code
0 = The journaling state was updated
not 0 = The journaling state was unable to be updated

Environment

Internal

See Also

Refer to the example

Required License(s)

gateway

```
int UF_PS_set_journal_state
(
    int journal_state
)
```

int	**journal_state**	Input	journaling state:
			UF_PS_DISABLED = Disable journaling
			UF_PS_ENABLED = Enable journaling

UF_PS_write_to_journal (view source)

Defined in: uf_ps.h

Overview

Writes a specified character string to the Parasolid journal file. The character string is written out to the journal file in groups of 80 characters or until the null character is encountered. The character string can be written out to the Parasolid journal file only if journaling is enabled. If Parasolid journaling is not enabled when the NX session is terminated, the journal file is deleted and all of the data in the file is lost.

Return

Return code
0 = The character string was written to the Parasolid journal file
not 0 = Unable to write the character string to the Parasolid journal file

Environment

Internal

See Also

See the example

Required License(s)

gateway

```
int UF_PS_write_to_journal
(
    char * journal_commt
)
```

char *	**journal_commt**	Input	Character string to be written to the Parasolid journal file