UF_SCOP_ask_row_column_count (view source)

Defined in: uf_scop.h

Overview
This function returns the number of rows and columns in the drive surface grid for a Surface Contouring operation using the Surface Area drive method.

Environment
Internal and External

History
Released in NX3.0

```
int UF_SCOP_ask_row_column_count
(
    tag_t object_tag,
    int * num_row,
    int * num_col
)
```

tag_t	**object_tag**	Input	The operation object
int *	**num_row**	Output	Number of rows in the drive surface grid
int *	**num_col**	Output	Number of columns in the grid

UF_SCOP_ask_tx_intp_data_type (view source)

Defined in: uf_scop.h

Overview
This function asks the data type of the given interpolation vectors for a Surface Contouring operation using the Surface Area drive method and Interpolation tool axis. This function also returns the error code. If return is not zero, error happens.

Environment
Internal and External

History
Released in NX3.0

```
int UF_SCOP_ask_tx_intp_data_type
(
    tag_t object_tag,
    UF_SCOP_tx_intp_data_type_t * tx_intp_data_type
)
```

tag_t	**object_tag**	Input	The operation object

UF_SCOP_tx_intp_data_type_t *	**tx_intp_data_type**	Output	Data type of the given vector

---

UF_SCOP_ask_tx_intp_method (view source)

Defined in: uf_scop.h

Overview
This function asks the interpolation method of the given vectors for a Surface Contouring operation using the Surface Area drive method and Interpolation tool axis. This function also returns the error code. If return is not zero, error happens.

Environment
Internal and External

History
Released in NX3.0

```
int UF_SCOP_ask_tx_intp_method
(
    tag_t object_tag,
    UF_SCOP_tx_intp_method_t * tx_intp_method
)
```

tag_t	**object_tag**	Input	The operation object
UF_SCOP_tx_intp_method_t *	**tx_intp_method**	Output	Interpolation method of the given vectors

---

UF_SCOP_ask_tx_intp_vector_data (view source)

Defined in: uf_scop.h

Overview
This function asks the vector data for a Surface Contouring operation using the Surface Area drive method and Interpolation tool axis. This function also returns the error code. If return is not zero, error happens.

Environment
Internal and External

History
Released in NX3.0

```
int UF_SCOP_ask_tx_intp_vector_data
(
    tag_t object_tag,
    int * count,
    UF_SCOP_vector_data_t * * vector_data
)
```

tag_t	**object_tag**	Input	The operation object
int *	**count**	Output	The number of the vector data set
UF_SCOP_vector_data_t * *	**vector_data**	Output to UF_*free*	the vector data list The data list must be freed by the user using UF_free()

UF_SCOP_display_uv_dirs (view source)

Defined in: uf_scop.h

Overview
Displays UV grid directions on a surface.

Environment
Internal Only

History
Released in NX3.0

int UF_SCOP_display_uv_dirs
(
tag_t object_tag
)

tag_t	**object_tag**	Input	the parent object

UF_SCOP_eval_grid (view source)

Defined in: uf_scop.h

Overview
Evaluates a grid of surfaces at a input parameter position.
This function takes an optional entity to evaluate. This will only be used in the case where the parameter position is on a boundary point between two surfaces and the tag is one of the two surfaces to evaluate. If the parameter position is not on a boundary the entity will be ignored. If the parameter position is on a boundary and the tag is not one of the surfaces that contains the parameter position an error will be given.

Environment
Internal and External

History
Released in NX3.0

int UF_SCOP_eval_grid
(

```
    tag_t object_tag,
    double * uv,
    tag_t entity,
    UF_MODL_SRF_VALUE_p_t srf_value
)
```

tag_t	**object_tag**	Input	
double *	**uv**	Input	u,v parameter position
tag_t	**entity**	Input	entity to evaluate
UF_MODL_SRF_VALUE_p_t	**srf_value**	Output	evaluation data structure

---

UF_SCOP_get_next_drive_point (view source)

Defined in: uf_scop.h

Overview

This function reads through the file of drive points in a Surface Contouring operation using the Surface Area drive method and returns the next position. The data for the drive point is returned with respect to the absolute coordinate system.

Environment

Internal and External

History

Released in NX3.0

```
int UF_SCOP_get_next_drive_point
(
    tag_t object_tag,
    UF_DRPOS_id_t * drpos,
    int * point_count
)
```

tag_t	**object_tag**	Input	The operation object
UF_DRPOS_id_t *	**drpos**	Output	The next drive point
int *	**point_count**	Output	Number of points returned so far

---

UF_SCOP_rewind_drive_point (view source)

Defined in: uf_scop.h

Overview

This function rewind the Drive Points of a Surface Contouring operation to the beginning, such that the next call to UF_SCOP_get_next_drive_point will output the very first Drive Point.

There is no need to call this function if UF_SCOP_get_next_drive_point hasn't been called on the Surface Contouring operation.

Environment
Internal and External

See Also
UF_SCOP_get_next_drive_point

History
Released in NX3.0

int UF_SCOP_rewind_drive_point
(
tag_t object_tag
)

tag_t	**object_tag**	Input	The operation object

UF_SCOP_set_tx_intp_data_type (view source)

Defined in: uf_scop.h

Overview
This function sets the data type of the given interpolation vectors for a Surface Contouring operation using the Surface Area drive method and Interpolation tool axis. This function also returns the error code. If return is not zero, error happens.

Environment
Internal and External

History
Released in NX3.0

int UF_SCOP_set_tx_intp_data_type
(
tag_t object_tag,
UF_SCOP_tx_intp_data_type_t tx_intp_data_type
)

tag_t	**object_tag**	Input	The operation object
UF_SCOP_tx_intp_data_type_t	**tx_intp_data_type**	Input	Data type of the given vector

---

UF_SCOP_set_tx_intp_method (view source)

Defined in: uf_scop.h

Overview

This function sets the interpolation method of the given vectors for a Surface Contouring operation using the Surface Area drive method and Interpolation tool axis. This function also returns the error code. If return is not zero, error happens.

Environment
Internal and External

History
Released in NX3.0

```
int UF_SCOP_set_tx_intp_method
(
    tag_t object_tag,
    UF_SCOP_tx_intp_method_t tx_intp_method
)
```

tag_t	**object_tag**	Input	The operation object
UF_SCOP_tx_intp_method_t	**tx_intp_method**	Input	Interpolation method of the given vectors

---

UF_SCOP_set_tx_intp_vector_data (view source)

Defined in: uf_scop.h

Overview
This function sets (add, modify, delete) the vector data for a Surface Contouring operation using the Surface Area drive method and Interpolation tool axis. This function also returns the error code. If return is not zero, error happens. Please notice each corner on the Drive surface must be set a vector. Otherwise, this function returns error.

Environment
Internal and External

History
Released in NX3.0

```
int UF_SCOP_set_tx_intp_vector_data
(
    tag_t object_tag,
    int count,
    UF_SCOP_vector_data_t * vector_data,
    logical * all_on_surface
)
```

tag_t	**object_tag**	Input	The operation object
int	**count**	Input	Number of vector data set
UF_SCOP_vector_data_t *	**vector_data**	Input	The vector data list
logical *	**all_on_surface**	Output	Flag to indicate whether all the locations (xyz) of the input vectors

are on the surface. If it returns FALSE, some vectors are moved to the closest points on the surface.