

## UF\_MODL\_cliff\_blend\_f\_t [\(view source\)](#)

Defined in: `uf_modl_blends.h`

### Overview

Registers a routine for creating a cliff blend. This allows you to register a routine into the Open API environment for the cliff blend.

To register a routine named `cliff_routine()`, the call is:  
`UF_MODL_register_cliff_blend(cliff_routine)`

where `cliff_routine` is defined as:  
`int cliff_routine(tag_t obj_id, int cliff)`

### Environment

Internal and External

```
int UF_MODL_cliff_blend_f_t
(
    tag_t,
    tag_t*
)
```

<code>tag_t</code>	Input
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<code>tag_t*</code>	Input
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## UF\_MODL\_rpo\_f\_p\_t [\(view source\)](#)

Defined in: `uf_modl_types.h`

### Overview

Typedef for a rpo routine function pointer.

```
int UF_MODL_rpo_f_p_t
(
    tag_t
)
```

<code>tag_t</code>	Input
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## UF\_MODL\_udf\_mapping\_f\_p\_t [\(view source\)](#)

Defined in: `uf_modl_types.h`

### Overview

Typedef for a UDF mapping routine function pointer.

```
int UF_MODL_udf_mapping_f_p_t
(
    tag_t,
    UF_MODL_udf_ref_data_p_t
)
```

tag\_t

UF\_MODL\_udf\_ref\_data\_p\_t

## UF\_MODL\_var\_blend\_f\_t [\(view source\)](#)

Defined in: `uf_modl_blends.h`

### Overview

Registers a routine for creating a variable radius blend (VRB). This allows you to register a routine into the Open API environment so that you can specify the points necessary for the VRB.

Subsequently, every time a blend is created, this registered routine is called. Note that this routine works in conjunction with `UF_MODL_create_blend`. The general procedure for using this function is to:

1. Register the `vrbl_routine` with a call to `UF_MODL_register_var_blend`.
2. Create the variable blend with a call to `UF_MODL_create_blend`. Your registered routine is called once for each edge on the list that was inputted to `UF_MODL_create_blend`.
3. Unregister your `vrbl_routine` with a call to `UF_MODL_unregister_var_blend`.

To register a routine named `vrbl_routine()`, the call is:  
`UF_MODL_register_var_blend(vrbl_routine)`

where `vrbl_routine` is defined as:

```
int vrbl_routine(tag_t obj_id, double points[100][3],
char radii[100][256],
int smooth_overflow, int cliff_overflow,
int notch_overflow, int number_pts)
```

The integer values for `smooth_overflow`, `cliff_overflow`, and `notch_overflow` control the overflow during blending. The following string defined constants should be used.

`UF_MODL_BLEND_NO_OVERFLOW` - allows overflow control.  
`UF_MODL_BLEND_SMOOTH_OVERFLOW` - does not allow smooth overflow control.  
`UF_MODL_BLEND_CLIFF_OVERFLOW` - does not allow cliff overflow control.  
`UF_MODL_BLEND_NOTCH_OVERFLOW` - does not allow notch overflow control.

`vrbl_tol` allows you to specify a variable radius blend tolerance and it should be positive and bigger than 10E-8mm.

### Environment

Internal and External

### See Also

Refer to [example](#)

```
int UF_MODL_var_blend_f_t
(
    tag_t a,
    double b [ 100 ] [ 3 ],
    char c [ 100 ] [ 256 ],
    int smooth_overflow,
    int cliff_overflow,
    int notch_overflow,
    double vrb_tol,
    int * d
)
```

tag_t	<b>a</b>	Input
double	<b>b [ 100 ] [ 3 ]</b>	Input
char	<b>c [ 100 ] [ 256 ]</b>	Input
int	<b>smooth_overflow</b>	Input
int	<b>cliff_overflow</b>	Input
int	<b>notch_overflow</b>	Input
double	<b>vrb_tol</b>	Input
int *	<b>d</b>	Input