UF_CURVE_asso_arc_subtype_e (view source)

Defined in: uf_curve.h

Also known as:

- UF_CURVE_asso_arc_subtype_t

Overview

This enum is used to specify the type of constraint to be applied.

Data Members

UF_CURVE_line_arc_three_point_arc = 0
3 point arc

UF_CURVE_asso_arc_from_center
arc from_center

UF_CURVE_bridge_method_e (view source)

Defined in: uf_curve.h

Also known as:

- UF_CURVE_bridge_method_t

Overview

Methods for Bridge Curve creation

Data Members

UF_CURVE_match_tangent_ends
Tangent Continuous, shape controlled at end points.

UF_CURVE_match_tangent_peak
Tangent Continuous, shape controlled at peak points.

UF_CURVE_match_curvature_ends
Curvature Continuous, shape controlled at end points.

UF_CURVE_match_curvature_peak
Curvature Continuous, shape controlled at peak points.

UF_CURVE_inherit_shape
Shape controlled by input reference curve.

UF_CURVE_tangent_conic
Tangent Continuous, conic curve.

UF_CURVE_constraint_type_e (view source)

Defined in: uf_curve.h

Also known as:

- UF_CURVE_constraint_type_t

Overview

This enum is used to specify the sub type of Arc .

Data Members

UF_CURVE_constraint_none = -1
no constraint defined

UF_CURVE_coincident
Coincident with a point

UF_CURVE_tangent
Tangent to a curve

UF_CURVE_normal
Normal to a curve/Surface

UF_CURVE_angle
At an angle to a linear entity

UF_CURVE_along_x
Along the WCS X axis

UF_CURVE_along_y
Along the WCS Y axis

UF_CURVE_along_z
Along the WCS Z axis

UF_CURVE_radius
Specific radius for arc/circle

UF_CURVE_direction_e (view source)

Defined in: uf_curve.h

Also known as:

- UF_CURVE_direction_t

Overview

Type of curve projection
UF_CURVE_create/ask/edit_combine_curves

Data Members

UF_CURVE_ALONG_PLANAR_CURVE_NORMALS

UF_CURVE_ALONG_FIXED_VECTOR

UF_CURVE_end_type_e (view source)

Defined in: uf_curve.h

Also known as:

- UF_CURVE_end_type_t

Overview

This enum is used to specify the end of curve to which the constraint must be applied.

Data Members

UF_CURVE_start = 0
Apply to the start of curve

UF_CURVE_end
Apply to the end of curve

UF_CURVE_middle
Apply to the middle of arc

UF_CURVE_center
Apply to the center of arc

UF_CURVE_help_data_type_e (view source)

Defined in: uf_curve.h

Also known as:

- UF_CURVE_help_data_type_t

Overview

This enum is used to specify the type of help data to be applied.

Data Members

UF_CURVE_help_data_none = 0

UF_CURVE_help_data_parameter
a parameter is supplied

UF_CURVE_help_data_value
coordinate of a point is supplied

UF_CURVE_join_types (view source)

Defined in: uf_curve.h

Also known as:

- UF_CURVE_join_type_t

Data Members

UF_CURVE_NO_JOIN = 0
Don't join the curves

UF_CURVE_CUBIC_JOIN
Create a cubic polynomial join curve

UF_CURVE_GENERAL_JOIN
Create a general spline join curve

UF_CURVE_QUINTIC_JOIN
Create a quintic polynomial join curve

UF_CURVE_limit_type_e (view source)

Defined in: uf_curve.h

Also known as:

- UF_CURVE_limit_type_t

Overview

This enum is used to specify the type of limit to be applied.

Data Members

UF_CURVE_limit_to_constraint= 0
Limit upto the constrained object

UF_CURVE_limit_value
Extend the end by a value

UF_CURVE_limit_to_entity
Limit upto the specified object

UF_CURVE_line_arc_type_e (view source)

Defined in: uf_curve.h

Also known as:

- UF_CURVE_line_arc_type_t

Overview

This enum is used to specify the type of to be create.

Data Members

UF_CURVE_asso_none = -1
no asso type

UF_CURVE_asso_line
Create a line

UF_CURVE_asso_arc
Create a arc

UF_CURVE_ocf_cross_boundaries_e (view source)

Defined in: uf_curve.h

Also known as:

- UF_CURVE_ocf_cross_boundaries_t

Overview

Enumeration fields for different types of boundary methods for offset curves in an associated offset curve on face.
There are two types of boundary methods for creating offset curve(s) in an associated offset curve on face feature.
The boundary method is used to control the offset curves in case the offset curves are crossing the boundary of the input faces for offset.

Data Members

UF_CURVE_OCF_CROSS_BOUNDARIES_NONE = 0
This type prevents from the offset curves from crossing the boundary of the input of faces

UF_CURVE_OCF_CROSS_BOUNDARIES
This type allows the offset curves to cross the boundary of the input faces

---

UF_CURVE_ocf_method_e (view source)

Defined in: uf_curve.h

Also known as:

- UF_CURVE_ocf_method_t

Overview

Enumeration fields for different types of offset methods for creating an associated offset curve on face. There are four types of methods for creating an offset curve in an associated offset curve on face feature. These methods are used for calculating different types of offset distances based on the input offset value.

Data Members

UF_CURVE_OCF_CHORDAL=0
This type will offset the string based on the chordal distance

UF_CURVE_OCF_ARCLENGTH
This type will offset the string based on the arc length

UF_CURVE_OCF_GEODESIC
This type will offset the string based on the geodesic method, i.e. the curve is offset along the minimum distance on the input faces

UF_CURVE_OCF_TANGENTIAL
This type will offset the string in tangential direction and then and then project it back on to the faces

---

UF_CURVE_ocf_span_method_e (view source)

Defined in: uf_curve.h

Also known as:

- UF_CURVE_ocf_span_method_t

Overview

Enumeration fields for different types of spanning methods for offset curves in an associated offset curve on face.
There are two types of spanning methods for creating offset curve(s) in an associated offset curve on face feature.
The spanning method is used to control the extent to which an offset curve is created in case there is a gap between the offset curve and the face boundary.

Data Members

UF_CURVE_OCF_SPAN_NONE = 0
This type will prevent the offset curves from being extended to the boundary

UF_CURVE_OCF_SPAN_QUILT
This type will result in the offset curves being extended to the boundary

---

UF_CURVE_ocf_trim_method_e (view source)

Defined in: uf_curve.h

Also known as:

- UF_CURVE_ocf_trim_method_t

Overview

Enumeration fields for different types of trimming methods for offset curves in an associated offset curve on face.
There are two types of trimming methods for creating offset curve(s) in an associated offset curve on face feature.
These methods are used for trimming the offset curves from a string.

Data Members

UF_CURVE_OCF_NO_EXTENSION=0

This type will prevent a corner being created between the offset curves

UF_CURVE_OCF_TANGENT

This type will create a corner between the offset curves along their tangents

---

UF_CURVE_offset_type_e (view source)

Defined in: uf_curve.h

Also known as:

- UF_CURVE_offset_type_t
- UF_CURVE_offset_type_p_t

Data Members

UF_CURVE_OFFSET_DISTANCE_NO_TRIM = 1

This type will offset by a distance with no trimming/extending done to the offset curves

UF_CURVE_OFFSET_DISTANCE_FILLET

This type will offset by a distance and trim/extend the offset curves to their intersection points using a fillet. The system constructs an arc tangent to the endpoint of each offset curve. The radius of the arc is equal to the offset distance.

UF_CURVE_OFFSET_DISTANCE_TANGENT

This type will offset by a distance and extend/trim the offset curves to their intersection points. The amount of extension is unlimited.

UF_CURVE_OFFSET_DISTANCE_LIMITED_TANGENT
This type will offset by a distance and extend/trim the offset curves to their intersection points. The amount of extension is limited to the extension factor.

UF_CURVE_OFFSET_DRAFT_NO_TRIM
This type will offset according to draft height and angle values with no trimming/ extending done to the offset curves.

UF_CURVE_OFFSET_DRAFT_FILLET
This type will offset according to draft height and angle values and trim/extend the offset curves to their intersection points using a fillet. The system constructs an arc tangent to the endpoint of each offset curve. The radius of the arc is equal to the offset distance.

UF_CURVE_OFFSET_DRAFT_TANGENT
This type will offset according to draft height and angle values and extend/trim the offset curves to their intersection points. The amount of extension is unlimited.

UF_CURVE_OFFSET_DRAFT_LIMITED_TANGENT
This type will offset according to draft height and angle values and extend/trim the offset curves to their intersection points. The amount of extension is limited to the extension factor.

UF_CURVE_OFFSET_3D_AXIAL
This type will offset a 3d axial distance.
The 3d axial offset corresponds to the intersection of an extrusion of the curves in the axial direction with a tube generated by the curves and having radius = axial distance

---

UF_CURVE_principal_axis_e (view source)

Defined in: uf_curve.h

Also known as:

- UF_CURVE_principal_axis_type_t

Overview
This enum is for choice of principal axis

Data Members

UF_CURVE_X_AXIS = 0

UF_CURVE_Y_AXIS

UF_CURVE_Z_AXIS

UF_CURVE_trim_opts_e (view source)

Defined in: uf_curve.h

Also known as:
- UF_CURVE_trim_opts_t

Overview
This enum is used to define spline extension options, type of trim desired, and end of strings to trim/extend.

Data Members

UF_CURVE_EXTEND_NATURAL

UF_CURVE_EXTEND_LINEAR

UF_CURVE_EXTEND_CIRCULAR

UF_CURVE_EXTEND_NONE

UF_CURVE_TRIM_TO_ONE_BOUND

UF_CURVE_TRIM_TO_TWO_BOUND

UF_CURVE_TRIM_TO_TOTAL_LENGTH

UF_CURVE_TRIM_TO_INCR_LENGTH

UF_CURVE_TRIM_OUTSIDE

UF_CURVE_TRIM_INSIDE

UF_CURVE_TRIM_EXTEND_START

UF_CURVE_TRIM_EXTEND_END

UF_CURVE_wrap_type_e (view source)

Defined in: uf_curve.h

Also known as:

- UF_CURVE_wrap_type_t
- UF_CURVE_wrap_type_p_t

Data Members

UF_CURVE_WRAP
Indicates that the curves are to be wrapped from the Wrap Plane onto the Wrap Face

UF_CURVE_UNWRAP
Indicates that the curves are to be unwrapped from the Wrap Face onto the Wrap Plane.

UF_MODL_units_e (view source)

Defined in: uf_curve.h

Also known as:

- UF_MODL_units_t

Overview
UF_CURVE_CREATE_SPLINE_THRU_PTS

Data Members

UF_MODL_UNITS_PART = 0
same as parts units

UF_MODL_INCH
inches

UF_MODL_MMETER
millimeters

UF_MODL_CMETER
centimeters

UF_MODL_METER
meters
