

Appendix A.

Reference Summary

Topic: Ignore

This appendix provides a summary of the reference items defined in the Component Name. Just the name and a brief description of each item is given. There is a separate section for each type of item (class, function, Scheme extension, test harness command, etc.).

Functions

Topic: Ignore

api_abh_chamfer_edges Chamfers (variable and/or nonplanar) the given edges.

api_abh_edge_project Creates an offset edge at a specified distance on the body parallel to a given edge.

api_abh_imprint Given the intersection graph between two bodies and a list of edges in that graph, imprints only those listed edges on the two bodies.

api_abh_slice Creates the intersection wire between two bodies, but does not delete the intersection graph part of it.

api_abh_vblend Creates a variable radius blend with smooth radius variation.

api_blend_edges_pos_rad Applies a variable radius blend on the list of edges, simplifying the blend for ends with constant blend radius.

api_initialize_advanced_blending Initializes the advanced blending library.

api_make_radius_constant Creates a variable radius object with a constant radius.

api_make_radius_fixed_width Creates a variable radius object with a fixed width.

<code>api_make_radius_param_rads</code>	Creates a variable radius object from parameter-radius pairs.
<code>api_make_radius_param_rads_tan</code>	Creates a variable radius object from parameter-radius pairs.
<code>api_make_radius_pos_rads</code>	Creates a variable radius object from position-radius pairs.
<code>api_make_radius_rnd_chamfer</code>	Creates the two variable radius objects for a blend with a rounded chamfer cross section.
<code>api_make_radius_rot_ellipse</code>	Creates a variable radius object with a rotational ellipse cross section.
<code>api_make_radius_spline_rad</code>	Creates a variable radius object for a blend whose radius function is specified by a 3D spline curve.
<code>api_make_radius_two_ends</code>	Creates a variable radius object for a blend with the radii specified at the two ends of the blend.
<code>api_set_abh_blends</code>	Sets an implicit variable radius blend on each of a list of edges or vertices. The blend radius is described by one or two variable radius objects.
<code>api_set_ee_cr_blend</code>	Creates a constant radius entity-entity blend.
<code>api_set_ee_vr_blend</code>	Creates a variable radius entity-entity blend. The blend radius is described by one or two variable radius objects.
<code>api_set_inst_blend</code>	Sets a blend instruction on the indicated entity to be obeyed by the general entity-entity blending algorithm.
<code>api_terminate_advanced_blending</code>	Terminates the advanced blending library.

Scheme Extensions

Topic:	Ignore
<code>abl:abh-edge-offset</code>	Creates a series of offset surfaces from an edge sequence.
<code>abl:abh-edge-project</code>	Creates an offset edge at a specified distance on the body parallel to a given edge.

<code>abl:abh-imprint</code>	Creates a series of offset surfaces from an edge sequence.
<code>abl:abh-slice</code>	Creates the intersection wire between two bodies, but does not delete the intersection graph part of it.
<code>abl:const-rad</code>	Creates a <code>vradius</code> object for setting advanced blending attributes for a blend with a constant radius.
<code>abl:create-vradius-wire</code>	Creates a wire body corresponding to a particular <code>vradius</code> object (reparameterized).
<code>abl:create-vradius-wire-from-edge</code>	Creates a wire body corresponding to a particular <code>vradius</code> object (reparameterized).
<code>abl:edge-blend</code>	Creates an edge sequence blend.
<code>abl:ell-rad</code>	Creates a <code>vradius</code> object for setting advanced blending attributes for a blend with an elliptical radius.
<code>abl:ent-ent-blend</code>	Creates an entity-entity blend.
<code>abl:eval-vradius-value</code>	Gets the evaluation value for a <code>vradius</code> object from a set of parameters.
<code>abl:eval-vradius-value-from-edge</code>	Gets the evaluation value for a <code>vradius</code> object from a set of parameters.
<code>abl:fixed-width-rad</code>	Creates a <code>vradius</code> object for setting advanced blending attributes for a blend with a fixed width radius.
<code>abl:make-radius-param-rads</code>	Creates a variable radius object from a set of parameter values along the blend and the radius values at each.
<code>abl:make-radius-param-rads-tan</code>	Creates a variable radius object from a set of parameter values along the blend and radius values at each parameter.
<code>abl:pos-rad</code>	Creates a <code>vradius</code> object for setting advanced blending attributes for a blend whose radius is specified by position-radius pairs.
<code>abl:rnd-ch-rad</code>	Creates a pair of <code>vradius</code> objects for setting advanced blending attributes for blend with a rounded chamfer cross section.

abl:set-abh-blends Creates an edge sequence blend by calling
api_set_abh_blends.

abl:set-instruction Attaches a blend instruction to an entity.

abl:spline-rad Creates a vradius object for setting advanced
blending attributes for a blend whose radius
function is specified by a 3D spline curve.

abl:two-ends-rad Creates a vradius object for setting advanced
blending attributes for a blend with the radii
specified at the two ends of the blend.

abl:var-round Attaches a smooth variable radius blend
instruction to an entity.

solid:blend-edges-pos-rads Blend edges of a solid by defining
position-radius pairs.

solid:var-chamfer-edges Creates a variable chamfer on the defined
edges.