

Appendix B.

Syntax Summary

Topic:

Ignore

This appendix provides a syntax summary of reference items defined in the Healing Component. There is a separate section for each item type (function, Scheme extension, etc.), and the items within each section are alphabetized. Just the syntax of each item is given; refer to the item's reference template for a complete description.

Functions

Topic:

Ignore

```
outcome api_hh_analytic_analyze(BODY*, AcisOptions* ao = NULL)
outcome api_hh_analytic_auto(BODY*, AcisOptions* ao = NULL)
outcome api_hh_analytic_calc_fix(BODY*, AcisOptions* ao = NULL)
outcome api_hh_analyze_body(BODY* body, AcisOptions* ao = NULL)
outcome api_hh_analyze_coedges(BODY* body, AcisOptions* ao =
    NULL)
outcome api_hh_analyze_edges(BODY* body, AcisOptions* ao = NULL)
outcome api_hh_analyze_faces(BODY* body, AcisOptions* ao = NULL)
outcome api_hh_analyze_loops(BODY* body, AcisOptions* ao = NULL)
outcome api_hh_analyze_lumps(BODY* body, AcisOptions* ao = NULL)
outcome api_hh_analyze_shells(BODY* body, AcisOptions* ao = NULL)
outcome api_hh_analyze_vertices(BODY* body, AcisOptions* ao =
    NULL)
outcome api_hh_auto_heal(BODY* body, AcisOptions* ao = NULL)
outcome api_hh_end_body_for_healing(BODY* body, AcisOptions* ao =
    NULL)
```

```

outcome api_hh_force_simplify_to_cone(FACE* inp_face,
    AcisOptions* ao = NULL)

outcome api_hh_force_simplify_to_cylinder(FACE* inp_face,
    AcisOptions* ao = NULL)

outcome api_hh_force_simplify_to_plane(FACE* inp_face,
    AcisOptions* ao = NULL)

outcome api_hh_force_simplify_to_sphere(FACE* inp_face,
    AcisOptions* ao = NULL)

outcome api_hh_force_simplify_to_torus(FACE* inp_face,
    AcisOptions* ao = NULL)

outcome api_hh_gen_spline_analyze(BODY*, AcisOptions* ao = NULL)
outcome api_hh_gen_spline_auto(BODY*, AcisOptions* ao = NULL)
outcome api_hh_gen_spline_calc_fix(BODY*, AcisOptions* ao = NULL)
outcome api_hh_geombuild_analyze(BODY*, AcisOptions* ao = NULL)
outcome api_hh_geombuild_auto(BODY*, AcisOptions* ao = NULL)
outcome api_hh_geombuild_calc_fix(BODY*, AcisOptions* ao = NULL)
outcome api_hh_geombuild_check(BODY*, AcisOptions* ao = NULL)
outcome api_hh_geombuild_cleanup(BODY*, AcisOptions* ao = NULL)
outcome api_hh_get_bad_coedges(BODY* body, ENTITY_LIST& list,
    AcisOptions* ao = NULL)
outcome api_hh_get_bad_edges(BODY* body, ENTITY_LIST& list,
    AcisOptions* ao = NULL)
outcome api_hh_get_bad_faces(BODY* body, ENTITY_LIST& list,
    AcisOptions* ao = NULL)
outcome api_hh_get_bad_loops(BODY* body, ENTITY_LIST& list,
    AcisOptions* ao = NULL)
outcome api_hh_get_bad_lumps(BODY* body, ENTITY_LIST& list,
    AcisOptions* ao = NULL)
outcome api_hh_get_bad_shells(BODY* body, ENTITY_LIST& list,
    AcisOptions* ao = NULL)
outcome api_hh_get_bad_vertices(BODY* body, ENTITY_LIST& list,
    AcisOptions* ao = NULL)

```

```
outcome api_hh_get_entity_details(ENTITY* entity, char*& history,
    AcisOptions* ao = NULL)

outcome api_hh_init_body_for_healing(BODY* body, AcisOptions* ao
    = NULL)

outcome api_hh_isospline_analyze(BODY*, AcisOptions* ao = NULL)
outcome api_hh_isospline_auto(BODY*, AcisOptions* ao = NULL)
outcome api_hh_isospline_calc_fix(BODY*, AcisOptions* ao = NULL)
outcome api_hh_make_tolerant(BODY* body, AcisOptions* ao = NULL)
outcome api_hh_postprocess(BODY* body, AcisOptions* ao = NULL)
outcome api_hh_preprocess(BODY* body, AcisOptions* ao = NULL)
outcome api_hh_sharp_edge_analyze(BODY*, AcisOptions* ao = NULL)
outcome api_hh_sharp_edge_auto(BODY*, AcisOptions* ao = NULL)
outcome api_hh_sharp_edge_calc_fix(BODY*, AcisOptions* ao = NULL)
outcome api_hh_simplify_analyze(BODY* inp_body, AcisOptions* ao =
    NULL)
outcome api_hh_simplify_auto(BODY* inp_body, AcisOptions* ao =
    NULL)
outcome api_hh_simplify_calculate(BODY* inp_body, AcisOptions* ao
    = NULL)
outcome api_hh_simplify_cleanup(BODY* inp_body, AcisOptions* ao =
    NULL)
outcome api_hh_simplify_fix(BODY* inp_body, AcisOptions* ao =
    NULL)
outcome api_hh_stitch_analyze(BODY* inp_body, AcisOptions* ao =
    NULL)
outcome api_hh_stitch_auto(BODY* inp_body, AcisOptions* ao =
    NULL)
outcome api_hh_stitch_calculate(BODY* inp_body, AcisOptions* ao =
    NULL)
outcome api_hh_stitch_cleanup(BODY* inp_body, AcisOptions* ao =
    NULL)
```

```

outcome api_hh_stitch_fix(BODY* inp_body, AcisOptions* ao = NULL)

outcome api_hh_store_entity_details(BODY* body, logical
    option_value, AcisOptions* ao = NULL)

outcome api_hh_wrapup_analyze(BODY*, AcisOptions* ao = NULL)

outcome api_hh_wrapup_auto(BODY*, AcisOptions* ao = NULL)

outcome api_hh_wrapup_calc_fix(BODY*, AcisOptions* ao = NULL)

outcome api_initialize_healing()

outcome api_terminate_healing()

logical is_ATTRIB_HH_AGGR_ANALYTIC(const ENTITY* e)

logical is_ATTRIB_HH_AGGR_GEN_SPLINE(const ENTITY* e)

logical is_ATTRIB_HH_AGGR_GEOMBUILD(const ENTITY* e)

logical is_ATTRIB_HH_AGGR_GEOMBUILD_BASE(const ENTITY* e)

logical is_ATTRIB_HH_AGGR_ISOSPLINE(const ENTITY* e)

logical is_ATTRIB_HH_AGGR_SHARP_EDGE(const ENTITY* e)

logical is_ATTRIB_HH_AGGR_SIMPLIFY(const ENTITY* e)

logical is_ATTRIB_HH_AGGR_SIMPLIFY_BASE(const ENTITY* e)

logical is_ATTRIB_HH_AGGR_WRAPUP(const ENTITY* e)

logical is_ATTRIB_HH_ENT_GEOMBUILD_BASE(const ENTITY* e)

logical is_ATTRIB_HH_ENT_GEOMBUILD_COEDGE(const ENTITY* e)

logical is_ATTRIB_HH_ENT_GEOMBUILD_CURVE(const ENTITY* e)

int is_ATTRIB_HH_ENT_GEOMBUILD_CURVE(const ENTITY*)

logical is_ATTRIB_HH_ENT_GEOMBUILD_EDGE(const ENTITY* e)

logical is_ATTRIB_HH_ENT_GEOMBUILD_FACE(const ENTITY* e)

logical is_ATTRIB_HH_ENT_GEOMBUILD_LOOP(const ENTITY* e)

logical is_ATTRIB_HH_ENT_GEOMBUILD_SURFACE(const ENTITY* e)

int is_ATTRIB_HH_ENT_GEOMBUILD_SURFACE(const ENTITY*)

```

```
logical is_ATTRIB_HH_ENT_GEOMBUILD_VERTEX (const ENTITY* e)
logical is_ATTRIB_HH_ENT_SIMPLIFY_BASE (const ENTITY* e)
logical is_ATTRIB_HH_ENT_SIMPLIFY_FACE (const ENTITY* e)
```

Scheme Extensions

Topic:

Ignore

```
(hh:analyze-body body [acis-opts])
(hh:analyze-coedge body [acis-opts])
(hh:analyze-edge body [acis-opts])
(hh:analyze-face body [acis-opts])
(hh:analyze-geom body [acis-opts])
(hh:analyze-loop body [acis-opts])
(hh:analyze-lump body [acis-opts])
(hh:analyze-shell body [acis-opts])
(hh:analyze-simplify body [acis-opts])
(hh:analyze-stitch body [acis-opts])
(hh:analyze-vertex entity [acis-opts])
(hh:autoheal body [filename] [acis-opts])
(hh:combine body-list [acis-opts])
(hh:geombuild body [acis-opts])
(hh:geombuild-analyze body [acis-opts])
(hh:get-analytic-tol body)
(hh:get-geombuild-tol body)
(hh:get-isospline-tol body)
(hh:get-simplify-tol body)
(hh:get-stitch-max-tol body)
```

(hh:get-stitch-min-tol body)
(hh:init-body-for-healing body)
(hh:make-tolerant body [acis-opts])
(hh:postprocess body [acis-opts])
(hh:preprocess body [acis-opts])
(hh:reset-tols)
(hh:set-analytic-tol tolerance)
(hh:set-geombuild-tol tolerance)
(hh:set-isospline-tol tolerance)
(hh:set-simplify-tol tolerance)
(hh:set-stitch-max-tol tolerance)
(hh:set-stitch-min-tol tolerance)
(hh:show-bad-coedges body)
(hh:show-bad-edges body)
(hh:show-bad-faces body)
(hh:show-bad-vertices body)
(hh:show-body body)
(hh:show-closed-curves body)
(hh:show-closed-surfaces body)
(hh:show-coedges-no-partner body)
(hh:show-coedges-not-on-faces body)
(hh:show-concave-edges body)
(hh:show-convex-edges body)
(hh:show-degenerate-curves body)
(hh:show-degenerate-surfaces body)
(hh:show-discontinuous-curves body)

(hh:show-discontinuous-surfaces body)
(hh:show-loops-disoriented body)
(hh:show-loops-gaps body)
(hh:show-loops-not-on-faces body)
(hh:show-loops-open body)
(hh:show-lumps body)
(hh:show-periodic-curves body)
(hh:show-periodic-surfaces body)
(hh:show-self-intersecting-curves body)
(hh:show-self-intersecting-surfaces body)
(hh:show-shells body)
(hh:show-short-edges body)
(hh:show-simplified body)
(hh:show-spline body)
(hh:show-tangent-edges body)
(hh:show-tolerant-edges body)
(hh:show-unstitched body)
(hh:show-vertices-edges-dont-meet body)
(hh:show-vertices-not-on-edges body)
(hh:show-vertices-not-on-faces body)
(hh:simplify body [acis-opts])
(hh:solve-analytic body [acis-opts])
(hh:solve-gen-spline body [acis-opts])
(hh:solve-isospline body [acis-opts])
(hh:solve-sharp-edge body [acis-opts])
(hh:stitch body [acis-opts])

```
(hh:terminate-body-for-healing body [acis-opts])
```

```
(hh:wrapup body [acis-opts])
```