

# Chapter 43.

## Typedefs

Topic: Ignore

In C++, a typedef (type definition) is used to define a new data type name. Typedefs are declared using the typedef keyword. A typedef declaration does not create a new data type; it simply creates a new name for some existing type. Typedefs are useful for making programs more portable and more readable. Refer to the *3D ACIS Online Help User's Guide* for a description of the fields in the reference template.

### bs2\_curve

Typedef: Spline Interface, Construction Geometry

Purpose: Defines a 2D B-spline curve.

Filename: kern/kernel/spline/bs2\_crv/bs2curve.hxx

Definition: `typedef class bs2_curve_def *bs2_curve;`

Description: Defines a 2D B-spline curve that is used to approximate true curves, and provides insulation between the modeler and the underlying curve package.

### bs3\_curve

Typedef: Spline Interface, Construction Geometry

Purpose: Defines a 3D B-spline curve.

Filename: kern/kernel/spline/bs3\_crv/bs3curve.hxx

Definition: `typedef class bs3_curve_def *bs3_curve;`

Description: Defines a 3D B-spline curve that is used to approximate true curves, and provides insulation between the modeler and the underlying curve package.

## bs3\_surface

Typedef:	Spline Interface, Construction Geometry
Purpose:	Defines a 3D B-spline surface.
Filename:	kern/kernel/spline/bs3_srf/bs3surf.hxx
Definition:	<pre>typedef struct bs3_surf_def *bs3_surface;</pre>
Description:	Defines a 3D B-spline surface that is used to approximate true surfaces, and provides insulation between the modeler and the underlying curve package.

## entity\_test\_proc

Typedef:	Scheme Interface, Entity
Purpose:	Procedure which tests an ENTITY.
Filename:	kern/kernel/geomhusk/efilter.hxx
Definition:	<pre>typedef logical (*entity_test_proc) (const ENTITY*);</pre>
Description:	Definition type for a procedure which tests an entity.

## is\_fun

Typedef:	Feature Naming
Purpose:	Function pointer type used in various search routines.
Filename:	kern/kernel/kernapi/api/kernapi.hxx
Definition:	<pre>typedef logical (*is_fun)(const ENTITY*);</pre>
Description:	Function pointer type used in various search routines. Functions named <code>is_&lt;entityclass&gt;</code> (where <code>&lt;entityclass&gt;</code> is the name of a class derived from ENTITY) can be assigned to this pointer to determine if a given object is a specific type of entity (i.e., a specific class derived from ENTITY).

## STATE\_ID

Typedef:	History and Roll
Purpose:	Identifier for a STATE.

Filename: kern/kernel/kernapi/api/kernapi.hxx  
Definition: `typedef int STATE_ID;`  
Description: Unique identifier for a given STATE.

## tag\_id\_type

Typedef: [History and Roll](#)  
Purpose: Identifier for a ENTITY.  
Filename: kern/kernel/kernapi/api/kernapi.hxx  
Definition: `typedef int tag_id_type;`  
Description: Unique identifier for a given ENTITY.