

Chapter 8.

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.

Image__Access_Function

Typedef: Environment Maps

Purpose: Image Access Function.

Filename: rbase/rnd_husk/include/rh_args.hxx

Definition:

```
typedef void (*Image_Access_Function)
(
    unsigned char *result,
    void *data,
    int x,
    int y
);
```

Description: An image access function, is an application supplied function which given an x-y position and pointer to some application data, returns a color value for that position. The result is a pointer to an array of char's whose length depends upon the the no. of color channels in use. So that for 3 channels the result would be hold 3 RGB values. Image access functions are used for creating cube environment maps.

LwConversionMethod

Typedef: Image Output

Purpose: Image conversion method type.

Filename: rbase/rnd_husk/include/rh_types.h

Definition: `typedef LwInt32 LwConversionMethod;`

Description: A 32-bit, signed integer which represents an image conversion method type.

LwDisplayMethod

Typedef: Viewing

Purpose: Image display method.

Filename: rbase/rnd_husk/include/rh_types.h

Definition: `typedef LwInt32 LwDisplayMethod;`

Description: A 32-bit, signed integer which represents an image display method.

LwFloat

Typedef: Image Output

Purpose: Floating point value.

Filename: rbase/rnd_husk/include/rh_types.h

Definition: `typedef float LwFloat;`

Description: A data type which represents a single precision floating point value.

LwInt32

Typedef: Image Output, Viewing

Purpose: 32-bit signed integer.

Filename: rbase/rnd_husk/include/rh_types.h

Definition: `typedef int LwInt32;`

Description: A 32-bit, signed integer which represents values in the range -2^{31} to $(2^{31}) - 1$.

LwNat8

Typedef: Image Output, Viewing

Purpose: 8-bit unsigned integer.

Filename: rbase/rnd_husk/include/rh_types.h

Definition: `typedef unsigned char LwNat8;`

Description: An 8-bit, unsigned integer which represents values in the range 0 to 255.