NAME

xgl_object_create – creates an XGL Object

SYNOPSIS

#include <xgl/xgl.h>

```
Xgl_object    xgl_object_create (
                  Xgl_sys_state      sys_state,
                  Xgl_obj_type       type,
                  Xgl_obj_desc       *desc,
                  <attribute-list>   attributes );
```

DESCRIPTION

Purpose

This operator creates a new XGL Object of type defined by *type* and initializes it with the settings given by the specified attributes in the *attributes* list. **xgl_object_create**(3) is used to create any XGL Object, except the system state, which must be created using **xgl_-open**(3)**.**

When an Object is no longer needed in an application, it can be explicitly destroyed by calling the **xgl_object_destroy**(3) operator to free the resources associated with it.

Parameters

sys_state

The handle to system state information for this XGL session. Use the value returned by the call to **xgl_open**(3)**.**

For more detailed information about this value, see **XGL_SYS_STATE**(3) and its corresponding man pages.

type,*desc*

type specifies the type of Object to create, and *desc* is a descriptor pointing to additional information required at Object creation time. *desc* is needed only in a few instances as specified below. When it is not needed, the application should pass NULL as the value for it. Xgl_obj_desc is a union defined as:

```
typedef union {
  struct {
    Xgl_window_type      type;         /* window type */
    void                 *desc;
  } win_ras;
  char                   *sfont_name;
  struct {
    Xgl_object           raster;
  } accum_buf;
  struct {
    char *name;
    void *desc;
  } stream;
} Xgl_obj_desc;
```

type can take the following values. For more detailed information about these values, see their corresponding man pages.

XGL_2D_CTX(3)
: Creates a 2D Context object. The parameter *desc* is ignored.

XGL_3D_CTX(3)
: Creates a 3D Context object. The parameter *desc* is ignored.

XGL_CGM_DEV(3)
: Creates a CGM Metafile Device object. The parameter *desc* is ignored.

XGL_CMAP(3)
: Creates a Color Map object. The parameter *desc* is ignored.

XGL_DMAP_TEXTURE(3)
: Creates a Data Map Texture object. The parameter *desc* is ignored.

XGL_GCACHE(3)
: Creates a Geometry Cache (Gcache) object. The parameter *desc* is ignored.

XGL_LIGHT(3)
: Creates a Light object. The parameter *desc* is ignored.

XGL_LPAT(3)
: Creates a Line Pattern object. The parameter *desc* is ignored.

XGL_MARKER(3)
: Creates a user defined Marker object. The parameter *desc* is ignored.

XGL_MEM_RAS(3)
: Creates a Memory Raster Device object. The parameter *desc* is ignored.

XGL_MIPMAP_TEXTURE(3)
: Creates a MipMap Texture object. The parameter *desc* is ignored.

XGL_PCACHE(3)
: Creates a Primitive Cache (Pcache) object. The parameter *desc* is ignored.

XGL_SFONT(3)
: Creates a Stroke Font object. The *sfont_name* field of the *desc* parameter is set to point to the name of the font.

XGL_STREAM(3)
: Creates a Stream Device object. The *desc* parameter is a pointer to an *Xgl_obj_desc* union. The application needs to supply the information in the *stream* field of the *Xgl_obj_desc* union. The *stream* structure consists of two fields: *name*, which is the name identifying the specific device pipeline, and *desc*, which is a pointer to device specific information that may be required by this particular device pipeline.

XGL_TMAP(3)
: Creates a Texture Map object. The parameter *desc* is ignored.

XGL_TRANS(3)

Creates a Transform object. The parameter *desc* is ignored.

XGL_WIN_RAS(3)
Creates a Window Raster Device object. The parameter *desc* contains a window type, which can be one of the Xgl_window_type enumerated types (see **xgl_enum_types**(3)), and a window descriptor whose contents depend on the window type.

attributes
A *NULL-terminated* list of attribute-value pairs that describe the initial state of the Object. For each pair, the attribute name is followed by a value. For example,

```
xgl_object_create(sys_state, type, desc, att1, v1, att2, v2, NULL);
```

sets att1 to v1 and att2 to v2 as part of the Object creation process. Those Object attributes not specified as parameters to the create operator are initialized to default values.

After creating the Object, the values of its attributes can be inquired by the application using the **xgl_object_get**(3) operator.

RETURN VALUE

Xgl_object – A handle to an XGL Object, if successful.
NULL – If unsuccessful.

SEE ALSO

xgl_object_destroy(3)
xgl_object_get(3)
xgl_object_set(3)
xgl_open(3)
xgl_enum_types(3)
XGL_2D_CTX(3)
XGL_3D_CTX(3)
XGL_CGM_DEV(3)
XGL_CMAP(3)
XGL_DMAP_TEXTURE(3)
XGL_GCACHE(3)
XGL_LIGHT(3)
XGL_LPAT(3)
XGL_MARKER(3)
XGL_MEM_RAS(3)
XGL_MIPMAP_TEXTURE(3)
XGL_PCACHE(3)
XGL_SFONT(3)
XGL_SYS_STATE(3)
XGL_STREAM(3)
XGL_TMAP(3)
XGL_TRANS(3)
XGL_WIN_RAS(3)

NOTES

A System State object must have been created with the **xgl_open**(3) operator before any other XGL Object can be created.