NAME

XGL_CMAP – a Color Map object

OVERVIEW

XGL_CMAP is the type of an object representing a Color Map object. It is used as the *type* parameter value for **xgl_object_create**(3)**.**

An XGL Color Map object provides the facility to convert colors from one color type to another. Once the Color Map has been created, to be useful it must be attached to a Raster. This is done explicitly by the application by setting the **XGL_DEV_COLOR_MAP**(3) attribute in the Raster.

After creating the Color Map, using **xgl_object_create**(3)**,** the application can inquire about the values of its attributes by using the **xgl_object_get**(3) operator.

The following is a brief description of the attributes associated with Color Map objects. For more information, see the man page for each attribute.

XGL_CMAP_COLOR_CUBE_SIZE(3)
The size of the color cube associated with a Color Map object when RGB-to-Index color conversions are required.

XGL_CMAP_COLOR_MAPPER(3)
The function that maps color values from XGL_COLOR_INDEX to XGL_COLOR_RGB.

XGL_CMAP_COLOR_TABLE(3)
The structure that includes an array of color values providing a mapping from XGL_COLOR_INDEX colors to XGL_COLOR_RGB colors.

XGL_CMAP_COLOR_TABLE_SIZE(3)
The number of elements in the array associated with a color table array.

XGL_CMAP_DITHER_MASK_N(3)
XGL_CMAP_DITHER_MASK_X
XGL_CMAP_DITHER_MASK_Y
The number of columns and rows, respectively, in the dither mask used for RGB-to-Index conversions.

XGL_CMAP_DITHER_MASK(3)
The dithering array used for RGB-to-Index color conversions.

XGL_CMAP_INVERSE_COLOR_MAPPER(3)
The function that maps color values from XGL_COLOR_RGB to XGL_COLOR_INDEX.

XGL_CMAP_MAX_COLOR_TABLE_SIZE(3)
The maximum number of elements that can be stored in a color table array.

XGL_CMAP_NAME(3)
The name given to a window-system-generated Color Map. It allows for the sharing of window-system resources.

XGL_CMAP_RAMP_LIST(3)
An array of offset and length pairs describing color ramps embedded within a color table.

XGL_CMAP_RAMP_NUM(3)
Number of color ramps within a color table.

XGL_OBJ_APPLICATION_DATA(3)
This attribute allows the application program to store its own data with an object.

XGL_OBJ_SYS_STATE(3)
This read-only attribute returns the System State that was used to create the object.

XGL_OBJ_TYPE(3)
This read-only attribute defines the type of an XGL object.

When a Color Map 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.

A System State object must have been created with the **xgl_open**(3) operator before a Color Map can be created.