NAME

XGL_CGM_DEV – a CGM Metafile Device object

OVERVIEW

XGL_CGM_DEV is the type of an object representing a Computer Graphics Metafile (CGM) output device. It is used as the *type* parameter value for **xgl_object_create**(3)**.**

XGL graphics are rendered onto a Device object. This Device object outputs a CGM. The CGM is a Unix file, written in a standard format, for representing and exchanging 2D images. XGL currently outputs Version 1 of the CGM as defined by ISO 8632:1985.

The contents of the Metafile are written to a stream (that is, a FILE *). The application can indicate which file is associated with the output stream; the default is standard output. Since the CGM device is implemented as a stream pipeline, the name of the stream pipeline must be placed in the desc parameter. See the *XGL Programmer's Guide* for example code.

After creating the Metafile Device, 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 CGM Metafile format. For more information, see the man page for each attribute.

XGL_CGM_DESCRIPTION(3)
: Specifies a structure that contains the output file pointer; a string containing the Metafile signature string; and the descriptor string, which describes the Metafile conformance level.

XGL_CGM_ENCODING(3)
: Specifies the output encoding used to write the Metafile. The three alternatives are as follows:
  - XGL_CGM_CLEAR_TEXT
  - XGL_CGM_CHARACTER
  - XGL_CGM_BINARY

XGL_CGM_PICTURE_DESCRIPTION(3)
: Specifies a string to describe the picture being output to the Metafile.

XGL_CGM_SCALE_FACTOR(3)
: Specifies the mapping of one unit of VDC space to one millimeter of screen space. The value can be any floating point value. It is used only when the XGL_CGM_-SCALE_MODE is metric.

XGL_CGM_SCALE_MODE(3)
: Specifies the type of scaling mode in the Metafile. The two alternatives are:
  - XGL_CGM_ABSTRACT
  - XGL_CGM_METRIC

XGL_CGM_TYPE(3)
: Specifies which CGM version the Metafile conforms to. The only supported value for type is XGL_METAFILE_CGM_V1.

XGL_CGM_VDC_EXTENT(3)
: Specifies the type and range of coordinate values in the Metafile. The three

alternatives are as follows:

XGL_CGM_VDC_EXT_FLOAT
XGL_CGM_VDC_EXT_SHORT
XGL_CGM_VDC_EXT_LONG

The first value, XGL_CGM_VDC_EXT_FLOAT, is not currently implemented.

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.

XGL_STREAM(3)
This is the type of an object representing a Stream.