NAME

xgl_context_push – saves the current state of the Context on a stack

SYNOPSIS

#include <xgl/xgl.h>

```
void  xgl_context_push (
          Xgl_ctx          ctx,
          Xgl_attribute    attr_list[] );
```

DESCRIPTION

Purpose

This operator saves the current state of the Context onto XGL's graphics context stack. Each Context has its own independent stack.

Parameters

attr_list A pointer to a list of attributes to be pushed on the stack. The end of the list is indicated by a NULL value. If the attribute list is NULL, all pushable attributes associated with the Context are saved.

The following is a list of all the pushable attributes. Some attributes listed here may not be present or implemented in the current version of XGL.

XGL_3D_CTX_BLEND_DRAW_MODE
XGL_3D_CTX_BLEND_FREEZE_Z_BUFFER
XGL_3D_CTX_DEPTH_CUE_COLOR
XGL_3D_CTX_DEPTH_CUE_INTERP
XGL_3D_CTX_DEPTH_CUE_MODE
XGL_3D_CTX_DEPTH_CUE_REF_PLANES
XGL_3D_CTX_DEPTH_CUE_SCALE_FACTORS
XGL_3D_CTX_HLHSR_DATA
XGL_3D_CTX_HLHSR_MODE
XGL_3D_CTX_JITTER_OFFSET
XGL_3D_CTX_LIGHT_SWITCHES
XGL_3D_CTX_LINE_COLOR_INTERP
XGL_3D_CTX_MODEL_CLIP_PLANE_NUM
XGL_3D_CTX_MODEL_CLIP_PLANES
XGL_3D_CTX_SURF_BACK_AMBIENT
XGL_3D_CTX_SURF_BACK_COLOR
XGL_3D_CTX_SURF_BACK_COLOR_SELECTOR
XGL_3D_CTX_SURF_BACK_DIFFUSE
XGL_3D_CTX_SURF_BACK_DMAP_SWITCHES
XGL_3D_CTX_SURF_BACK_FILL_STYLE
XGL_3D_CTX_SURF_BACK_FPAT
XGL_3D_CTX_SURF_BACK_FPAT_POSITION
XGL_3D_CTX_SURF_BACK_ILLUMINATION
XGL_3D_CTX_SURF_BACK_LIGHT_COMPONENT
XGL_3D_CTX_SURF_BACK_SPECULAR
XGL_3D_CTX_SURF_BACK_SPECULAR_COLOR
XGL_3D_CTX_SURF_BACK_SPECULAR_POWER
XGL_3D_CTX_SURF_BACK_TMAP_SWITCHES

XGL_3D_CTX_SURF_BACK_TRANSP
XGL_3D_CTX_SURF_DC_OFFSET
XGL_3D_CTX_SURF_FACE_CULL
XGL_3D_CTX_SURF_FACE_DISTINGUISH
XGL_3D_CTX_SURF_FRONT_AMBIENT
XGL_3D_CTX_SURF_FRONT_DIFFUSE
XGL_3D_CTX_SURF_FRONT_DMAP_SWITCHES
XGL_3D_CTX_SURF_FRONT_ILLUMINATION
XGL_3D_CTX_SURF_FRONT_LIGHT_COMPONENT
XGL_3D_CTX_SURF_FRONT_SPECULAR
XGL_3D_CTX_SURF_FRONT_SPECULAR_COLOR
XGL_3D_CTX_SURF_FRONT_SPECULAR_POWER
XGL_3D_CTX_SURF_FRONT_TMAP_SWITCHES
XGL_3D_CTX_SURF_FRONT_TRANSP
XGL_3D_CTX_SURF_GEOM_NORMAL
XGL_3D_CTX_SURF_LIGHTING_NORMAL_FLIP
XGL_3D_CTX_SURF_NORMAL_FLIP
XGL_3D_CTX_SURF_SILHOUETTE_EDGE_FLAG
XGL_3D_CTX_SURF_TRANSP_BLEND_EQ
XGL_3D_CTX_SURF_TRANSP_METHOD
XGL_3D_CTX_VIEW_CLIP_PLUS_W_ONLY
XGL_3D_CTX_Z_BUFFER_COMP_METHOD
XGL_3D_CTX_Z_BUFFER_WRITE_MASK
XGL_CTX_ARC_FILL_STYLE
XGL_CTX_ATEXT_CHAR_HEIGHT
XGL_CTX_ATEXT_CHAR_SLANT_ANGLE
XGL_CTX_ATEXT_CHAR_UP_VECTOR
XGL_CTX_ATEXT_STYLE
XGL_CTX_ATEXT_ALIGN_HORIZ
XGL_CTX_ATEXT_ALIGN_VERT
XGL_CTX_ATEXT_PATH
XGL_CTX_BACKGROUND_COLOR
XGL_CTX_CLIP_PLANES
XGL_CTX_DC_VIEWPORT
XGL_CTX_EDGE_AA_BLEND_EQ
XGL_CTX_EDGE_AA_FILTER_SHAPE
XGL_CTX_EDGE_AA_FILTER_WIDTH
XGL_CTX_EDGE_ALT_COLOR
XGL_CTX_EDGE_CAP
XGL_CTX_EDGE_COLOR
XGL_CTX_EDGE_JOIN
XGL_CTX_EDGE_MITER_LIMIT
XGL_CTX_EDGE_PATTERN
XGL_CTX_EDGE_STYLE
XGL_CTX_EDGE_WIDTH_SCALE_FACTOR

XGL_CTX_GLOBAL_MODEL_TRANS
XGL_CTX_LINE_AA_BLEND_EQ
XGL_CTX_LINE_AA_FILTER_SHAPE
XGL_CTX_LINE_AA_FILTER_WIDTH
XGL_CTX_LINE_ALT_COLOR
XGL_CTX_LINE_CAP
XGL_CTX_LINE_COLOR
XGL_CTX_LINE_COLOR_SELECTOR
XGL_CTX_LINE_JOIN
XGL_CTX_LINE_MITER_LIMIT
XGL_CTX_LINE_PATTERN
XGL_CTX_LINE_STYLE
XGL_CTX_LINE_WIDTH_SCALE_FACTOR
XGL_CTX_LOCAL_MODEL_TRANS
XGL_CTX_MARKER
XGL_CTX_MARKER_AA_BLEND_EQ
XGL_CTX_MARKER_AA_FILTER_SHAPE
XGL_CTX_MARKER_AA_FILTER_WIDTH
XGL_CTX_MARKER_COLOR
XGL_CTX_MARKER_COLOR_SELECTOR
XGL_CTX_MARKER_SCALE_FACTOR
XGL_CTX_MAX_TESSELLATION
XGL_CTX_MIN_TESSELLATION
XGL_CTX_NEW_FRAME_ACTION
XGL_CTX_NURBS_CURVE_APPROX
XGL_CTX_NURBS_CURVE_APPROX_VAL
XGL_CTX_NURBS_SURF_APPROX
XGL_CTX_NURBS_SURF_APPROX_VAL_U
XGL_CTX_NURBS_SURF_APPROX_VAL_V
XGL_CTX_NURBS_SURF_ISO_CURVE_PLACEMENT
XGL_CTX_NURBS_SURF_ISO_CURVE_U_NUM
XGL_CTX_NURBS_SURF_ISO_CURVE_V_NUM
XGL_CTX_NURBS_SURF_PARAM_STYLE
XGL_CTX_PICK_ID_1
XGL_CTX_PICK_ID_2
XGL_CTX_PLANE_MASK
XGL_CTX_RASTER_FILL_STYLE
XGL_CTX_RASTER_FPAT
XGL_CTX_RASTER_FPAT_POSITION
XGL_CTX_RASTER_STIPPLE_COLOR
XGL_CTX_ROP
XGL_CTX_SFONT_0
XGL_CTX_SFONT_1
XGL_CTX_SFONT_2
XGL_CTX_SFONT_3

XGL_CTX_STEXT_AA_BLEND_EQ
XGL_CTX_STEXT_AA_FILTER_SHAPE
XGL_CTX_STEXT_AA_FILTER_WIDTH
XGL_CTX_STEXT_ALIGN_HORIZ
XGL_CTX_STEXT_ALIGN_VERT
XGL_CTX_STEXT_CHAR_ENCODING
XGL_CTX_STEXT_CHAR_EXPANSION_FACTOR
XGL_CTX_STEXT_CHAR_HEIGHT
XGL_CTX_STEXT_CHAR_SLANT_ANGLE
XGL_CTX_STEXT_CHAR_SPACING
XGL_CTX_STEXT_CHAR_UP_VECTOR
XGL_CTX_STEXT_COLOR
XGL_CTX_STEXT_PATH
XGL_CTX_STEXT_PRECISION
XGL_CTX_SURF_AA_BLEND_EQ
XGL_CTX_SURF_AA_FILTER_SHAPE
XGL_CTX_SURF_AA_FILTER_WIDTH
XGL_CTX_SURF_EDGE_FLAG
XGL_CTX_SURF_FRONT_COLOR
XGL_CTX_SURF_FRONT_COLOR_SELECTOR
XGL_CTX_SURF_FRONT_FILL_STYLE
XGL_CTX_SURF_FRONT_FPAT
XGL_CTX_SURF_FRONT_FPAT_POSITION
XGL_CTX_SURF_INTERIOR_RULE
XGL_CTX_THRESHOLD
XGL_CTX_VDC_MAP
XGL_CTX_VDC_WINDOW
XGL_CTX_VIEW_CLIP_BOUNDS
XGL_CTX_VIEW_TRANS

Special cases If the application only wants to push (and later pop) the model transforms (**XGL_CTX_-LOCAL_MODEL_TRANS**(3) or **XGL_CTX_GLOBAL_MODEL_TRANS**(3)), the Context operator **xgl_context_update_model_trans**(3) should be used instead of **xgl_context_push**(3) and **xgl_context_pop**(3)**.**

RETURN VALUE

Nothing is returned.

SEE ALSO

xgl_context_pop(3)
xgl_context_update_model_trans(3)
XGL_CTX_GLOBAL_MODEL_TRANS(3)
XGL_CTX_LOCAL_MODEL_TRANS(3)

NOTES

For all the attributes of a context that reference other XGL objects (such as XGL_CTX_LINE_-PATTERN, for example), pushing the attribute is equivalent to pushing the object handle. There is one exception to this rule — when the attribute represents a Transform object. In such a case, the contents of the object are pushed, not the object handle.