NAME

xgl_context_flush – causes pending or asynchronous processing to complete

SYNOPSIS

```
#include <xgl/xgl.h>

void  xgl_context_flush (
            Xgl_ctx              ctx,
            Xgl_flush_action     flush_action );
```

DESCRIPTION

Purpose

This operator allows some rendering devices to render by directly processing the application's data. While the devices are processing that data, it is possible for the rendering routine to return to the application's code to gain a degree of parallelism, thus improving the overall performance (see **XGL_CTX_GEOM_DATA_IS_VOLATILE**(3)**).**

Further, some devices can buffer XGL commands and require explicit flushing to post their buffers. A return from any XGL operator call does not guarantee that all actions have been completed (see **XGL_CTX_DEFERRAL_MODE**(3)**).**

The **xgl_context_flush**(3) operator is used to flush one or both of XGL's use of application's data and XGL internal buffers. In the case of XGL's buffers, the application might want XGL to block until all posted buffers have been processed by the rendering device.

Parameters

ctx The XGL 2D or 3D Context containing the graphics state used when processing **xgl_context_flush**(3)**.**

flush_action
The types of flushing to be performed based on any OR'ed combination of the following values:

XGL_FLUSH_GEOM_DATA
Ensures that this context is not using any application data. If **XGL_CTX_GEOM_DATA_IS_VOLATILE**(3) is set to TRUE, XGL_FLUSH_GEOM_DATA does nothing.

XGL_FLUSH_BUFFERS
Causes any pending graphics primitives for this context to be sent to the rendering device. If **XGL_CTX_DEFERRAL_MODE**(3) is set to XGL_DEFER_ASAP, XGL_FLUSH_BUFFERS does nothing.

XGL_FLUSH_SYNCHRONIZE
Causes XGL to block until the rendering device has finished processing all of the graphics primitives for this context. If this flag is not set, XGL may return control to the application before the rendering device has finished processing the geometry data, allowing XGL and the application to run asynchronously. Specifying XGL_FLUSH_SYNCHRONIZE also implies the setting of XGL_FLUSH_GEOM_DATA and XGL_FLUSH_BUFFERS.

This operator is device-dependent in that a given action might be irrelevant on Devices that do not support the corresponding parallelism. In this case, the given action is a NO-OP. Consult your accelerator guide for details.

RETURN VALUE

Nothing is returned.

SEE ALSO

XGL_CTX_DEFERRAL_MODE(3)
XGL_CTX_GEOM_DATA_IS_VOLATILE(3)

NOTES

When mixing XGL with Xlib function calls on the same Window, and if the rendering order is important, **xgl_context_flush**(3) (ctx, XGL_FLUSH_SYNCHRONIZE) should be called at the end of a block of XGL calls that is followed by Xlib commands. Inversely, the Xlib calls should be flushed with XSync before further XGL commands be issued.