NAME

xgl_context_accumulate – accumulates from the draw buffer of the raster attached to the context to the destination buffer

SYNOPSIS

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

void  xgl_context_accumulate (
        Xgl_ctx           ctx,
        Xgl_bounds_i2d*   rectangle,
        Xgl_pt_f2d*       pos,
        float             src_wt,
        float             accum_wt,
        Xgl_buffer_sel    buf );
```

DESCRIPTION

This operator accumulates from the draw buffer of the raster attached to the Context *ctx* to the destination buffer specified by the attribute **XGL_3D_CTX_ACCUM_OP_DEST**(3)**.** The accumulated area is copied to the buffer specified by *buf*. The area in the draw buffer of the raster that is to be accumulated is specified by the rectangular region *rectangle*. The accumulation is done starting from position *pos* in the destination buffer. The rectangular region that is used as source is not clipped to DC viewport. It is clipped by the maximum dimension of the draw buffer as defined by **XGL_DEV_MAXIMUM_COORDINATES**(3)**.** If the rectangle is a NULL pointer, the maximum area from the draw buffer of the raster is used as source. If *position* is NULL, the top and left corner of the destination buffer is used.

After accumulation, the accumulated area is copied to the buffer *buf*. The rectangle starting from position *pos* and width and height up to a maximum of width and height of the *rectangle* is the source area for copy. The destination area starts at (xmin,ymin) of the rectangle up to a maximum width and height specified by *rectangle*.

The accumulation calculation occurs as follows:

DEST_BUFFER = SRC_BUFFER ∗ SRC_WEIGHT + DEST_BUFFER ∗ ACCUM_WEIGHT

Parameters

ctx Specifies the context to which source raster is attached and whose draw buffer is used as the source in the accumulation process. The destination buffer (specified by the attribute **XGL_3D_CTX_ACCUM_OP_DEST**(3)**)** of the *ctx* is used as the destination buffer in the accumulation operation.

rectangle
Specifies the source area of the draw buffer of the raster attached to the *ctx* with *xmin*, *xmax*, *ymin*, *ymax*.

pos Specifies the position in the destination buffer (specified by the attribute **XGL_3D_CTX_ACCUM_OP_DEST**(3)**)** to be used as the starting position. The width and height up to a maximum of width and height of the *rectangle* is accumulated. If any region exceeds the bounds of the raster, all are correspondingly clipped.

src_wt The weight to be used as SRC_WEIGHT in the accumulation calculation given above.

accum_wt

The weight to be used as ACCUM_WEIGHT in the accumulation calculation given above.

buf Specifies the buffer to copy the accumulated image to. It takes on values:

XGL_BUFFER_SEL_NONE
: No copy back to the image buffers once it is done.

XGL_BUFFER_SEL_DISPLAY
: The contents of the destination buffer is always copied to the display buffer.

A value of 0 to N-1
: N is the number of buffers allocated in the raster attached to the Context *ctx*.

RETURN VALUE

Nothing is returned.

SEE ALSO

xgl_object_set(3)
xgl_object_get(3)
XGL_3D_CTX_ACCUM_OP_DEST(3)
XGL_DEV_MAXIMUM_COORDINATES(3)

NOTE

This primitive is only supported when **XGL_DEV_REAL_COLOR_TYPE**(3) is XGL_COLOR_RGB.