NAME

PEXFillAreaSet - 3D Set of Fill Areas Primitive

SYNTAX

void PEXFillAreaSet(Display **display*, XID *resource_id*, PEXOCRequestType *req_type*, int *shape_hint*, int *ignore_edges*, int *contour_hint*, unsigned int *count*, PEXListOfCoord **point_lists*)

PARAMETERS

display	A pointer to a display structure returned by a successful **XOpenDisplay** call.
resource_id	The resource identifier of the renderer or structure.
req_type	The request type for the output command (**PEXOCRender, PEXOCStore, PEXOCRenderSingle** or **PEXOCStoreSingle**).
shape_hint	The shape which describes all of the contours (**PEXShapeComplex, PEXShapeNonConvex, PEXShapeConvex, PEXShapeUnknown**).
ignore_edges	A flag that determines if surface edges are rendered (**True** or **False**).
contour_hint	A flag that indicates whether contours are disjoint or overlapping (**PEXContourDisjoint, PEXContourNested, PEXContourIntersecting, PEXContourUnknown**).
count	The number of fill areas in the set.
point_lists	A pointer to the list of point arrays defining each contour of the fill area set.

RETURNS

None

DESCRIPTION

This function creates a fill area set output primitive.

This function is similar to **PEXFillArea**(3)**,** but allows for the creation of areas with *islands* or *holes.*

If any fill area in the set has fewer than three vertices, or if there are no contours defined, the primitive is considered degenerate. The primitive is stored in a structure, but when rendered, the primitive is ignored and has no visual effect.

A fill area set consists of an array of fill areas that define "contours" (disjoint pieces or holes) making up the primitive. Each fill area, or contour, is defined by a list of vertices joined together to form a planar surface.

The contour hint provides further information about the relationships between contours in the fill area set. If the contour hint is **PEXContourDisjoint,** all contours will be spatially disjoint. No overlapping or intersection occurs between any contours in the fill area set. If the contour hint is **PEXContourNested,** contours will either be disjoint or wholly contained within another contour. No contour will have edges that intersect or are coincident with edges of any other contour. If the contour hint is **PEXContourIntersecting,** separated contours may have edges that are coincident or overlap. If the contour hint is **PEXContourUnknown** nothing is known about the interrelationships between contours. Fill area sets with contours that have higher complexity interrelationships than that indicated by the contour hint are rendered in an implementation-dependent manner.

The ignore edges flag is applied to each of the fill areas in the set.
All other aspects of this primitive are the same as **PEXFillArea**(3)**.**

DATA STRUCTURES

See **PEXlib.h.**

ERRORS

BadPEXOutputCommand
The output command contains an invalid value.

BadPEXRenderer
The specified renderer resource identifier is invalid.

BadPEXStructure
The specified structure resource identifier is invalid.

SEE ALSO

PEXSetInteriorStyle(3)
PEXSetInteriorStyleIndex(3)
PEXSetSurfaceColorIndex(3)
PEXSetSurfaceColor(3)
PEXSetReflectionAttributes(3)
PEXSetReflectionModel(3)
PEXSetSurfaceInterpMethod(3)
PEXSetBFInteriorStyle(3)
PEXSetBFInteriorStyleIndex(3)
PEXSetBFSurfaceColorIndex(3)
PEXSetBFSurfaceColor(3)
PEXSetBFReflectionAttributes(3)
PEXSetBFReflectionModel(3)
PEXSetBFSurfaceInterpMethod(3)
PEXSetFacetCullingMode(3)
PEXSetFacetDistinguishFlag(3)
PEXSetPatternSize(3)
PEXSetPatternAttributes(3)
PEXSetPatternAttributes2D(3)
PEXSetInteriorBundleIndex(3)
PEXSetSurfaceEdgeFlag(3)
PEXSetSurfaceEdgeType(3)
PEXSetSurfaceEdgeWidth(3)
PEXSetSurfaceEdgeColor(3)
PEXSetSurfaceEdgeColorIndex(3)
PEXSetEdgeBundleIndex(3)