NAME

PEXSetModelClipVolume - Set Model Clip Volume 3D

SYNTAX

void PEXSetModelClipVolume(Display **display*, XID *resource_id*, PEXOCRequestType *req_type*, int *op*, unsigned int *count*, PEXHalfSpace **half_spaces*)

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**).
op	The model clipping volume operator (**PEXModelClipReplace** or **PEXModelClipIntersection**).
count	The number of halfspaces.
half_spaces	An array of points and normal vectors defining the model clipping volume.

RETURNS

None

DESCRIPTION

This function creates an output primitive attribute which sets the model clip volume attribute. The operator will be used to combine the specified list of half-spaces with the current model clipping volume to form a new model clipping volume. Values for the operator are **PEXModelClipReplace** (replace current volume) and **PEXModelClipIntersection** (intersect specified volume with current volume). Each half-space is defined by a point and a normal in model coordinates. The normal points in the direction of the half-space, and the point is considered to be on the plane. See **PEXGetImpDepConstants**(3) for the maximum allowable number of model clip planes.

Each half-space is transformed by the current composite modeling transformation and combined with the current model clipping volume. The resulting model clipping volume is not affected by subsequent changes to the composite modeling transformation.

DATA STRUCTURES

```
typedef struct {
        PEXCoord        point;
        PEXVector       vector;
} PEXHalfSpace;
```

See also **PEXlib.h.**

ERRORS

BadPEXRenderer
The specified renderer resource identifier is invalid.

BadPEXStructure
The specified structure resource identifier is invalid.

SEE ALSO

PEXSetModelClipFlag(3)
PEXSetModelClipVolume2D(3)
PEXRestoreModelClipVolume(3)
PEXGetImpDepConstants(3)