

Defined Types

N3DProjectionType

DECLARED IN 3Dkit/next3d.h

SYNOPSIS typedef enum {
 N3D_Perspective,
 N3D_Orthographic
} **N3DProjectionType**

DESCRIPTION Used to set and test the projection type of an N3DCamera.

N3DLightType

DECLARED IN 3Dkit/next3d.h

SYNOPSIS typedef enum {
 N3D_AmbientLight,
 N3D_PointLight,
 N3D_DistantLight,
 N3D_SpotLight
} **N3DLightType**

DESCRIPTION Used to set and test the light type of an N3DLight.

N3DAxis

DECLARED IN 3Dkit/next3d.h

SYNOPSIS typedef enum {
 N3D_AllAxes,
 N3D_XAxis,
 N3D_YAxis,
 N3D_ZAxis,
 N3D_XYAxes,
 N3D_XZAxes,
 N3D_YZAxes
} **N3DAxis**

DESCRIPTION Used to determine the combination of axes about which a matrix is rotated by N3DRotator objects.

N3DHider

DECLARED IN 3Dkit/next3d.h

SYNOPSIS typedef enum {
 N3D_HiddenRendering = 0,
 N3D_InOrderRendering,
 N3D_NoRendering
} **N3DHider**

DESCRIPTION Used to set the hider algorithm used by N3DCamera and N3DImageRep objects.

N3DShapeName

DECLARED IN 3Dkit/N3DShape.h

SYNOPSIS typedef struct {
 char **id**[6];
 char **name**;
} **N3DShapeName**

DESCRIPTION The name and id of the shape as character strings (used for picking shapes).

N3DSurfaceType

DECLARED IN 3Dkit/next3d.h

SYNOPSIS typedef enum {
 N3D_PointCloud = 0,
 N3D_WireFrame,
 N3D_ShadedWireFrame,
 N3D_FacetedSolids,
 N3D_SmoothSolids
} **N3DSurfaceType**

DESCRIPTION Used to set the surface type applied to N3DShape and N3DRIBImageRep objects.

SLOArgs

DECLARED IN 3Dkit/N3DShader.h

SYNOPSIS typedef struct {
 SLO_VISSYMDEF **symb**;
 union {
 float **fval**;
 RtPoint **pval**;
 NXColor **cval**;
 char ***sval**;
 } **value**;
} **SLOArgs**

DESCRIPTION The union that represents shader language function arguments.

Symbolic Constants

Matrix Constants

DECLARED IN 3Dkit/N3DShape.h

SYNOPSIS N3D_BOTH_CLEAN
N3D_CTM_DIRTY
N3D_CTM_INVERSE_DIRTY
N3D_CTM_BOTH_DIRTY

DESCRIPTION These constants track the status of an N3DShape's composite transformation matrix and its inverse.

Global Variables

N3DIdentityMatrix

DECLARED IN 3Dkit/next3d.h

SYNOPSIS const RtMatrix **N3DIdentityMatrix**

DESCRIPTION Assigned the values representing a normalized matrix when 3D Kit applications are initialized:

```
{ {1, 0, 0, 0},  
  {0, 1, 0, 0},  
  {0, 0, 1, 0},  
  {0, 0, 0, 1}}
```

N3DOrigin

DECLARED IN 3Dkit/next3d.h

SYNOPSIS const RtPoint **N3DOrigin**

DESCRIPTION Assigned the value {0, 0, 0} when 3D Kit applications are initialized.

N3DRIBPboardType

DECLARED IN 3Dkit/next3d.h

SYNOPSIS NXAtom **N3DRIBPboardType**

DESCRIPTION Pasteboard for copying RIB data.