

# 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**

## DECLARED IN 3Dkit/N3DShape.h

N3D\_CTM\_DIRTY  
N3D\_CTM\_INVERSE\_DIRTY  
N3D\_CTM\_BOTH\_DIRTY

# Global Variables

## DECLARED IN 3Dkit/next3d.h

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

**DECLARED IN**      3Dkit/next3d.h

<b>DESCRIPTION</b>	Assigned the value $\{0, 0, 0\}$ when 3D Kit applications are initialized.
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**DECLARED IN**      3Dkit/next3d.h

<b>DESCRIPTION</b>	Pasteboard for copying RIB data.
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