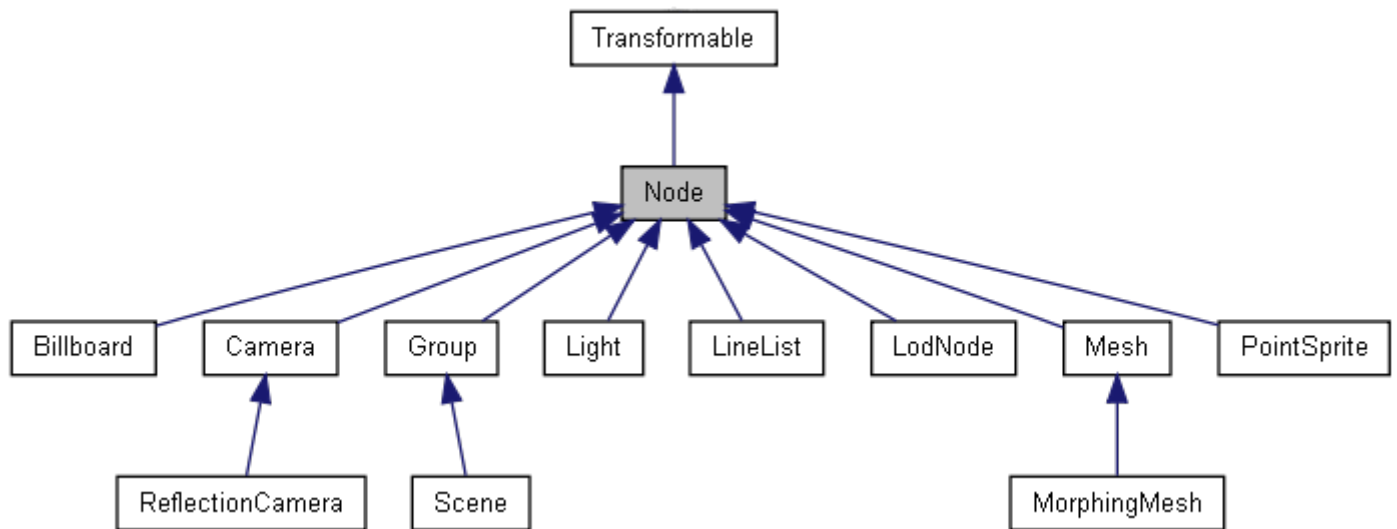


3D Scenes and Nodes

Scenes and Nodes

[Candera::Node](#) is an abstract base class for all scene graph nodes.



Each node defines a local coordinate system relative to the coordinate system of the parent node. The functionality to define the local coordinate system is derived from [Candera::Transformable](#) and consists of following components:

- position,
- rotation,
- scale,
- and a generic matrix called transform matrix.

If the node is transformed from the local coordinate system to the world's coordinate system, then the node's local transformation is multiplied with all its parent's transformations. A node can also store a set of nodes as its children but a node can only have one parent at a time. Cycles are prohibited. The nodes alpha value is multiplied with the alpha value of its descendent nodes.

[Candera::Scene](#) is the top level scene node which cannot be part of any other node.

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