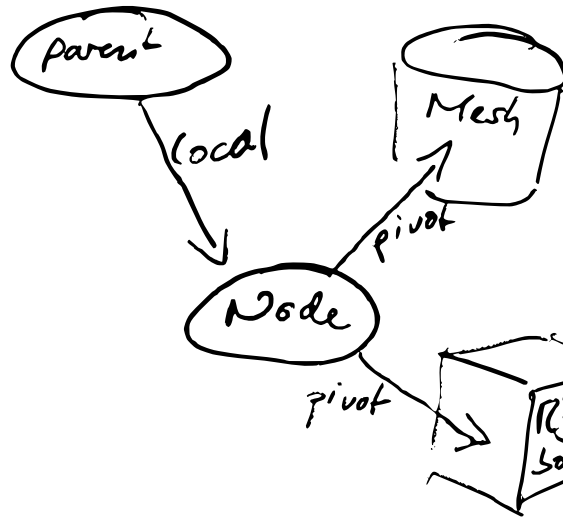


Physics RigidBody Pivot



Fluss for adjustment
 RigidBodyTo Mesh \rightarrow pivot
 RigidBodyTo Node \rightarrow pivot
 Mesh to RigidBody \rightarrow pivot

most plausible
 \downarrow

- creation - when?
 - on new Component RigidBody?
 - on add Component?
 - on node being appended to Graph?
 - on Physx. transform by Physics if not existent yet?
- $(node.mtxWorld \cdot pivot)$ defines t, r, s of rs
 - \rightarrow $mtxWorld$
 - save pivot
 - create inverse \rightarrow $mtxPivotInverse$
- simulation
 - OIMO calculates new t, r of rs in world
 - scale unchanged
 - set t, r of $mtxWorld$
 - $mtxWorld \cdot mtxPivotInverse$
 - \rightarrow $node.mtxWorld$
 - calculate $node.mtxLocal$