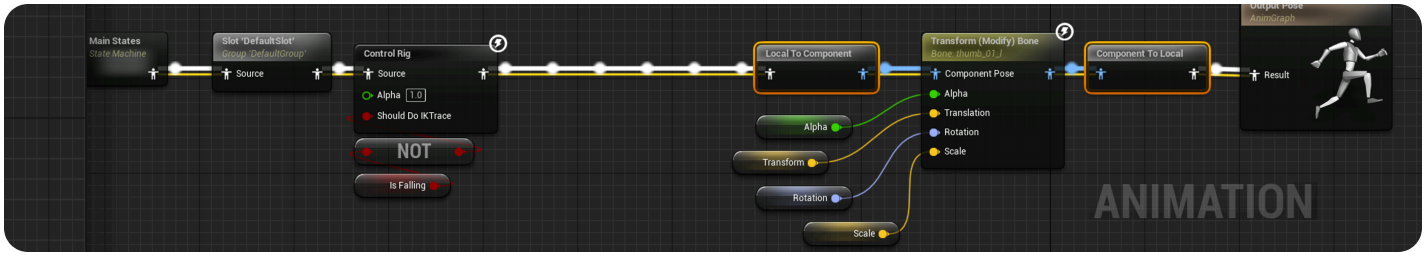
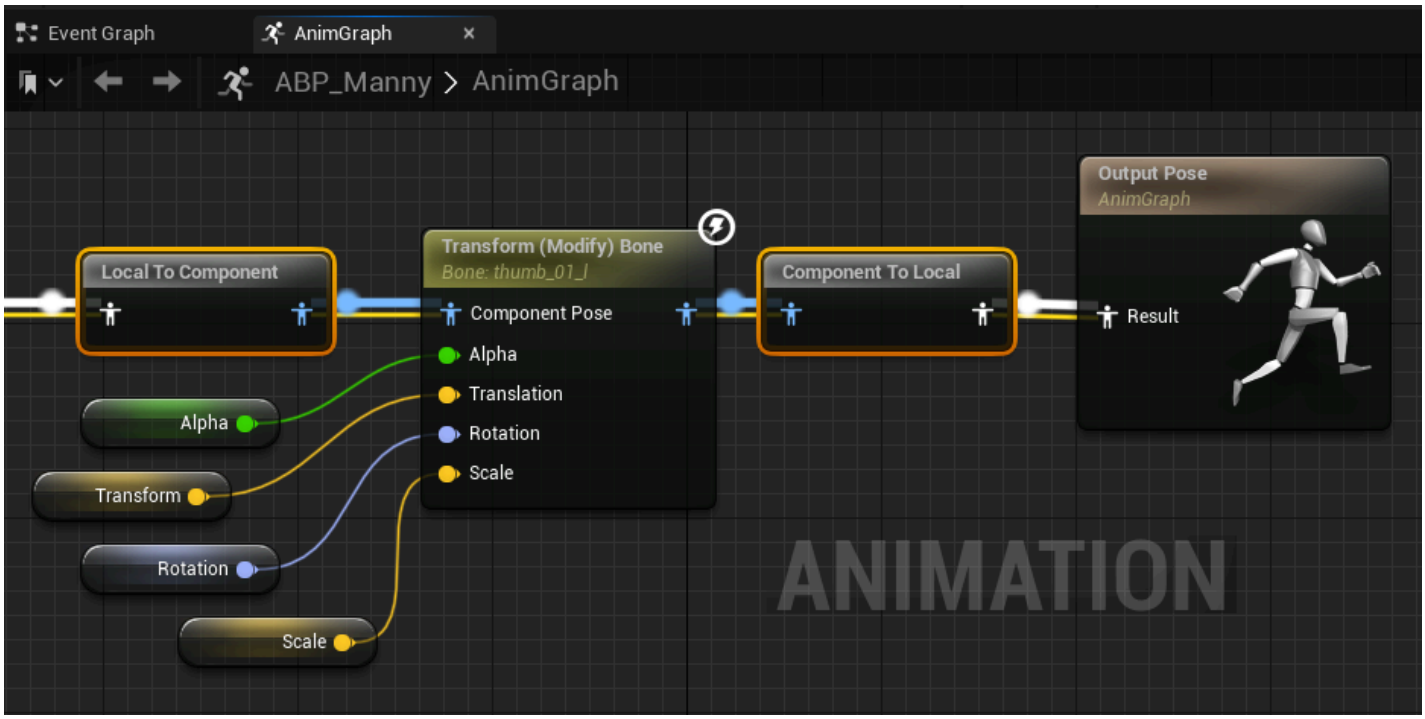
Space Conversion Nodes

Animation nodes that convert poses between local and component space.



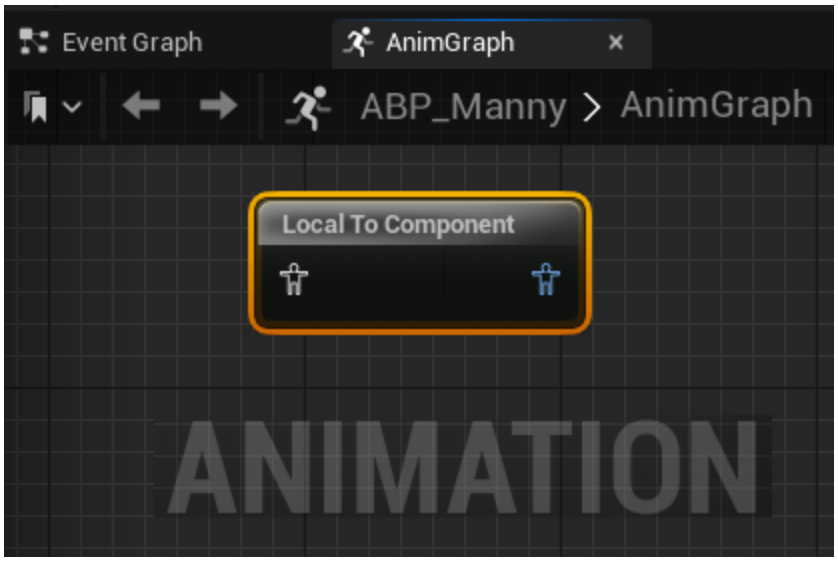
Animation Blueprint nodes on the **AnimGraph** calculate and generate new poses that drive animations in either the **Local Space** or a **Component Space**. Animation poses generated in **Local space** calculate bone transforms relative to the bones **parent bone**. Animation poses generated in **Component Space** calculate bone transforms relative to the Skeletal Mesh Component of your character.



The **Convert Spaces** nodes available in the **AnimGraph** of Animation Blueprints provides the ability to convert poses between **local** and **component** space.

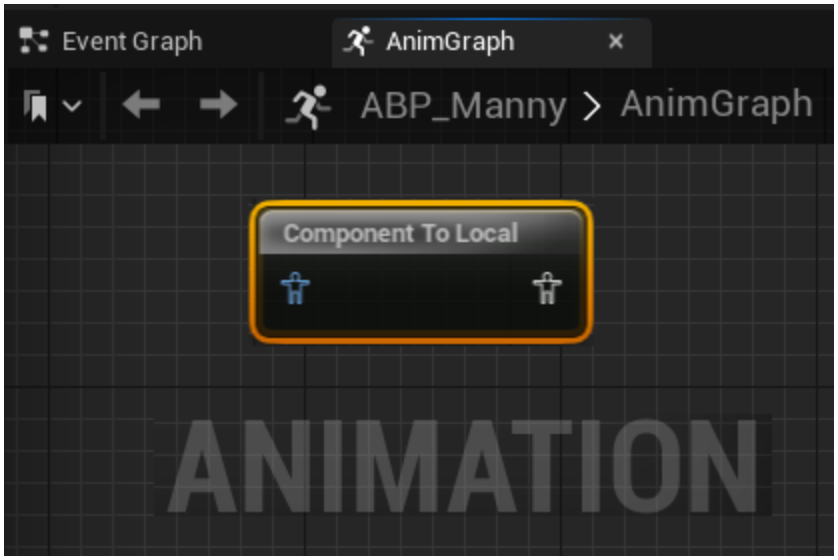
When working with poses in an Animation Blueprint, most nodes will operate within Local Space, indicated with **white** pose input and output pins. However, certain blend nodes and all skeletal controls nodes, operate in **Component Space**, indicated with **blue** pose input and output.

To use nodes that operate within Component Space, poses must first be converted to Component Space using the Local to Component conversion node.



After an animation pose has undergone component space operations, it must be converted back to local space in order to be usable by additional nodes, or provide a final pose for the

output node.



Because there is a cost associated with each conversion **to** or **from** Component Space, it is best to group any nodes that operate in Component Space, to reduce the number of conversions needed.