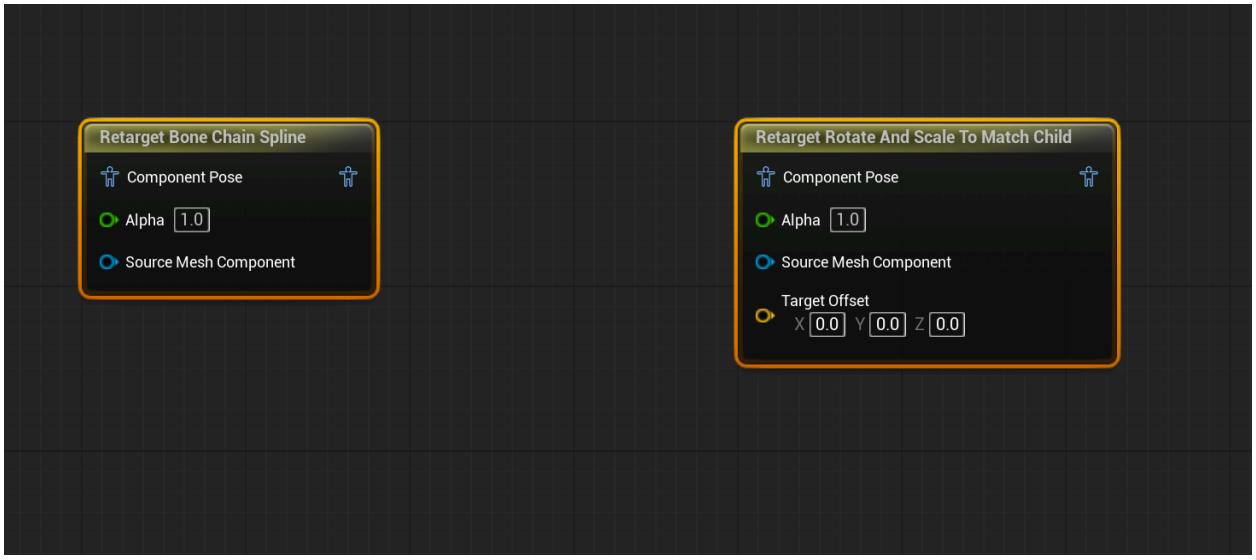
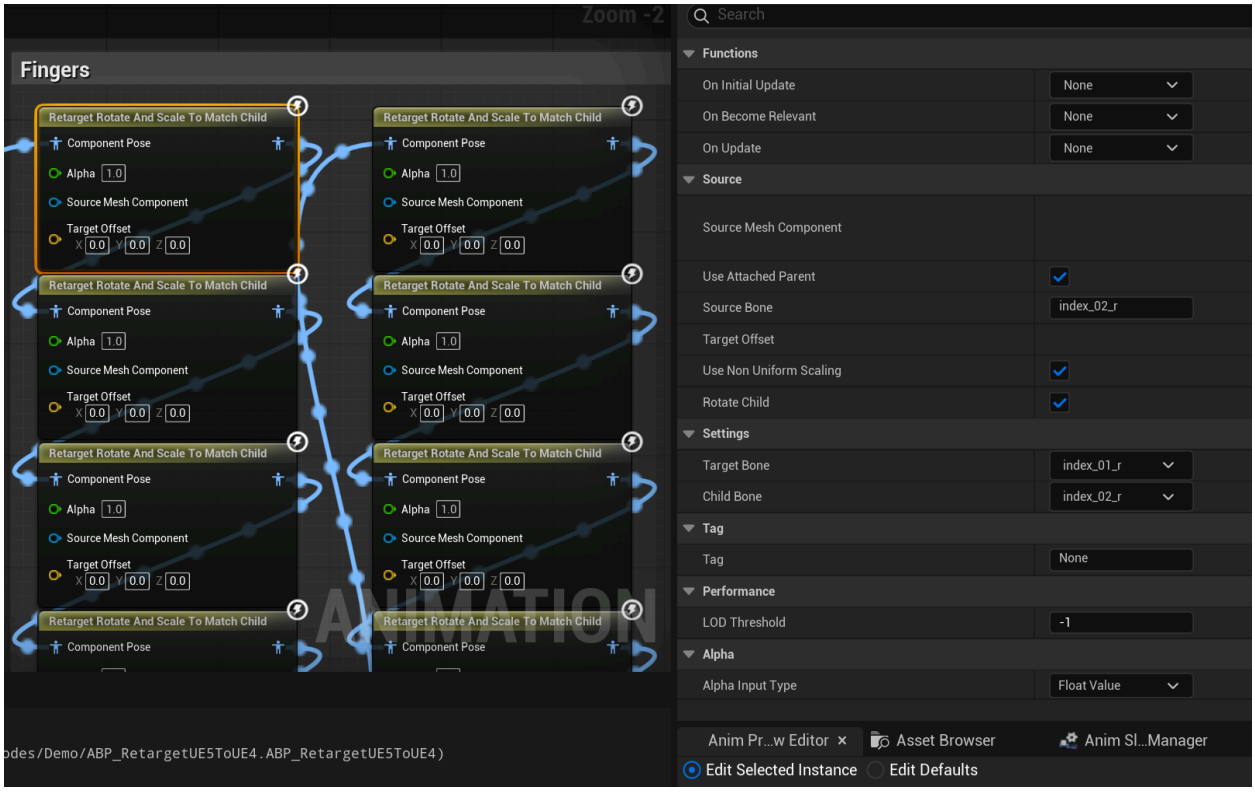
Premium Live Retarget Nodes

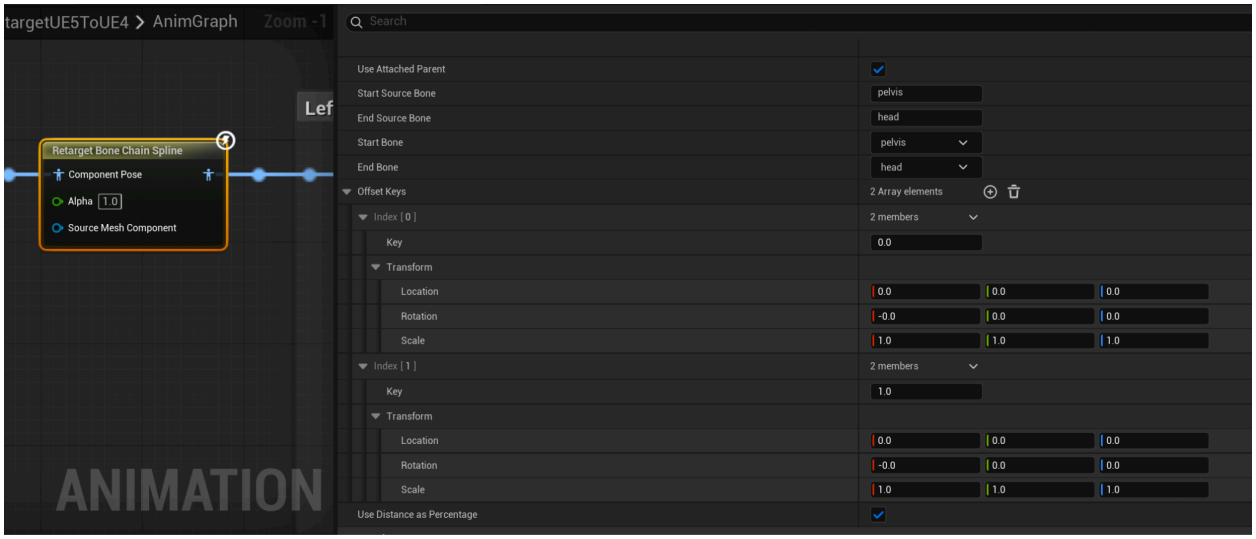
Premium Live Retarget Nodes includes two new animation nodes to use in your animation blueprints.These are designed around live-retarget workflow, where cosmetic mesh assets are driven by a parent skeletal mesh component, allowing the use of meshes with differing rigs while easily sharing animation. The main animation blueprint will drive the parent mesh, which is usually invisible, while the other assets simply use their animation blueprints to retarget to match it.



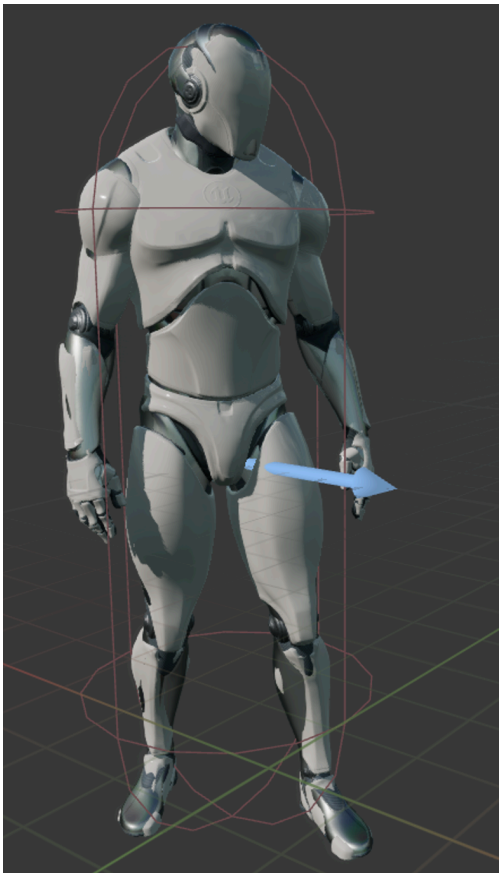
1. Anim Node Retarget Rotate and Scale to Match Child
    - Rotates and scales the target bone to move one of its child bones to match the location of a selected bone on a source skeletal mesh, parent mesh to the owning component if none is supplied. Useful for discrete limb segments.
    - ‘Use Attached Parent’
        - When true uses the owning components parent component as the source mesh component, assuming it is a skeletal mesh component.
    - ‘Source Bone’
        - The bone on the source mesh to use as the target location to reach/
    - ‘Target Offset’
        - Offset for target location applied in ‘Source Bone’ space.
    - ‘Use Nonuniform Scaling’
        - When true the target bone is scaled only along the axis pointing towards its selected child
    - ‘Rotate Child’
        - When true the child bone’s rotation is affected by rotation applied to the target bone.
    - ‘Target Bone’
        - The bone to apply rotation and scaling to.
    - ‘Child Bone’
        - Must be child of ‘Target Bone’
        - The modifications to ‘Target Bone’ will match the location of this bone to the target location.



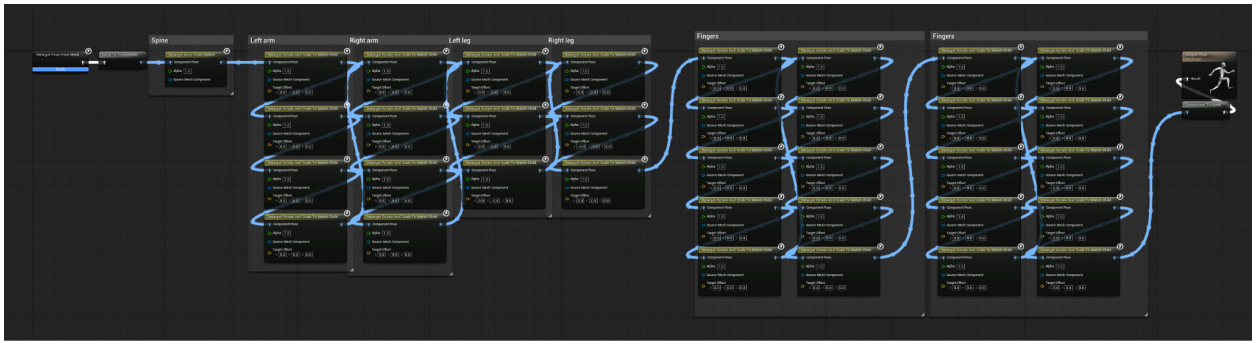
2. Anim Node Retarget Bone Chain Spline
    - Uses a spline as an intermediary to map a chain of bones from the target mesh to one of the source mesh, they need not have the same number of bones. Useful for spines, tails, and tendrils.
    - ‘Use Attached Parent’
        - When true uses the owning components parent component as the source mesh component, assuming it is a skeletal mesh component.
    - ‘Start Source Bone’ and ‘End Source Bone’
        - The start and end of the source bone chain the spline is created from.
        - ‘End Source Bone’ must be a descendent of ‘Start Source Bone’ on the source mesh.
    - ‘Start Bone’ and ‘End Bone’
        - The start and end of the target bone chain on this mesh.
        - ‘End Bone’ must be a descendent of ‘Start Bone.’
    - ‘Offset Keys’ field allows you to pair offset transforms to distance keys.
        - ‘Use Distance as Percentage’ will interpret the offset key as a percentage of the source spline length rather than distance along it. When active, 0 will place the offset at the start of the source spline and 1.0 (one hundred percent) will place the key at the end of the source spline.
        - Offsets are applied in source space.



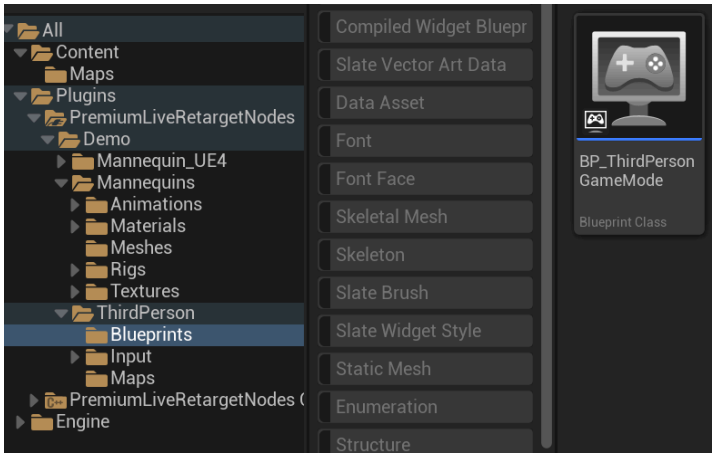
3. Both have parameters to apply offsets (see above) to account for differing joint locations and achieve perfect fit.



4. A demo animation blueprint for driving the UE4 mannequin from either UE5 mannequin is provided.
    - PremiumLiveRetargetNodes/Demo/ABP_RetargetUE5ToUE4



5. A demo gamemode is provided to play as a character using this animation blueprint.
    - PremiumLiveRetargetNodes/Demo/ThirdPerson/Blueprints/BP_ThirdPersonGameMode
    - You can cycle between male and female style animations, as well as which mesh is visible, using the Left Shift key.



Using these nodes, an exact match can be achieved that the standard Retarget Pose From Mesh node cannot.