

To retarget animations from an Unreal Engine 4 FBX file to a new character in Unreal Engine 5.6, follow these optimized instructions:

### Step 1: Prepare Skeletons

1. Import FBX animations into UE5.6, selecting the source skeleton during import<sup>36</sup>.
2. Configure bone retargeting modes for the target skeleton:
  - \* Right-click the root bone → Recursively Set Translation Retargeting Skeleton<sup>12</sup>.
  - \* Set the pelvis bone to AnimationScaled<sup>12</sup>.
  - \* Set root/IK/weapon bones to Animation<sup>12</sup>.

### Step 2: Map Skeletons

1. Open Retarget Manager (Window → Animation → Retarget Manager)<sup>32</sup>.
2. Assign source/target skeletons:
  - \* Select the imported UE4 skeleton as Source<sup>3</sup>.
  - \* Select your UE5.6 character skeleton as Target<sup>32</sup>.
3. Map bones using the Humanoid Rig preset for automatic alignment<sup>32</sup>. Manually remap mismatched bones via the hierarchy panel<sup>35</sup>.

### Step 3: Adjust Reference Poses

1. Match base poses (e.g., A-pose ↔ T-pose):
  - \* In Retarget Manager, click Source/Target → Edit Mode<sup>4</sup>.
  - \* Rotate/translate bones to align poses<sup>4</sup>.
  - \* Disable Edit Mode when done<sup>4</sup>.
2. For precision, numerically adjust rotations in the Details panel<sup>4</sup>.

### Step 4: Retarget Animations

1. In the Content Browser:
  - \* Right-click the UE4 animation → Retarget Animations → Duplicate & Retarget<sup>36</sup>.
  - \* Select the target skeleton when prompted<sup>62</sup>.
2. Verify results: Play the animation on the target character and check for distortions<sup>52</sup>.

### Troubleshooting Tips

- \* Bone naming mismatches: Ensure consistent naming (e.g., pelvis vs hip)<sup>5</sup>.
- \* Scaling issues: Use AnimationScaled for spine/pelvis bones<sup>12</sup>.
- \* Twisted joints: Adjust the retarget pose or IK Rig settings<sup>45</sup>.

### Best Practices

- \* Prefix/suffix bones (e.g., head\_MST) for clarity<sup>5</sup>.
- \* Test with a single animation first before batch-processing<sup>52</sup>.

These steps leverage UE5.6's streamlined retargeting workflow, combining traditional methods<sup>12</sup> with newer tools like the Retarget Manager<sup>36</sup>. For complex skeletons, IK Rig retargeting provides finer control<sup>4</sup>