

## Professional Workflow for Importing Characters into Unreal Engine

### 1. Character Preparation in Character Creator

- Retrieve the character file from the designated drive.
- Open the file in **Character Creator (CC)** for initial adjustments.
- Once adjustments are complete, export the character to **iClone**, which will handle motion integration.

### 2. Motion Import & Application in iClone

- Close **Character Creator** and open **iClone**.
- Retrieve pre-recorded motion capture data from **Move.ai**.
- Organize files in a designated project folder (e.g., "Stay Dry").
- Import motion files into **iClone** by dragging them onto the character model.

### 3. Troubleshooting Motion Import Issues

- If the motion does not apply correctly, experiment with different presets such as **Mixamo**.
- If issues persist (e.g., deformations, errors), use a **custom profile** acquired externally.
- Import the custom motion profile and reapply the animation to correct errors.
- Validate animation functionality and resolve any remaining issues.

### 4. Motion Refinement & Cleanup in iClone

- Play the animation to ensure smooth movement.
- Use **Motion Layer Editing** to:
  - Correct foot placement and grounding.
  - Adjust hand positions to prevent body clipping.
  - Ensure natural joint rotations and positioning.
- Optimize **cloth simulations** to prevent body mesh clipping.
- Remove unnecessary polygons to optimize scene performance.

### 5. Exporting Animation from iClone to Unreal Engine

- Crop animation to remove the **T-Pose** and unnecessary frames.
- Export animation as **FBX** for **Unreal Engine**.
- Select the appropriate frame range to avoid redundant data.
- Verify that the **iClone Live Link Plugin** is properly configured for UE compatibility.

### 6. Preparing Unreal Engine for Import

- Download and install the **Live Link Plugin for Unreal Engine** (ensure version compatibility, e.g., 5.4 vs. 5.5).

- Copy plugin files to the **Unreal Engine Plugins** and **Content** folders.
- Activate the plugin inside Unreal Engine under **Edit > Plugins > Reallusion**.

## 7. Importing Character & Animation into Unreal Engine

- Navigate to **Unreal Engine Project Directory**.
- Create a dedicated folder for the character (e.g., "Lima").
- Drag and drop **FBX files** into Unreal Engine.
- Ensure that **auto-setup for Character Creator/iClone** is enabled.
- Choose the preferred **shader quality** for optimal rendering.
- Validate the imported character and animation inside the Unreal Engine environment.

## 8. Final Adjustments & Optimization in Unreal Engine

- Ensure **textures and materials** are correctly assigned.
- Check for any animation discrepancies and apply necessary fixes.
- Validate the character's movement and interaction within the game environment.
- Optimize assets for real-time performance.

## Conclusion

This workflow ensures a **structured, error-free, and optimized** process for transferring characters from Character Creator to Unreal Engine while maintaining high-quality motion and rendering fidelity.