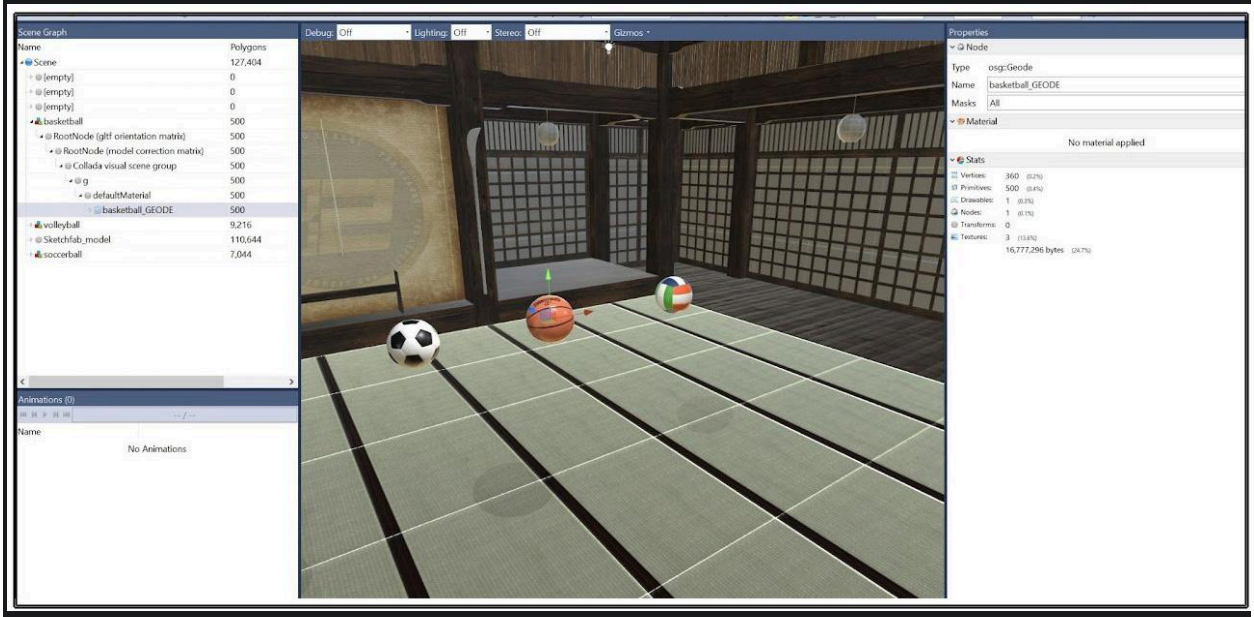
Scene Editor - Inspector

Overview



Inspector is a versatile visual browser and editor for 3D models. It enables users to:

- View and manage nodes in the scene graph.
- Add, move, and edit objects or nodes.
- Tag Regions of Interest (ROIs).
- Adjust lighting and starting points.
- Analyze polygon and texture details to optimize performance.

Opening and Using Inspector

Open Models in Inspector:

- Click **Edit** in the Experiment Options editor to open a model.
- Use Inspector to add objects, set ROIs, and adjust lighting or starting points.
- Alternatively, open Inspector from Tools in the Vizard IDE or via the Inspector shortcut.

Add New Models:

- Use File- Open to open a new model (Can also drag and drop models into the editor)

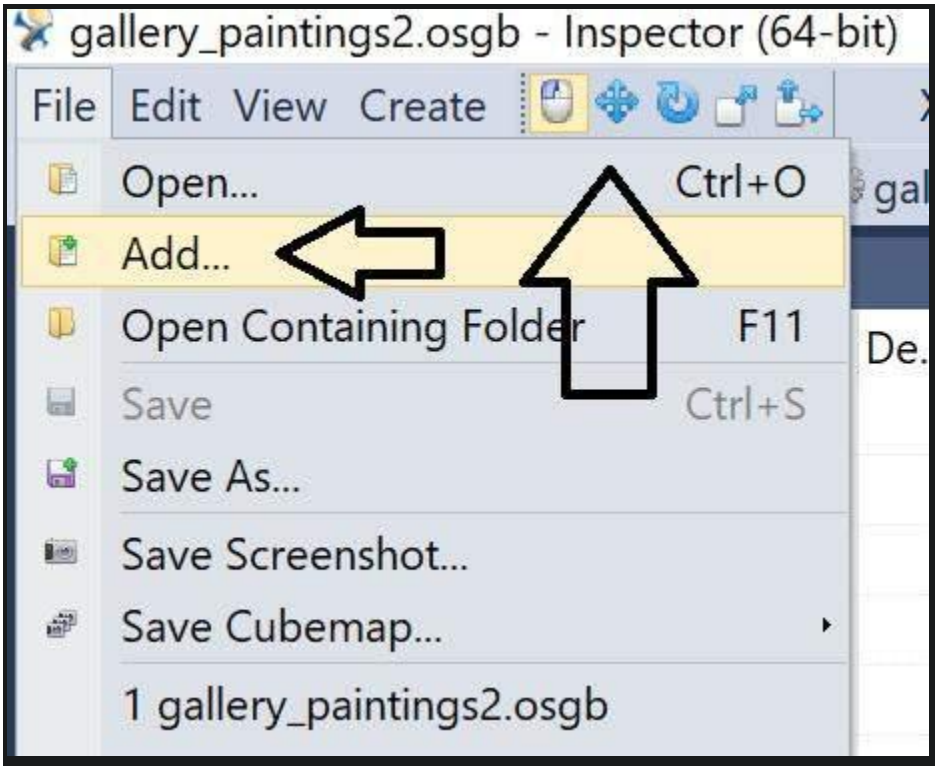
Navigation Controls:

- **Left Mouse Drag:** Orbit view.
- **Shift + Left Click:** Move view to clicked surface.
- **Right Mouse Drag:** Pan.
- **Scroll Wheel:** Zoom.
- **Z:** Zoom to selected node.

Node Management

Understanding Nodes:

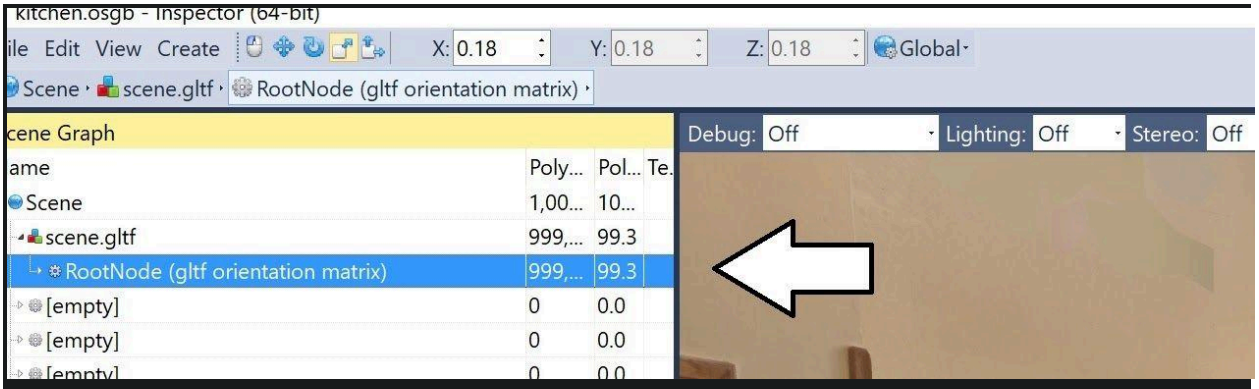
- Nodes represent objects or elements in the scene.
- **Group Nodes (red, blue, green):** Required for data collection.
- **Transform Nodes:** Used for object positioning.

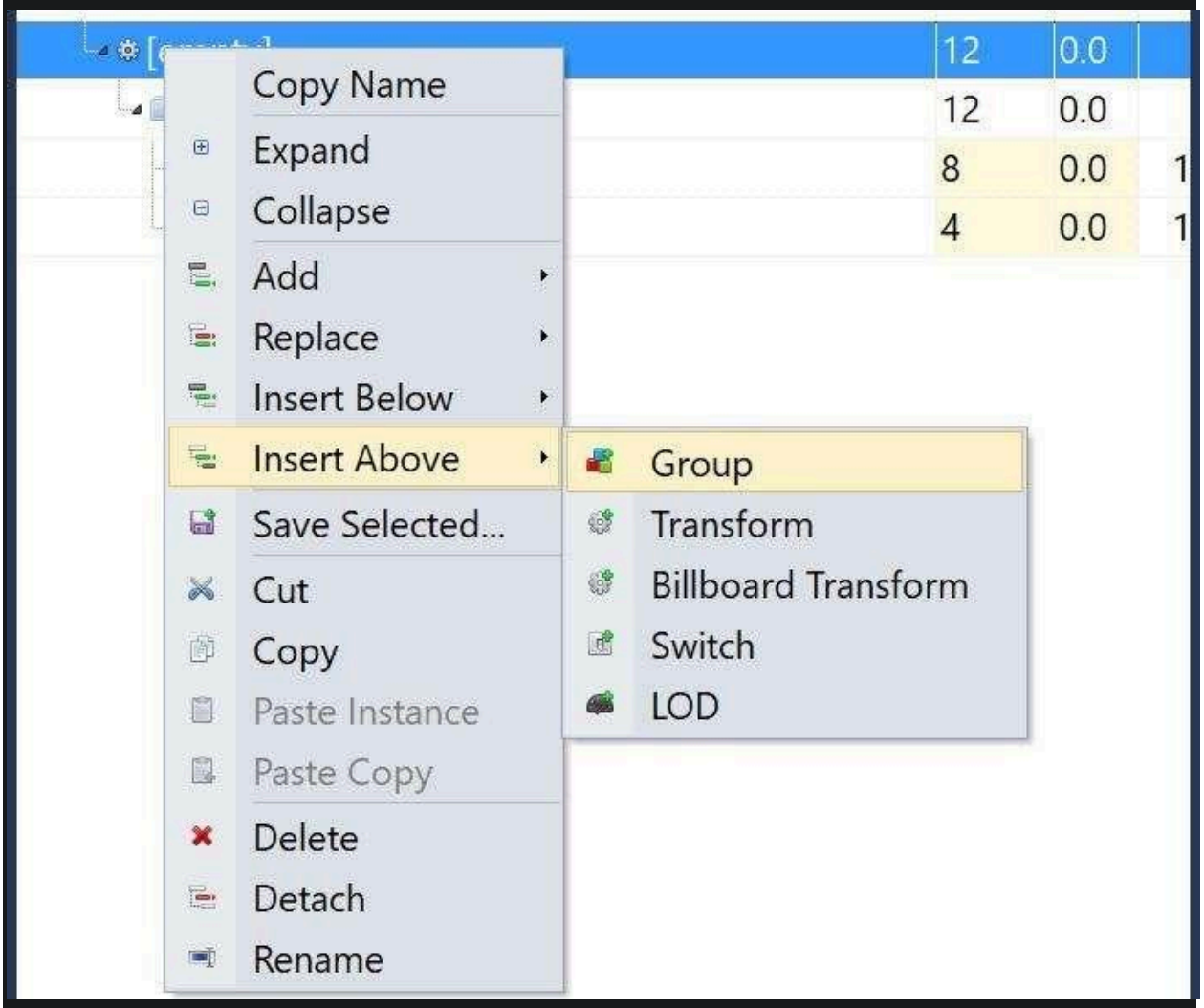


Creating and Managing Nodes:

1. Right-click a node in the scene graph.
2. Select **Insert Above** or **Insert Below** to create new group/transform nodes.

3. Rename nodes for clarity.
4. Copy, paste, or delete nodes as needed.





Adding Objects and ROIs

Add Objects of Interest:

1. Use **File > Add** to include objects (or drag and drop)
2. Position/scale objects with transform tools.

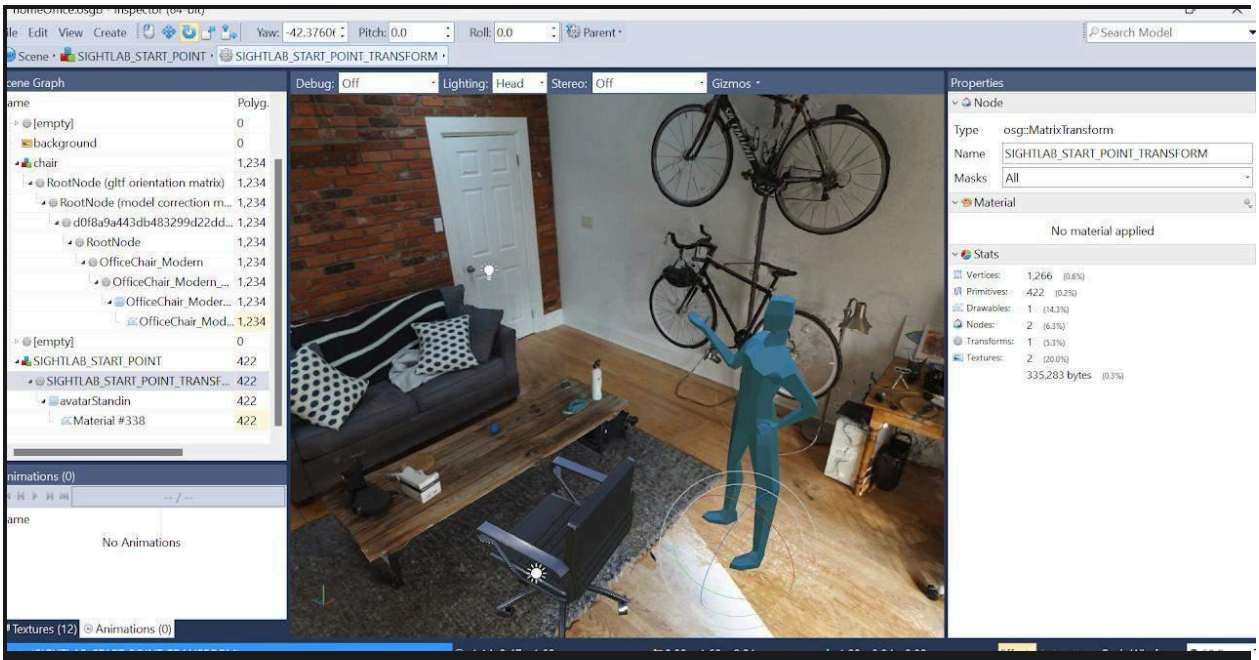
Adding Regions of Interest (ROIs):

1. Add ROIs using **File > Add** and select `RegionOfInterest.osgb` (available in the Resources/scene_objects folder or in the sightlab_resources in Program Files, or can download from the Asset Browser directly on the Scene Objects tab). To find the scene objects use File- Open Containing Folder then go up one level to Resources- Scene Objects.
2. Use transform tools to adjust ROI size and position.
3. Name ROIs uniquely.



Set Starting Points

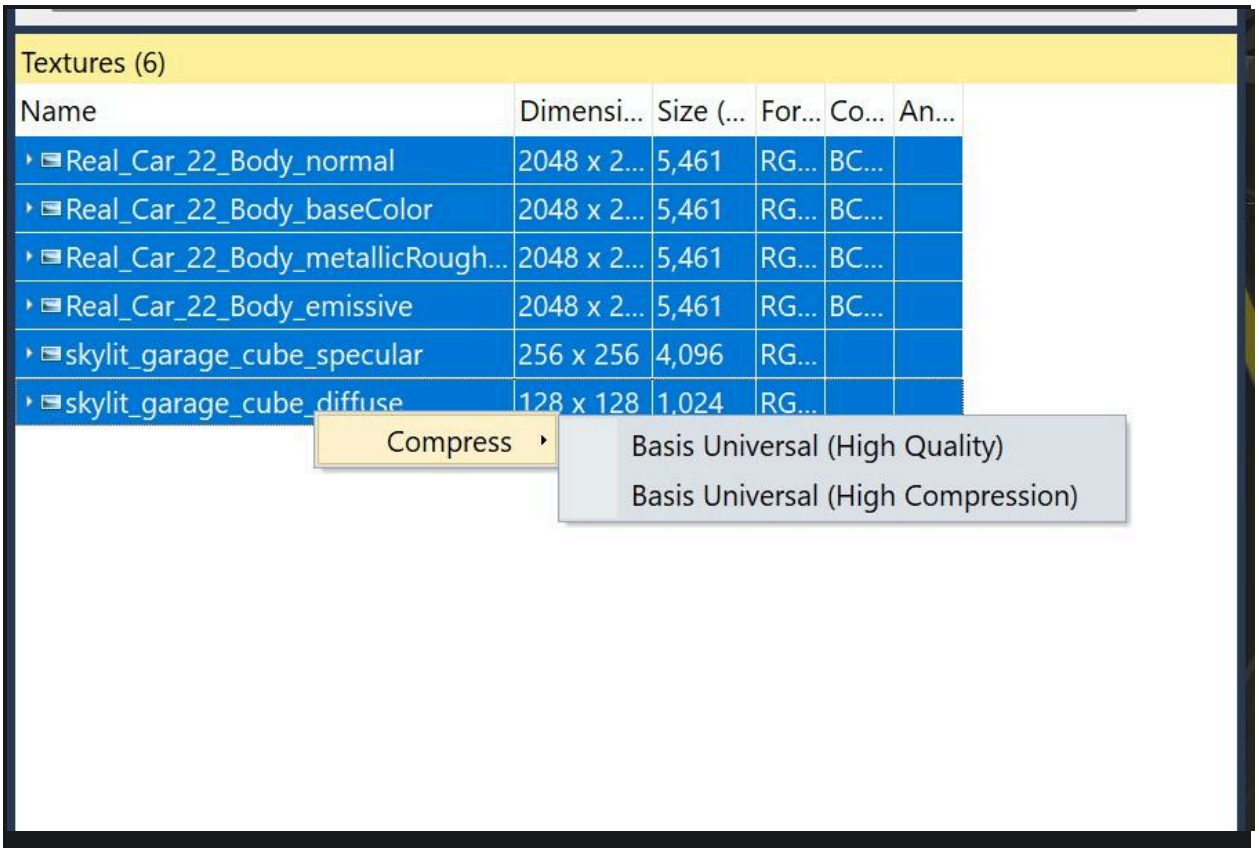
- Use **File > Add** to include `SIGHTLAB_STARTING_POINT`.
- Default locations: `Resources\scene_objects`, `Documents\SightLab2\Util_Files\SightLab_Resources`.
- Move/rotate the starting point using transform tools.



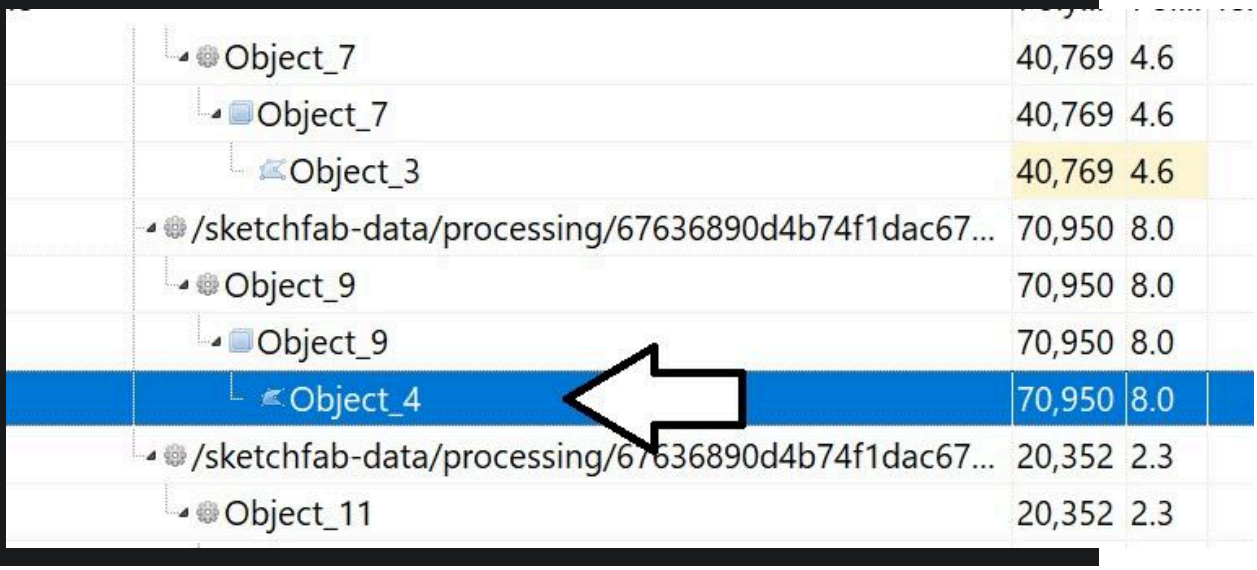
Textures

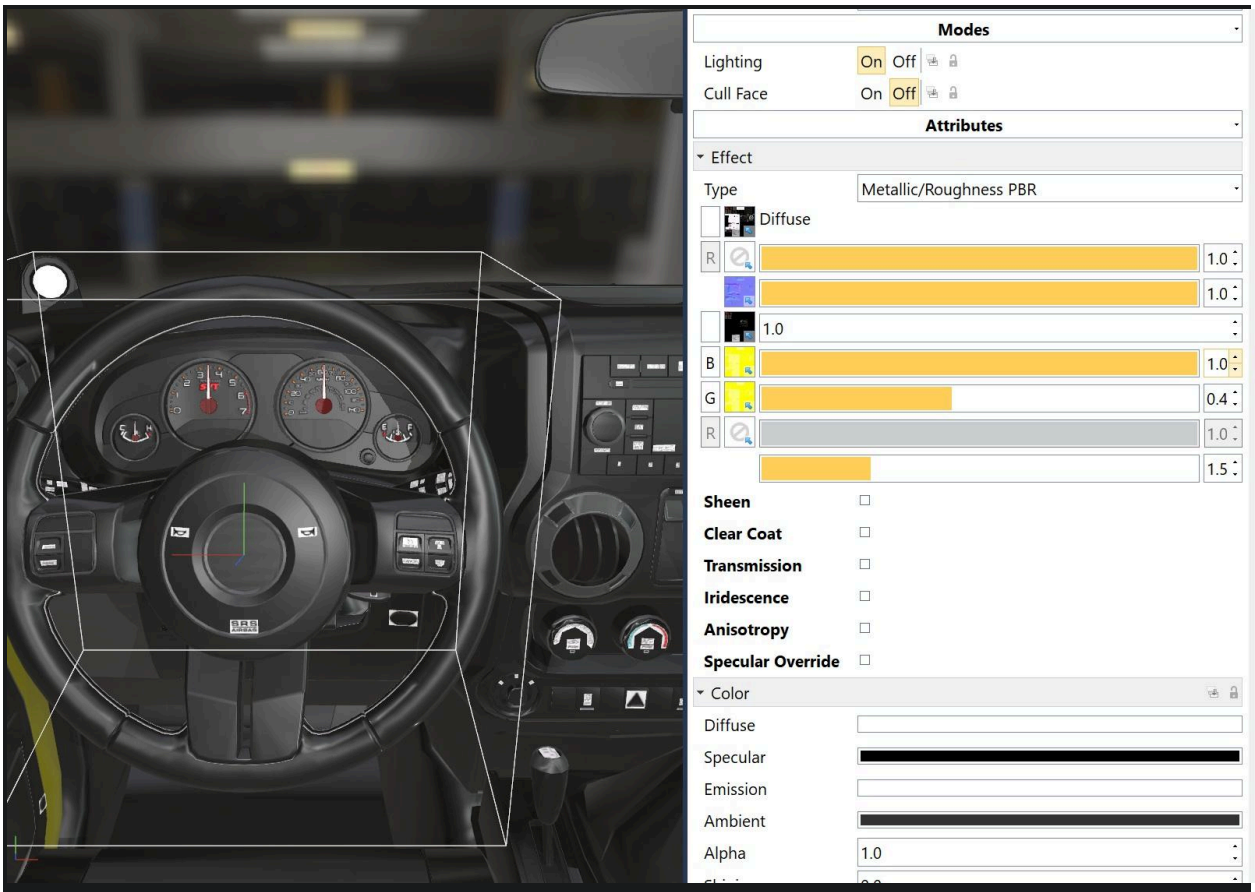
Browsing Textures:

- View and manage all textures in the scene via the textures pane in the lower left.
- Check details like dimensions, memory size, and compression.

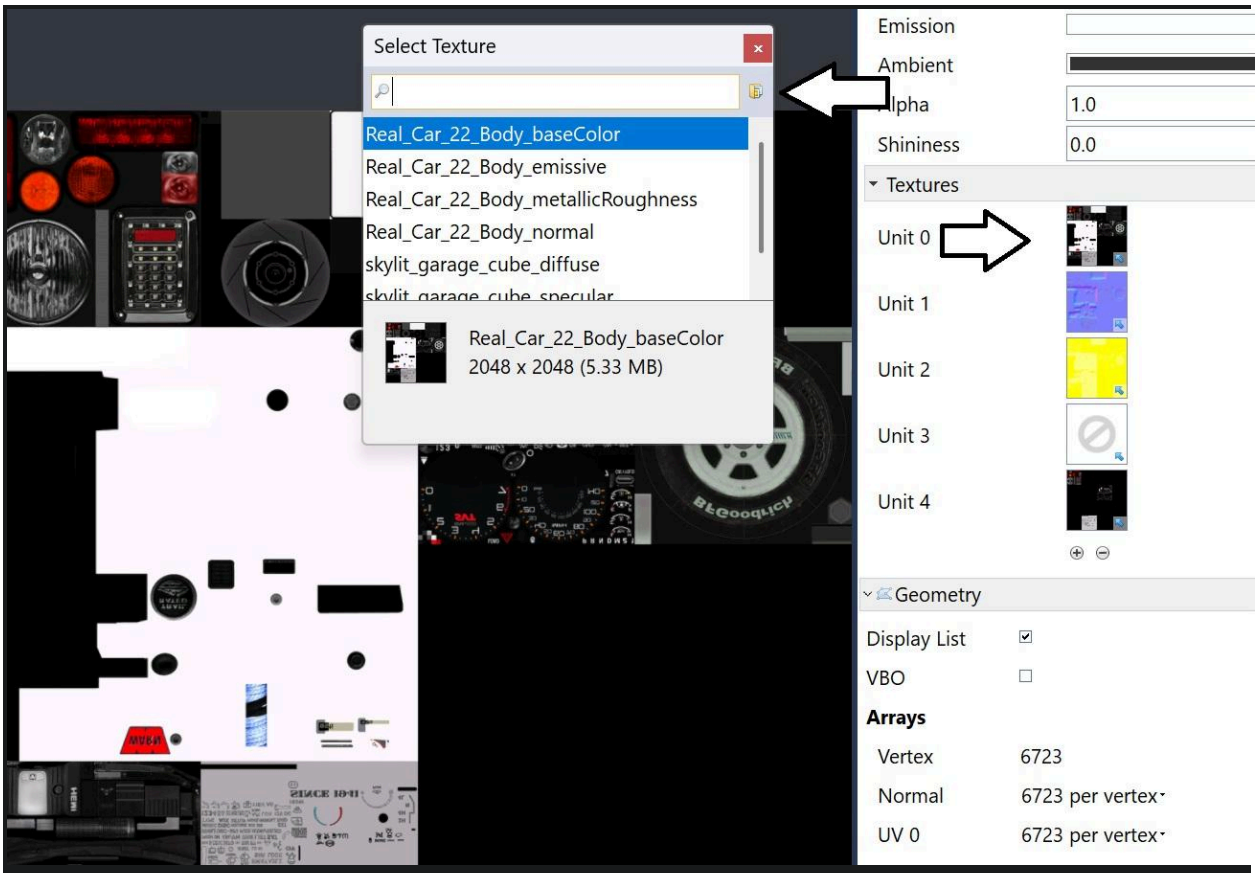


- Click on the Material node in the Scene Editor to edit the Texture properties on the right to adjust material properties such as PBR attributes, diffuse, color, alpha values, swapping textures, and more





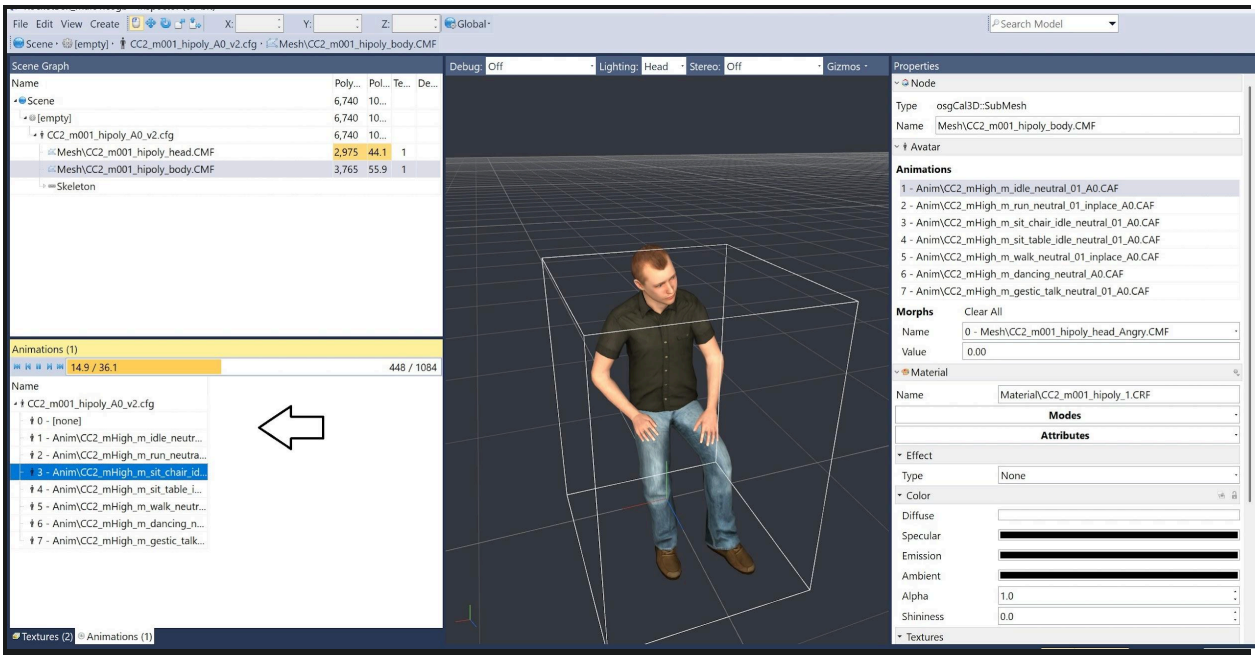
You can also swap out textures by clicking on the unit (under the "Textures" section), then clicking on the folder icon from the window that pops up to select a new texture.



Animation Management

Working with Animations:

- Manage animations for nodes and avatars.
- Use playback controls to navigate animations.



Lighting Management

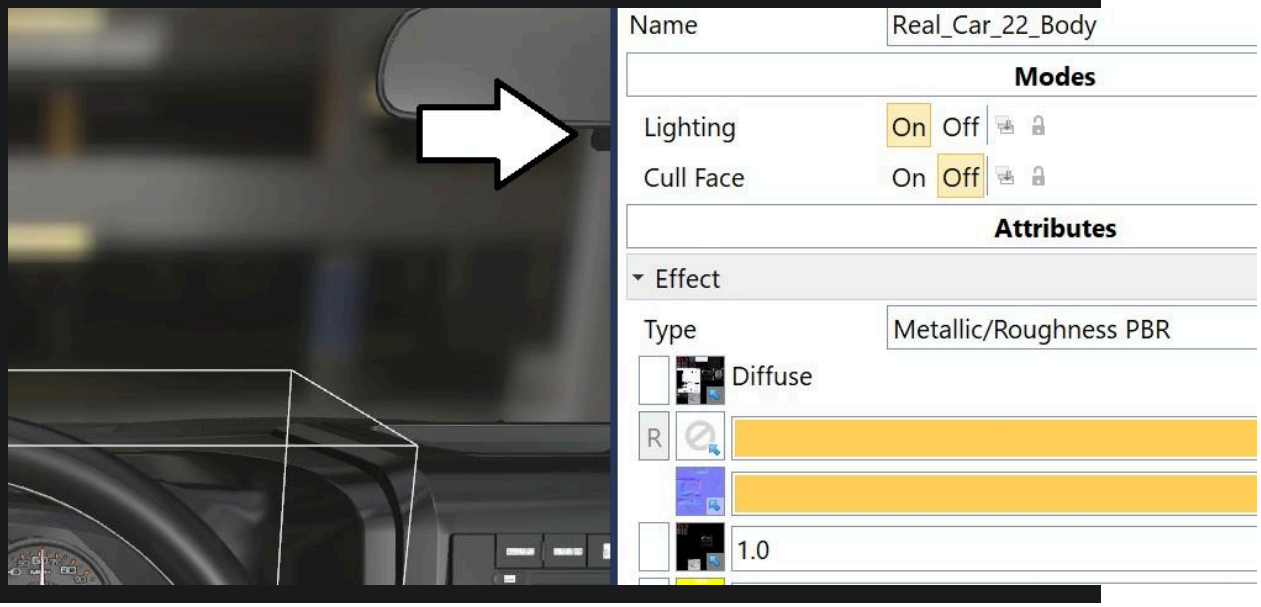
Adding Custom Lights:

1. Go to **Create > Light** and select a light type (e.g., Directional Light).
2. Enable translate or rotate mode to set the light's position and orientation.
3. Note: The position of a directional light does not affect its output but helps with visualization in Inspector.
4. Change light color and enable shadows in the properties window.
5. Rename the light in the scene graph (e.g., "Sun") to access it in Vizard scripts.

Enabling Lighting on the Model:

- Note: For the model to have lighting effect it, you may need to toggle lighting on by clicking on the material node and in the Properties window under

"Modes" toggle Lighting to "On"

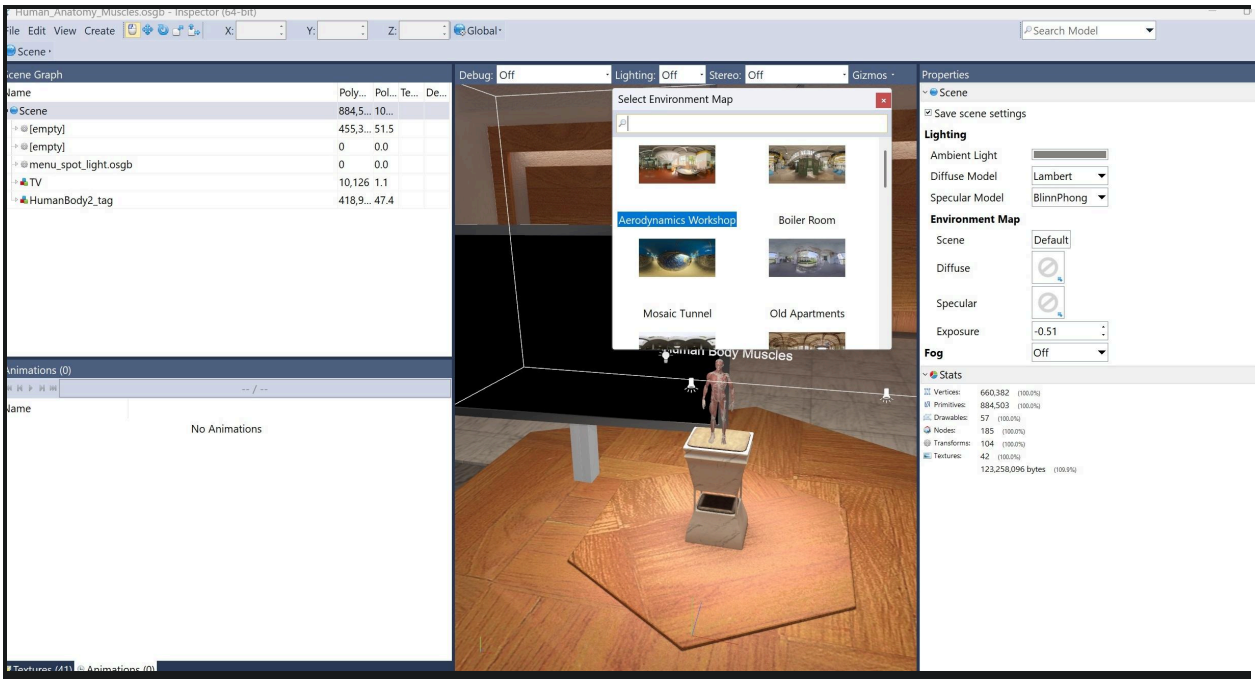


Enabling Shadows:

- In the properties window, check the box for "Shadows" to enable shadow-casting for the light.

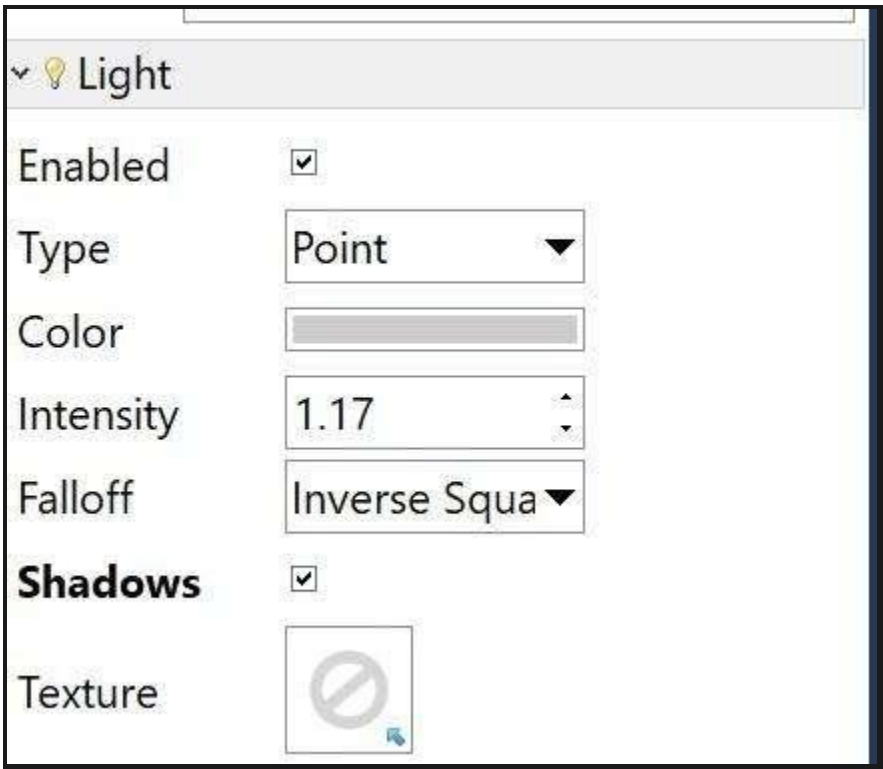
Adjusting Ambient Light:

1. Select the "Scene" root node in the scene graph.
2. In the properties window, click on the bar next to 'Ambient Light'.
3. Drag the cursor in the color box to change the ambient light.
4. Enable "Effects" in the bottom right corner to preview changes.
5. To store the settings, check "Save Scene Settings" in the properties panel.
6. In the Scene Properties you can also swap out the Environment Map and add Fog



Saving Changes:

- Go to **File > Save** to save the model with the lighting adjustments.

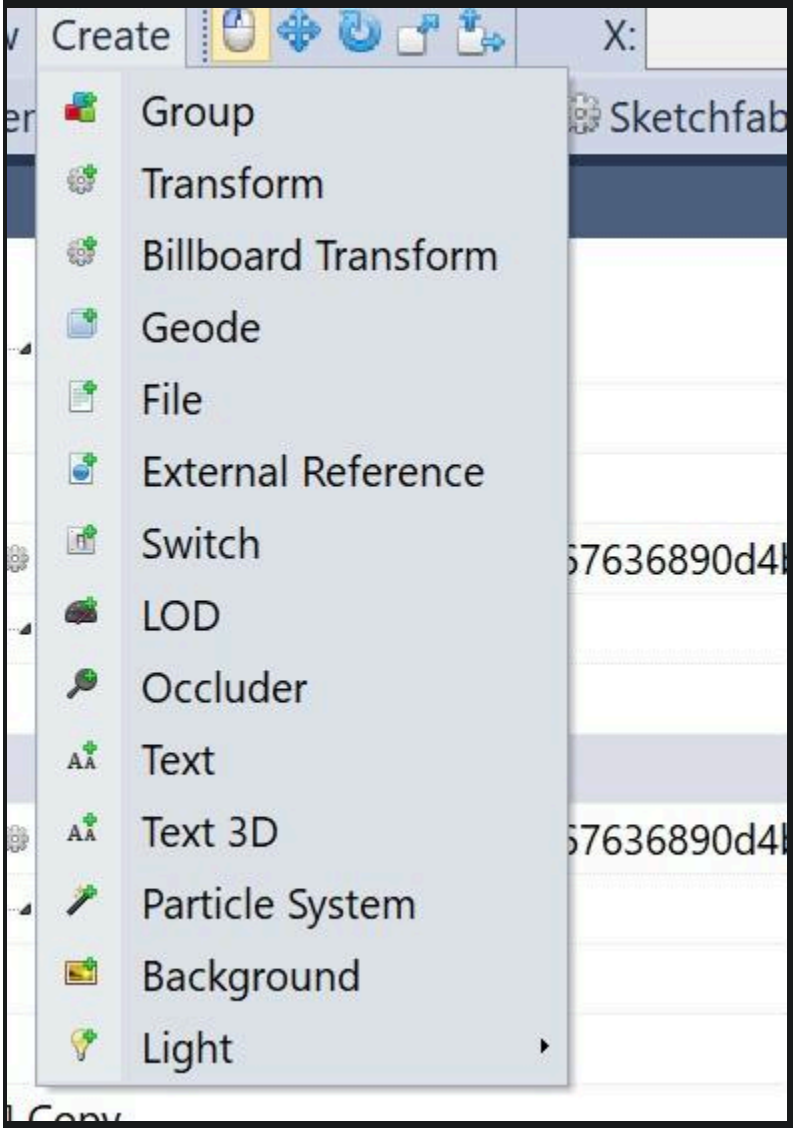


Adding 3D Text

To add 3D text for something like a label above an object, go to Create- Text 3D. Then use the scale, move and rotate tools to place the 3D text. Use the properties on the right to change the text field.

Additional Items That Can be Added Through Inspector

Under the "Create" Menu find the additional items that can be added to a scene in Inspector. Each one of these will have adjustable attributes on the right in the "Properties" window.



Using an External Reference Model

If you want to re-use a 3D model without having to add it every time and take up more hard drive space, you can reference an external model by placing it in a folder below

your collection (call this something like "objects") and then going to Create- External Reference

Tips and Advanced Features

- Use **fullscreen mode (F2)** to view in Fullscreen.
- Use the search toolbar (Alt + D) to locate specific nodes or textures.
- Enable "Peek Mode" to isolate a selected object visually.

For additional details, visit Vizard Documentation or the full SightLab documentation.