

3D Measurements

Energise Software

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SUMMARY

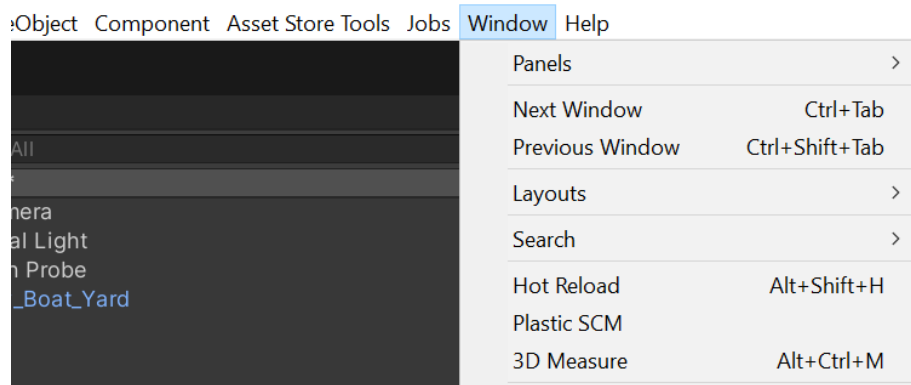
3D Measurements is an essential asset tailored for those aiming for pinpoint accuracy and efficiency in their Unity workflow. Immediately ready to enhance your design and development process, its applications are vast, catering to a myriad of use-cases:

- **Level Design:** Ensure optimal gameplay flow and aesthetics with precise positioning.
- **LOD Level Markers:** Gain insights into object details for optimal level-of-detail adjustments.
- **Navigational Gaps:** Ascertain adequate spaces and passages for characters, vehicles, or other entities to maneuver seamlessly.
- **Asset Integration:** Confirm that new assets fit harmoniously within the scene, preventing overlaps or undesired spatial interactions.
- **Safety Checks:** Ensure appropriate gaps between objects to avoid unwanted collisions or gameplay disruptions.
- **Proportional Scaling:** Maintain desired proportions consistently when scaling objects, safeguarding consistent gameplay mechanics tied to size.
- **Collaborative Consistency:** Ensure all team members adhere to the same spatial standards, resulting in a unified final product.
- **Debugging Assistance:** Identify and rectify spatial anomalies or glitches swiftly.
- **Event Triggers:** Precisely measure and set activation points to ensure spatial event triggers activate as intended.

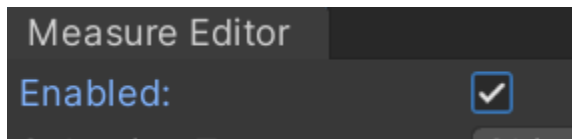
Whether you're intricately designing a level layout, determining mesh detail from a distance, or ensuring smooth character and vehicle movements, 3D Measurements delivers the precision and convenience you seek. Dive into an experience where meticulous design is made simple, bringing your visions to life with unmatched accuracy. Empower your Unity design workflow with precision. Try 3D Measurements today!

HOW TO USE

To access the measure tool, navigate to Window -> 3D Measure, alternatively Alt+Ctrl+M.



First, ensure the window is enabled. You can disable functionality at any time by unselecting.

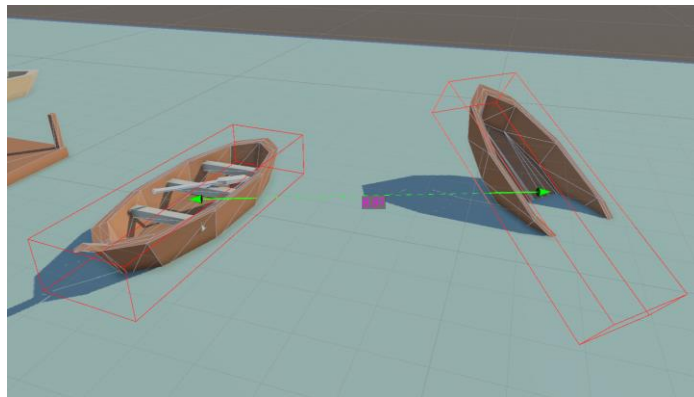


From here, you can choose to make selection, by object, vertex or hit.

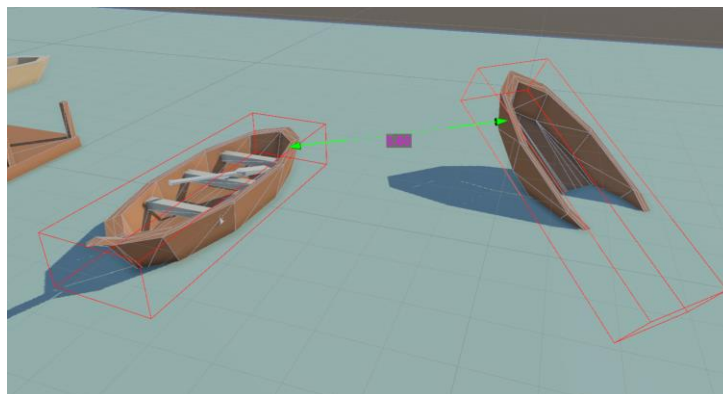
Selecting an object is clicking with the specified modifier key pressed. This can be adjusted in the settings.

Functionality changes depending on selection state, however, you can change state at any time.

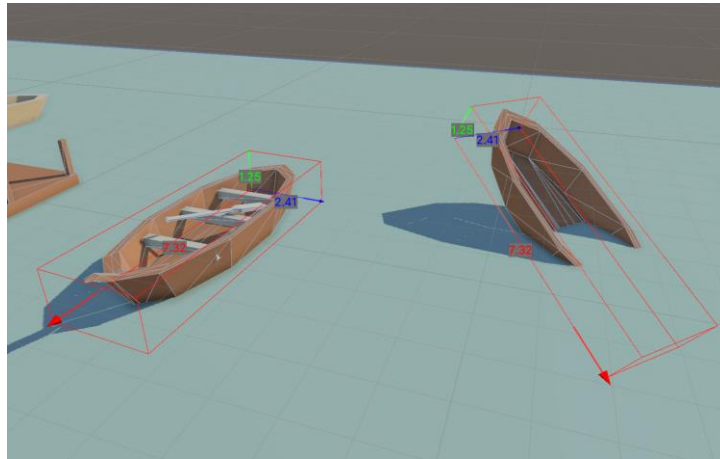
- Object
 - You can show distance from centre point to centre point.



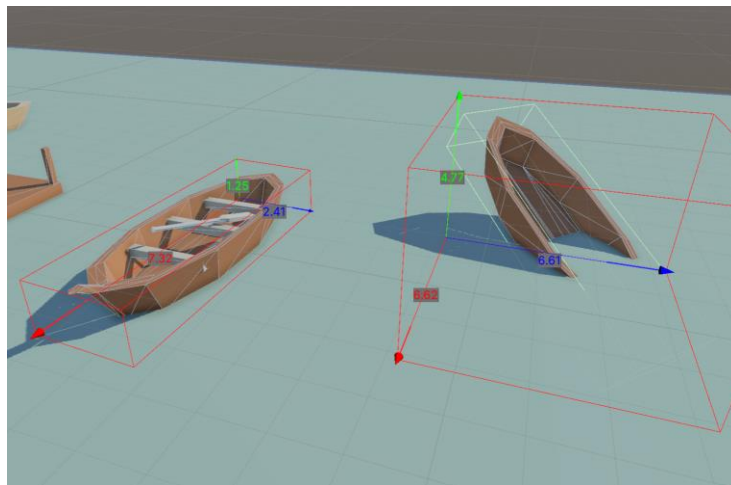
- Closest point to closest point



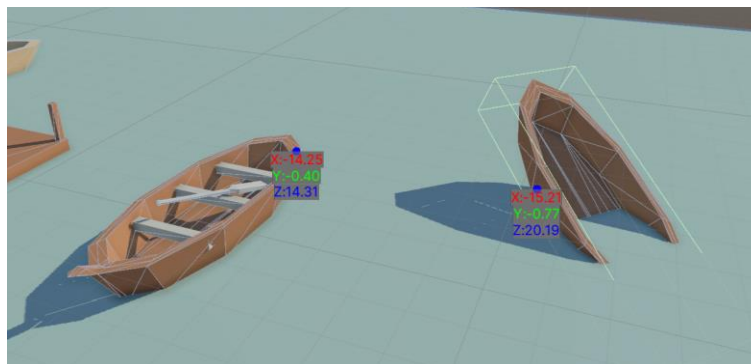
- Show Sizes of objects



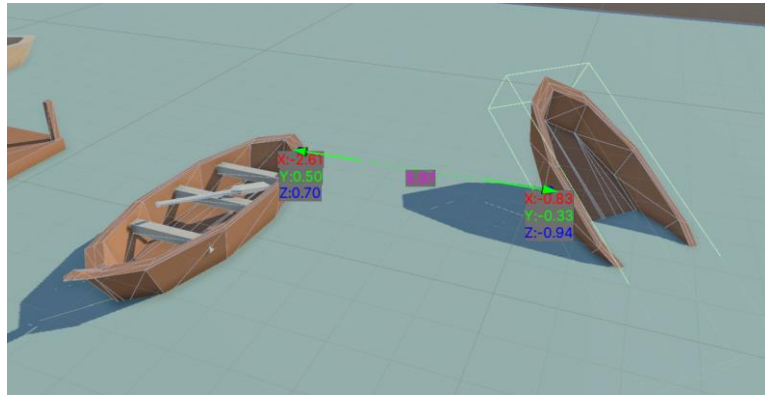
- Toggle between mesh and collider bounds(Assuming your object has both)



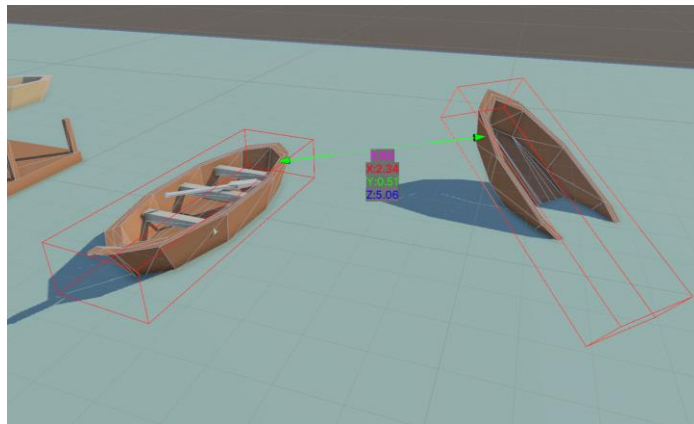
- Vertex & Hit
 - Show vertex position in local and world coordinates.



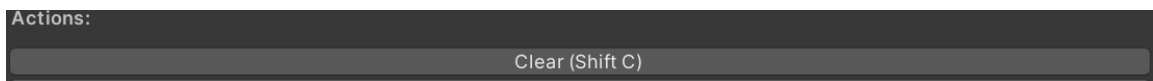
- Show distance.



- All
 - Show distance with XYZ differences.



You can clear all selections by the button in the editor window, or with “Shift C”



If a mesh has been updated, but this is not reflected in the selection, you can invalidate the caches to force a refresh of the underlying mesh data.



SETTINGS

Measure Editor

Enabled: ☒

Selection Type:

Object

Distance Markers:

Show Distance as XYZ: ☒

Closest Point Distance: ☒

Centre Distance: ☒

Component Type Preference:

Mesh

Space:

World

Measure Sequence:

Pair

Size:

Show Size: ☒

Actions:

Clear (Shift C)

Invalidate Caches

Settings

Modifier Key:

Control

Colors:

Object Selection Color:

Vertex Selection Color:

Distance Line Color:

Label Color:

Label Background Color:

Dark Grey

Size X Color:

Size Y Color:

Size Z Color:

Graphics:

Line Type:

Arrowheads

Text Size Scale:

0.554

Marker Dot Size Scale:

0.1

Click Accuracy Threshold:

10

Label Float Precision:

2

3D Measurements

Thanks for using our 3D Measurements.

In the settings you can specify the key modifier. Simply click with the modifier to select. Re-clicking removes the item. Shift+C, or the button on this window can be used to clear all objects

There is options to change between selecting objects, the closest vertex or the actual hit point. You can choose to show the size of the selected object, as well as the XYZ detail

Any comments, requests, feedback, please email: EnergiseTools@gmail.com

Thanks, Stuart Heath (Energise Software)

1. **Modifier:** The key modifier for certain actions.

2. **Selection:** Type of selection (Vertex, Object, Hit.) – How you want to make the selection of the measurement point
3. **Object Select Color:** Highlight color for selected objects. – Bounding box
4. **Vertex Select Color:** Highlight color for selected vertices
5. **Distance Line Color:** Color for the distance line.
6. **Size X Color:** Color for size representation in the X-axis.
7. **Size Y Color:** Color for size representation in the Y-axis.
8. **Size Z Color:** Color for size representation in the Z-axis.
9. **Text Color:** Color for measurement text.
10. **Show Closest Point Distance:** Option to display distance to the closest point. – When using object selection
11. **Show Centre Mass Distance:** Option to display distance to the center of mass. – When using object selection
12. **Show Size:** Option to display object size.
13. **Show Distance XYZ:** Option to display distance in X, Y, and Z axes.
14. **World Type:** Measurement space (World or Local).
15. **Text Size Scale:** Scaling for measurement text size.
16. **Marker Dot Size Scale:** Scaling for marker dot size.
17. **Interaction Type:** Type of interaction (Collider, Mesh). – This will attempt to use the preferred, but will also attempt the other if the priority is not found
18. **Line Type:** Style of the line (Arrowheads, Dots, etc.).
19. **Label Background Color:** Background color for labels.
20. **Click Accuracy Threshold:** Click accuracy setting – how close you need to select to a previously selected vertex/point to deselect.
21. **Label Precision:** Decimal precision for labels.
22. **Show Hit XYZ:** Option to display hit coordinates.
23. **Sequence:** Measurement sequence type (All, Linear, Pair).
24. **Enabled:** Option to enable or disable the tool.

SUPPORT

Any questions, comments, requests, please contact:

energisetools@gmail.com

<https://discord.gg/vpCbqQMdPJ>