

3.2.5.8.10 Editors - 3D View - Transforms - Transform Controls - Snapping

- Snapping.....1
 - Snap.....1
 - Transform Snapping.....1
 - Snap Element.....2
 - Snap Target.....2
 - Additional snap options.....3
 - Multiple Snap Targets.....4

Snapping

There are two types of snap operations that you can use in Blender. The first type snaps your selection or cursor to a given point while the second type is used during transformations (translate, rotate, scale) and snaps your selection to elements within the scene.

Snap

Reference
Mode: <i>Object</i> and <i>Edit</i> modes
Hotkey: Shift-S

The *Snap* menu (also available from the 3D header in both *Object* and *Edit* mode (Object ▸ Snap and Mesh ▸ Snap). This menu provides a number of options to move the cursor or your selection to a defined point (the cursor, selection or the grid).

Selection to Grid

Snaps the currently selected object(s) to the nearest grid point.

Selection to Cursor

Snaps the currently selected object(s) to the cursor location.

Cursor to Selected

Moves the cursor to the center of the selected object(s).

Cursor to Center

Moves the cursor to the center of the grid.

Cursor to Grid

Moves the cursor to the nearest grid point.

Cursor to Active

Moves the cursor to the center of the active object.

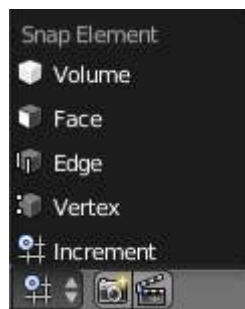
Transform Snapping

The ability to snap Objects and Mesh element to various types of scene elements during a transformation is available by toggling the magnet icon (which will turn red) in the 3D view’s header buttons.



Magnet icon in the 3D view header (red when enabled).

Snap Element



Snap Element menu

Volume

Snaps to regions within the volume of the first Object found below the mouse cursor. Unlike the other options, this one controls the depth (i.e. Z-coordinates in current view space) of the transformed element. By toggling the button that appears to the right of the snap target menu (see below), target objects will be considered as a whole when determining the volume center.

Face

Snap to the surfaces of faces in mesh objects. Useful for retopologizing.

Edge

Snap to edges of mesh objects.

Vertex

Snap to vertices of mesh objects.

Increment

Snap to grid points. When in Orthographic view, the snapping increment changes depending on zoom level.

Note

In this context the grid does not mean the visual grid cue displayed. Snapping will use the resolution of the displayed grid, but all transformations are relative to the initial position (before the snap operation).

Snap Target

Snap target options become active when either *Vertex*, *Edge*, *Face*, or *Volume* is selected as the snap element. These determine what part of the selection snaps to the target objects.

Active

Moves the active element (vertex in Edit mode, object in Object mode) to the target.

Median

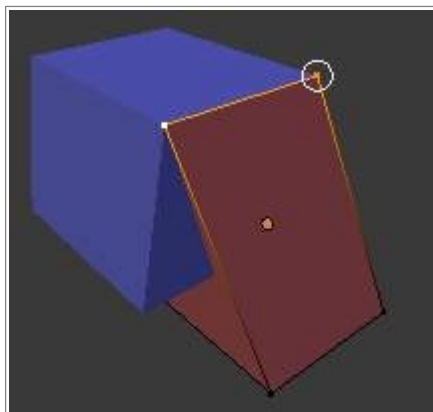
Moves the median of the selection to the target.

Center

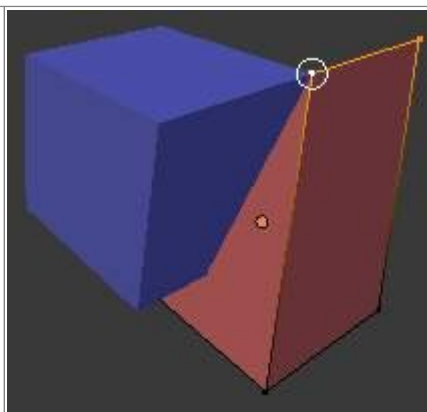
Moves the current transformation center to the target. Can be used with 3D cursor to snap with an offset.

Closest

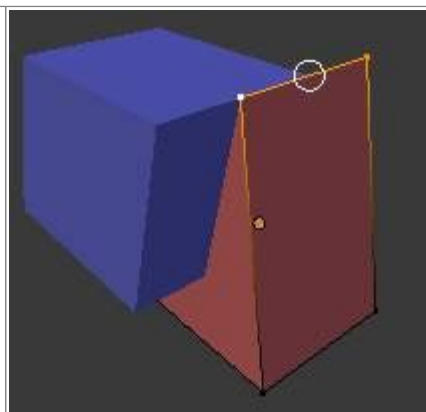
Moves the closest point of the selection to the target.



Closest



Active



Median

Additional snap options







Object mode

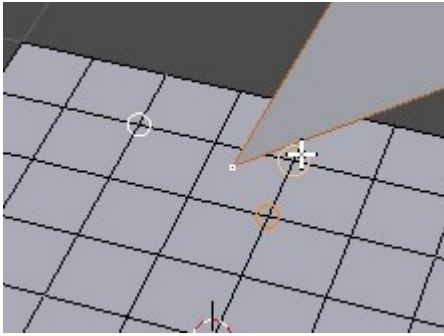


Edit mode

As seen by the red highlighted areas in the image above, additional controls are available to alter snap behaviour. These options vary between mode (Object and Edit) as well as Snap Element. The four options available are:

-  Align rotation with the snapping target.
-  Project individual elements on the surface of other objects.
-  Snaps elements to its own mesh.
-  Consider Objects as whole when finding volume center.
-

Multiple Snap Targets



Multiple snapping targets.

Once transforming a selection with Snapping on (not just with the `Ctrl` key held), you can press `A` to mark the current snapping point, then proceed to mark as many other snapping points as you wish and the selection will be snapped to the average location of all the marked points.

Marking a point more than once will give it more weight in the averaged location.