

## 15.2 Troubleshooting - 3D View

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### Troubleshooting the 3D View

TODO

See: <https://developer.blender.org/T43810>

#### Drawing

##### Depth Buffer Glitches

TODO, see: <http://blender.stackexchange.com/questions/1385>

##### Objects Invisible in Camera View

If you have a large scene, viewing it through Camera View may not display all of the Objects in the scene. One possibility may be that the clipping distance of the camera is too low. The camera will only show objects that fall within the clipping range.

#### Performance

##### Slow Drawing

TODO.

##### Slow Selection

Blender uses OpenGL drawing for selection, some graphics card drivers are slow at performing this operation. This becomes especially problematic on dense geometry.

Possible Solutions:

##### OpenGL Occlusion Queries (User Preference)

See User Preferences ▸ System ▸ Selection

This option defaults *Automatic*, try setting this to *OpenGL Occlusion Queries*, since there is a significant performance difference under some configurations.

### Upgrade OpenGL Driver

In some cases slow selection is resolved by using updated drivers. *It's generally good to use recent drivers when using 3D software.*

### Select Centers (Workaround)

In *Object Mode*, holding `Ctrl` while selecting uses the object center point. While this can be useful on its own, it has the side-effect of not relying on OpenGL selection.

### Change Draw Modes (Workaround)

Using *Wireframe* or even *Bounding Box* draw modes can be used to more quickly select different objects.

#### Note

Obviously the workarounds listed here aren't long term solutions, but it's handy to know if you're stuck using a system with poor OpenGL support.

Ultimately, if none of these options work out it may be worth upgrading your hardware.

## Navigation

### Lost in Space

When navigating your scene, you may accidentally navigate away from your scene and find yourself with a blank view-port

TODO.

### Invisible Limit Zooming In

TODO, see: <http://blender.stackexchange.com/questions/644>

## Tools

### Invalid Selection

There are times when selection fails under some configurations, often this is noticeable in mesh *Edit Mode*, selecting vertices/edges/faces where random elements are selected.

Internally Blender uses OpenGL for selection, so the graphics card driver is relied on giving correct results.

Possible Solutions:

#### Disable Anti-Aliasing (FSAA, Multi-Sampling)

This is by far the most common cause of selection issues.

There are known problems with some graphics cards when using FSAA/multi-sampling.

You can disable this option by:

- Turning FSAA/multi-sampling off in your graphics card driver options.

- Turning *Multi-Sampling* off in the system preferences.

### **Change Anti-Aliasing Sample Settings**

Depending on your OpenGL configuration, some specific sample settings may work, while others fail.

Unfortunately finding working configuration involves trial & error testing.

### **Upgrade OpenGL Driver**

As with any OpenGL related issues, using recent drivers can resolve problems.

However it should be noted that this is a fairly common problem and remains unresolved with many drivers.