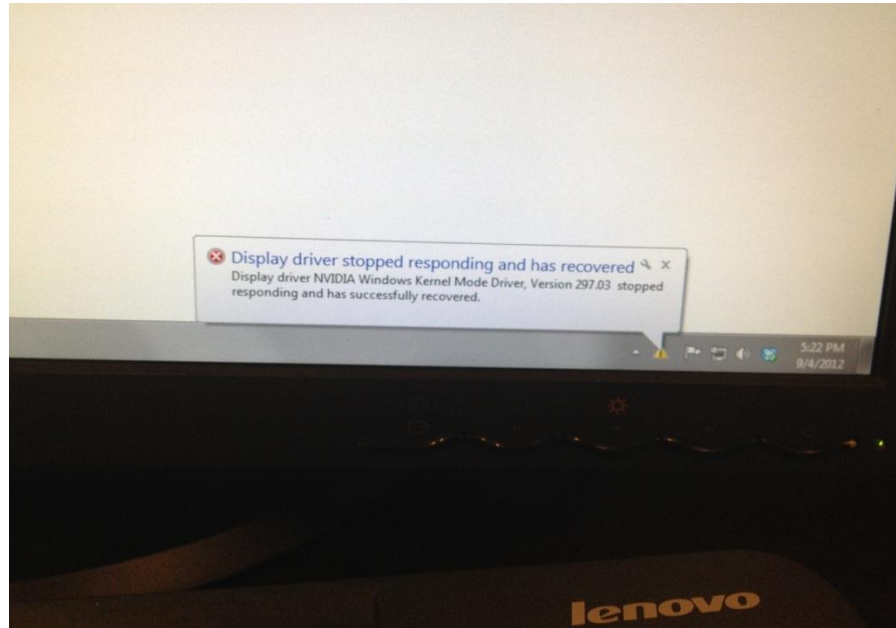


1. Current Configuration of desk-side workstation

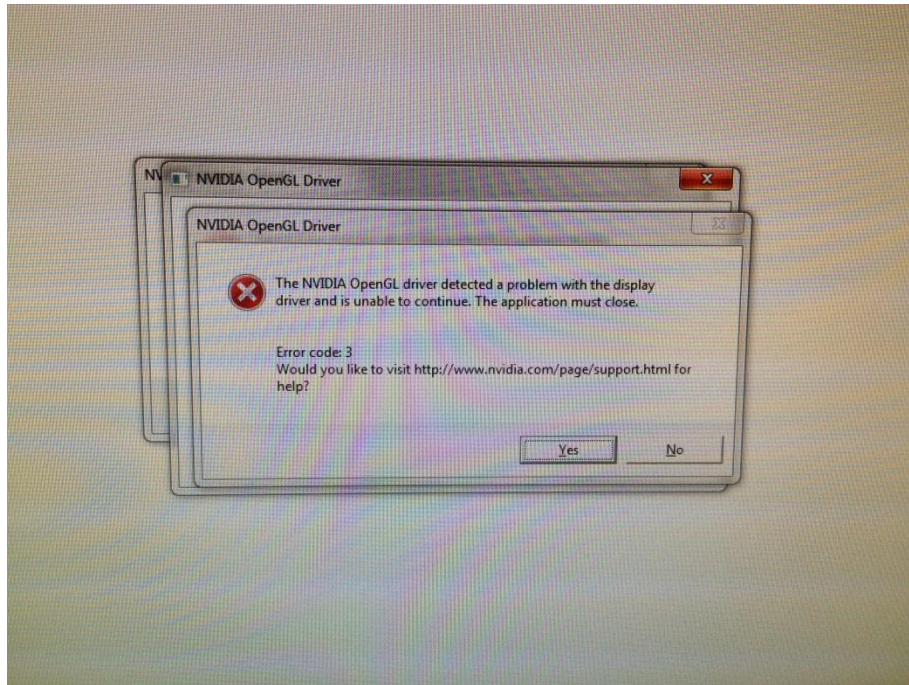
- a. Processor - Intel Xeon E31240 @ 3.30 Ghz
- b. Memory – 16 GB
- c. Graphics – Nvidia Quadro 2000 (1GB)
- d. OS - Windows 7 Professional 64

2. The following is the NVidia error message that is displayed while manipulating, rendering the volume during visualization. This is when FluoRender was used. However, the same holds true for ImageVis3D.

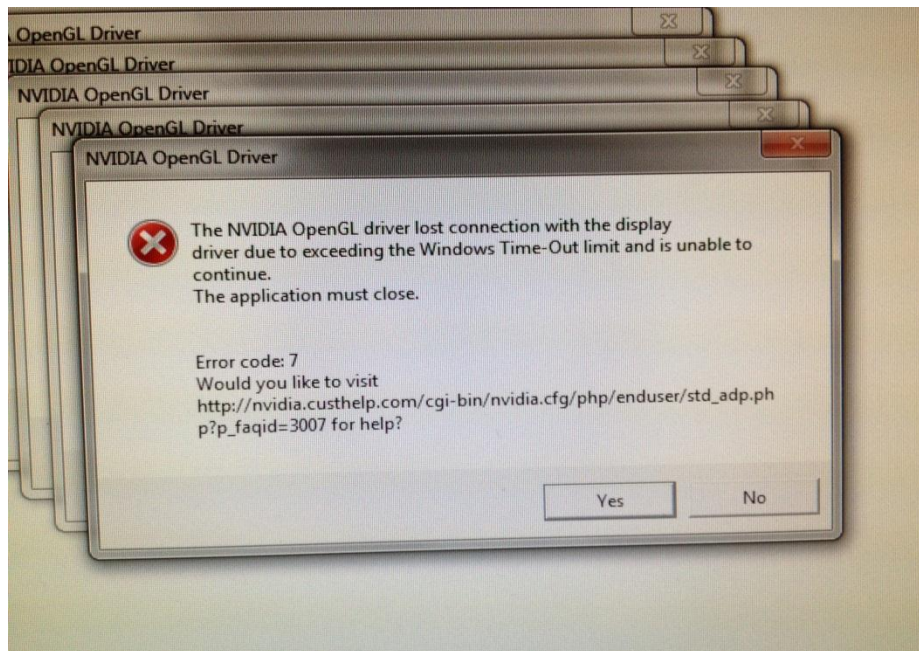


Just before this error, the entire screen goes completely dark momentarily and then absolute white. Following the display of the error, windows shows that FluoRender is not responding and I need to start the task manager to shut it down. This holds true for ImageVis3D as well. However, there is a greater scope of rendering/visualization with Vis3D and it doesn't crash as often as FluoRender.

3. Rendering a 229MB dataset with FluoRender causes this error message as well.



4. This is another error that was recorded while using ImageVis3D



5. In addition, the rendering time taken by ImageVis3D (generating 100 percent level of detail) is sometime as much as 30-40mins for a dataset that is large in terms of size (greater than 20GB).

In lieu of all these problems, what is the best desk-side workstation configuration including OS, which could help us in visualizing and rendering these extremely large volume data-sets ?