



Correcting Windows graphics and scaling problems

Rev 2, Updated 17 February 2020

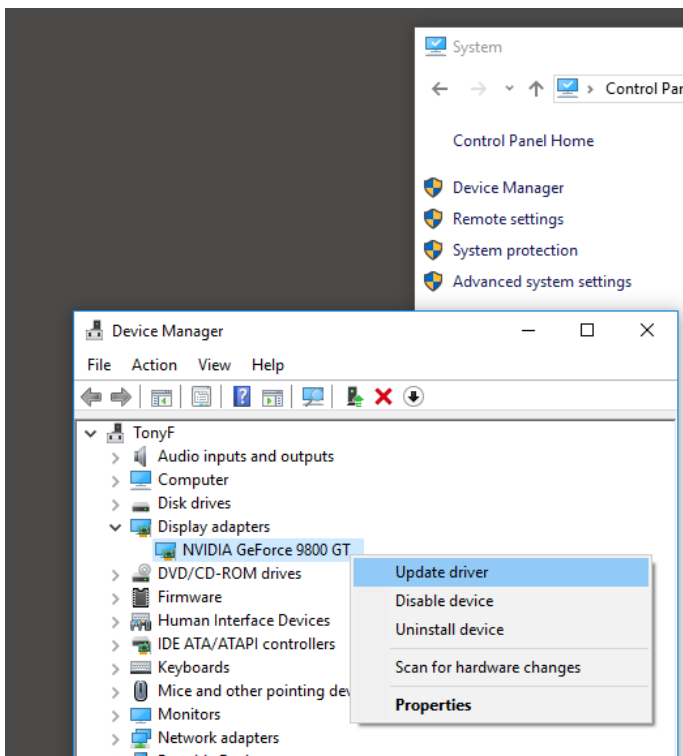
This document covers problems associated with the Structural Toolkit's Analysis view.

- Updating the Graphics Card drivers
- Scaling problems
- Adjusting High DPI settings for the application
- Program crash on startup
- Speeding up panning and model viewing

Updating the Graphics Card Drivers

Ensuring the graphic card drivers are up to date as the handling may have been addressed in an update to the driver by the graphics card manufacturer. You may need to go to your manufacturer's website to locate the appropriate update.

You can also attempt to update the driver via Windows by going to the Control Panel > System and Security > System > Device Manager.



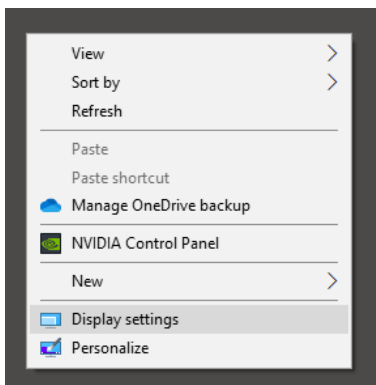


Scaling Problems

With more powerful graphics cards and higher resolutions becoming available, there are situations where the graphics driver may not correctly handle scaling of the Structural Toolkit application. These are High DPI settings and the graphics drivers may override the Windows System handling causing unexpected display of the application.

Issues encounter may include fonts not fitting on the window elements; sudden changing of the window size with fonts becoming small and illegible.

These issues may be a result of the scaling of text, found in the Display settings dialog (right-click on the desktop > Display settings). But they can occur even when the scaling is set to 100%.



Scale and layout

Change the size of text, apps, and other items

[Advanced scaling settings](#)

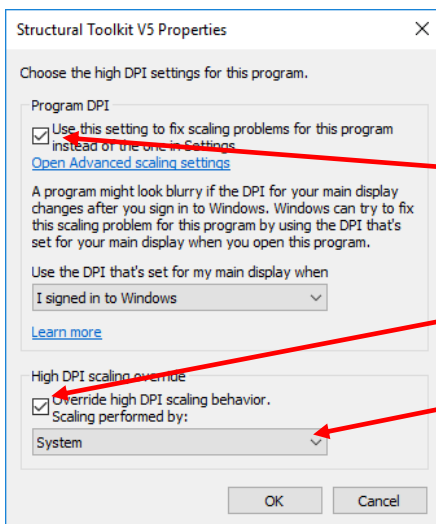
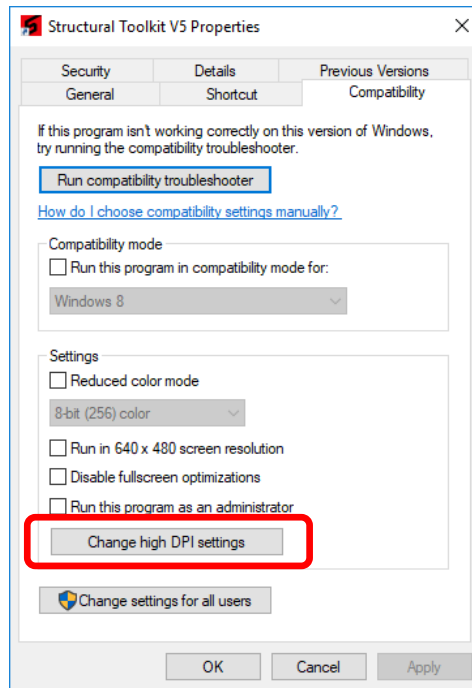
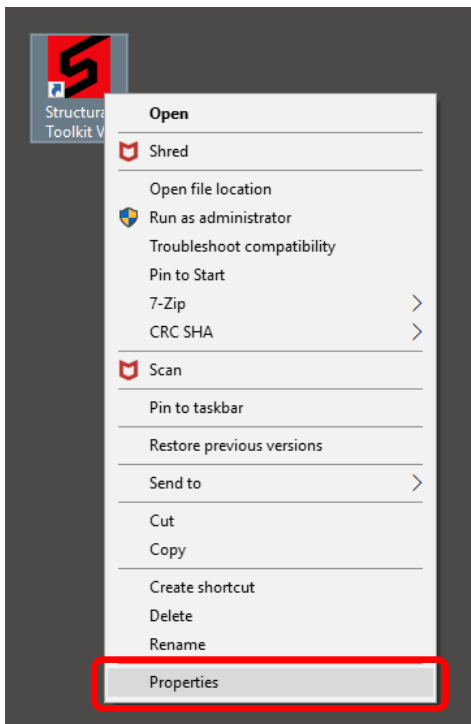
These scaling issues can generally be corrected by adjusting the High DPI settings.



Adjusting High DPI settings for the application

The way that the application window is scaled can be modified using the High DPI settings for the application. Right-click on the Application icon on the desktop, and select Properties, to access these settings.

Try the following settings to correct scaling problems.



Select to fix the scaling

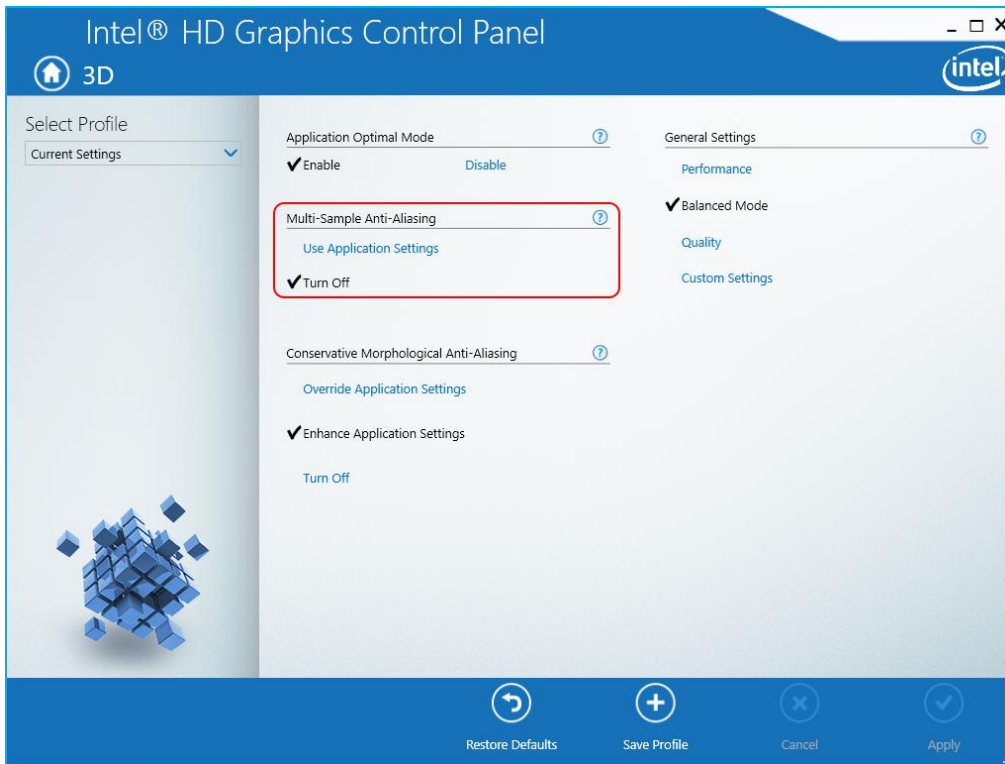
Select to override scaling

Select scaling to be performed by the System

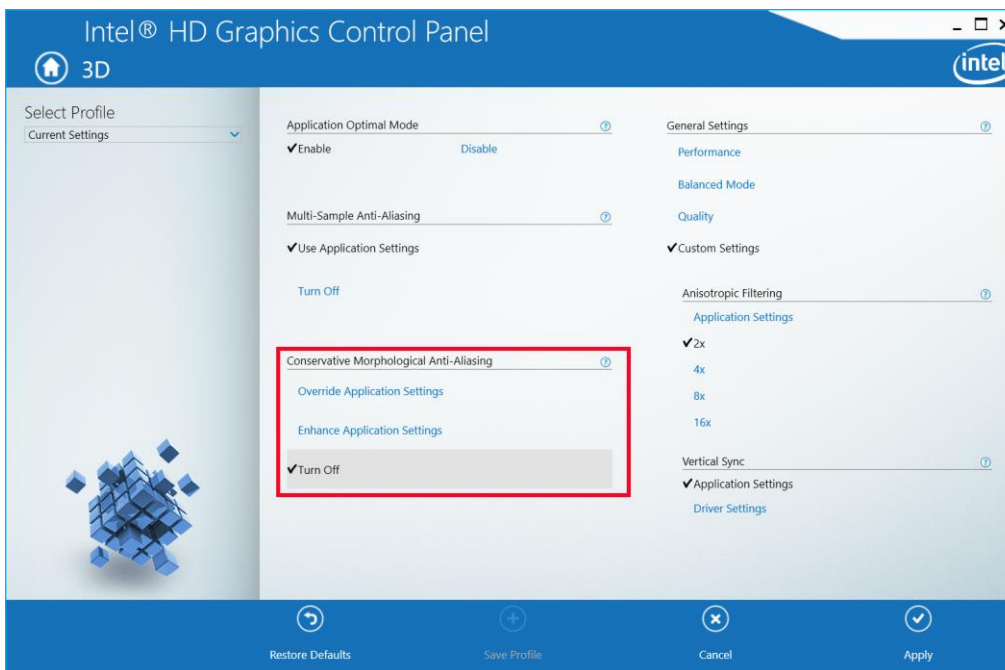


Program Crash on Startup

If using an Intel integrated on-board graphics card (no dedicated graphics card) and the Structural Toolkit program crashes on starting a new analysis, this could be resolved by adjusting the following setting.

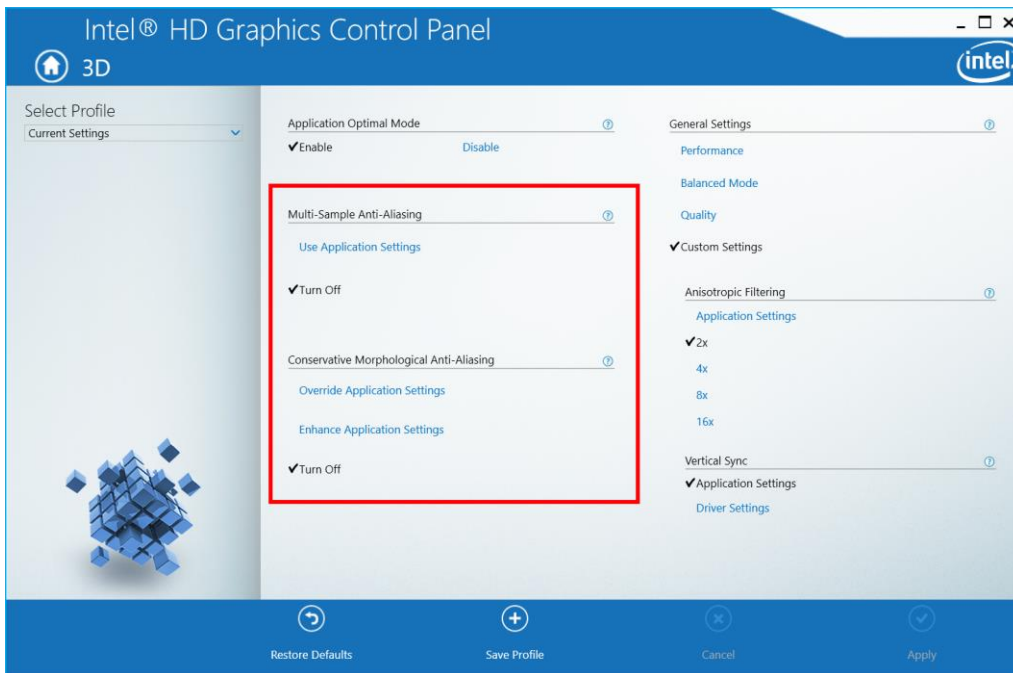


If the above does not work, the following setting may work instead.





If neither of the above work, try turning both of simultaneously as shown below.

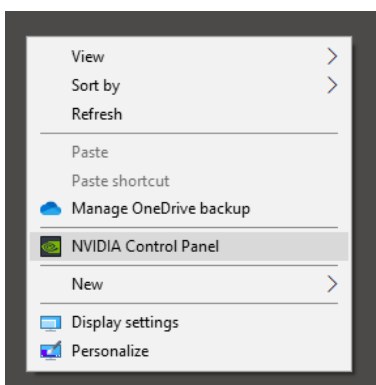


Speeding up panning and model viewing

Before looking at the optimizing the graphics card settings, ensure that you have the latest version of Structural Toolkit.

Laptops and desktops with integrated and dedicated graphics cards may require you to modify or create program settings in order to take advantage of the dedicated graphics acceleration.

From the desktop, right click and access the Graphics card control panel.



Find the Manage 3D settings, and select the Program Settings.

1. Select [Add] and find the Structural Toolkit application. If the default location was selected during installation this is likely to be "C:\Program Files (x86)\Structural Toolkit V5\STK.exe".
2. Select the High-Performance NVIDIA processor (Not integrated graphics).



The screenshot shows the NVIDIA Control Panel window titled "Manage 3D Settings". The interface includes a left-hand navigation pane with categories like 3D Settings, Display, Video, and Workstation. The main content area is titled "Manage 3D Settings" and contains a "Restore Defaults" button. Below the title, there is an introductory text: "You can change the global 3D settings and create overrides for specific programs. The overrides will be used automatically each time the specified programs are launched." A section titled "I would like to use the following 3D settings:" contains two tabs: "Global Settings" and "Program Settings". The "Program Settings" tab is active, showing a list of programs to customize. The first step is "1. Select a program to customize:", with a dropdown menu showing "c:\program files (x86)\structura...". There are "Add", "Remove", and "Restore" buttons. A checkbox "Show only programs found on this computer" is checked. The second step is "2. Select the preferred graphics processor for this program:", with a dropdown menu showing "High-performance NVIDIA processor". The third step is "3. Specify the settings for this program:", which displays a table of settings.

Feature	Setting
Ambient Occlusion	Not supported for this application
Anisotropic filtering	Use global setting (Application-controlled)
Antialiasing - FXAA	Use global setting (Off)
Antialiasing - Gamma correction	Use global setting (On)
Antialiasing - Mode	Use global setting (Application-controlled)
Antialiasing - Setting	Use global setting (Application-controlled)

Description:
Select a program to apply different setting values than those found on the Global Settings tab. You can add or remove programs from this list by clicking on the Add or Remove buttons.

Typical usage scenarios:
• Program-specific 3D setting
• NVIDIA program setting for compatibility or stability