From Eye to Insight





Introduction

NVIDIA graphics display drivers are commonly installed along with the LAS-X software. Various software security vulnerabilities affecting NVIDIA graphics display drivers have been disclosed recently by NVIDIA. These vulnerabilities may lead to denial of service, escalation of privileges or allow other kinds of attacks. The severity rating of these security related issues goes up to 8.4 on a severity scale ranging from 0 to 10. The qualitative severity of the vulnerabilities is therefore rated as "high". See <u>https://nvidia.custhelp.com/app/answers/ detail/a_id/5142</u> for further details.

All users of the LAS-X software are recommended to update to the version 461.09 of the NVIDIA graphics display drivers to close all known software vulnerabilities. This document will guide Leica customers through the update procedure.

Check if the system is equipped with an NVIDIA graphics card

Press the Windows key plus "X" or right-click on the Start button in the Windows taskbar to open the Windows Power User Menu and select "Device Manager" in the menu. The system's graphics card is shown under "Display adapters" (Figure 1). Note that there might be several graphics cards shown, depending on the system's configuration. Continue with the NVIDIA driver update as outlined below if there is at least one NVIDIA graphics card installed.

Identify the installed NVIDIA graphics card and the display driver version

The version number of the NVIDIA graphics display driver that is currently used on a LAS-X workstation is shown in the NVIDIA Control Panel.

To open the NVIDIA Control Panel right-click on the Windows desktop and choose "NVIDIA Control Panel". Alternatively, the NVIDIA Control Panel can be found in the Windows Control Panel under "Hardware and Sound". Open "System Information" under "Help" in the NVIDIA Control Panel to open the System Information dialog, where the driver version is shown. Customers, running the latest



Figure 1: All installed graphics cards are indicated in the Windows Device Manager.



Figure 2: Start NVIDIA Control Panel via the desktop context menu.



Figure 3: Alternatively, start NVIDIA Control Panel via Windows Control Panel.



NVIDIA Control Panel								
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⊡ · Display				_				
<mark>Change resolution</mark> Adjust desktop color settings Rotate display						1. Select the display you would like to change.		
View HDCP status Set up digital audio Adjust desktop size and pos								
				ition E				
Set up multiple displays								

Figure 4:

Select "System Information" from the "Help" menu in the NVIDIA Control Panel.

version of the LAS-X software should find version 456.71 here. The System Information dialog also indicates the model name of the workstation's graphics card, e.g., "Quadro RTX 6000". The figures 1 to 4 illustrate the identification of the installed NVIDIA graphics card and display driver version information. (Figure 2) Start NVIDIA Control Panel via the desktop context menu.

Figure 5:

- (Figure 3) Alternatively, start NVIDIA Control Panel via Windows Control Panel.
- (Figure 4) Select "System Information" from the "Help" menu in the NVIDIA Control Panel
- (Figure 5) Determine the graphics card model name and the driver version.

System Information Detailed information about your NVIDIA hardware and the system it's running on. Display Components System information Windows 10 Enterprise LTSC 2019, 64-bit Operating system: DirectX runtime version: 12.0 Graphics card information Items Details Ouadro RTX 6000 Driver version: 456.71 Driver Type: Standard Direct3D API version 12

Determine the graphics card model name and the driver version.

Update the NVIDIA graphics display driver

Workstations running an NVIDIA graphics display driver with version 461.09 are not required to upgrade the graphics card driver. These systems are already equipped with a driver version, which fixes all known vulnerabilities.

Upgrade systems with older display drivers

To upgrade a system with an older display driver to version 461.09 please download the driver from the NVIDIA website. For workstations equipped with a "Quadro" branded card please follow https://www.nvidia.com/download/driverResults.aspx/168683/en-us, in case of a "GeForce" branded card follow https://www.nvidia.com/download/driverResults.aspx/168683/en-us, in case of a "GeForce" branded card follow https://www.nvidia.com/download/driverResults.aspx/168776/en-us. Download the driver installer package that is applicable to the graphics card model that has been identified before as described above. Note that both mentioned download web pages specify the supported graphics card models under "SUPPORTED PRODUCTS", which allows to double-check if the right driver packages is chosen. Finally, execute the downloaded installer package and follow the instructions as displayed by the installer to finish the driver update.

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