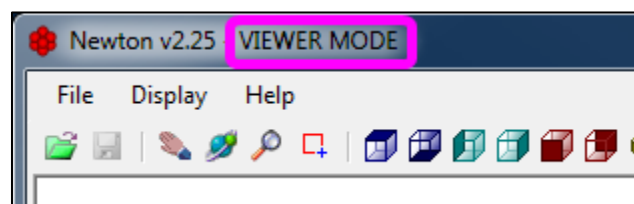# How to Install Newton Demo

1. Newton requires Microsoft.NET 2.0 or later. If you are running Windows XP, you may need to download and install .NET from Microsoft's website. If you are running Vista, 7, or 8, a newer version of Microsoft.NET should already be installed on your computer.

2. Download Newton from the following link:

   http://www.actek.com/Newton/Newton_Software_Installation.zip

3. Extract the files to a temporary directory. From this directory, double-click **setup.exe** to install Newton. Note that the demo version does **not** use a USB dongle, so the HASP USB drivers (**HASPUserSetup.exe**) do **not** need to be installed.

4. From the temp directory, double-click **vcredist_x86.exe** to install the Visual C++ Redistributable.

5. Newton requires the latest DirectX 9.0c drivers. Even if you have a newer version of DirectX, you might still need to install these drivers. If Newton opens without any errors after installing, then you do not need these drivers. However, Newton may throw a DirectX error at startup, alerting you to download and install these drivers from the following link:
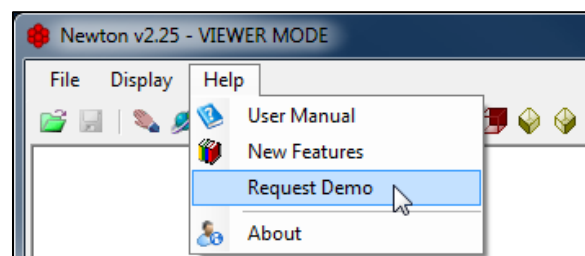
   http://www.actek.com/Newton/Newton_DirectX.zip

   To install the DirectX drivers, double-click the **directx_Jun2010_redist.exe** file inside the ZIP file. You will be asked to extract the files to a temporary folder. After extracting the files, open that folder and double-click **DXSETUP.exe** to update DirectX.
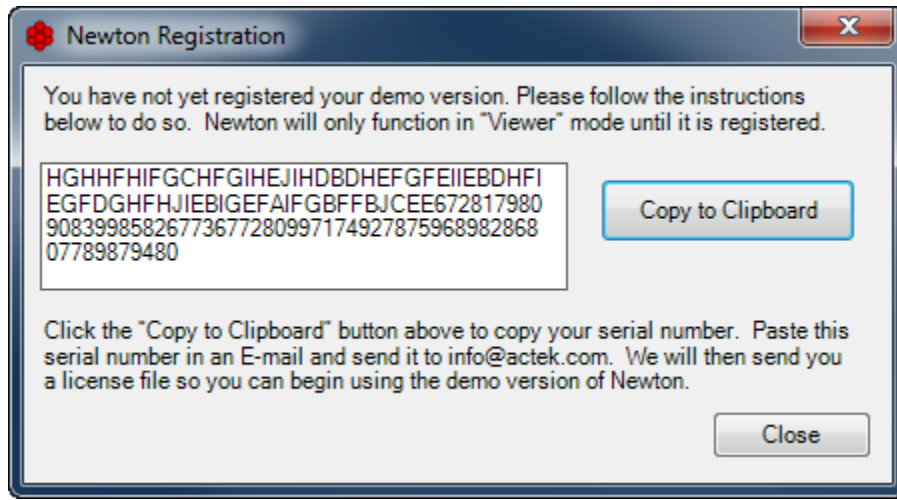
6. You can now start Newton by clicking on the Newton icon on your desktop, or from the Windows start menu. The software will start in "Viewer Mode." This mode only allows the user to open Newton DEM results files to view simulation results.
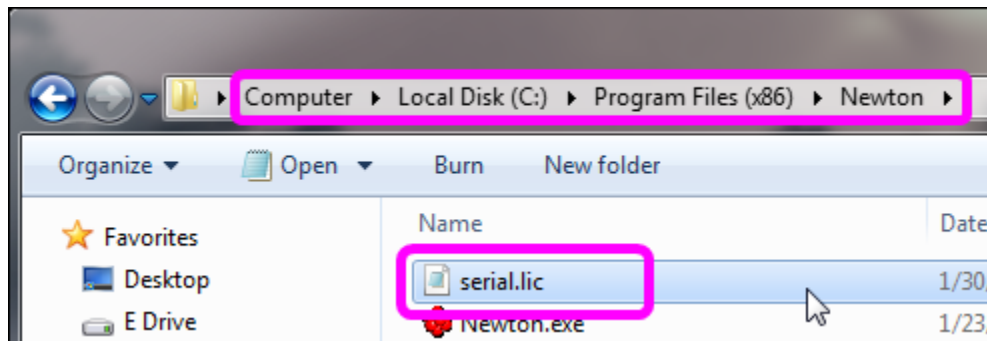

7. To request a demo license, navigate to the "Help" menu and select "Request Demo" from the dropdown menu.
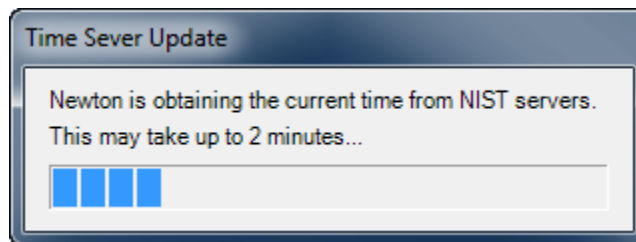
8. Copy the generated license number to an e-mail and send it to AC-Tek at **info@actek.com**. After verifying your information, we will send you a license file **serial.lic**.

9. Upon receiving the license file from us, copy it into the Newton installation directory.

    For Windows XP users, this location is usually **C:\Program Files\Newton**

    For Windows Vista, 7, 8 users, this location is usually **C:\Program Files (x86)\Newton**

10. Newton will now start in Demo mode. When starting Newton, you will see this window:

    Newton checks the current date and time using NIST internet time servers. Ensure that your PC is connected to the internet and that a firewall is not blocking **TCP Port 13**.

    This time check is **only** for Newton Demo. The paid versions of Newton **do not** use the NIST servers and **do not** need an active internet connection, other than to download updates.

Example Files

Newton includes several example files to help you get started. When you are running Newton Demo, click **File > Open** and navigate to the **Examples** folder inside your Newton installation directory.

For Windows XP users this location is typically **C:\Program Files\Newton\Examples**

For Windows Vista, 7, and 8 users, this location is typically **C:\Program Files (x86)\Newton\Examples**

Inside this folder are several example files. The following files are the sample files that can be opened by the Demo version of Newton:

Example 1 (Demo).nwt

Example 2 (Demo).nwt

Example 3 (Demo).nwt

Each of these files has been set up with the proper simulation parameters and material has already been generated. After opening any of these files, you can run a simulation by clicking **Solver > Run** from the main menu bar.

Example 1 and Example 2 show typical transfer chute simulations, while Example 3 shows a transfer chute that includes a rotating flop gate which directs flow to one of two lower discharge chutes.

Installation Notes

- Newton does not support DPI Scaling. If you have problems with the size and placement of the grids, buttons, and menus, disable DPI Scaling in your computer's display settings.

- We recommend that you disable hyper-threading on your CPU to maximize Newton's efficiency.

- Creating video animations using Newton requires a video compression codec. Your computer may already have one or more codecs. AC-Tek recommends using either of the following free codecs:

    o The DivX codec – **http://www.divx.com**

    o The Xvid codec – **http://www.xvid.org**

- If you have any questions, concerns, or comments about Newton or getting started, please send an email to **info@actek.com**.