

Analog Circuit Simulator Offers Many New Features

[Sidelinesoft](#) has released version 3 of the NL5 analog electronic circuit simulator. Listening to input from active users of its software, the company has significantly redesigned the software with this version offering many new functions and features.

Among the changes and improvements, NL5 Ver.3 is 64-bit application with no 2-GB limit on simulation data. Its new GUI design offers support of multiple monitors, while still keeping old “multi-document interface” style available. Also, many new components and models have been added such as a current and fully differential amplifier, an s- and z-function component with arbitrary and polynomial transfer function, different types of controlled generators, and more. In addition, the simulation algorithm has been significantly redesigned, making it up to 5 times faster for most circuits, with much more reliable convergence at switching points.

Another new feature is “transient state,” which stores a circuit state at any moment during transient simulation, and then restarts simulation from any of those stored states. There are also many improvements in the transient analysis widow such as new display modes, multiple analog sections and advanced trace formatting. Finally, the NL5 DLL (Windows and Linux) now uses the same code as NL5 GUI version, which guarantees identical results in GUI and DLL simulation.

NL5 is an analog electronic circuit simulator working with ideal and piecewise-linear components. The first version of NL simulator for personal computers was developed in the early '90s as a tool for switching power supply design. Since then NL has evolved into the Microsoft Windows-based tool, which is being used extensively by world-class engineers in different fields of electronics for almost 15 years. The first publicly available version, NL5, was released in 2009.

The new NL5 version (along with the latest build of NL5 Ver.2) with documentation and examples is available at the NL5 website. Users for NL5 Ver.2 should note that they don't need to switch to NL5 Ver.3—they can continue to use NL5 Ver.2 with their current license for an unlimited amount of time.

To try NL5 Ver.3 with an unlimited number of components, order the Ver.3 Trial License. The company advises users to be aware that the new Ver.3 license file name is also nl5.nll, however it is not compatible with the Ver.2 license file. If you order a Ver.3 License, please keep new and old license files in different directories.

For a limited time, users can upgrade their Ver.2 License to a new Ver.3 at a discounted price. If you are interested in upgrading, please contact the company for further instructions. For more information, see the [website](#).