Qucs-S: A short overview on development status

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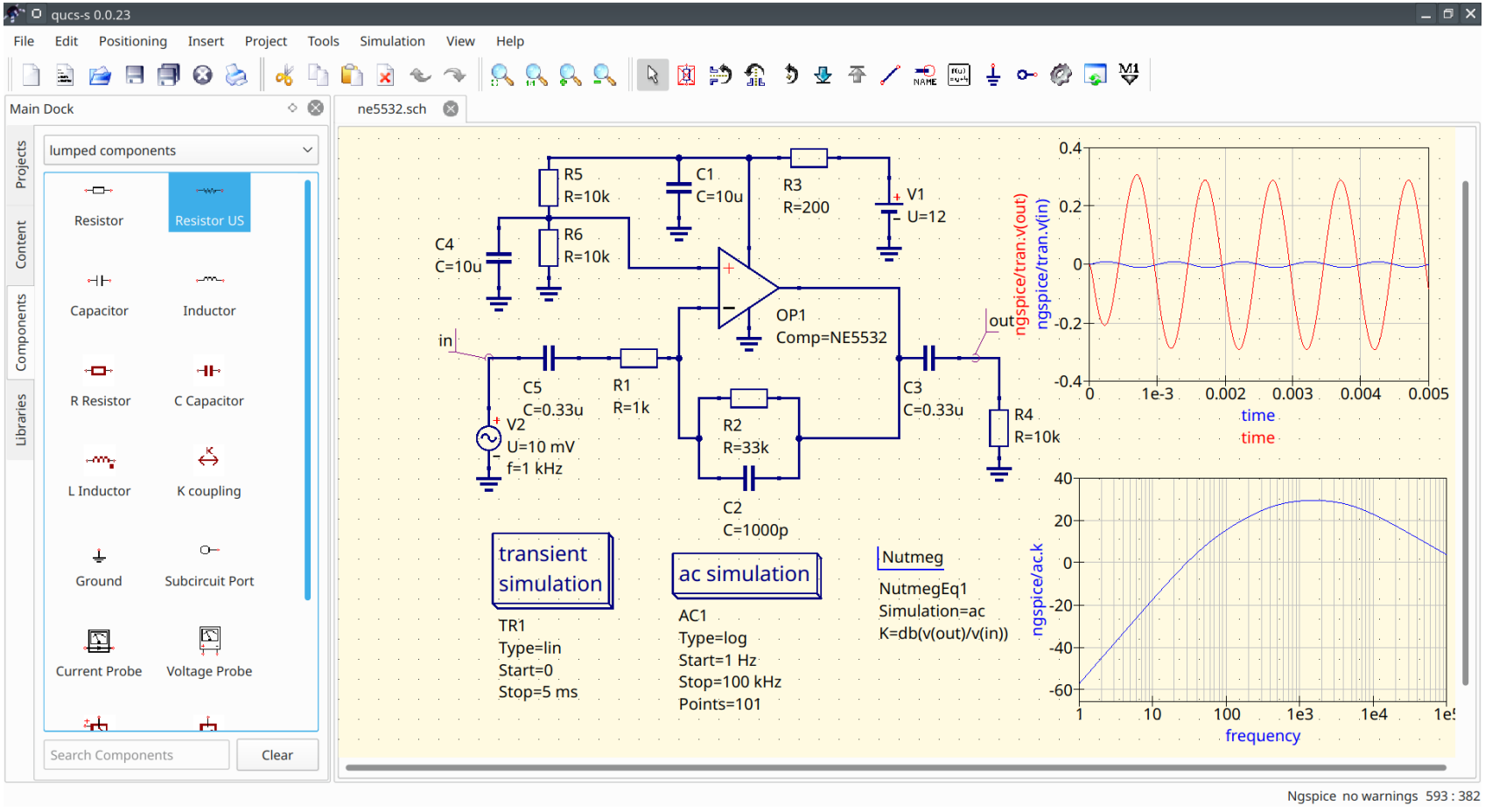
- What is Qucs-S?
  - Qucs-S provides and universal GUI for different circuit simulation kernels; Ngspice is recommended fro usage with Qucs-S;
  - Qucs-S doesn't provide simulator and/or Verilog-A compiler by itself; It should be installed separately;
  - Qucs-S was forked from originally Qucs in 2016 and since 2017 has been developed independently;
  - Qucs-S is cross-platform software and could be run on Linux, Windows, and FreeBSD;
  - In February 2022 Qucs-S was ported to Qt5 and 0.0.23 release was prepared;
  - Compact modelling features implemented using Qucsator+ADMS;
  - Verilog-A synthesizer allows to export subcircuit into Verlog-A code;
- What simulators are supported by Qucs-S?
  - Ngspice `https://ngspice.org`
  - Xyce `https://xyce.sandia.gov/`
  - SpiceOpus `http://www.spiceopus.si/`
  - Qucsator `http://github.com/qucs/qucsator`
- Qucs-S is not related to the "modular Qucs" developed by main project!

Qucs-S main window



Currently Qucs-S development roadmap

- The main task is to improve Qt5 compatibility. Qt5 porting is finished in 0.0.23;
  - Qt5 migration checklist `https://github.com/ra3xdh/qucs_s/issues/72`
- Prepare sources for porting to Qt6
  - QtScript is deprecated; It's need to get rid of QtScript dependency. It is essential for Verilog-A support; `https://github.com/ra3xdh/qucs_s/issues/77`
  - Provide compatibility with Qt5.15 `https://github.com/ra3xdh/qucs_s/issues/75`
- The main simulator should be Ngspice; the second simulator is Xyce;
- Add support for new Xyce features like Verilog-A modules compilation on the fly; `https://xyce.sandia.gov/documentation-tutorials/xyce-adms-users-guide/`
- Add new component models to the libraries;
- Switch from Qucsator+ADMS to Xyce+ADMS for compact modelling;
- Unforking and merging as module for modular Qucs is not considered in the near future;

Where to find Qucs-S?

- Qucs-S repository on Github: `https://github.com/ra3xdh/qucs_s/`
- Website: `https://ra3xdh.github.io/`
- Release 0.0.23 page: `https://github.com/ra3xdh/qucs_s/releases`
- Windows 64-bit portable binaries could be downloaded from release page;
- Linux repositories (built with OBS):
  `http://download.opensuse.org/repositories/home:/ra3xdh/`
- Issue tracker to report bugs:
  `https://github.com/ra3xdh/qucs_s/issues`