

NOTICE: This document contains references to Agilent Technologies. Agilent's former Test and Measurement business has become Keysight Technologies. For more information, go to **www.keysight.com**.





Agilent Technologies

Genesys 2010.05 SP1 Release Notes

The latest **Genesys 2010.05 SP1 Service Pack** contains significant bug fixes against crashes; and many enhancements to usability and nonlinear simulation.

It takes less than **10** minutes to download and install.

REMEBER:

1. Genesys 2010.05 SP1 Service Pack installs over an existing Genesys 2010.05 installation
2. For Japanese, Chinese, Korean or Russian user interface, use new Language Pack SP1

Installation Instructions

1. Download "Genesys_2010_05_SP1.exe" to your local drive
2. Before installing the SP1, you first need to install the released Genesys 2010.05 version and Invoke once. If you have already installed released Genesys 2010.05 version then there is no need to download and Install Genesys 2010.05 version.
3. Close all Genesys 2010.05 Application windows if you have already opened.
4. Double click on the executable (Genesys_2010_05_SP1.exe) and follow the instructions on screen to finish the installation.

Important Notes

1. In case of Windows 7 and Vista ,right click on executable "Genesys_2010_05_SP1.exe" and click on "Run as administrator"
2. Un- installation of SP1 is not possible. You need to completely uninstall whole Genesys and install fresh Genesys 2010.05 version.

REASONS: Why you should install Genesys 2010.05 SP1 Service Pack (2010-11-30 release).

It fixes crashes when using:

- Modelithics CLR library v.7.3. Also need updated Genesys CLR v 7.5 directly from Modelithics.
- Mfilter synthesis
- Momentum GX/GXF optimization and sweep when multiple windows are opened
- Equations

It includes simulation enhancements:

- Harbec convergence and >5x speed improvement with proven block-sparse matrix solver from ADS
- Improved accuracy and stability of HBOSC linear oscillation frequency calculations
- Different port types can now be used in one group for Momentum GX/GXF simulation

It improves usability:

- New X-parameters circuit example: "SimpleXparamAmplifier.wsx" in Examples/Amplifiers folder showing how to use nonlinear X-parameter models in circuit simulation
- Defaults for Momentum GX/GXF analysis set for improved accuracy-
 - Simulation mode changed from "RF" to "MW" which provides surface current and far-field data for 3D viewing
 - Unchecked "Reduce Mesh" option

- Defaults for new graph options now set to “Show All Columns” to reduce searching for available contents to plot
- Frequency parameter “F” set to 300MHz default for all Q(f) models, including INDQ, CAPQ, MUCQ, MUCQx (x=2...10) to be consistent with ADS
- Improved Mfilter error messages to warn user of non-physically implementable structures and recommendation on how to correct
- Default interpolation set to “Polar” on X-parameter models for improved accuracy
- Footprint name is now shown in its editor window
- LiveReport now displays report name, date and time
- Eliminate “Rename part” annoying dialogs for
 - NPO Slabline models
 - Coupled Slabline Models
 - Coupled Microstrip models
 - Coupled Stripline models
 - Coupled Transmission Line models

It improves reliability by fixing bugs in:

- Automatic equation calculations in encrypted models (affecting mainly Modelithics models since Genesys 2007.3)
- Tuning update
- Optimization user interface
- Keeping design partlist and schematic in sync
- DC annotation
- Momentum port impedance error when defined by equations or file
- T-line caching
- Loading 2004.07 workspaces which contain netlists
- Spectrasys CNRV measurement
- Spectrasys CNR measurement. Now includes phase noise (PNCP) consistent with CNDR measurement.
- Mfilter generated layout of 2nd order combline tapped microstrip bandpass filter
- Touchstone circuit file export. Now includes node numbers.
- Gerber import origin offset
- Launching PLL and Tline