

GoldenGate 2020
Update 1.2

RFIC Simulator Update Release Notes

Notices

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GoldenGate RFIC Simulator Update Release Notes

GoldenGate 2020 Update 1.0 Release Notes

- To download GoldenGate, visit the [GoldenGate Software Downloads](#) page.
- To install GoldenGate, please refer to the [GoldenGate Installation](#) documentation.
- To use Data Display, Momentum, supported Ptolemy sources and sinks, or ADE extensions with the GoldenGate RFIC Simulator, use ADS.
- For information about other EEs of products, refer to the [Keysight EEs of EDA Design & Simulation Software](#) page.

Support discontinued for

- Linux RHEL 5
- Cadence ADE version IC 5.1.41, 6.1.4, and 6.1.5

New Features in GoldenGate 2020 Update 1.2

Released in March 2021

- VTBs can now have inputs in current
- Support of ICADVM 20
- Support of SiMKit 5.3
- Addition for latest models:
 - HICUM Level 0 Version 2.00 and Level 2 Version 3.00
 - BSIM-IMG Version 102.94 and Version 103
- Job Distribution:
 - Support of SiteCluster to unify setups with RFPro and ADS Circuit simulator
- Improve parsing performance for large Spice model files (Pilot phase)

New Features in GoldenGate 2020 Update 1.1

Released in April 2020

- Addition for latest models:
 - HiSIM_SOI Version 1.40
 - HiSIM_HV Version 2.20
 - HiSIM_HV Version 2.40
- Model improvements:
 - UTSOI Version 2.20
 - UTSOI Version 2.30
- Enhancements to the VTB flow:
 - Current sources as modulated inputs to the circuits are now supported in addition to voltage and power sources.
 - Piecewise linear (PWL) sources are now available even in the Fast Envelope flow.

- Parallel sources with same frequency are now taken into account.

New Features in GoldenGate 2020 Update 1.0

Released in February 2020

GoldenGate 2020 Update 1.0 is a major update of GoldenGate 2020 with the following enhancements:

- Introduction of Compact Test Signals (CTS) to speed up EVM computations with Regular Envelope
 - Sharing an algorithm present in Keysight instruments, CTS aim at reducing the runtime of classical Envelope simulations by orders of magnitude
- Model improvements:
 - SiMKit 5.2
 - BSIM-CMG 111
- Various fixes
 - NFmin computation when using complex impedances
 - Fix of BSIM-CMG 108 Vth discontinuity using BSIM-CMG 111 equation
 - Fixed an error when using swept performances for ports at multiple of the fundamental
 - Speed up of S-Parameters when using large SP matrices
 - Fixed GUI issues when using sweeps with Multiple Ranges

NOTE

Fast Envelope Levels 2 and 4 deprecation in GoldenGate 2021:

- As Fast Envelope *Level 3* is a superset of *Level 2* and *Level 5* a superset of *Level 4*, GoldenGate 2020 releases will be the last ones using Fast Envelope *Level 2* and *Level 4*. In case these levels are used, it is advised to switch either to *Level 3* or *Level 5* that are already available.
- Starting GoldenGate 2021, only the Fast Envelope *Level 1* (No Memory Effect), *Level 3* (Memory effects extracted with sines), and *Level 5* (Memory effects extracted with pulses) will be available.

New Features in GoldenGate 2020

Support for TSMC Model Interface (TMI) 2017

- GoldenGate can work with models that use TMI (ETMI version 2017), the TSMC Model Interface.
- TMI uses compiled code in a shared library file that is provided by the foundry as part of the transistor models for a semiconductor process.
- For a PDK that uses TMI, GoldenGate will automatically locate, load, and use the correct shared library that comes with the PDK.

Multi-technology simulation is supported where models for some devices come from TMI and others are based on traditional Spectre or Hspice netlist files.

NOTE

TMI has not been qualified for use with SOI devices and aging simulations. Such simulations may run, but their accuracy is not guaranteed.

Core Features

[GGATE-345], [GGATE-350]

- Support for Cadence IC 618/ICADVM 18
- Harmonic Balance improvements in speed and memory for large designs [GGATE-472]
- Various updates of non-linear models : BSIM-BULK 106.2, R2_CMC, R3_CMC, BSIM-CMG, HiSIM_SOI, HiSIM_HV, SiMKit
- New Verilog-A compiler

Links with Electromagnetic Simulations

- Ability to generate data to drive RFPro current excitation. For information on saving the RFPro current excitation, see [Save RFPro Current Excitation](#).
- Support of reading SIO format for smaller S-Parameters footprint

Links with System Simulations

- Support SystemVue 2018 Update1 and associated VTBs including new VTBs for 5G NR and IoT
- New Fast Envelope modeling level for better handling of deep nonlinear memory effects
- Introduction of Distortion EVM
- VTBs now embed noise effects
- GoldenGate can now generate parameterized FCE models.

NOTE The FCE models are supported from SystemVue 2020 only. For more details on the known issue, click [here](#).

Pilot: Support of multiple SiMKit

Starting with the 2020 release, GoldenGate is delivering a **pilot project** to try using models from different SiMKit versions ahead of an official release.

You can activate the multiple SiMKit by turning on a **registry** variable in the configuration file. The variable is `/goldengate/simkit/use_multiple_simkit`. Valid values to activate the multiple SiMKit are 1, on, true, and yes.

NOTE By default, the GoldenGate will use the latest SiMKit version. The multiple SiMKit will become the default in the future major release.

Improvements

- Support SystemVue 2018 Update 1.0 and associated VTBs, including new VTBs for 5G and NB-IoT.

Additional Support For

- Models (in addition to those supported in last major release). For a complete list of supported models, see [Models Supported in GoldenGate](#) .
 - BSIM-CMG 111.0.
- SiMKit 5.1, 5.1.2, 5.2

Keysight EEsof Licensing and GoldenGate

- GoldenGate requires:
 - the **version 2019.02** of the EEsof EDA licensing software
 - a minimum code-word version **2019.02 or above**
 - the licensing server software, **lmgrd** and **agileesofd**, to be upgraded to at least the same versions as what are included in EEsof EDA Licensing software **2019.02**.

GoldenGate will not start if any of these requirements is not met. Refer to the [License Codeword Version Compatibility](#) Table.

- In the EEsof EDA License Tools version 2019.02, licensing vendor daemon (**agileesofd**) is integrated with FlexNet FNP **11.13.1.4** version (Windows) and FlexNet FNP **11.13.1.3** version (Linux) of FlexNet license manager daemon (**lmgrd**). For the Windows platform, GoldenGate installer will automatically set up these two new license server daemons by default for the local node-locked license users; for the Linux platform, you need to follow the [Linux/Solaris Licensing Setup](#) instruction to complete the licensing configuration process. For more details, refer to [Licensing \(For Administrators\)](#).

Licenses supported in previous releases are no longer supported. For more information, see [Licensing](#).

Platform Support

64-bit Linux:

- Linux RHEL 6
- Linux RHEL 7
- SUSE Linux 11.x
- SUSE Linux 12.x

Cadence ADE Support

Supported Versions

- **IC 6.1.6, 6.1.7, 6.1.8**, and all subversions

NOTE

If you plan to use ADE Explorer (maestro views) with GoldenGate, you need to use IC 6.1.7.709 or later.

- **ICADV 12.1, 12.2, 12.3**
- **ICADVM 18.1**

Documentation

Starting with the 2020 release, the online help gets a new user interface. The new UI improves overall online help usability by providing the following key benefits in addition to several other minor benefits:

- **Table of Contents Sidebar:** Displays collapsible Table of Contents for the entire documentation. The left-double-arrow icon collapses the sidebar, and the right-double-arrow icon displays the sidebar back again.
- **PDF Button:** Allows you to instantly generate PDFs of the latest documentation anytime, including current page's children pages. Currently, the PDF generation option is available only for GG 2020 release. For other releases, you can switch to their [Printing Manuals](#) page and download the existing PDFs like earlier. Note that with the introduction of PDF generation feature, the Printing Manuals page will not be available from next release onward.
- **Product Release Switcher:** Allows you to view the current page in other supported releases listed in the drop-down menu. Once you select a release from the drop-down menu, the current page is updated to show the content applicable to the selected release. The Table of Contents is updated as well. With this, you bookmark URL of only one release and then switch to other releases from this drop-down menu.
- **Latest Documentation:** The documentation available in the new UI is always kept updated for all supported releases. These updates are available to you as soon as they happen at our end. This provides you 24x7 access to the most recent and technically accurate documentation.

For more details, see [How to Use Online Help](#).

Fixed Issues

- Upgrade the GoldenGate to support the latest TMI version.
- The SSB output noise results for psin component in analogLib are read improperly.
- GoldenGate simulation crashes even when the default carrier frequency is set to 450 MHz.
- GoldenGate 2020, for the HiSIM_HV model a warning message is displayed when the parameter type is set to 0 ('TYPE' == 0).
- For the R3 CMC model, the DC operating point parameters are not annotated.
- Only the GoldenGate 2019 should contain the ADS versions 490 and 491 for the GoldenGate in ADS to work with ADS 2019 and ADS 2019 Update 1.0.
- When performing Envelope Transient (ET) simulation with fast envelope level 1, an unexpected EVM result is found.
- Cadence ADE IC 6.17.714 and ICADV 12.30.711 versions: The bus signal was not getting flattened to bits when printing the DC node voltage.
- Upgrade the GoldenGate to support the latest SystemVue 2018 Update 1.0.
- Abnormal termination for the Envelope Transient analysis simulation with checkpoint period.
- An error message appeared when selecting the Environment button in ADE.

- GoldenGate simulation crash error reported when carrier frequency set does not correspond to any of the frequencies of the envelope simulation.
- Support the magnitude/phase format in I/Q data file for envelope sources.
- PSP 103.6 model: The output noise of GoldenGate was neither matching with ADS nor SPECTRE.
- GoldenGate simulator crashed or abnormally terminated when performing the ac noise analysis on a test bench that is written in SPICE format.
- Update GoldenGate with changes made to the BSIM-CMG version 106.
- Add support for the BSIM6 version 6.11.
- For the Envelope Transient (ET) analysis, the parameters Step Size Control and Integration Accuracy do not control the right simulator parameter settings.
- UTSOI2 version 2.3: Output currents during DC simulation in GG 2020 were not matching with that of ADS 2019.
- UTSOI2 version 2.3: Noise results of PMOS devices in GG 2020 were not matching with that of ADS 2019.
- GoldenGate parser reported error to handle the Spice nmos model (BSIM-IMG) with level parameter 78.
- Provide support for the BSIM-IMG version 102.91.
- Provide support for Hspice global simulator option parameter with geoshrink set to 0.855.
- Provide support of the BSIM-SOI version 4.61.
- Output currents in GoldenGate are not matching for Spectre BSIM-SOI with bias points soimod=2 and shmod=1
- bicmos7wl PDK : Simulation fails when the default values for the minimum/maximum parameters conflict with the absolute parameters.
- ICADVMS version 181: Unable to launch the ADE Explorer from ADE state.
- Provide support for the BSIM-IMG version 102.92.
- BSIM-IMG 102.8, 102.91, and 102.92 models are unable to recognize the parameters rsc, rdc, and so on.
- GoldenGate parser crash error reported.
- Include the Fast Envelope level 5 option in the ET analysis setup window.
- Abnormal termination reported for the *Conjugate Gradient* algorithm of ET sources when random seed was set to 30105.

Known Issues

System Integration

- Custom VTB workspaces saved with an earlier version of SystemVue cannot be used as is and if you plan to use a saved workspace, then it must be opened in supported SystemVue and resaved.
- SystemVue engine used by GoldenGate 2020 is evolved based on the updated SystemVue 2018 Update 1.0 VTB engine. Due to this the VTB examples may provide different results for GoldenGate 2020 and SystemVue 2018 Update 1.0.

General Issues

- In GoldenGate 2020 Update 1.0, if you have a state with "Multiple Ranges" Sweep Type option values defined, then loading the saved state might not work properly.
Workaround: You need to redefine the "Multiple Ranges" Sweep Type option values and save the state.
- For the GF 22FDX Idfet model (ICADV 12.3 version), DC operating point parameters are not annotated and cannot be viewed.
- Performing GoldenGate simulation with fast envelope level 3 provides inconsistent results.
- For the GF12LP and GF14LPP models, the GoldenGate results are not matching with Spectre results.
- LSF simulation with -mt option is unsupported for GoldenGate.
- Increasing points in GoldenGate to 20 hangs Cadence Virtuoso IC 6.1.6.
Workaround: The issue has been resolved in Virtuoso version 6.1.7. Use the updated version.
- The Verification Test Bench (VTB) simulations are not supported in conjunction with parallel and Monte Carlo simulations.
- An error is displayed when VTB simulation results are opened in DDS from linked ADS 2016.01.
Workaround: Use ADS 2016.01 update 4 or use the following procedure to convert the VTB results to DDS.

NOTE

The issue is resolved in ADS 2017 and later releases.

1. Browse to <simulation_dir>/psf directory.
Where, <simulation_dir> is the path to simulation directory.
2. Execute the following command:

```
adx2ds <vtb_result>.adx
```

 Where, <vtb_result>.adx is the file created after VTB simulation.
3. Copy the <vtb_result>.ds file to the <simulation_dir>/data directory.
 - GoldenGate does not support references to "\$freq" in spectre expressions.
Workaround: GoldenGate provides a variable "GoldenGateFreq" to be used in place of "freq".

[142372]

SystemVue 2016.08 can not read FCE model file generated by GoldeGate 2017

- Removed in GG 2020 (information with references to 2017 updates as suggested by Tom)
 - `absdelay()` is not supported in *Carrier (HB)* analysis. The system issues the following error.
The `absdelay()` operator is not currently supported in HB and ET analyses.
 - Parameter default in the `nport` device model. The default for the `thermalnoise` parameter is reset to match a new default in Spectre IC06.15.140 as following:

Spectre	GoldenGate	Default (in bold)
Before IC06.15.140	Before 2012.10 (4.7.2)	thermalnoise= no (off)
IC06.15.140 and later	2012.10 (4.7.2) and later	thermalnoise= yes (on)

NOTE

In the designs that use `analogLib` nport devices with the `thermalnoise` parameter set to a default, you will see some differences in the noise outputs with GoldenGate 2014.10 (4.9.0) and later releases. To reproduce the older results, set `thermalnoise=off` in the nport devices in your schematics.

- Compatibility issues with Spectre devices from *analogLib*:
 - `noisetemp` is ignored in *analogLib* nport device
- With SSNA and FYC selected, S12 and S22 do not vary with trials. Only S11 and S21 results are correct.
- The Sweep Task is not supported for the parameters with mapped names.
- XP Analysis is not supported in simulations with GDE.
- New/Old UI forms:
 - Old states containing sweep task variables and saved with the old UI can miss variable definitions when opened with the new UI.

Workaround: When opening an old saved state with UI click on a variable entry in the sweep task listbox and apply, then resave the state.
- In the *Monte Carlo* Task:
 - Correlation variables that refer to the device instances are not supported.
 - When a PDK parameter is declared to have both process and mismatch variations only the last declaration (in a netlist) is accepted.
 - `weight` is ignored for *Yield Goals*.
 - When simulation has failed for some *MC* trials with the **Local Parallel** setting the results for the failed trials are not accessible.
 - When re-running a parallel *Monte Carlo* simulation, after changing the number of processes and trials, the output data does not get refreshed correctly in an existing *qWave* plot.

Workaround: Upload the updated data manually.
- Instances of *adsLib* components inside model files will not be processed correctly if the Spectre format is set to be case-insensitive (`simulator lang=spectre insensitive=yes`). This is not an issue for most users that will be using the schematic editor.

Workaround: Edit the model files so a `simulator lang=spectre` statement would precede the blocks with the *adsLib* components declarations and the default case sensitive format would be applied.

- The use model of the *Virtual Test Bench (VTB)* has several restrictions that include:
 - Supported Analyses
 - The version of GoldenGate Tools it can be simulated with.
 - Signals it can handle.
 - Ports and simulation parameters settingsFor more information refer to [VTB Uses and Restrictions](#)
- After running a Momentum simulation, you may generate a symbol for the S-parameter model to reuse the data in the GoldenGate simulations. Note that in this case the symbol must be generated **with a grounded reference pin** to run in GoldenGate. However, if you want to simulate the extracted view of a layout with a Momentum model for a part of the layout, you need to use the symbol for the S-parameter model generated **without a reference pin**.
- Current and voltage output information is not available in the *DDS Results Viewer* when either an input *Digital State File* or Ptolemy components with parameter sweeps are used.

In Cadence ADE

- When simulation states are saved as the design cell views, opening several states simultaneously within the same ADE session might lead to state corruption.
Workaround: Reload the corrupted states with **Session > Load States**

In IC6.x ADE

- In IC617, after running a simulation in GoldenGate and when viewing the results, click **Plot**:
 - A waveform appears the first time. However, with the next click, **Plot** or **table**, an error message appears indicating inability to plot the waveform again or get the table form of the waveform respectively.
 - A waveform appears and then select **Waveform > send to > Calculator**. An error message appears when the plot and table options are used in the calculator window.

The above is working fine in IC 618/ICADV 18 versions and later.

- The **Vir Probe**, **Vir Src**, and **Job Manager** buttons are not displayed in the window
Workaround: Use the menu items instead to access to the **Vir Probe**, **Vir Src** and **Job Manager** settings, respectively, as follows:
 - **Outputs > GoldenGate Probes ...**
 - **Setup > Virtual Source Editor ...**
 - **Simulation > Job Manager ...**
- A double-click on the *Variables* section in the ADE window launches the native dialog, not the one that belongs to the GoldenGate simulator.
Workaround: To access the GoldenGate dialog, use **Variables > Edit ...**
Please also refer to [GoldenGate Integration into ADE-L and ADE-XL Test Editor](#) documentation.
- If you need to use the Skill debugger, set `gcdisable=t` in your `.cdsinit` file.
- The **Setup > Environment > Results View > Auto Plot Results After Simulation** only works for performances and expressions. Same as plotting from the **Plot** icon.
Workaround: Create expressions in the **Output > Setup**. You can use the Cadence Calculator to help create expressions.

Oceanscript Issue

- If a parameter's default value is "t" and users change it to "nil", it will give an error message and will not take the value so the default is used instead. This is a Cadence issue because Spectre behaves

the same. To work around this please manually change your parameter value to "nil" in the oceanscript.

If oceanscript contains lengthy function calls which exceed 8192 characters then you can't redirect it to ocean at the command line. This is a Skill language limitation and is well documented in Cadence's documentation. Cadence proposes the following three workarounds:

- workaround 1: invoke ocean at the command line, then load the file inside ocean.

workaround 2:

- Save the function definition to another file ("myFunction.il") and delete it from the ocean script.
- Load the function with the help of a load statement in your ocean script

```
load("myFunction.il")
```

- From command line type

```
%ocean < oceanScript.ocn
```

workaround 3: If you want to exit from ocean at the end of the script.

- Add the "exit" statement at the very end of your ocean script.
- Load the ocean script as follows:

```
%ocean -restore ocnScript. ocn
```

SSNA Results

- In rare cases, GoldenGate 2020 SSNA results might differ from GoldenGate 2017.

Workaround: Roll back to GoldenGate 2017 behavior by adding the below command in ADE-L menu **Command Line Params** (Setup → Environment, Simulation tab)

```
-analysis matrix_vector_loop=0
```

The issue will be fixed in the next minor update of GoldenGate 2020.

GoldenGate in ADS

- Schematic (unnamed) Node Names
Handling of unnamed nodes is different in ADS than in Virtuoso®. By default, in Virtuoso® unnamed nodes use the format *** (for example, net1, net2, etc) whereas ADS uses N_*** (for example, N_1, N_2, etc). After an interoperable design is loaded in ADS, the original node names (net1, ...) will be kept until the design is modified or saved. At this point, the ADS defaults will apply. This may cause problems with GoldenGate virtual probes, since they refer to node names. A warning is displayed to redefine those probes.
- Momentum Integration
 - Need to regenerate the old momentum views.
 - Parameterized layout is not supported.
 - In ADS, it is essential to generate a momentum view before running the simulation. This differs from the regular ADS flow.
- Unsupported Elements
 - ADS primitive devices
Workaround: Use analogLib or interoperable PDK components
 - analogLib vsource, isource, port
Workaround: Use vsin, isin, vcd, psin instead of analogLib vsource, isource, port
 - P-cells (pcel) instances in a design
 - Verilog-A instances
 - ADS tools such as Optimization cockpit; Load Pull cockpit
 - Hierarchical Editor

- The GoldenGate in ADS does not support a few GoldenGate features. For details, see [RFIC Cockpit Limitations](#).
- Spacing between value and multiplier are not supported by GoldenGate, e.g. '1 m', '0.5 u'.
- The Copy from Schematic option copies the variables available in the right-side of the deactivated devices to the RFIC Cockpit.
- In Virtuoso®, pins are used from the basic library. In ADS, pins are used from the standard ADS library available from the toolbar.
- Simulating a virtual C-meter hierarchical probe gives error.
Workaround: To simulate a virtual C-meter hierarchical probe, either create a hierarchical current probe using **Analysis > Save Options > Select from schematic** or create a virtual probe and keep the 'Probe Name' as hierarchy, for example: for NM0 transistor one level down the hierarchy, use Probe Name = NM0:d

Licensing

- Unable to install Licensing Hardware Key Drivers on Windows.
Workaround: Turn off UEFI Secure Boot (BIOS) and use the default 6.3 version of the Wibu key driver delivered with the EEsof Licensing tools.
- Licensing may not support a license file path that is too long. This will likely occur when you have too many license files.
Workaround: Remove some license files, move the license files to a shorter directory path or to combine license files into a single file.
- License Setup wizard may not be able to start license server with many license files. During setup, it may lead to a situation where a command prompt window appears/disappears incessantly. This is due to the fact that License Setup wizard is not able to start Imgrd with a long command line and may get stuck in a loop.
Workaround:
 - a. It is recommended to combine all license code words tied to same MAC ID into single license file to avoid setting large number of license files.
 - b. Try to use a shorter path to place license files.
 - c. If #1 and/or #2 does not help, start the license server (*Imgrd.exe*) from the command line (e.g. *Imgrd.exe -c <lic-file-path> -l <license_server_log.txt>*) and then set `<PRODUCT>_LICENSE_FILE=<PORT-NUMBER>@localhost` for product you want to use on same PC.
- Dongle drivers for Flex-10 dongles on Linux are release specific. Installing the latest dongle drivers on Linux will function properly only for the most recent EEsof releases.
Workaround: Install and use dongle drivers as needed. If you need to run the most recent EEsof releases, use the latest Flex-10 dongle driver. If you need to use older releases, uninstall the latest dongle driver and re-install the older dongle driver
- FLO and EEsof License setup are writing server logs at different locations. However, the EEsof server log file location is updated in the License Manager > Environment tab.
- When multiple **same-named** INCREMENT lines **of different version** exist on the license server, few advanced FlexNet options to reserve/limit licenses may not work properly.
- Product Selector "Check Availability" generates incorrect results (which leads to license failure) for older releases when multiple date base versions of like-named bundles exist in the license pool.
- In Linux, Product Selector **OK** and **Cancel** Buttons locations are reserved.
- Starting from FlexNet Publisher 2015 (also known as version 11.13.1), the adoption of the best practice of the least-privilege security therein results in the License Server related Windows Service to run with the LocalService Account privilege (instead of the LocalSystem privilege as before.) Running with the LocalService Account privilege, an executable can no longer access any files located in the

per-user specific type of folders. As a result, any license file placed in those folders can no longer be accessed by the License Server when the License Server is automatically started via the Windows Service upon each PC reboot. For the local node-locked license, this would not result in any disruption to the usage of EESof applications; however, for the license installed on a network PC that is accessed by multiple client PCs, this may cause EESof applications not to start after the network PC reboots

Workaround: Store your license files in the Windows folders that are accessible by the LocalService Account privilege. For example, C:\ProgramData or C:\users\public are both qualified choices. In general, any folder that has the "Users" group listed in its Properties > Security page and this "Users" group has the *read* permission enabled should work.

- Using the default port to connect to a license server may cause a delay when checking out licenses. If no port is given in the license file, Flexera scans ports 27000 to 27009 to find the port. Starting from FlexNet Publisher 2015 (aka version 11.13.1), the default timeout for the response from each port increased from .1 seconds to 3 seconds.

To avoid the delay, KSM now issues licenses with port 27009 instead of leaving this blank. The EESof License Setup Wizard (from Licensing 2017.01 onwards) handles some common situations such as: where it detects license file(s) without port, when users get a new license file with port 27009, or when all license files for a vendor daemon does not have same port.

NOTE

You will not be able to start the license server if all license files for a vendor daemon on a server does not have same port.

Users who manually setup a license server or using EESof License Setup Wizard with older licensing bits may need to manually edit license files to comply with the following rules:

- a. All license files for a vendor daemon on a server must use the same port (or all be blank).
- b. Using the default port (blank) is allowed but may result in longer checkout times.
- c. If setting up a network server, select an unused port that is not blocked by a firewall.

Workaround: If the user cannot change the port, or wants to use the default Flexera ports, the environment variable FLEXLM_TIMEOUT can be set to .2 seconds (200000), to minimize the performance degradation. However, if the network latency is an issue in your environment, you may need to fine-tune this setting to minimize the general performance degradation while still accommodating the network latency.

- Installation of EESof EDA tools (such as, SystemVue 2016.08, Genesys 2017.XX, or ADS 2017.XX) may hang at 4% (percentage vary based on the products) for few hours or even more on some specific machines.

Workarounds:

- Disable Firewall setting in Anti-Virus Software installed on the PC.
or
 - Download and unzip process explorer from the below link and then invoke *procexp.exe*.
<https://technet.microsoft.com/en-us/sysinternals/processexplorer.aspx>
Right click on the *wusa.exe* process under <Product installer exe> and select KillProcess. Now it will continue the product installation.
- After installing EESof EDA tools (such as, SystemVue 2016.08, Genesys 2017.XX, or ADS 2017.XX) successfully and try to invoke the software or License wizard, you may encounter "api-ms-win-crt-runtime-l1-1-0.dll" missing error.

Workaround: Install the Update for Universal C Runtime in Windows . On Windows 64-bit system systems, the file to install is x64 version of the Microsoft hotfix KB2999226. A copy of the Windows6.1-KB2999226-x64.msu Microsoft 64-bit hotfix installer can be found under the c : \Program Files\Keysight\EESof_License_Tools\bin directory. The Microsoft hotfix KB2999226

can be found under the Update for Universal C Runtime in Windows page at <https://support.microsoft.com/en-us/help/2999226/update-for-universal-c-runtime-in-windows> as well.

- On a newly formatted RHEL system, the EEsof Licensing tools may fail to boot. This is because the FlexNet Publisher 2015 requires a certain rpm
Workaround: Under the EEsof product installation directory, there exists a utility script named "*Linux_sys_check.sh*" under the *bin* directory. Run this script to find out whether any rpm is missing; run this script with a "-y" command-line option to also have all the missing rpms automatically installed if you have the *sudo* or *root* privilege.
- License server may stop recognizing Flex-10 dongle on some systems within a few hours after starting
Workaround: If you experience this problem, install the latest WibuKey drivers from **Wibu Systems**.
- Unable to install Flex-10 driver if Flex-9 dongle is already plugged into a machine
Workaround: Before installing a Flex-10 driver for the first time, unplug the Flex-9 dongle.
- There is a known FlexNet Publisher issue, whereby mixing node-locked codewords and floating codewords in one license file can result in: a) Remote simulations not working or b) A second local simulation not working in case the license is node-locked and also has incorrect version.
Workaround: It is strongly recommended that you do not mix node-locked codewords and floating codewords in one license file nor in *any* configuration that ends up with node-locked codewords and floating codewords both available on the same server. In other words, put the node-locked license and the floating license on different servers, and point to the respective one based on what you need to run.
- If a user simultaneously runs two instances of a product and has mixed different versions of the same codeword on one license server, extra licenses may be pulled and result in unexpected "Licensed number of users already reached for this feature" errors.
Workaround: We recommend you remove expired codewords, to separate out the new and the old versions of codewords into different files and different servers, and to point to the respective one based on what you need to run.
- Not specifying the TCP/IP port for the license server during license setup may lead to unexpected behavior and/or license checkout failure on the Windows platform. We strongly recommend you to always explicitly specify the TCP/IP port associated with each license server.
- A node-locked and floating bundle operating on Linux cannot be shared between products using EDA License Tools version older than 2014.01 when run at the same time.
- License Setup Wizard does not remove any previous user-configured FLEX Windows License Service manually set up by a user using FlexNet's Imtools.
Workaround: You must remove the previous user-configured Windows License Service via Imtools.
 - Run the Imtools.exe from C:\Program Files\Agilent\EEsof_License_Tools\bin to invoke the Imtools utility. The Imtools utility window is displayed.

CAUTION

If you have installed an EEsof product released before 1st August, 2014 on your system prior to installing an EEsof product released after 1st August, 2014 then the default EEsof Licensing tools path will remain C:\Program Files\Agilent\EEsof_License_Tools. On the systems that only have EEsof products released after 1st August, 2014 installed then the default EEsof Licensing tools path will be C:\Program Files\Keysight\EEsof_License_Tools.

- In the **Service/License File** tab, check the **Configuration using Services** option. All user-configured FLEX Windows License Services will be listed.
- Select the service you wish to remove.
- Select the **Config Services** tab and click the **Remove Service** button to remove the service. To ensure that the license service or *Imgrd* is running, click **View Log**. A log window appears that confirms whether *agileesofd* and *Imgrd* are up and running.
- While running multiple versions of prior GoldenGate releases together, set GoldenGate_MAXIMUM_BUNDLE_USAGE=ON in your environment so that all of them will use the

same method to check out licenses. Otherwise, you might receive an error message, "Licensed number of users already reached".

- On some Windows 7 machines, when more than one definition of an Ethernet adapter exists (duplicates), license checkouts may appear to hang up.
Workaround: Disable the duplicate network card definitions in your network settings: **Control Panel > Network and Internet > Network Connections**. This issue has been acknowledged by Flexera and they have created a bug report (SIOC-000103097).
- For LSF style distributed simulations, ensure that the PATH on the client computer points to the \$HPEESOF_DIR/EEsof_License_Tools/\${architecture} directory that corresponds to the EEsof release being used. This needs to be done in order to ensure that the proper version of the Flexera utilities (like *Imutil*) gets picked up in the path before any older in-compatible versions (that may also be installed on a users' system.)
- **License Setup Wizard** (*aglmwizard.exe*), which is used to set up and record the license path would not work if you already have an environment variable set for GoldenGate_LICENSE_FILE.
Workaround: You can use GoldenGate_LICENSE_FILE variable to point to license file or refer to [Licensing \(For Administrators\)](#).
- The License Setup Wizard will exit or not properly configure a license server, if the server has all of its licenses currently in use.
Workaround: Wait for a license on the server to become available as you normally would before launching the product.
- Unable to set license in case unicode characters are used either in path or license file name because the Flex License Service does not support these characters.
- The Product Selector tool will be unable to display the license server status properly when connected to older license server.
Workaround: Upgrade your license server to the latest version.
- EEsof Licensing Tools installer can hang on systems with McAfee LiveSafe installed and running the default firewall settings.
Workaround: Prior to installing EEsof Licensing Tools, temporarily turn off the McAfee LiveSafe firewall.
- Licensing setup steps on systems with McAfee LiveSafe installed can fail.
Workaround: Under the McAfee LiveSafe firewall settings, under Port and Settings, allow the use of port 27001 for Imgrd.exe under the EEsof Licensing Tools installation bin directory. Under Internet Connections for Programs, enable Imgrd.exe, aglmmgr.exe and aglmwizard.exe for all devices and turn off monitoring.
- On Windows, EEsof product releases prior to 2014 can have boot time issues with licensing if a newer EEsof product is installed prior to installing the older product. For example, if a users installs Advanced Design System 2017 and then installs Advanced Design systems 2014.01, the user can have boot time errors with ADS 2014.01.
Workaround: For Advanced Design System users, set a system environmental variable named ADS_LICENSE_FILE under the Control Panel/ System, and Security / System / Advanced system settings and under the "environmental variables". Add an System variable named ADS_LICENSE_FILE and the value will be the path to your local license file or the port@host setting for your site.

Removed in GG 2020 (information with references to 2017 updates as suggested by Tom)

- When the same user is running similar simulations from multiple sessions of GoldenGate on the same computer and display—that is, the same User-Display-Host— and if simulations are rerun an extra license may be pulled.
Workaround: Select **Simulation > Stop** in all the GoldenGate sessions to release all the simulator licenses, then rerun the simulations.

Documentation

- GoldenGate online help is not supported on the Google Chrome browser.
Workaround: Use Internet Explorer or Firefox to view GoldenGate documentation.
 If the GoldenGate help does not show any content, throws an error, or does not display any search results.
Workaround: Close the help and delete the contents of the following directory:
 - On Windows 7: C:\Users\ - On Linux: \$HOME/.local/share/Keysight/Help
- GoldenGate QT search does not support [] or {} or any other text using these combinations.

Compatibility table for GoldenGate in ADS

GoldenGate Version	ADS Version
2020 Update 1.2	2021 and later
2020 Update 1.1	2020 Update 1.0 and 2020 Update 1.1
2020 Update 1.0	2020 Update 1.0
2020	2020
	2019 Update 1.0

