

PSpice Advanced Analysis Known Problems and Solutions

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PSpice Advanced Analysis Known Problems and Solutions

PSPice Advanced Analysis Known Problems and Solutions

This Known Problems and Solutions document describes important Cadence Change Requests (CCRs) for Advanced Analysis and tells you how to solve or work around these problems. For information about CCRs that are fixed for this release, see Advanced Analysis¹ Product Notes.

Important: Only known problems and solutions applicable at the time of this release are listed in this document.

Known Problems and Solutions in Advanced Analysis

This section lists the known problems in Advanced Analysis and tells you how to solve or work around these problems.

CCR 153216: Incorrect plot is displayed if the outer sweep variable has a single value

Description: In Parametric Plot analysis if the outer sweep variable has a single value, and it is set as X axis in the plot definition, the correct trace will not be displayed.

Solution: To view the correct plot, turn off the performance analysis from PSPice UI. Then bring up the Add trace dialog, and select the variable defined as Y axis. Next, add the trace.

CCR 174349: Advanced Analysis tools do not run if the csdf option set.

Description: To evaluate expressions, Advanced Analysis tools such as Optimizer, Parametric Plotter, Monte Carlo, and Sensitivity use the data file after every run. Therefore, if the csdf option is set these tools are not able to run.

1. Depending on the license you will either access PSPice Advanced Analysis or PSPice Simulator Advanced Analysis.

Solution: Before running advanced analysis on the design, ensure that the *Save data in the CSDF format (.CSD)* check box, in the Data Collection tab of the Simulation Settings dialog box is clear.

CCR 20199: Fewer data points in Advanced Analysis Optimizer .DAT file

Description: When running an optimization that uses an AC sweep, it is possible for the highest frequency data point to not be written to the .DAT file. As a consequence, a measurement that uses the last data point (highest frequency) will fail to be evaluated.

Solution: Either specify more points (higher resolution) for the AC sweep or increase the highest frequency for the sweep, so that the measurement does not use the highest frequency point.

CCR 23833: Simulation server (Simsrvr) may crash if Advanced Analysis is invoked during pause

Description: Advanced Analysis uses simulation profiles that are set up for the PSPice project. If you run one of these simulation profiles, the status of the simulation will be displayed in the PSPice Simulation Manager. If a simulation profile is Paused and then one of the Advanced Analysis tools is invoked, the Simulation server may crash.

Solution: Before invoking Advanced Analysis, be sure to check that there are no paused simulations in the PSPice Simulation Manager for the circuit. To do this, go to the Windows system tray, which is located in the lower right corner of your computer screen. Double-click the PSPice Simulation Manager icon (hover your mouse over the icon shaped like a yellow square to check the icon name). In the PSPice Simulation Manager window, right-click on any paused simulations, and then choose Stop.

Known Problems and Solutions in Capture-Advanced Analysis and Design Entry HDL -Advanced Analysis Flows

This section lists the important Cadence Change Requests (CCRs) in using Capture or Design Entry HDL with Advanced Analysis and tells you how to solve or work around these problems.

CCR 32518: Smoke analysis: Need to change SOURCE_PACKAGE property value to match IMPLEMENTATION property value if you edit smoke information in a part

If you edit the model for a part placed in your design and change its smoke parameters, you must change the value of the `SOURCE_PACKAGE` property on the part to match the value of the `IMPLEMENTATION` property on the part.

To change the value of the `SOURCE_PACKAGE` property on the part, do the following:

1. Select the part on the schematic page.
2. From the Edit menu, choose Part.
The part editor window appears.
3. From the Options menu, choose Package Properties.
The Edit Part Properties dialog box appears.
4. In the Name text box, enter the name of the model that is specified as the value of the `IMPLEMENTATION` property on the part.
5. Click OK.
6. From the File menu, choose Close.
7. Click Update All in the Save Part Instance message box that appears.

Note: If the value of the `SOURCE_PACKAGE` property is not the same as the value of the `IMPLEMENTATION` property, the modified smoke information will not be used for smoke analysis. Instead, the smoke information from the part library will be used for smoke analysis.

CCR 32420: Changes in device parameters are not being recognized by PSPice Advanced Analysis

Description: This problem occurs when you open a PSPice model from Capture and change its device parameters in Model Editor or change device parameters on a part instance in Capture. When you run PSPice Advanced Analysis, you will notice that the new parameters are not visible.

Solution: From the PSPice menu in Capture, choose Create Netlist, then run Advanced Analysis.