
Virtuoso ADE Environment Variables Reference

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Virtuoso ADE Environment Variables Reference

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Virtuoso ADE Environment Variables Reference

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Virtuoso ADE Environment Variables Reference

Environment Variables

This appendix describes public environment variables that control the characteristics of the Analog Design Environment (ADE). You can customize the operation and behavior of Analog Design Environment products by changing the value of a particular environment variable.

This appendix lists environment variables belonging to the following products:

- [adexl.setupdb](#)
- [adexl.test](#)
- [adexl.testEditor](#)
- [adexl.simulation](#)
- [adexl.distribute](#)
- [adexl.monte](#)
- [adexl.historyNamePrefix](#)
- [adexl.icrpStartup](#)
- [adexl.results](#)
- [adexl.gui](#)
- [adexl.cpupdtr](#)
- [adexl.datasheet](#)
- [asimenv](#)
- [asimenv](#)
- [asimenv.startup](#)
- [adexl.plotting](#)
- [asimenv.plotting](#)
- [ADE Simulation Environment](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

- [ADE XL](#)
- [AMS](#)
- [ams.envOpts](#)
- [Calculator](#)
- [Distributed Processing](#)
- [Environment Variables for Advanced Run Modes](#)
- [HspiceD](#)
- [Analysis](#)
- [Spectre](#)
- [Ultrasim](#)

The appendix also provides you a list of deprecated environment variables.

Licensing Requirements

The license number required for ADE L is `Analog_Design_Environment_L`. One ADE L feature license is required for one User, Display and Host (UHD) session of ADE L.

You can also set ADE L to be your default application by selecting *File - Set Default Application* and ensuring that ADE L is set as the default for the listed scenario options. For more information on setting a default application see, [Virtuoso Design Environment User Guide](#).

For more information on licensing and related information, see:

- [Obtaining Licences in Virtuoso Design Environment User Guide](#)
- [Cadence Workspaces in Virtuoso Design Environment User Guide](#)
- [Virtuoso Software Licensing and Configuration User Guide](#)

adexl.setupdb

- [loadSetupToActiveAlsoViewsResults](#) on page 24
- [saveDir](#)
- [percentageForNearSpec](#)
- [useNMPForMapping](#) on page 27

Virtuoso ADE Environment Variables Reference

Environment Variables

loadSetupToActiveAlsoViewsResults

```
adexl.setupdb loadSetupToActiveAlsoViewsResults boolean { t | nil }
```

Description

Specifies if the *Load Setup To Active* command should display the results in addition to loading the setup details from a history.

The valid values are:

- `t`: The Load Setup To Active command displays the results in addition to loading the setup details from a history.

This is the default value.

- `nil`: The Load Setup To Active command only loads the setup details from a history and does not show results.

By default, this tool loads the results of a history while loading the setup details. When the results are large, loading them takes a lot of time. Setting this variable to `nil` loads only the setup details.

GUI Equivalent

None

Examples

```
envGetVal("adexl.setupdb" "loadSetupToActiveAlsoViewsResults")
envSetVal("adexl.setupdb" "loadSetupToActiveAlsoViewsResults" 'boolean nil)
```


Virtuoso ADE Environment Variables Reference

Environment Variables

saveDir

```
adexl.setupdb saveDir string "saveDirpath"
```

Description

Specifies where you want the program to write the setup database file.

If you do not specify a file path or if the path you specify is not valid, the program writes the setup database file to the maestro view. If your design library is set up as read-only, you can use this environment variable to specify a writable location.

GUI Equivalent

None

Examples

```
envGetVal("adexl.setupdb" "saveDir string")  
envSetVal("adexl.setupdb" "saveDir string" "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

percentageForNearSpec

```
adexl.setupdb percentageForNearSpec int percentageValue
```

Description

Specifies the percentage value based on which the *near* status is displayed in the *Pass/Fail* column of the *Results* table. The status is set to near when one or more measured values for an output are no more than the percentage value outside the target value of the specification.

The default value is 10.

The valid value is an integer between than 0 and 99.

Note: If set to 0, only the pass or fail status is displayed in the Pass/Fail column on the Results tab.

GUI Equivalent

None

Examples

```
envGetVal("adexl.setupdb" "percentageForNearSpec")
envSetVal("adexl.setupdb" "percentageForNearSpec" 'int 20)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

useNMPForMapping

```
adexl.setupdb useNMPForMapping boolean { t | nil }
```

Description

Specifies whether nmp-based name mapping scheme must be used for naming files created by ADE XL and ADE GXL.

The valid values are:

- `t`: Uses nmp-based name mapping scheme for naming files.

Only the files in views that were created when this variable is set to `t` will have names assigned using the nmp-based name mapping scheme. Files in views that were created when this variable is not set or set to `nil`, will continue to be named using the default name mapping scheme.

- `nil`: Uses the default name mapping scheme for naming files.

This is the default value.

Note: Cadence recommends setting this environment variable to `t` if you are using a design management system.

GUI Equivalent

None

Examples

```
envGetVal("adexl.setupdb" "useNMPForMapping")  
envSetVal("adexl.setupdb" "useNMPForMapping" 'boolean t)
```

adexl.test

- [autoCopyCellviewVars](#) on page 29
- [autoPromoteVarsToGlobal](#) on page 30
- [checkForUnsavedViewsUponRun](#) on page 31
- [checkForUnsavedViewsUponRun](#) on page 31
- [debugDataDir](#) on page 33
- [initiallyAddNameUniqifier](#) on page 34

Virtuoso ADE Environment Variables Reference

Environment Variables

autoCopyCellviewVars

```
adexl.test autoCopyCellviewVars boolean { t | nil }
```

Description

Controls copying of new design variables and new values for existing design variables from the design associated with a test when you open an maestro view or add a test in this tool.

The valid values are:

- **t**: Automatically copies design variables from the design associated with a test when you open a maestro view or add tests in a maestro view.
- **nil**: Disables the automatic copying of design variables when you open an maestro view or add tests in an maestro view.

This is the default value.

You can do one of the following to manually copy new design variables and new values for existing design variables from the design associated with a test:

- ☐ On the *Variables* tab of the Variables and Parameters pane, right-click the test and choose *Copy from Cellview*.
- ☐ In an expanded test tree on the Data View assistant, right-click a design variable and choose *Copy from Cellview*.

GUI Equivalent

None

Examples

```
envGetVal("adexl.test" "autoCopyCellviewVars")  
envSetVal("adexl.test" "autoCopyCellviewVars" 'boolean t)
```

Related Topics

[Data View](#)

[Variables and Parameters](#)

autoPromoteVarsToGlobal

```
adexl.test autoPromoteVarsToGlobal boolean { t | nil }
```

Description

Controls whether design variables are automatically added as global variables on the Data View assistant and on the *Variables* tab of the Variables and Parameters pane.

The valid values are:

- **t**: All design variables are automatically added as global variables in the *Global Variables* tree on the Data View assistant and the *Variables* tab of the Variables and Parameters pane.

This is the default value.

- **nil**: Disables the automatic addition of design variables as global variables.

GUI Equivalent

None:

Examples

```
envGetVal("adexl.test" "autoPromoteVarsToGlobal")  
envSetVal("adexl.test" "autoPromoteVarsToGlobal" 'boolean nil)
```

Related Topics

Data View

Variables and Parameters

Virtuoso ADE Environment Variables Reference

Environment Variables

checkForUnsavedViewsUponRun

```
adexl.test checkForUnsavedViewsUponRun boolean { t | nil }
```

Description

Specifies whether unsaved design views should be checked before running simulations.

The valid values are:

- `t`: Checks for unsaved design views before running simulations.
This is the default value.
- `nil`: Checks for unsaved design views are deferred until netlisting.

GUI Equivalent

None

Examples

```
envGetVal("adexl.test" "checkForUnsavedViewsUponRun")
```

```
envSetVal("adexl.test" "checkForUnsavedViewsUponRun" 'boolean nil)
```

checkForNewCellviewVarsUponRun

```
adexl.test checkForNewCellviewVarsUponRun cyclic { "Full" | "No" |  
    "SimInfoParameters" }
```

Description

Controls the check for new design variables before running simulations in the schematic hierarchy.

The valid values are:

- **Full**: Checks for all new design variables before running simulations.
This is the default value.
- **No**: Checks for new design variables is deferred until netlisting. This helps in reducing the netlisting time when the simulation hierarchy contains large number of instances.
- **SimInfoParameters**: Checks for only those variables that are defined in the CDF `simInfo` section and are related to netlisting or simulation.

GUI Equivalent

None

Examples

```
envGetVal("adexl.test" "checkForNewCellviewVarsUponRun")  
envSetVal("adexl.test" "checkForNewCellviewVarsUponRun" 'cyclic "No")  
envSetVal("adexl.test" "checkForNewCellviewVarsUponRun" 'cyclic  
"SimInfoParameters")
```


Virtuoso ADE Environment Variables Reference

Environment Variables

debugDataDir

```
adexl.test debugDataDir string "saveResults"
```

Description

Controls where to save results for the simulations run from ADE XL Test Editor.

GUI Equivalent

None

Examples

```
envGetVal("adexl.test" "debugDataDir")  
envSetVal("adexl.test" "debugDataDir" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

initiallyAddNameUniqifier

```
adexl.test initiallyAddNameUniqifier boolean { t | nil }
```

Description

Appends a sequence number to the end of test name to make it unique.

When you create a new test, ADE XL provides a name to the test by using a default format. If the `initiallyAddNameUniqifier` environment variable is set to `t`, the tool appends a sequence number to it to make it unique.

The valid values are:

- `t`: Appends a unique number to the test name.
This is the default value.
- `nil`: Does not append a unique number to the test name.

GUI Equivalent

None

Examples

```
envGetVal("adexl.test" "initiallyAddNameUniqifier")  
envSetVal("adexl.test" "initiallyAddNameUniqifier" 'boolean nil)
```

adexl.testEditor

- adexlTestEditorSetupValidateMsg
- showAllMenus

Virtuoso ADE Environment Variables Reference

Environment Variables

adexlTestEditorSetupValidateMsg

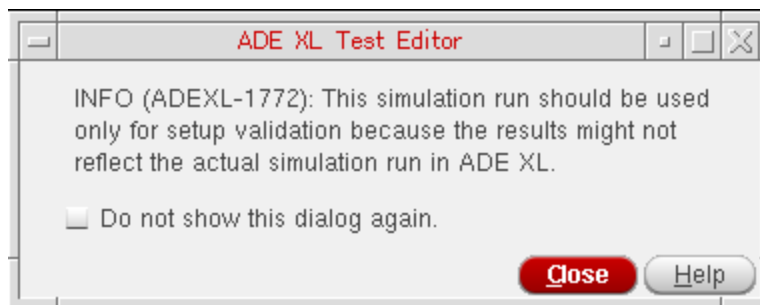
```
adexl.testEditor adexlTestEditorSetupValidateMsg boolean { t | nil }
```

Description

Controls whether to display the following message when a debug test run is started from the ADE XL Test Editor.

The valid values are:

- `t`: Displays the information message when a debug test run is started.
This is the default value.
- `nil`: Does not display the information message when a debug test run is started.



GUI Equivalent

None

Examples

```
envGetVal("adexl.testEditor" "adexlTestEditorSetupValidateMsg")  
envSetVal("adexl.testEditor" "adexlTestEditorSetupValidateMsg" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

showAllMenus

```
adexl.testEditor showAllMenus boolean { t | nil }
```

Description

The ADE XL Test Editor window is a customized version of the Virtuoso Analog Design Environment L (ADE L) session window. By default, all ADE L menus, except the custom menus, are displayed in the ADE XL Test Editor window. Set this environment variable to `nil` to display only the ADE XL specific menus.

The valid values are:

- `t`: Displays all ADE L menus, except the custom menus, in this tool Test Editor window.
This is the default value.
- `nil`: Displays only the ADE XL-specific menus in this tool Test Editor window.

GUI Equivalent

None

Examples

```
envGetVal("adexl.testEditor" "showAllMenus")  
envSetVal("adexl.testEditor" "showAllMenus" 'boolean nil)
```

Related Topics

[Opening the Test Editor Window](#)

adexl.simulation

- [autoDetectNetlistProcs](#) on page 40
- [checkInstanceBindings](#) on page 41
- [createCompositeSimLogFileWhenSimCountFewerThan](#) on page 42
- [createRunLogForSweepsCorners](#) on page 43
- [createRunLogWhenSimsFewerThan](#) on page 45
- [diskLowWarningInterval](#) on page 46
- [haltCurrentRunAfterPreRunTrigger](#) on page 47
- [envSetVal\("adexl.simulation" "haltCurrentRunAfterPreRunTrigger" 'boolean t\)](#) on page 47
- [ignoreDesignChangesDuringRun](#) on page 48
- [ignoredLibsForDUT](#) on page 49
- [includeStatementForNetlistInSimInputFile](#) on page 50
- [matlabResultTimeout](#) on page 51
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- [moveConfigsToNetlistDir](#) on page 53
- [overrideNetlistProcDetection](#) on page 54
- [overwriteHistory](#) on page 55
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- [retainNetlistsOverwriteHistory](#) on page 57
- [saveBestNDesignPoints](#) on page 58
- [saveBestPointsStrategy](#) on page 59
- [saveLastNHistoryEntries](#) on page 60
- [saveNetlistData](#) on page 61
- [saveRawData](#) on page 62
- [saveRawDataMode](#) on page 63
- [setCurrentRunPostSimulation](#) on page 64

Virtuoso ADE Environment Variables Reference

Environment Variables

- [showErrorForNonExistingVariables](#) on page 65
- [showWarningForReferenceNetlist](#) on page 66
- [singleNetlistForAllPoints](#) on page 67
- [sortVariableValues](#) on page 68
- [warnWhenSimsExceed](#) on page 69

autoDetectNetlistProcs

```
adexl.simulation autoDetectNetlistProcs boolean { t | nil }
```

Description

Controls whether cellviews that use netlist procedures are automatically detected and renetlisted every time the design is netlisted.

The valid values are:

- `t`: Automatically detects cellviews that use netlist procedures and renetlists these cellviews every time the design is netlisted.
- `nil`: Disables the automatic-detection of cellviews that use netlist procedures. These cellviews will not be renetlisted every time the design is netlisted.

This is the default value.

Note: Even if the value is set to `nil`, a cellview that uses netlist procedures is renetlisted if parameters are specified in the *Parameters* tab of the *Variables* and *Parameters* pane for an instance of the cellview.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "autoDetectNetlistProcs")
envSetVal("adexl.simulation" "autoDetectNetlistProcs" 'boolean t)
```

Related Topics

[overrideNetlistProcDetection](#)

[Variables and Parameters](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

checkInstanceBindings

```
adexl.simulation checkInstanceBindings boolean { t | nil }
```

Description

If config sweeps are used in the simulation setup, ADE Assembler checks for instance bindings in the Hierarchy Editor. If the instance or occurrence bindings in the config view conflict with the config sweeps, the tool displays a message prompt with a list of those instances and seeking confirmation whether the tool should clear the bindings in the config view. When this variable is set to `nil`, this check is not run, but the netlist may not be correct in that case.

The valid values are:

- `t`: Before running a simulation, ADE Assembler runs a check to identify instance or occurrence bindings in the config view that conflict with the config sweeps.
- `nil`: The check is not run.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "checkInstanceBindings")  
envSetVal("adexl.simulation" "checkInstanceBindings" 'boolean t)
```

createCompositeSimLogFileWhenSimCountFewerThan

```
adexl.simulation createCompositeSimLogFileWhenSimCountFewerThan int  
numberOfSimulations
```

Description

By default, ADE XL creates a composite output log if there are upto 100 points for which simulations are to be run. However, if the number of data points is notably large, a lot of disk space and time is taken to create and save the composite log. In such cases, you can use this variable to specify the maximum number of simulations up to which ADE XL should save a composite output log file for the outputs.

The specified value must be a positive value between 0 and 100000.

The default value is 101.

Note: If the composite output log file is not saved, the *Output Log* command in the context-sensitive menu for an output is not enabled.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "createCompositeSimLogFileWhenSimCountFewerThan")  
envSetVal("adexl.simulation" "createCompositeSimLogFileWhenSimCountFewerThan"  
'int 45)
```

createRunLogForSweepsCorners

```
adexl.simulation createRunLogForSweepsCorners cyclic { "Always" |  
    "ManualTuningOrSimLimited" | "WhenMultipleDesignPoints" | "SimLimited" |  
    "OnlyInManualTuning" | "Never" }
```

Description

Specifies if the run log created for the *Single Run, Sweeps and Corners* run mode needs to include the details about the best design point. Adding this information in the run log takes time. Therefore, by default, ADE XL writes the best design point for this run mode only in the following two scenarios:

- When the *Single Run, Sweeps and Corners* simulation is run as part of the *Manual Tuning* run mode that aims at finding the best design point.
- When the number of points in the *Single Run, Sweeps and Corners* run mode is less than the limit specified by the `createRunLogWhenSimsFewerThan` environment variable.

However, if required, you can choose to include this information in other scenarios as well. The valid values are:

- **Always:** Always appends the details of the best design point in the run log for *Single Run, Sweeps and Corners* run mode.
- **ManualTuningOrSimLimited:** Appends the details of the best design point only when the *Single Run, Sweeps and Corners* run mode is run as part of the Manual Tuning run mode or when the number of points is less than the count specified by `createRunLogWhenSimsFewerThan` environment variable.

This is the default value.

- **WhenMultipleDesignPoints:** Appends the details of the best design point only when the simulation includes multiple design points. This information is not added to the run log for a simulation with a single design point.
- **SimLimited:** Appends the details of the best design point if the number of points is less than the count specified by `createRunLogWhenSimsFewerThan` environment variable.
- **OnlyInManualTuning:** Appends the details of the best design point only when the *Single Run, Sweeps and Corners* run mode is run as part of the Manual Tuning run.
- **Never:** Never adds the details of the best design point to the run log for the *Single Run, Sweeps and Corners* run mode.

Virtuoso ADE Environment Variables Reference

Environment Variables

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "createRunLogForSweepsCorners")
envSetVal("adexl.simulation" "createRunLogForSweepsCorners" 'cyclic "Always")
envSetVal("adexl.simulation" "createRunLogForSweepsCorners" 'cyclic
"ManualTuningOrSimLimited")
envSetVal("adexl.simulation" "createRunLogForSweepsCorners" 'cyclic
"WhenMultipleDesignPoints")
```

Related Topics

Viewing the Run Log for a Particular Checkpoint

[createRunLogWhenSimsFewerThan](#)

createRunLogWhenSimsFewerThan

`adexl.simulation createRunLogWhenSimsFewerThan int maxSimulationPoints`

Description

Specifies the maximum number of simulation points up to which the details of the best design point are appended to the run log for the *Single Run*, *Sweeps* and *Corners* run. ADE XL checks for this limit when the `createRunLogForSweepsCorners` environment variable is set to `ManualTuningOrSimLimited` or `SimLimited`.

The valid value is a positive integer value between 0 and 100000.

The default value is 101.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "createRunLogWhenSimsFewerThan")  
envSetVal("adexl.simulation" "createRunLogWhenSimsFewerThan" 'int 50)
```

Related Topics

[Viewing the Run Log for a Particular Checkpoint](#)

[createRunLogForSweepsCorners](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

diskLowWarningInterval

```
adexl.simulation diskLowWarningInterval int timeInterval
```

Description

Sets the time interval, in milliseconds, when ADE XL must display a warning regarding low disk space after it has finished running the first run point.

The valid value is a positive integer value between 0 and 100000.

The default value is 100.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "diskLowWarningInterval")
envSetVal("adexl.simulation" "diskLowWarningInterval" 'int 45)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

haltCurrentRunAfterPreRunTrigger

```
adexl.simulation haltCurrentRunAfterPreRunTrigger boolean { t | nil }
```

Description

Halts the current simulation run after the preRun event occurs. When the preRun event is triggered, you can perform some checks before starting a simulation and set this environment variable to stop the simulation, if required.

The valid values are:

- `t`: Halts the current simulation run after the preRun trigger
- `nil`: Continues with the current simulation run.

This is the default value.

For example, if you need to ensure that simulations are not run locally. Instead, they should run on remote computers only, you can use this environment variable, as shown in the code below, to halt the simulation if the distribution method is set to `Local`.

```
; define a callback function in .cdsinit
(define (RunStopper sessionName sdbHandle modeName testName)
  (when ((axlGetAttachedJobPolicy)->distributionmethod == "Local")
    (printf "Local distribution method used; terminating simulation\n")
    (envSetVal "adexl.simulation" "haltCurrentRunAfterPreRunTrigger" 'boolean t))
)

; Connect the callback with the event
(define (connect_handlers session_name)
  (axlSessionConnect session_name "preRun" 'RunStopper))

; Register the connected callback to connect the triggers on ADE XL session start
(axlSessionRegisterCreationCallback 'connect_handlers)
```

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "haltCurrentRunAfterPreRunTrigger")
envSetVal("adexl.simulation" "haltCurrentRunAfterPreRunTrigger" 'boolean t)
```

ignoreDesignChangesDuringRun

```
adexl.simulation ignoreDesignChangesDuringRun boolean { t | nil }
```

Description

Specifies whether ADE XL needs to ignore any design changes in the simulation run that is already running.

It is recommended not to set this variable in CIW. This ensures that it is consistent in Virtuoso and remote simulation processes.

The valid values are:

- **t**: Ignores the design changes in the simulation run that is in progress.
- **nil**: ADE XL may consider the design changes for the netlist creation and simulation of the pending design points in the current run.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "ignoreDesignChangesDuringRun")
envSetVal("adexl.simulation" "ignoreDesignChangesDuringRun" 'boolean t)
```

Related Topics

[Ignoring Design Changes During Run](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

ignoredLibsForDUT

```
adexl.simulation ignoredLibsForDUT string "libraryNameList"
```

Description

Specifies the list of libraries that should not be displayed in the *Library* drop-down list in the Design Under Test form. Disabling the display of unnecessary libraries makes it easier to select the correct design under test library for Monte Carlo analysis.

The valid value is a list of library names separated by spaces. For example, specify the following in the `.cdsenv` file to ignore the libraries named `lib5` and `lib8`:

```
adexl.simulation ignoredLibsForDUT string "lib5 lib8"
```

Note: By default, the libraries `analogLib`, `cdsDefTechLib`, and `basic` are not displayed in the Library drop-down list.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "ignoredLibsForDUT")
envSetVal("adexl.simulation" "ignoredLibsForDUT" 'string "")
```

Related Topics

[Design Under Test](#)

includeStatementForNetlistInSimInputFile

```
adexl.simulation includeStatementForNetlistInSimInputFile boolean { t | nil }
```

Description

Specifies how to include netlist file in the `input.scs` file.

This variable is ignored when the `ignoreDesignChangesDuringRun` environment variable is set to `t`.

The valid values are:

- `t`: Includes the netlist file by using the following statement in the `input.scs` file:

```
include "netlist"
```

This helps in saving space consumed by the netlist directory because the netlist is directly included from the netlist file instead of copying the long netlist in the `input.scs` file.

- `nil`: Appends the complete netlist to `input.scs` file.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "includeStatementForNetlistInSimInputFile")
envSetVal("adexl.simulation" "includeStatementForNetlistInSimInputFile" 'boolean
t)
```

Related Topics

[ignoreDesignChangesDuringRun](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

matlabResultTimeout

`adexl.simulation matlabResultTimeout int timeInterval`

Description

The time in seconds, for which ADE XL will wait after issuing a MATLAB command until a prompt is returned.

The valid value is an integer value between 1 and 10000.

The default value is 10.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "matlabResultTimeout")
envSetVal("adexl.simulation" "matlabResultTimeout" 'int "20")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

matlabStartTimeout

`adexl.simulation matlabStartTimeout int timeInterval`

Description

The time, in seconds, for which ADE XL waits for the script to start evaluation.

The valid value is an integer value between 1 and 10000.

The default value is 60.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "matlabStartTimeout")  
envSetVal("adexl.simulation" "matlabStartTimeout" 'int 80)
```

moveConfigsToNetlistDir

```
adexl.simulation moveConfigsToNetlistDir boolean { t | nil }
```

Description

Specifies if the config views generated when using CONFIG global variables are to be saved in the netlist directory.

The valid values are:

- **t**: The generated configs are moved to the corresponding netlist directory.
This is the default value.
- **nil**: The config information generated for every data point is saved in the *<library>/<cell>* directory structure. This option is helpful for debugging purposes as the config views saved in the design hierarchy can be viewed in Virtuoso Hierarchy Editor. However, the view list will become notably large as it will include the config view for all the data points.

To ensure that the setting is available on the ICRP, set this variable either in `.cdsinit` or in `.cdsenv`. This will not be applied if set from CIW.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "moveConfigsToNetlistDir")
envSetVal("adexl.simulation" "moveConfigsToNetlistDir" 'boolean nil)
```

Related Topics

[ICRP](#)

overrideNetlistProcDetection

```
adexl.simulation overrideNetlistProcDetection string "{ \"yes\" | \"no\" | \" \" }"
```

Description

Controls how messages are displayed when the `autoDetectNetlistProcs` environment variable is set to `t` and the netlisting mode for incremental simulation runs is set to *Use reference netlist* option in the Reference History form.

The valid values are:

- `" "`: Displays a message box that indicates that auto-detection and execution of netlist procedures is disabled because the netlisting mode for incremental simulation runs is set to *Use reference netlist*, and prompts you to continue or cancel the incremental simulation run.

This is the default value.

- `yes`: Displays a warning in the CIW that indicates that auto-detection and execution of netlist procedures is disabled because the netlisting mode for incremental simulation runs is set to *Use reference netlist*, and continues with the incremental simulation run.
- `no`: Displays a message box that indicates that auto-detection and execution of netlist procedures is disabled because the netlisting mode for incremental simulation runs is set to *Use reference netlist* option, and requires you to either set the netlisting mode in the Reference History form to *New*, or set the `autoDetectNetlistProcs` environment variable to `nil`.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "overrideNetlistProcDetection")
envSetVal("adexl.simulation" "overrideNetlistProcDetection" 'string "yes")
```

Related Topics

Reference History

autoDetectNetlistProcs

overwriteHistory

```
adexl.simulation overwriteHistory boolean { t | nil }
```

Description

Controls whether a specified history item is overwritten for subsequent simulation runs.

The valid values are:

- `t`: Enables overwriting the specified history item for subsequent simulation runs.
The value of this variable is automatically set to `t` if you specify `1` as the value for the `saveLastNHistoryEntries` environment variable.
- `nil`: Disables overwriting the specified history item for subsequent simulation runs.
A new history item is created for each simulation run.
This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "overwriteHistory")  
envSetVal("adexl.simulation" "overwriteHistory" 'boolean t)
```

Related Topics

[overwriteHistoryName](#) on page 56

[retainNetlistsOverwriteHistory](#) on page 57

[Overwriting a History Item during Subsequent Simulation Runs](#)

[saveLastNHistoryEntries](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

overwriteHistoryName

```
adexl.simulation overwriteHistoryName string "historyItemName"
```

Description

Specifies the name of the history item to be overwritten for subsequent simulation runs.

The `overwriteHistoryName` variable impacts only the newly created adexl views. The existing views will retain the values they have in the active setup.

The default value is `Next History Run` which indicates that the next history item that is created should be overwritten for subsequent simulation runs. The name of any existing history, for example: `Interactive.3`

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "overwriteHistoryName")
envSetVal("adexl.simulation" "overwriteHistoryName" 'string "Interactive.3")
```

Related Topics

[overwriteHistory](#) on page 55

[retainNetlistsOverwriteHistory](#) on page 57

[Overwriting a History Item during Subsequent Simulation Runs](#)

retainNetlistsOverwriteHistory

```
adexl.simulation retainNetlistsOverwriteHistory boolean { t | nil }
```

Description

Controls whether the netlist information in a history item that is specified to be overwritten is retained for subsequent simulation runs.

The valid values are:

- **t**: Retains the netlist information in the history item for subsequent simulation runs.
- **nil**: Deletes the netlist information before each subsequent simulation run.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "retainNetlistsOverwriteHistory")
envSetVal("adexl.simulation" "retainNetlistsOverwriteHistory" 'boolean t)
```

Related Topics

[overwriteHistory](#) on page 55

[overwriteHistoryName](#) on page 56

[Overwriting a History Item during Subsequent Simulation Runs](#)

saveBestNDesignPoints

`adexl.simulation saveBestNDesignPoints int defaultNumber`

Description

Specifies the default number of best design points for which to save data when the *Save best* radio button is selected in the *Data Points per Optimization Run* group box on the Save Options form that appears when you choose *Options – Save* in the ADE GXL environment. The valid value is an integer value greater than 10.

The default value is 10.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "saveBestNDesignPoints")
envSetVal("adexl.simulation" "saveBestNDesignPoints" 'int 20)
```

Related Topics

[saveBestPointsStrategy](#)

[Save Options](#)

saveBestPointsStrategy

```
adexl.simulation saveBestPointsStrategy cyclic { "Save best" | "Save all design  
points" }
```

Description

Specifies which radio button is selected in the *Design Points per Optimization Run* group box on the Save Options form that appears when you choose *Options – Save* in the ADE GXL environment.

The valid values are:

- `Save all design points`: Saves data for all design points.
- `Save best`: Saves data for the specified number of best design points; use `saveBestNDesignPoints` to specify the number of points.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "saveBestPointsStrategy")  
envSetVal("adexl.simulation" "saveBestPointsStrategy" 'cyclic "Save all design  
points")
```

Related Topics

[Save Options](#)

[saveBestNDesignPoints](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

saveLastNHistoryEntries

`adexl.simulation saveLastNHistoryEntries int numberOfHistoryEntries`

Description

Specifies the number of history entries (checkpoints) to save above and beyond any locked entries.

The valid value is an integer value greater than 0 .

The default value is 10.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "saveLastNHistoryEntries")
envSetVal("adexl.simulation" "saveLastNHistoryEntries" 'int 2)
```

Related Topics

[Specifying Options for Saving Simulation Results](#)

[locked entries](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

saveNetlistData

```
adexl.simulation saveNetlistData cyclic { "Save all points" | "Save none" }
```

Description

Specifies whether to preserve the netlist data generated during a simulation run. This is similar to the *Save Netlists* check box in the Save Options form that appears when you choose *Options – Save* in the tool environment.

The valid values are:

- **Save all points:** Preserves netlist data.
This is the default value.
- **Save none:** Deletes netlist data after the simulation run is complete.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "saveNetlistData")  
envSetVal("adexl.simulation" "saveNetlistData" 'cyclic "Save none")
```

Related Topics

[Specifying Options for Saving Simulation Results](#)

[Save Options](#)

saveRawData

```
adexl.simulation saveRawData cyclic { "Save all points" | "Save none" }
```

Description

Specifies whether to preserve the simulation data generated during a simulation run. This is similar to the *Save simulation* check box in the Save Options form that appears when you choose *Options – Save* in the tool environment.

The valid values are:

- **Save all points:** Preserves simulation data.
This is the default value.
- **Save none:** Deletes simulation data after the simulation run is complete.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "saveRawData")
envSetVal("adexl.simulation" "saveRawData" 'cyclic "Save all points")
envSetVal("adexl.simulation" "saveRawData" 'cyclic "Save none")
```

Related Topics

[Specifying Options for Saving Simulation Results](#)

[Save Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

saveRawDataMode

```
adexl.simulation saveRawDataMode cyclic { "All" | "Quick Plot Data Only" }
```

Description

Specifies whether to save all the simulation data or only the quick plot data.

The valid values are:

- **All:** Preserves all the simulation data.
This is the default value.
- **Quick Plot Data Only:** Preserves only the quick plot data.

This variable works only if `saveRawData` is set to save all points.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "saveRawData")
envSetVal("adexl.simulation" "saveRawData" 'cyclic "All")
envSetVal("adexl.simulation" "saveRawData" 'cyclic "Quick Plot Data Only")
```

Related Topics

[Specifying Options for Saving Simulation Results](#)

[saveRawData](#)

setCurrentRunPostSimulation

```
adexl.simulation setCurrentRunPostSimulation boolean { t | nil }
```

Description

Specifies if ADE XL should internally open the PSF data for the last run simulation. By default, this variable is set to `nil` and ADE XL does not open the psf data after running the simulation. The tool explicitly opens it when you perform post processing operations, such as plotting of graphs. This improves the performance in case of large number of sweeps and corners.

If you have any scripts that plot data after running simulation, set this variable to `t` so that the results are readily available.

The valid values are:

- `t`: Opens the PSF data for the last run simulation.
- `nil`: Does not open the PSF data.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "setCurrentRunPostSimulation")  
envSetVal("adexl.simulation" "setCurrentRunPostSimulation" 'boolean t)
```


showErrorForNonExistingVariables

```
adexl.simulation showErrorForNonExistingVariables boolean { t | nil }
```

Description

Checks whether before running a simulation, ADE XL should match the design variables in the Corners Setup form with the list of global variables in the active setup. If the setup for corners uses any design variable that is not present in the active ADE XL setup, simulation is not run and an error is displayed suggesting you to either add that design variable in the active setup or to remove it from the Corners Setup form.

The valid values are:

- `t`: Checks for the presence of non-existing variables in the setup for corners.
- `nil`: Does not check for the presence of non-existing variables in the setup for corners. This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "showErrorForNonExistingVariables")  
envSetVal("adexl.simulation" "showErrorForNonExistingVariables" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

showWarningForReferenceNetlist

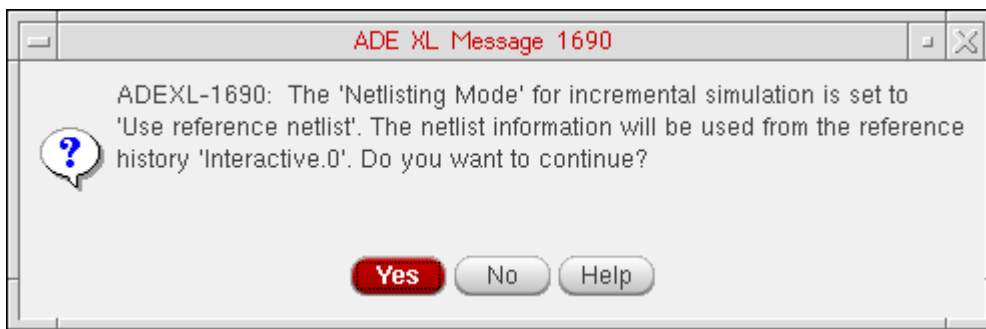
```
adexl.simulation showWarningForReferenceNetlist boolean { t | nil }
```

Description

Controls whether the following message box is displayed when you run an incremental simulation with the netlisting mode set to *Use reference netlist* in the Reference History form.

The valid values are:

- **t**: Enables the display of the message box when you run an incremental simulation.
This is the default value.
- **nil**: Disables the display of the message box when you run an incremental simulation.



GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "showWarningForReferenceNetlist")
envSetVal("adexl.simulation" "showWarningForReferenceNetlist" 'boolean nil)
```

Related Topics

[Running an Incremental Simulation](#)

[Reference History](#)

singleNetlistForAllPoints

```
adexl.simulation singleNetlistForAllPoints boolean { t | nil }
```

Description

By default, ADE XL creates and saves a separate netlist file in the results directory for every design point. For large designs, this results in consuming huge space with same netlist file being saved in multiple directories.

This variable specifies that a common netlist is to be used for all the design points. When this variable is set, a single netlist file is created and a link to that is created in all the point directories. This helps in minimizing the size of the simulation directory.

The valid values are:

- `t`: Specifies that only a single netlist will be created for all points.
- `nil`: Creates a separate netlist for each point.

This is the default value.

Note: This variable is ignored in the following cases:

- ☐ When the `ignoreDesignChangesDuringRun` environment variable is set to `t`.
- ☐ When device parameterization is enabled.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "singleNetlistForAllPoints")
```

```
envSetVal("adexl.simulation" "singleNetlistForAllPoints" 'boolean t)
```

Related Topics

[ignoreDesignChangesDuringRun](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

sortVariableValues

```
adexl.simulation sortVariableValues boolean { t | nil }
```

Description

By default, while running a simulation, the values of variables, parameters, and corner definitions are saved in the order they were specified. It maintains the same order while saving and displaying the results.

To sort these values in ascending order, in the *Results* tab, set this variable to `t`.

The valid values are:

- `t`: Sorts the values of variables, parameters, and corner definitions in ascending order, in the *Results* tab.
- `nil`: Displays the values of variables, parameters, and corner definitions in the *Results* tab, in the user-specified order.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "sortVariableValues")
envSetVal("adexl.simulation" "sortVariableValues" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

warnWhenSimsExceed

`adexl.simulation warnWhenSimsExceed int maxNumberOfSimulations`

Description

Specifies the maximum number of simulations after which the tool displays a message informing about the exceeding the limit and seeking confirmation to proceed with the run.

The valid value is a integer value between 0 to 100000. If 0, the warning message will not be displayed irrespective of the number of simulations.

The default value is 100.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "warnWhenSimsExceed")
envSetVal("adexl.simulation" "warnWhenSimsExceed" 'int 400)
```

adexl.distribute

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Virtuoso ADE Environment Variables Reference

Environment Variables

continueICRPRunOnAbruptGUIExit

```
adexl.distribute continueICRPRunOnAbruptGUIExit boolean { t | nil }
```

Description

Enables continuation and completion of in-process simulations after the ADE XL GUI exits abruptly.

The valid values are:

- `t`: If the ADE XL GUI exits abruptly, keeps the in-process simulations active. After completion of these simulations, saves their results in the results database.
- `nil`: Stops the in-process simulations immediately after the ADE XL GUI exits.

This is the default value.

Note: This environment variable cannot be used if the specified distribution method in the job policy setup is *Command* and the command is interactive. An interactive command waits for the job to complete before returning control to the terminal.

GUI Equivalent

None

Examples

```
envGetVal("adexl.distribute" "continueICRPRunOnAbruptGUIExit")
envSetVal("adexl.distribute" "continueICRPRunOnAbruptGUIExit" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

createUniqueLogsDirForICRPLogs

`adexl.distribute createUniqueLogsDirForICRPLogs boolean { t | nil }`

Description

Specifies whether a unique log subdirectory must be created under the `logs_<username>_logs<num>` directory in the Virtuoso working directory. This subdirectory will be used by all the ICRPs started by that Virtuoso process to write their job log files.

By default, this variable is set to `t` and a unique subdirectory is created for each Virtuoso process.

The valid values are:

- `t`: Creates unique subdirectories for each Virtuoso process started from a directory.
This is the default value.
- `nil`: Specifies that all Virtuoso processes share a common subdirectory under the `logs_processID` directory.

GUI Equivalent

None

Examples

```
envGetVal("adexl.distribute" "createUniqueLogsDirForICRPLogs")
envSetVal("adexl.distribute" "createUniqueLogsDirForICRPLogs" 'boolean nil)
```


defaultRunInParallel

```
adexl.distribute defaultRunInParallel boolean { t | nil }
```

Description

Specifies the default option for the *Run in* in the Run Options form that appears when you choose *Options – Run Options* in the ADE XL environment.

The valid values are:

- `t`: Sets *Parallel* as the default option for the *Run in* field in the Run Options form.
- `nil`: Sets *Series* as the default option for the *Run in* field in the Run Options form.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.distribute" "defaultRunInParallel")  
envSetVal("adexl.distribute" "defaultRunInParallel" 'boolean t)
```

Related Topics

[Run Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

defaultPerRunNumJobs

`adexl.distribute defaultPerRunNumJobs int defaultValue`

Description

Specifies a default value for the Specify field in the Run Options form that appears when you choose *Options – Run Options* in the ADE XL environment.

The valid value is a positive integer value.

The default value is -1.

GUI Equivalent

None

Examples

```
envGetVal("adexl.distribute" "defaultPerRunNumJobs")
envSetVal("adexl.distribute" "defaultPerRunNumJobs" 'int 2)
```

Related Topics

[Run Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

enableICRPReconnect

```
adexl.distribute enableICRPReconnect boolean { t | nil }
```

Description

Enables reconnection of an ICRP job with the ADE XL GUI. This variable is useful in scenarios when due to some issues with a remote server running an ICRP job, the DRMS (LSF or SGE) migrates the ICRP to another resource, and reconnects it with the ADE XL GUI using the same job ID.

By default, when the DRMS migrates an ICRP job, the connection between the ADE XL GUI and the ICRP is broken. ADE XL assumes that the ICRP job has exited due to an error. If that job was running a point, ADE XL resubmits that point to another ICRP. In this case, when the original ICRP that was migrated to another resource tries to re-establish the connection, ADE XL ignores it and does not recognize it as a valid ICRP.

When you set the `enableICRPReconnect` environment variable to `t`, ADE XL allows the original ICRP to re-establish the connection and to run the same point again. In this case, the ICRP is considered as a new process and goes through all the states, such as starting, configuring, and evaluating. The in-progress simulations that were earlier running for the points submitted to the original ICRP might run on this new ICRP or some other ICRP that might be available at that time.

The valid values are:

- `t`: Reconnects an ICRP job with the ADE XL GUI.
- `nil`: Does not reconnect ICRP jobs with the ADE XL GUI. Instead, new ICRP jobs are started to submit the points.

This is the default value.

Examples

```
envGetVal("adexl.distribute" "enableICRPReconnect")  
envSetVal("adexl.distribute" "enableICRPReconnect" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

estimateMemoryUnitForFarm

```
adexl.distribute estimateMemoryUnitForFarm cyclic { "B" | "K" | "M" | "G" | "T" }
```

Description

Specifies the unit for displaying the estimated memory usage in a simulation, which will also be an estimation of the memory required for farm machines.

The valid values are:

- B: Units in Byte
- K: Units in Kilobyte
- M: Units in Megabyte.
This is the default value.
- G: Units in Gigabyte
- T: Units in Terabyte

GUI Equivalent

None

Examples

```
envGetVal("adexl.distribute" "estimateMemoryUnitForFarm")
envSetVal("adexl.distribute" "estimateMemoryUnitForFarm" 'cyclic "B"')
envSetVal("adexl.distribute" "estimateMemoryUnitForFarm" 'cyclic "K"')
```

Virtuoso ADE Environment Variables Reference

Environment Variables

generateJobFileOnlyOnError

```
adexl.distribute generateJobFileOnlyOnError boolean { t | nil }
```

Description

Specifies if the job log is to be saved only for jobs with an error or for all the jobs. By default, the job log is saved only when a point fails due to an error.

The valid values are:

- `t`: Saves the job log only for the jobs that fail.
This is the default value.
- `nil`: Saves the job log for all the jobs.

GUI Equivalent

None

Examples

```
envGetVal("adexl.distribute" "generateJobFileOnlyOnError")  
envSetVal("adexl.distribute" "generateJobFileOnlyOnError" 'boolean nil)
```

inferCommandICRPStatusFromProxy

```
adexl.distribute inferCommandICRPStatusFromProxy cyclic { "Always" | "Never" |  
    "GuessFromCommand" }
```

Description

Specifies whether ADE XL should consider the command jobs to be interactive or not so as to infer the ICRP status from the local shell or proxy process.

The valid values are:

- **Always:** Specifies that the job is always interactive.
Use this value when you are sure that every job would be interactive because if it is not, the job distribution might not work correctly.
- **Never:** Specifies that the job is never interactive.
- **GuessFromCommand:** Specifies that the ADE XL must treat the jobs to be interactive only when interactive flags or commands are given.

This is the default value.

ADE XL guesses the known interactive flags or commands only for LSF, SGE, and Network Computer. If you have any other DRMS, ADE XL will not be able to understand whether the jobs are interactive or not. In such case, set this variable to *Always*.

Examples

```
envGetVal("adexl.distribute" "inferCommandICRPStatusFromProxy")  
envSetVal("adexl.distribute" "inferCommandICRPStatusFromProxy" 'cyclic "Always")  
envSetVal("adexl.distribute" "inferCommandICRPStatusFromProxy" 'cyclic "Never")
```

Related Topics

[Specifying a Command for DRMS](#)

isLSFMemSwapHostLimit

```
adexl.distribute isLSFMemSwapHostLimit boolean { t | nil }
```

Description

Sets the memory limit specified in the LSF queue for simulation runs by enabling or disabling the *Memory Host Limit* field on the Job Policy Setup form. The valid value are provided below:

- `t`: Enables the memory limit configured with the LSF queue for the jobs submitted for simulation.

The value of this variable is automatically set to `t` if you select the *Memory Host Limit* check box on the Job Policy Setup form.

- `nil`: Disables the memory limit configured with the LSF queue for the jobs submitted for simulation.

The value of this variable is automatically set to `nil` if you deselect the *Memory Host Limit* check box on the Job Policy Setup form.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.distribute" "isLSFMemSwapHostLimit")
envSetVal("adexl.distribute" "isLSFMemSwapHostLimit" 'boolean t)
```

Related Topics

[Setting Up Run Options](#)

[Job Policy Setup](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

jobFileHeader

```
adexl.distribute jobFileHeader cyclic { "None" | "CIWHeader" | "JobInfo" |  
    "CIWHeaderAndJobInfo" | "Custom" }
```

Description

Specifies what type of header information must be prepended to the Job logs which are saved in the PSF directories for individual points.

The variable `adexl.distribute generateJobFileOnlyOnError` controls whether these individual Job logs are saved for every point, or only for failed points.

The valid values are:

- **None:** Does not include any header information in the log. This is the default value.
- **CIWHeader:** Includes the CIW header.
- **JobInfo:** Writes the values of common environment variables from LSF and SGE.
- **CIWHeaderAndJobInfo:** Includes both, CIW header and job information.
- **Custom:** Calls a user-defined function, `axlCustomJobLogHeader()`. It accepts a disembodied property list as argument, which has the following properties:
 - **CIWHeader:** Contains the header information as a list of strings
 - **JobInfo:** Contains job information as a list of strings

The following example demonstrates how `axlCustomJobLogHeader()` can be used:

```
procedure( axlCustomJobLogHeader( myData )  
println("Anything written to stdout, such as this text, will appear in the job log  
header")  
foreach( x myData->CIWHeader println(x) )  
foreach( x myData->JobInfo println(x) )  
)
```

This example prints the header information similar to what `CIWHeaderAndJobInfo` will do.

GUI Equivalent

None

Virtuoso ADE Environment Variables Reference

Environment Variables

Examples

```
envGetVal("adexl.distribute" "jobFileHeader")  
envSetVal("adexl.distribute" "jobFileHeader" 'cyclic "None")  
envSetVal("adexl.distribute" "jobFileHeader" 'cyclic "CIWHeader")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

jobFileDir

```
adexl.distribute jobFileDir string "directoryPath"
```

Description

Specifies a location where the user logs are saved. By default, the logs are saved in the `logs_<user-name>` directory in the current run directory. The valid value is the path to the directory where you want to save the user logs.

GUI Equivalent

None

Examples

```
envGetVal("adexl.distribute" "jobFileDir")  
envSetVal("adexl.distribute" "jobFileDir" 'string "<dir-path>")
```

useAllLingeringJobs

```
adexl.distribute useAllLingeringJobs boolean { t | nil }
```

Description

Specifies whether idle or unconfigured jobs must be used when simulations runs are run in series.

For example, assume that you have specified that a maximum of five jobs must be used when simulation runs are run in series. You then run two runs in series, with the first run requiring five jobs to complete and the second run requiring three jobs to complete. When the first run is complete, there will be five idle jobs, but the second run requires only three jobs. If `useAllLingeringJobs` is set to `nil` (the default), the second run will use only three jobs and the remaining two idle jobs will timeout according to the specified linger timeout value. If `useAllLingeringJobs` is set to `t`, the second run will use all the five jobs.

The valid values are:

- `t`: Uses idle or unconfigured jobs when simulations are run in series.
- `nil`: Does not use idle or unconfigured jobs when simulations are run in series.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.distribute" "useAllLingeringJobs")
envSetVal("adexl.distribute" "useAllLingeringJobs" 'boolean t)
```

Related Topics

[Setting Up Run Options](#)

[Specifying Job Timeouts](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

maxJobFailPerPolicy

`adexl.distribute maxJobFailPerPolicy int maxJobRestartTime`

Description

Specifies the maximum number of times the application should restart an ICRP job if it fails to start.

An ICRP job may fail to start due to system slowness or long queue for job distribution and as a result, an error message may appear. In such a case, set this environment variable to a large number, say 1000.

The valid value is an integer between 1 to 100000.

The default value is 3.

GUI Equivalent

None

Examples

```
envGetVal("adexl.distribute" "maxJobFailPerPolicy")
envSetVal("adexl.distribute" "maxJobFailPerPolicy" 'int 2)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

maxJobFailPerPolicyInBatch

`adexl.distribute maxJobFailPerPolicyInBatch int maxTimesICRPRestarts`

Description

Specifies the maximum number of times the application should restart an ICRP job if it fails to start. This variable is used in batch mode to ensure that the job retries do not go into an infinite loop.

The valid value is an integer between 1 to 100000.

The default value is 20.

GUI Equivalent

None

Examples

```
envGetVal("adexl.distribute" "maxJobFailPerPolicyInBatch")
envSetVal("adexl.distribute" "maxJobFailPerPolicyInBatch" 'int 30)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

maxIPCJobsLimit

```
adexl.distribute maxIPCJobsLimit int maxTimesJobRun
```

Description

Specifies the maximum number of jobs that can be run at any time during your ADE XL session when the distribution method specified in your job policy is *Command*, *Local* or *Remote-Host* (uses SKILL-IPC).

The valid value is an integer between 1 to 1000000.

The default value is 1000.

Note: This variable is not applicable when the distribution method is *LBS* or *Interface*. Therefore, if you want to run more than the number of jobs specified using this variable, use the `axlAddJobPolicy` or `axlAttachJobPolicy SKILL` function to set the distribution method to *LBS* or *Interface*. In the later case, you also need to provide a custom job interface derived from the `axlJobIntfC` class.

GUI Equivalent

None

Examples

```
envGetVal("adexl.distribute" "maxIPCJobsLimit")  
envSetVal("adexl.distribute" "maxIPCJobsLimit" 'int 10)
```

Related Topics

[Setting Up Job Policies](#)

[SKILL-IPC](#)

[axlAddJobPolicy](#)

[axlAttachJobPolicy](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

maxJobsIsHardLimit

```
adexl.distribute maxJobsIsHardLimit boolean { t | nil }
```

Description

Controls the interaction between the maximum number of jobs specified for simulation runs, and the number of jobs specified in the *Max Jobs* field on the Job Policy Setup form.

The valid values are:

- **t**: Launches only the number of jobs specified in the *Max Jobs* field on the Job Policy Setup form, even if you have specified a greater number of jobs to be used for simulation runs. This is the default value.
- **nil**: Launches the maximum number of jobs specified to be used for simulation runs, even if you have specified a lesser number of jobs in the *Max Jobs* field on the Job Policy Setup form.

GUI Equivalent

None

Examples

```
envGetVal("adexl.distribute" "maxJobsIsHardLimit")
envSetVal("adexl.distribute" "maxJobsIsHardLimit" 'boolean nil)
```

Related Topics

[Setting Up Run Options](#)

[Job Policy Setup](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

maxNFSSyncWait

`adexl.distribute maxNFSSyncWait int maxWaitingTime`

Description

Specifies the maximum time (in seconds) for which ADE Explorer or ADE Assembler must wait for the synchronization of files and directories to complete over a network file system (NFS) before returning an error for expression evaluation or data plotting. This wait time allows the local host, where ADE Explorer or ADE Assembler is running, to get time to view any changes done at the remote host, where the simulation is running, to save a netlist file or to create a new directory for simulation results. The tool checks regularly after a gap of one second until the required file or directory is visible or the maximum time is reached. Specify an integer between 1 and 300.

The default Value is 60.

GUI Equivalent

None

Example

```
envGetVal("adexl.distribute" "maxNFSSyncWait")
envSetVal("adexl.distribute" "maxNFSSyncWait" 'int 30)
```


Virtuoso ADE Environment Variables Reference

Environment Variables

numRetriesOnError

`adexl.distribute numRetriesOnError int maxTimesSimulationSubmit`

Description

Specifies the maximum number of times ADE XL should retry to submit a simulation in case a job fails. By default, ADE XL resubmits a failed simulation once. If it fails again, ADE XL prints the output as `error`.

The valid value is an integer between 0 to 100.

The default value is 1.

There will be no retry in case of a partially successful simulation.

GUI Equivalent

None

Examples

```
envGetVal("adexl.distribute" "numRetriesOnError")
```

```
envSetVal("adexl.distribute" "numRetriesOnError" 'int 2)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

runTimeoutScaleFactor

`adexl.distribute runTimeoutScaleFactor int scaleFactor`

Description

Specifies the scale factor to be used to calculate a scaled run timeout value if the `useAsRunTimeout` environment variable is set to `ScaledFromAvgSimTime` or `ScaledFromMaxSimTime`.

The valid value is an integer between 1 to 1000.

The default value is 6.

GUI Equivalent

None

Examples

```
envGetVal("adexl.distribute" "runTimeoutScaleFactor")
```

```
envSetVal("adexl.distribute" "runTimeoutScaleFactor" 'int 2)
```

Related Topics

`useAsRunTimeout`

`runTimeoutScalingStartsAfterSimCount`

runTimeoutScalingStartsAfterSimCount

`adexl.distribute runTimeoutScalingStartsAfterSimCount int maxSimulationNumber`

Description

Specifies the maximum number of simulations after which the run timeout value is to be scaled. The scale factor specified by `runTimeoutScaleFactor` is used to calculate the scaled timeout value.

The valid value is an integer between 1 to 1000.

The default value is 20.

GUI Equivalent

None

Examples

```
envGetVal("adexl.distribute" "runTimeoutScalingStartsAfterSimCount")
envSetVal("adexl.distribute" "runTimeoutScalingStartsAfterSimCount" 'int 30)
```

Related Topics

[useAsRunTimeout](#)

[runTimeoutScaleFactor](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

useAsRunTimeout

```
adexl.distribute useAsRunTimeout cyclic { "JobPolicyRunTimeoutValue" |  
    "ScaledfromAvgSimTime" | "ScaledfromMaxSimTime" }
```

Description

Specifies the method to be used to calculate the run timeout value for a non-responsive ICRP job. By default, ADE XL uses the run timeout value specified in the job policy. You can use this variable to use an alternate value. The valid values are:

- **JobPolicyRunTimeoutValue:** ADE XL uses the run timeout value from the job policy. If that value is set to NULL, ADE XL waits for an indefinite time for the ICRP job to confirm that the simulation is complete. In case of a large number of simulations, this can affect the completion of all the pending simulations. This is the default value.
- **ScaledFromAvgSimTime:** If the simulation count is less than the limit specified by `runTimeoutScalingStartsAfterSimCount`, ADE XL uses the run timeout value from the job policy. If the simulation count is more than this limit, ADE XL calculates the run timeout value as:

Average sim time * runTimeoutScaleFactor

- **ScaledFromMaxSimTime:** If the simulation count is less than the limit specified by `runTimeoutScalingStartsAfterSimCount`, ADE XL uses the run timeout value from the job policy. If the simulation count is more than this limit, ADE XL calculates the run timeout value as:

Max sim time * runTimeoutScaleFactor

GUI Equivalent

None

Examples

```
envGetVal("adexl.distribute" "useAsRunTimeout")  
envSetVal("adexl.distribute" "useAsRunTimeout" 'cyclic  
"JobPolicyRunTimeoutValue")  
envSetVal("adexl.distribute" "useAsRunTimeout" 'cyclic "ScaledfromAvgSimTime")
```

Related Topics

[runTimeoutScaleFactor](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

runTimeoutScalingStartsAfterSimCount

Virtuoso ADE Environment Variables Reference

Environment Variables

useSameProcess

```
adexl.distribute useSameProcess boolean { t | nil }
```

Description

Specifies whether the simulation for a single point must be optimized by completing the netlist generation and expression evaluation tasks inside the ADE Assembler process and running the simulation as per the distribution method specified by the job policy. If optimization is not done, new processes are started for netlist generation and expression evaluation.



The *Optimize Single Point Run* option on the Job Policy Setup form is used only when the `useSameProcess` variable is set to `t`.

The valid values are:

- `t`: The simulation with a single point is optimized by using a single process to complete all the tasks.

This is the default value.

- `nil`: The simulation with a single point is not optimized. A new process is started to complete the tasks.

GUI Equivalent

None

Examples

```
envGetVal("adexl.distribute" "useSameProcess")
envSetVal("adexl.distribute" "useSameProcess" 'boolean nil)
```

adexl.monte

- [additionalNetlistOptions](#) on page 96
- [applySaveOptionsToNetlist](#) on page 97
- [createStatisticalCornerType](#) on page 98
- [enableMonteCarloOverStatisticalCorners](#) on page 100
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- [saveProcessOptionDefaultValue](#) on page 106
- [saveMismatchOptionDefaultValue](#) on page 108
- [warnWhenSimsExceed](#) on page 109

additionalNetlistOptions

```
adexl.monte additionalNetlistOptions string "analysisOptions"
```

Description

Specifies the additional analysis options to be generated in the netlist.

The valid value can be any string. For example, "nullmfactorcorrelation=yes".

The default value is an empty string.

GUI Equivalent

Command: *Tools – Monte*

Field: The *Netlist Options* field in the *Monte Carlo* form.

Examples

```
envGetVal("adexl.monte" "additionalNetlistOptions")  
envSetVal("adexl.monte" "additionalNetlistOptions" 'string "")
```


applySaveOptionsToNetlist

```
adexl.monte applySaveOptionsToNetlist boolean { t | nil }
```

Description

Controls the writing of process and mismatch parameter information in the netlist.

The valid values are:

- **t**: Applies the `saveprocessparams` and `savemismatchparams` options in the netlist depending on the settings for the Save Process Data and Save Mismatch Data check boxes in the Monte Carlo form.

For example, if the Save Process Data and Save Mismatch Data check boxes are not selected in the Monte Carlo form, the `saveprocessparams` and `savemismatchparams` options are set to `no` in the netlist and Spectre will not write process and mismatch parameter information to the disk. This is the default value.

- **nil**: Writes process and mismatch parameter information in the netlist. When `nil`, the settings for the *Save Process Data* and *Save Mismatch Data* check boxes in the **Monte Carlo** form are not passed to the netlist.

GUI Equivalent

None

Examples

```
envGetVal("adexl.monte" "applySaveOptionsToNetlist")  
envSetVal("adexl.monte" "applySaveOptionsToNetlist" 'boolean nil)
```

createStatisticalCornerType

```
adexl.monte createStatisticalCornerType cyclic { "sequence" | "values" | "prompt" |  
    "promptValues" | "auto" }
```

Description

Specifies which method is to be used to create a statistical corner from the Monte Carlo results. The valid values are provided below:

- **sequence:** Create a statistical corner by using a sequence ID of a sample.
- **values:** Create a statistical corner by using the statistical parameter values of a sample.

Note: This requires saving the mismatch data while running Monte Carlo.

- **prompt:** Displays the Create Statistical Corner form in which you can confirm which one of the two types mentioned above is to be used to create a statistical corner. The default choice selected in the form is to create the sequence ID-based corner.

Note: If you have saved the mismatch data while running Monte Carlo, you can choose to create a statistical corner by using the statistical parameter values.

- **promptValues:** Displays the Create Statistical Corner form in which you can confirm which one of the two types mentioned above is to be used to create a statistical corner. The default choice selected in the form is to create the statistical parameter-based corner.
- **auto:** Allows ADE Assembler to automatically choose the type of statistical corner, values-based or sequence-based, to be created after the Monte Carlo simulation is complete. To make this decision, ADE Assembler considers the status of the Create Statistical Corners check box in the Guided Mode section of the Monte Carlo options form. This is the default value.

For more details, refer to the [figure](#) that describes how ADE Assembler creates a statistical corner when this variable is set to "auto".

GUI Equivalent

None

Examples

```
envGetVal("adexl.monte" "createStatisticalCornerType")  
envSetVal("adexl.monte" "createStatisticalCornerType" 'cyclic "sequence")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

```
envSetVal("adexl.monte" "createStatisticalCornerType" 'cyclic "values")
```

Related Topics

[Creating Statistical Corners](#)

enableMonteCarloOverStatisticalCorners

```
adexl.monte enableMonteCarloOverStatisticalCorners boolean { t | nil }
```

Description

Lets you run Monte Carlo analysis (mismatch variation) over parameter-based statistical corners, consisting of process variation.

The valid values are:

- `t`: Monte Carlo analysis can be run over parameter-based statistical corners.
- `nil`: Monte Carlo analysis cannot be run with statistical corners. This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.monte" "enableMonteCarloOverStatisticalCorners")  
envSetVal("adexl.monte" "enableMonteCarloOverStatisticalCorners" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

incrementalUpdate

```
adexl.monte incrementalUpdate boolean { t | nil }
```

Description

Controls the update of Monte Carlo simulation results in the Results tab of the Outputs pane.

The valid values are given below:

- **t**: Monte Carlo simulation results are updated after each iteration of the Monte Carlo run.
Use the [iterationUpdates](#) environment variable to specify the number of iterations of the Monte Carlo run after which the simulation results are updated in the Results tab of the Outputs pane.
- **nil**: Monte Carlo simulation results are displayed only after all iterations of the Monte Carlo run are over.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.monte" "incrementalUpdate")  
envSetVal("adexl.monte" "incrementalUpdate" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

iterationUpdates

adexl.monte iterationUpdates int *numberOfRunIterations*

Description

Controls the number of iterations of the Monte Carlo run after which simulation results are updated in the *Results* tab of the *Outputs Setup* tab.

The valid value is a positive integer value.

The default value is 1.

GUI Equivalent

None

Examples

```
envGetVal("adexl.monte" "iterationUpdates")
envSetVal("adexl.monte" "iterationUpdates" 'int 2)
```

minGroupSizeSplitAcrossIdleJobs

`adexl.monte minGroupSizeSplitAcrossIdleJobs int numberOfRunIterations`

Description

Specifies the minimum group size to be considered while splitting or distributing the Monte Carlo simulation points to the available idle jobs. By default, this variable is set to 0 and the points are not reallocated after an initial assignment to jobs. However, if there are multiple jobs, you can set this variable to a value greater than 1 to enable reallocation of points. In this case, the tool identifies the busy or idle jobs, and if the number of pending points on a busy job is more than the specified group size, it reallocates some of the points to the idle jobs, thereby helping in optimum utilization of the available resources.

For example, if a Monte Carlo simulation has 100 points and the *Max Jobs* field on the Job Policy Setup form is set to 2, a set of 50 simulation points are allocated to each one of `job1` and `job2`. If the simulations running on `job1` are completed faster than those running on `job2`, `job1` becomes idle. If you have specified the minimum size for a group of simulations to be considered for the reallocation of points to 5 and the number of points pending with `job2` is greater than 5, some of the points are reallocated to `job1`. This can improve the overall run time for Monte Carlo simulations.

The valid value is a positive integer value greater than 1.

The default value is 0.

GUI Equivalent

None

Examples

```
envGetVal("adexl.monte" "minGroupSizeSplitAcrossIdleJobs")
envSetVal("adexl.monte" "minGroupSizeSplitAcrossIdleJobs" 'int 2)
```

numberOfPointsToView

adexl.monte numberOfPointsToView int *noOfPoints*

Description

Specifies the number of points to be displayed in the *Detail* view results view for the Monte Carlo Sampling run mode. By default, the *Detail* view shows all the points of a Monte Carlo run. By setting this variable, you can choose to view only a selected number of worst points.

When this environment variable is set to a zero, all the points are displayed in both Detail and *Detail - Transpose* results views. When it is set to a non-zero value, the *Detail - Transpose* results view is disabled for the Monte Carlo Sampling run mode.

The valid value is a positive integer value.

The default value is 0.

GUI Equivalent

None

Examples

```
envGetVal("adexl.monte" "numberOfPointsToView")
```

```
envSetVal("adexl.monte" "numberOfPointsToView" 'int 2)
```

Related Topics

[Detail - Transpose](#)

samplingMethod

```
adexl.monte samplingMethod string "defaultSamplingMethod"
```

Description

Sets the default sampling method for the Monte Carlo Sampling run mode.

The valid values are:

- "random": Random
- "lhs": Latin Hypercube Sampling
- "lds": Low-Discrepancy Sequence

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.monte" "samplingMethod")  
envSetVal("adexl.monte" "samplingMethod" 'string "lhs")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

saveProcessOptionDefaultValue

```
adexl.monte saveProcessOptionDefaultValue boolean { t | nil }
```

Description

Controls the default setting for the *Save Process Data* check box in the form.

The valid values are:

- `t`: The *Save Process Data* check box in the *Monte Carlo* form is selected by default (if the settings for this option is not there in the setup database).
- `nil`: The *Save Process Data* check box in the *Monte Carlo* form is deselected by default (if the settings for this option is not there in the setup database).

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.monte" "saveProcessOptionDefaultValue")  
envSetVal("adexl.monte" "saveProcessOptionDefaultValue" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

saveSimulationData

```
adexl.monte saveSimulationData boolean { t | nil }
```

Description

Specifies if the simulation data is to be saved so that it can be used for plotting. This environment variable sets the default value of the *Save Data To Allow Family Plots* check box in the *Monte Carlo* form.

The valid values are:

- **t**: The *Save Data To Allow Family Plots* check box in the *Monte Carlo* form is selected by default.
- **nil**: The *Save Data To Allow Family Plots* check box in the *Monte Carlo* form is deselected by default.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.monte" "saveSimulationData")  
envSetVal("adexl.monte" "saveSimulationData" 'boolean t)
```

saveMismatchOptionDefaultValue

```
adexl.monte saveMismatchOptionDefaultValue boolean { t | nil }
```

Description

Controls the default setting for the *Save Mismatch Data* check box in the *Monte Carlo* form. By default, this check box is cleared and the tool does not save the mismatch parameters and their values in the associated Monte Carlo results files.

Even if the *Save Mismatch Data* check box is cleared, the mismatch parameters do have an effect on Monte Carlo simulation.

The valid values are:

- **t**: The *Save Mismatch Data* check box in the *Monte Carlo* form is selected by default (if the setting for this option is not there in the setup database).
- **nil**: Clears the *Save Mismatch Data* check box in the *Monte Carlo* form (if the setting for this option is not there in the setup database).

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.monte" "saveMismatchOptionDefaultValue")
envSetVal("adexl.monte" "saveMismatchOptionDefaultValue" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

warnWhenSimsExceed

`adexl.monte warnWhenSimsExceed int simulationsThresholdLimit`

Description

Specifies a threshold limit for the number of simulations to be run for Monte Carlo. When the number of simulations to be run for Monte Carlo exceeds the specified limit, the tool shows a warning message to indicate that you have run the specified number of simulations and whether you want to continue further.

By default, the warning threshold is 8000. The warning will appear when the total number of simulations is greater than 8000.

The tool does not apply this check when you use the auto stop feature to stop Monte Carlo run based on a specific criteria.

The valid value is an integer value between 8000 and 1000000.

GUI Equivalent

None

Examples

```
envGetVal("adexl.monte" "warnWhenSimsExceed")
envSetVal("adexl.monte" "warnWhenSimsExceed" 'int 9000)
```

adexl.historyNamePrefix

- showNameHistoryForm
- initiallyAddHistoryNameUniquifier
- singleRunSweepsAndCorners
- monteCarloSampling
- WorstCaseCorners
- globalOptimization
- localOptimization
- improveYield
- highYieldEstimation
- sensitivityAnalysis
- feasibilityAnalysis
- manualTuning
- sizeOverCorners

showNameHistoryForm

```
adexl.historyNamePrefix showNameHistoryForm boolean { t | nil }
```

Description

Controls the display of the Specify History Name form before a simulation run is started. The Specify History Name form is used to specify the history name to be set for the current run.

The valid values are:

- `t`: Displays the Specify History Name form before the simulation run.
- `nil`: The Specify History Name form is not displayed before the simulation run.
This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.historyNamePrefix" "showNameHistoryForm")  
envSetVal("adexl.historyNamePrefix" "showNameHistoryForm" 'boolean t)
```

initiallyAddHistoryNameUniquifier

```
adexl.historyNamePrefix initiallyAddHistoryNameUniquifier boolean { t | nil }
```

Description

Specifies if a unique incremental number is to be suffixed to the history name to keep each history name unique.

The valid values are:

- `t`: Uses a unique incremental number as a suffix for the history names.
- `nil`: Does not add any suffix to the history name. Only the history name is used for the first time. In subsequent runs that use the same history name, a unique number will be suffixed.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.historyNamePrefix" "initiallyAddHistoryNameUniquifier")
envSetVal("adexl.historyNamePrefix" "initiallyAddHistoryNameUniquifier" 'boolean
t)
```


Virtuoso ADE Environment Variables Reference

Environment Variables

singleRunSweepsAndCorners

`adexl.historyNamePrefix singleRunSweepsAndCorners string "defaultHistoryName"`

Description

Specifies the default history name to be used for the Single Run, Sweeps, and Corners run mode.

The valid value is a string value specifying the history name.

The default value is "Interactive".

GUI Equivalent

None

Examples

```
envGetVal("adexl.historyNamePrefix" "singleRunSweepsAndCorners")
envSetVal("adexl.historyNamePrefix" "singleRunSweepsAndCorners" 'string
"singleRun")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

monteCarloSampling

```
adexl.historyNamePrefix monteCarloSampling string "defaultMonteCarlo"
```

Description

Specifies the default history name to be used for the Monte Carlo Sampling run mode.

The valid value is a string value specifying the history name.

The default value is "MonteCarlo".

GUI Equivalent

None

Examples

```
envGetVal("adexl.historyNamePrefix" "monteCarloSampling")  
envSetVal("adexl.historyNamePrefix" "monteCarloSampling" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

WorstCaseCorners

```
adexl.historyNamePrefix WorstCaseCorners string "defaultHistoryName"
```

Description

Specifies the default history name to be used for the Worst Case Corners run mode.

The valid value is a string value specifying the history name.

The default value is "WorstCaseCorners".

GUI Equivalent

None

Examples

```
envGetVal("adexl.historyNamePrefix" "WorstCaseCorners")  
envSetVal("adexl.historyNamePrefix" "WorstCaseCorners" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

globalOptimization

```
adexl.historyNamePrefix globalOptimization string "defaultHistoryName"
```

Description

Specifies the default history name to be used for the Global Optimization run mode.

The valid value is a string value specifying the history name.

The default value is "GlobalOpt".

GUI Equivalent

None

Examples

```
envGetVal("adexl.historyNamePrefix" "globalOptimization")  
envSetVal("adexl.historyNamePrefix" "globalOptimization" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

localOptimization

```
adexl.historyNamePrefix localOptimization string "defaultHistoryName"
```

Description

Specifies the default history name to be used for the Local Optimization run mode.

The valid value is a string value specifying the history name.

The default value is "LocalOpt".

GUI Equivalent

None

Examples

```
envGetVal("adexl.historyNamePrefix" "localOptimization")  
envSetVal("adexl.historyNamePrefix" "localOptimization" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

improveYield

```
adexl.historyNamePrefix improveYield string "defaultHistoryName"
```

Description

Specifies the default history name to be used for the Improve Yield run mode.

The valid value is a string value specifying the history name.

The default value is "ImproveYield".

GUI Equivalent

None

Examples

```
envGetVal("adexl.historyNamePrefix" "improveYield")  
envSetVal("adexl.historyNamePrefix" "improveYield" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

highYieldEstimation

```
adexl.historyNamePrefix highYieldEstimation string "defaultHistoryName"
```

Description

Specifies the default history name to be used for the High Yield Estimation run mode.

The valid value is a string value specifying the history name.

The default value is "HighYieldEstimation".

GUI Equivalent

None

Examples

```
envGetVal("adexl.historyNamePrefix" "highYieldEstimation")  
envSetVal("adexl.historyNamePrefix" "highYieldEstimation" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

sensitivityAnalysis

`adexl.historyNamePrefix sensitivityAnalysis string "defaultHistoryName"`

Description

Specifies the default history name to be used for the Sensitivity Analysis run mode.

The valid value is a string value specifying the history name.

The default value is "SensitivityAnalysis".

GUI Equivalent

None

Examples

```
envGetVal("adexl.historyNamePrefix" "sensitivityAnalysis")
```

```
envSetVal("adexl.historyNamePrefix" "sensitivityAnalysis" 'string "")
```


Virtuoso ADE Environment Variables Reference

Environment Variables

feasibilityAnalysis

```
adexl.historyNamePrefix feasibilityAnalysis string "defaultHistoryName"
```

Description

Specifies the default history name to be used for the Feasibility Analysis run mode.

The valid value is a string value specifying the history name.

The default value is "FeasibilityAnalysis".

GUI Equivalent

None

Examples

```
envGetVal("adexl.historyNamePrefix" "feasibilityAnalysis")  
envSetVal("adexl.historyNamePrefix" "feasibilityAnalysis" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

manualTuning

```
adexl.historyNamePrefix manualTuning string "defaultHistoryName"
```

Description

Specifies the default history name to be used for the Manual Tuning run mode.

The valid value is a string value specifying the history name.

The default value is "ManualTuning".

GUI Equivalent

None

Examples

```
envGetVal("adexl.historyNamePrefix" "ManualTuning")
```

```
envSetVal("adexl.historyNamePrefix" "manualTuning" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

sizeOverCorners

`adexl.historyNamePrefix sizeOverCorners string "defaultHistoryName"`

Description

Specifies the default history name to be used for the Size Over Corners run mode.

The valid value is a string value specifying the history name.

The default value is "SizeOverCorners".

GUI Equivalent

None

Examples

```
envGetVal("adexl.historyNamePrefix" "sizeOverCorners")
envSetVal("adexl.historyNamePrefix" "sizeOverCorners" 'string "")
```

adexl.icrpStartup

- [binaryName](#) on page 125
- [defaultJobPolicy](#) on page 126
- [enableOutdir](#) on page 128
- [refreshCDF](#) on page 129
- [refreshCDF](#) on page 129
- [showJobStdout](#) on page 130
- [showJobStderr](#) on page 131
- [showOutputLogOnError](#) on page 132

Virtuoso ADE Environment Variables Reference

Environment Variables

binaryName

```
adexl.icrpStartup binaryName string "binaryName"
```

Description

Specifies the name of the binary to run on the remote host.

The valid value is a binary value that is valid on the remote host (such as `virtuoso`).

The default value is `virtuoso`.

GUI Equivalent

None

Examples

```
envGetVal("adexl.icrpStartup" "binaryName")  
envSetVal("adexl.icrpStartup" "binaryName" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

defaultJobPolicy

```
adexl.icrpStartup defaultJobPolicy string "jobPolicyName"
```

Description

Specifies the name of the job policy to be used if no job policy is specified in the Job Policy Setup form.

Note the following:

- If no job policy is specified in the Job Policy Setup form or using this variable, the program uses the default job policy settings.
- The job policy settings are overlaid in the following order. A setting from a previous policy is preserved in the final result if not overridden by a subsequent policy.
 - a. The default job policy settings.
 - b. The settings in the job policy specified using this variable.
 - c. The settings in the job policy specified in the Job Policy Setup form.

For more information, see the following examples:

Example 1

If the job policy specified using this variable has a *Max. Jobs* value of 5 and the job policy specified in the Job Policy Setup form has a *Max. Jobs* value of 10, the tool uses a *Max. Jobs* value of 10 for simulation runs.

Example 2

If the job policy specified using this variable has a *Simulation Run Timeout* value of 600 and the job policy specified in the Job Policy Setup form does not have a *Simulation Run Timeout* value, the tool uses a *Simulation Run Timeout* value of 600 for simulation runs.

The valid value is any valid policy name.

Note the following:

- Do not use the `.jp` job policy file extension when specifying the policy name. For example, specify `myPolicy` instead of `myPolicy.jp`.
- If the job policy name you specify is not defined, setting this environment variable does nothing and the program reverts to the default job policy settings or whatever you select on the Job Policy Setup form in the environment.

Virtuoso ADE Environment Variables Reference

Environment Variables

GUI Equivalent

None

Examples

```
envGetVal("adexl.icrpStartup" "defaultJobPolicy")  
envSetVal("adexl.icrpStartup" "defaultJobPolicy" 'string "")
```

Related Topics

[default job policy settings](#)

[Job Policy Setup](#)

[valid job policy name](#)

enableOutdir

```
adexl.icrpStartup enableOutdir boolean { t | nil }
```

Description

Enables or disables the `-outdir` option, which refers to compiled verilogA module, in the APS or Spectre run script. By default, `-outdir` is included in the script.

The valid values are:

- `t`: Includes the `-outdir` option, which refers to compiled verilogA module, in the APS or Spectre run script.

The default is `t`.

- `nil`: Removes the `-outdir` option, which refers to compiled verilogA module, from the APS or Spectre run script.

GUI Equivalent

None

Examples

```
envGetVal("adexl.icrpStartup" "enableOutdir")
envSetVal("adexl.icrpStartup" "enableOutdir" 'boolean nil)
```


Virtuoso ADE Environment Variables Reference

Environment Variables

refreshCDF

```
adexl.icrpStartup refreshCDF cyclic { "Always" | "UnlessUserCDF" | "Never" }
```

Description

Specifies when to refresh CDF to consider the base-level CDF values for netlist generation and to ignore the user-level CDF changes.

Any user-level modification in the CDF must be included in `.cdsinit`, so that ICRP picks it for correct netlisting. For example:

CDF is modified using the SKILL file *modify_siminfo.il*:

```
cdf=cdfGetCellCDF(ddGetObj("analogLib" "pmos"))
cdf->simInfo->spectre->instParameters=list('w 'l 'as)
cdfSaveCDF(cdf)
```

After the modification, include the *modify_siminfo.il* file in `.cdsinit`:

```
envSetVal("adexl.icrpStartup" "refreshCDF" 'cyclic "UnlessUserCDF")
;envSetVal("adexl.icrpStartup" "refreshCDF" 'cyclic "Always")
;envSetVal("adexl.icrpStartup" "refreshCDF" 'cyclic "Never")
load("modify_siminfo.il")
```

The valid values are:

- **Always:** Always refreshes the CDF to consider the base values.
This is the default value.
- **Never:** Never refreshes the CDF. Set this value to use user-level CDF settings for netlisting.
- **UnlessUserCDF:** Refreshes the CDF only if user-level CDF is not available.

GUI Equivalent

None

Examples

```
envGetVal("adexl.icrpStartup" "refreshCDF")
envSetVal("adexl.icrpStartup" "refreshCDF" 'cyclic "Always")
envSetVal("adexl.icrpStartup" "refreshCDF" 'cyclic "Never")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

showJobStdout

```
adexl.icrpStartup showJobStdout boolean { t | nil }
```

Description

Specifies whether you want standard output messages from the job submit command (those that the program writes to standard output) to appear in the output area of the Command Interpreter Window (CIW).

You can use this setting to debug problems that might occur while running jobs in Local, Remote-Host or Command mode.

The valid values are:

- **t**: Write standard output messages from the job submit command to the CIW.
- **nil**: Do not write standard output messages from the job submit command to the CIW. This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.icrpStartup" "showJobStdout")  
envSetVal("adexl.icrpStartup" "showJobStdout" 'boolean t)
```

Related Topics

[output area](#)

showJobStderr

```
adexl.icrpStartup showJobStderr boolean { t | nil }
```

Description

Specifies whether you want standard error messages from the job submit command (those that the program writes to standard error) to appear in the output area of the Command Interpreter Window (CIW).

You can use this setting to debug problems that might occur while running jobs in Local, Remote-Host or Command mode.

The valid values are:

- `t`: Write standard error messages from the job submit command to the CIW.
This is the default value.
- `nil`: Do not write standard error messages from the job submit command to the CIW.

GUI Equivalent

None

Examples

```
envGetVal("adexl.icrpStartup" "showJobStderr")  
envSetVal("adexl.icrpStartup" "showJobStderr" 'boolean nil)
```

Related Topics

[output area](#)

showOutputLogOnError

```
adexl.icrpStartup showOutputLogOnError boolean { t | nil }
```

Description

This variable is obsolete from the IC6.1.2 release and will be removed in a future release. Instead of specifying this variable, do one of the following:

- Select the *Show output log on error* check box in the Job Policy Setup form.
- Use the `axlSetJobPolicyProperty SKILL` function to specify the default behavior.

For example, use the following function to display the simulation log file when the program encounters a simulation error:

```
axlSetJobPolicyProperty (<policy_name> "showoutputlogerror" "1")
```

Where the boolean value "1" specifies that the simulation log file must be displayed when the program encounters a simulation error. Use the value "0" to specify that the simulation log file must not be displayed.

It also specifies whether you want the program to display the simulation log file when it encounters a simulation error. Equivalent to selecting (t) or deselecting (nil) the *Show output log on error* check box in the Job Policy Setup form.

The valid values are:

- t: Display the simulation log file when there is a simulation error.
This is the default value.
- nil: Do not display the simulation log file.

GUI Equivalent

None

Examples

```
envGetVal("adexl.icrpStartup" "showOutputLogOnError")
envSetVal("adexl.icrpStartup" "showOutputLogOnError" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

Related Topics

[Job Policy Setup](#)

adexl.results

- [checksAssertsFiltersPath](#) on page 135
- [checksAssertsViewTool](#) on page 136
- [defaultBackAnnotationOption](#) on page 137
- [defaultResultsViewForMonteCarlo](#) on page 138
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- [exportPreserveScalingFactors](#) on page 142
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- [saveResultsFromHistoryDir](#) on page 149
- [useLocalPsfDir](#) on page 150
- [useLocalPsfDir](#) on page 150

Virtuoso ADE Environment Variables Reference

Environment Variables

checksAssertsFiltersPath

```
adexl.results checksAssertsFilterPath string "listOfDirectories"
```

Description

Specifies a colon-separated list of directories containing Check/Asserts filter definitions (XML files).

The valid value is a directory path containing filter definitions.

The default value is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("adexl.results" "checksAssertsFilterPath")
envSetVal("adexl.results" "checksAssertsFilterPath" 'string "/myPath/myDir:/
myPath1/myDir1")
```

checksAssertsViewTool

```
adexl.results checksAssertsViewTool string "browserExecutable"
```

Description

Specifies the browser in which you want to view the following two violation filter reports for Checks/Asserts:

- Netlisted Checks/Asserts
- Dynamic/Static Violation Report

The valid value is the name of the browser executable in which you want to view the violation filter reports for Checks/Asserts.

The default value is `firefox`.

GUI Equivalent

None

Examples

```
envGetVal("adexl.results" "checksAssertsViewTool")  
envSetVal("adexl.results" "checksAssertsViewTool" 'string "")
```


Virtuoso ADE Environment Variables Reference

Environment Variables

defaultBackAnnotationOption

```
adexl.results defaultBackAnnotationOption cyclic { "All variables and parameters"  
  | "Only design variables" | "Only device parameters" | "None" }
```

Description

Specifies the default option to be used while backannotating the values from the results to the design schematic and maestro setup.

The valid values are:

- All variables and parameters: Backannotates all the global variables and device parameters.
This is the default value.
- Only design variables: Backannotates only the global variables.
- Only device parameters: Backannotates only the device parameters.
- None: Does not backannotate any value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.results" "defaultBackAnnotationOption")  
envSetVal("adexl.results" "defaultBackAnnotationOption" 'cyclic "All variables and  
parameters")  
envSetVal("adexl.results" "defaultBackAnnotationOption" 'cyclic "Only device  
parameters")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

defaultResultsViewForMonteCarlo

```
adexl.results defaultResultsViewForMonteCarlo cyclic { "Detail" | "Detail -  
Transpose" | "Status" | "Summary" }
```

Description

Specifies the default results view for the Monte Carlo Sampling run mode.

The valid values are:

- Detail
- Detail - Transpose
- Status
- Summary
- Yield: This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.results" "defaultResultsViewForMonteCarlo")  
envSetVal("adexl.results" "defaultResultsViewForMonteCarlo" 'cyclic "Detail")  
envSetVal("adexl.results" "defaultResultsViewForMonteCarlo" 'cyclic "Detail -  
Transpose")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

defaultResultsViewForSweepsCorners

```
adexl.results defaultResultsViewForSweepsCorners cyclic { "Checks/Asserts" |  
    "Fault" | "Detail - Transpose" | "Status" | "Summary" | "Optimization" |  
    "Yield" }
```

Description

Specifies the default results view for the Single Run, Sweeps, and Corners run mode.

The valid values are:

- Detail
- Detail - Transpose
- Status
- Summary
- Yield: This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.results" "defaultResultsViewForSweepsCorners")  
envSetVal("adexl.results" "defaultResultsViewForSweepsCorners" 'cyclic "Checks/  
Asserts")  
envSetVal("adexl.results" "defaultResultsViewForSweepsCorners" 'cyclic "Fault")
```

evalOutputsOnSimFailure

```
adexl.results evalOutputsOnSimFailure cyclic { "SkipFailedAnalyses" | "None" |  
    "All" }
```

Description

Controls the evaluation of outputs if an analysis fails. The setup for a particular test can contain more than one analysis. This variable controls how to display outputs for measurements in situations where the simulation for a particular analysis fails.

When this variable is set to `SkipFailedAnalyses` and the simulation for a particular analysis fails, then the expressions tied to the failed analysis are skipped. Their status is displayed as `sim err`.

The other outputs that are not dependent on the failing analysis will display the output value if the expression has been successfully evaluated, otherwise it will display `eval_error`.

Note: This environment variable is not supported for the Monte Carlo Sampling run mode.

The valid values are:

- `SkipFailedAnalyses`: Skips the expressions that are tied to failed analysis and calculates the results of other expressions.

For the outputs that are tied to the failed analyses, the tool shows `sim err`. You can hover over the cell to display the tooltip with more details on the failed analysis.

For the other outputs, which are not tied to a failed analysis, the tool shows the output value in case of successful evaluation. In case of an evaluation error, it displays `eval err`.

This is the default value.

- `None`: In case of a failed analysis, reports `sim err` for all the expressions.
- `All`: All the expressions are evaluated irrespective of whether simulation has passed or failed.

If any analysis fails, evaluation is done on partial data that is available in the simulation results directory.

GUI Equivalent

None

Virtuoso ADE Environment Variables Reference

Environment Variables

Examples

```
envGetVal("adexl.results" "evalOutputsOnSimFailure")
envSetVal("adexl.results" "evalOutputsOnSimFailure" 'cyclic "SkipFailedAnalyses")
envSetVal("adexl.results" "evalOutputsOnSimFailure" 'cyclic "None")
```

exportPreserveScalingFactors

```
adexl.results exportPreserveScalingFactors boolean { t | nil }
```

Description

By default, results are exported to CSV files in the scientific notation format. Set this environment variable to export results in the same format as they are displayed in the Results tab to the CSV file.

The valid values are:

- `t`: Export results as they are displayed in the Results tab to the CSV file.
- `nil`: Export results to CSV files in the scientific notation format. This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.results" "exportPreserveScalingFactors")
envSetVal("adexl.results" "exportPreserveScalingFactors" 'boolean t)
```

retainReferenceSimResults

```
adexl.results retainReferenceSimResults boolean { t | nil }
```

Description

Controls whether the simulation results of the history item for unfinished or erroneous points are retained in that history item or not.

The valid values are:

- **t**: Retains the simulation results and related netlists of the history item for unfinished or erroneous points.
- **nil**: Does not retain the simulation results of the history item for unfinished or erroneous points. As a result, you will not be able to perform postprocessing operations (like plotting, printing, annotation, reevaluation, and so on) on the history item.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.results" "retainReferenceSimResults")
envSetVal("adexl.results" "retainReferenceSimResults" 'boolean t)
```

Related Topics

[Simulating Only Error or Incomplete Points](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

saveDir

```
adexl.results saveDir string "writableLocation"
```

Description

Specifies where you want the program to write results database information and run log files for an ADE session. When you set this environment variable, the program writes results database information and run log files to `libraryName/cellName/viewName/results` in the specified `saveDir` location.

If your design library is set up as read-only, you can use this environment variable to specify a writable location. See also the *Simulation Results Database Location* field on the Save Options form that appears when you choose *Options – Save* command.

Note the following:

- In case of ADE Explorer and ADE Assembler If you do not specify a `saveDir`, the program writes results database information and run log files in the `libraryName/cellName/viewName/results/maestro` directory. If you do not specify a `saveDir`, and you open the cellview in read-only mode or do not have write permissions, the program writes results database information and run log files to `libraryName/cellName/viewName/results/maestro/<history_item>` in the location specified using the `asimenv.startup projectDir` environment variable.
- In case of ADE XL (IC6.1.8 only), if you do not specify a `saveDir`, the program writes results database information and run log files in the `libraryName/cellName/adexl/results/data` directory. If you do not specify a `saveDir`, and you open the cellview in read-only mode or do not have write permissions, the program writes results database information and run log files to `libraryName/cellName/viewName/results/maestro/<history_item>` in the location specified using the `asimenv.startup projectDir` environment variable.

The valid value is any valid directory path.

GUI Equivalent

None

Examples

```
envGetVal("adexl.results" "saveDir")
```


Virtuoso ADE Environment Variables Reference

Environment Variables

```
envSetVal("adexl.results" "saveDir" 'string "")
```

Related Topics

[saveDir](#)

[asimenv.startup_projectDir](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

saveLocalPsfDir

```
adexl.results saveLocalPsfDir string "localDirectoryPath"
```

Description

If the useLocalPsfDir environment variable is set, use this environment variable to specify the path to the local directory on remote systems where the results for distributed simulation jobs run on each remote system must be saved.

Ensure that the specified local directory path exists on all the remote systems on which a distributed simulation is run. The valid value is any directory path.

GUI Equivalent

None

Examples

```
envGetVal("adexl.results" "saveLocalPsfDir")  
envSetVal("adexl.results" "saveLocalPsfDir" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

saveResDir

```
adexl.results saveResDir string "simulationResults"
```

Description

Specifies where you want ADE to write simulation results generated during a run.

When you set this environment variable:

- ADE Explorer and ADE Assembler write simulation results to *libraryName/cellName/viewName/results/data/<history_item>* in the specified saveResDir location
- ADE XL (IC 6.1.8 Only) writes simulation results to *libraryName/cellName/adexl/results/data/<history_item>* in the specified saveResDir location.

If your design library is set up as read-only, you can use this environment variable to specify a writable location. See also the *Simulation Results Directory Location* field on the Save Options form that appears when you choose the *Options – Save* command.

When you do not set this environment variable:

If a results database location is specified by saveDir, the program writes simulation results in that location. If saveDir is also not specified, the program writes simulation results in the location specified using the *asimenv.startup projectDir* environment variable.

- In case of ADE XL (IC 6.1.8 Only), the directory structure is *libraryName/cellName/adexl/results/data/<history_item>*.

In case of ADE Explorer and ADE Assembler, the directory structure is *libraryName/cellName/viewName/results/data/<history_item>*.

The valid value is any valid directory path.

GUI Equivalent

None

Examples

```
envGetVal("adexl.results" "saveResDir")
envSetVal("adexl.results" "saveResDir" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

Related Topics

[saveDir](#)

[asimenv.startup_projectDir](#)

saveResultsFromHistoryDir

```
adexl.results saveResultsFromHistoryDir string  
    "defaultValueForSaveDirectoryField"
```

Description

Specifies a default value for the *Save Directory* field in the *Save Results* form that appears when you right-click a history item in the Data View assistant, and choose *Save Results*.

The valid value is any valid directory path.

GUI Equivalent

None

Examples

```
envGetVal("adexl.results" "saveResultsFromHistoryDir")  
envSetVal("adexl.results" "saveResultsFromHistoryDir" 'string "")
```

Related Topics

[Data View](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

useLocalPsfDir

```
adexl.results useLocalPsfDir boolean { t | nil }
```

Description

By default, the results for distributed simulation runs are saved in the location specified using the `asimenv.startup projectDir` environment variable. Set this environment variable to save the results for distributed simulation jobs run on a remote system in a local directory on that system. Specify the local directory path using the `saveLocalPsfDir` environment variable.

The valid values are:

- `t`: Saves the results for distributed simulation jobs run on a remote system in a local directory on that system.
- `nil`: Saves the results for distributed simulation runs are saved in the location specified using the `asimenv.startup projectDir` environment variable. This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.results" "useLocalPsfDir")
envSetVal("adexl.results" "useLocalPsfDir" 'boolean t)
```

Related Topics

[asimenv.startup projectDir](#)

[saveLocalPsfDir](#)

adexl.gui

- [autoCornerUpdate](#) on page 154
- [continueJobsOnExitQuery](#) on page 155
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Virtuoso ADE Environment Variables Reference

Environment Variables

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Virtuoso ADE Environment Variables Reference

Environment Variables

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Virtuoso ADE Environment Variables Reference

Environment Variables

autoCornerUpdate

```
adexl.gui autoCornerUpdate boolean { t | nil }
```

Description

Specifies if any changes related to corners or tests in the setup database should be automatically reflected in the Corners Setup form that is already open. When set to `t`, the already open Corners Setup form is automatically updated to show the changes.

When this variable is set to `nil`, the details are not automatically updated in the Corners Setup form. You need to close and re-open the form to view the updated details.

The valid values are:

- `t`: Automatically updates the Corners Setup form with the changes in corner and test details.
- `nil`: Does not automatically update the Corners Setup form with the changes in corner and test details. You need to close and re-open the form to view the updated details.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "autoCornerUpdate")  
envSetVal("adexl.gui" "autoCornerUpdate" 'boolean t)
```

continueJobsOnExitQuery

```
adexl.results defaultBackAnnotationOption cyclic { "Stop" | "Ask" | "Continue" }
```

Description

Specifies whether to continue running the in-progress simulations before exiting an ADE Explorer or ADE Assembler. This variable overrides the value of the `continueICRPRunOnAbruptGUIExit` environment variable.

The valid values are:

- **Ask:** If any simulation is in progress when a session is being exited, the tool prompts you to confirm if the in-progress simulations are to be continued.
This is the default value.
- **Stop:** Stops all the in-progress simulations before exiting the session. Even if the `continueICRPRunOnAbruptGUIExit` variable is set to `t`, the simulations are stopped.
- **Continue:** Continues to run and complete the in-progress simulations after exiting the session. Even if the `continueICRPRunOnAbruptGUIExit` variable is set to `nil`, the simulations are completed.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "continueJobsOnExitQuery")
envSetVal("adexl.gui" "continueJobsOnExitQuery" 'cyclic "Stop")
envSetVal("adexl.gui" "continueJobsOnExitQuery" 'cyclic "Ask")
```

Related Topics

[continueICRPRunOnAbruptGUIExit](#)

copyMeasurementScripts

```
adexl.gui copyMeasurementScripts boolean { t | nil }
```

Description

Controls whether the OCEAN script file specified for an output of type *MATLAB script* or *OCEAN script* in the *Outputs Setup* tab is copied to the maestro view or used from the original location.

The valid values are:

- **t**: Copies the MATLAB or OCEAN script file to the maestro L view. Only the file in the maestro view is used for simulation runs. As a result, any changes in the original file will not be applied for subsequent simulation runs.

This is the default value.

- **nil**: Does not copy the MATLAB or OCEAN script file to the maestro view. The original file is used for simulation runs. As a result, any changes in the original file will be applied for subsequent simulation runs.

Any change in the value of this environment variable will be applied only to new outputs of type *MATLAB script* or *OCEAN script* that you add in the *Outputs Setup* tab.

For example, if you add an OCEAN script output named `OCEAN1` when the value of this variable is `t`, the script file specified for the output is copied to the maestro view. However, if you later change the value of this environment variable to `nil`, the script file in the maestro view for the OCEAN script output named `OCEAN1` will continue to be used. The original file will not be used.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "copyMeasurementScripts")
envSetVal("adexl.gui" "copyMeasurementScripts" 'boolean nil)
```

copyPreRunScripts

```
adexl.gui copyPreRunScripts boolean { t | nil }
```

Description

Controls whether or not the simulation uses a copy (snapshot) of the pre-run script that is saved inside the maestro view when you browse to the file and set it up as the pre-run script for the test.

The valid values are:

- **t**: Each point in the simulation run uses the snapshot of the pre-run script that was copied into the maestro view when the file was selected in the Pre-Run Script setup form. Any changes to the pre-run script file are ignored because the snapshot is used.

This is the default value.

- **nil**: Each point in the simulation run uses the pre-run script file that is maintained outside of the maestro view. Any changes in the script file are considered in the simulation run because the current version of the file is used.

A snapshot of the pre-run script file will still be found in the maestro view for simulation purposes. The difference is that this snapshot is created at the simulation run time instead of the time when the script was first selected in the Pre-Run Script setup form.

Any change in the value of this environment variable will be applied only to new outputs of type *MATLAB script* or *OCEAN script* that you add in the *Outputs Setup* tab. For example, if you add an OCEAN script output named `OCEAN1` when the value of this variable is `t`, the script file specified for the output is copied to the maestro view. However, if you later change the value of this environment variable to `nil`, the script file in the maestro view for the OCEAN script output named `OCEAN1` will continue to be used. The original file will not be used.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "copyPreRunScripts")
envSetVal("adexl.gui" "copyPreRunScripts" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

confirmReEvaluationWhen

```
adexl.gui confirmReEvaluationWhen cyclic { "Always" | "AgeHoursThresholdExceeded"  
    | "RemovingOutputsThresholdExceeded" | "Never" }
```

Description

Specifies when to show a confirmation dialog while re-evaluating results for a history.

The valid values are:

- **Always:** Always prompts the user to confirm if the results need to be reevaluated.
- **AgeHoursThresholdExceeded:** If the age of the history for which the results are to be reevaluated is more than the threshold age specified by the `reEvaluationAgeHoursThreshold` environment variable, ADE XL prompts the user to confirm that reevaluation is to be run.
- **RemovingOutputsThresholdExceeded:** If the outputs in a history item are more than the outputs in the active setup and the difference between the number of outputs in the active setup and the history has exceeded the threshold value specified by the `reEvaluationRemovingOutputsThreshold` environment variable, ADE XL prompts the user to confirm that reevaluation is to be run.
- **Never:** Never prompts the user for confirmation. Instead, it always reevaluates the results for previous history items.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "confirmReEvaluationWhen")  
envSetVal("adexl.gui" "confirmReEvaluationWhen" 'cyclic "Always")  
envSetVal("adexl.gui" "confirmReEvaluationWhen" 'cyclic  
"AgeHoursThresholdExceeded")
```

Related Topics

[reEvaluationRemovingOutputsThreshold](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

reEvaluationAgeHoursThreshold

Virtuoso ADE Environment Variables Reference

Environment Variables

continueJobsOnExitQuery

```
adexl.gui continueJobsOnExitQuery cyclic { "Ask" | "Stop" | "Continue" }
```

Description

Specifies whether to continue running the in-progress simulations before exiting an ADE XL session. This variable overrides the value of the `continueICRPRunOnAbruptGUIExit` environment variable.

The valid values are:

- **Ask:** Prompts the user to confirm if the already running jobs need to be continued after exiting ADE XL. This is the default value.
- **Stop:** Always stops the already running jobs after exiting ADE XL.
- **Continue:** Always continues the already running jobs after exiting ADE XL.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "continueJobsOnExitQuery")
envSetVal("adexl.gui" "continueJobsOnExitQuery" 'cyclic "continue")
envSetVal("adexl.gui" "continueJobsOnExitQuery" 'cyclic "Stop")
```


Virtuoso ADE Environment Variables Reference

Environment Variables

defaultCorners

```
adexl.gui defaultCorners string "defaultCornerSetupFile"
```

Description

Specifies the default corners setup (.sdb) file you want the program to load onto the Corners Setup form. Using this variable, you cannot load corners from a .csv file.

The default corners will be loaded only if no other corners are defined in the Corners Setup form.

The valid value is a string value containing the path to a valid ADE XL corners setup file.

The default value is " " .

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "defaultCorners")  
envSetVal("adexl.gui" "defaultCorners" 'string "")
```

Related Topics

[Corners Setup form](#)

defaultCornerExportFileFormat

```
adexl.gui defaultCornerExportFileFormat cyclic { "CSV" | "SDB" }
```

Description

Specifies the default format in which the corner details exported from the Corners Setup form are saved. This variable is applicable only before opening the Corners Setup form for the first time in an ADE XL session. After the form is opened in a session, the format used or specified in the form is saved as a user preference.

The valid values are:

- CSV: Specifies that by default the corner details are to be saved in a `.csv` file.
This is the default value.
- SDB: Specifies that by default the corner details are to be saved in a `.sdb` file.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "defaultCornerExportFileFormat")  
envSetVal("adexl.gui" "defaultCornerExportFileFormat" 'cyclic "SDB")
```

Related Topics

[Corners Setup form](#)

defaultCornerImportFileFormat

```
adexl.gui defaultCornerImportFileFormat cyclic { "CSV" | "SDB" | "PCF" }
```

Description

Specifies the default format from which the corner details are to be imported into the Corners Setup form.

This variable is considered only before opening the Corners Setup form for the first time in an ADE XL session. After the form is opened in a session, the format used or specified in the form is saved as a user preference.

The valid values are:

- CSV: Specifies that by default the corner details are to be imported from a `.csv` file.
This is the default value.
- SDB: Specifies that by default the corner details are to be imported from a `.sdb` file.
- PCF: Specifies that by default the corner details are to be imported from a `.pcf` file.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "defaultCornerImportFileFormat")
envSetVal("adexl.gui" "defaultCornerImportFileFormat" 'cyclic "SDB")
envSetVal("adexl.gui" "defaultCornerImportFileFormat" 'cyclic "CSV")
```

Related Topics

[Corners Setup form](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

defaultParametersAssistantFilter

```
adexl.gui defaultParametersAssistantFilter string "defaultFilter"
```

Description

Specifies the default filter to be set for device instance parameters in the *Parameters* tab in the Variables and Parameters assistant.

The valid values are:

- **Allow List:** Displays parameters specified in the list that you can edit by using the Filter Setup form.
This is the default value.
- **Automatic:** Displays the parameters list by object, which can be further expanded to view the object names.
- **Editable:** Displays the parameters list by object, which can be further expanded to view the object names.
- **All:** Displays all the parameters.
- **Custom:** Displays the parameters as defined in the custom filter.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "defaultParametersAssistantFilter")  
envSetVal("adexl.gui" "defaultParametersAssistantFilter" 'string "")
```

defaultParametersViewBy

```
adexl.gui defaultParametersViewBy cyclic { "Object" | "Property" }
```

Description

Specifies the default view to be set for the *Parameters* tab in the Variables and Parameters assistant.

The valid values are:

- **Property:** Displays the parameters list by property names, which can be further expanded to view the object names.
This is the default value.
- **Object:** Displays the parameters list by object, which can be further expanded to view the object names.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "defaultParametersViewBy")  
envSetVal("adexl.gui" "defaultParametersViewBy" 'cyclic "Object")  
envSetVal("adexl.gui" "defaultParametersViewBy" 'cyclic "Property")
```

Related Topics

[Sorting Parameters by Properties and Objects](#)

descendIntoSubcktForShowingInstOrNet

```
adexl.gui descendIntoSubcktForShowingInstOrNet boolean { t | nil }
```

Description

Specifies if a lower level subcircuit is to be opened to show the net or instance that violates a circuit check or assert.

The valid values are:

- `t`: Opens the lower level subcircuit that contains the net or instance.
This is the default value.
- `nil`: Opens the top hierarchy level that contains the subcircuit.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "descendIntoSubcktForShowingInstOrNet")  
envSetVal("adexl.gui" "descendIntoSubcktForShowingInstOrNet" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

detailViewShowDefault

```
adexl.gui detailViewShowDefault string "defaultColumnsDisplayed"
```

Description

Specifies the default columns to be displayed in the *Detail* results view.

The valid value is a list of space-separated column names for the *Details* result view.

By default, all the columns are displayed.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "detailViewShowDefault")  
envSetVal("adexl.gui" "detailViewShowDefault" 'string "")
```

detailtransposeViewShowDefault

```
adexl.gui detailtransposeViewShowDefault string "defaultColumnDisplayed"
```

Description

Specifies the default columns to be displayed in the *Detail-Transpose* results view. The valid value is a list of space-separated column names for the *Detail-Transpose* result view.

By default, all the columns are displayed.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "detailtransposeViewShowDefault")
envSetVal("adexl.gui" "detailtransposeViewShowDefault" 'string "")
```


disableConstraintsRead

```
adexl.gui disableConstraintsRead boolean { t | nil }
```

Description

Controls if the tool needs to elaborate the Constraint Manager hierarchy to find the matched parameter constraints and import them to the setup in a maestro cellview. By default, this variable is set to `t` and the tool does not elaborate the Constraint Manager hierarchy. This helps in improving the performance of the tool.

The valid values are:

- `t`: Disables elaboration of the Constraint Manager hierarchy to find matched parameter constraints.

This is the default value.

- `nil`: Enables elaboration of the Constraint Manager hierarchy to find matched parameter constraints.

Note: If you use matched parameter constraints, then set this variable to `nil` to automatically traverse the design and update the *Parameters* tree with the constraints. If you use the default value `t`, import the constraints manually by right-clicking the *Parameters* tree and choosing *Import Constraints*.

GUI Equivalent

The *Import Constraints* command in the context menu of the *Parameters* tree of the Data View Assistant.

Examples

```
envGetVal("adexl.gui" "disableConstraintsRead")
envSetVal("adexl.gui" "disableConstraintsRead" 'boolean nil)
```

Related Topics

[Working with Parameters Created for Matched Parameter Constraints](#)

disableNominalSimulation

```
adexl.gui disableNominalSimulation boolean { t | nil }
```

Description

Controls whether the *Nominal Corner* check box in the Run Summary assistant is selected or deselected by default when you start ADE XL. If the *Nominal Corner* check box is selected, the simulator runs nominal corner simulation.

The valid values are:

- `t`: Deselects the Nominal Corner check box by default when you start ADE XL.
- `nil`: Selects the Nominal Corner check box by default when you start ADE XL. This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "disableNominalSimulation")
envSetVal("adexl.gui" "disableNominalSimulation" 'boolean t)
```

Related Topics

[Run Summary](#)

disableRunInReadOnly

```
adexl.gui disableRunInReadOnly boolean { t | nil }
```

Description

Controls whether simulations can be run when the ADE XL view is opened in read-only mode.

The valid values are:

- `t`: Does not allows simulations to be run in ADE XL when the ADE XL view is opened in read-only mode.
- `nil`: Allows simulations to be run in ADE XL when the ADE XL view is opened in read-only mode.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "disableRunInReadOnly")  
envSetVal("adexl.gui" "disableRunInReadOnly" 'boolean t)
```

Related Topics

[Working with Read-Only maestro Views](#)

disableSimulationsDefault

```
adexl.gui disableSimulationsDefault cyclic { "nominal" | "corners" | "none" }
```

Description

Specifies whether the nominal corner or other corners (corners other than the nominal corner) are enabled or disabled by default when you create a new ADE XL view.

This environment variable can be used along with the `defaultCorners` environment variable to only run the provided list of corners.

The valid values are:

- **nominal**: Disables the nominal corner when you create a new ADE XL view. The *Nominal Corner* check box in the Run Summary assistant is deselected by default.

If tests are enabled in the ADE XL view but no corners are specified, the *Nominal Corner* check box in the Run Summary assistant is automatically enabled so that simulations can be run.
- **corners**: Disables other corners (corners other than the nominal corner) when you create a new ADE XL view. The *Corner* check box in the Run Summary assistant is deselected by default.
- **none**: Disables other corners (corners other than the nominal corner) when you create a new ADE XL view. The *Corner* check box in the Run Summary assistant is deselected by default.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "disableSimulationsDefault")  
envSetVal("adexl.gui" "disableSimulationsDefault" 'cyclic "nominal")  
envSetVal("adexl.gui" "disableSimulationsDefault" 'cyclic "corners")
```

Related Topics

Run Summary

Virtuoso ADE Environment Variables Reference

Environment Variables

defaultCorners

enableAutoRefreshSetupSummary

```
adexl.gui enableAutoRefreshSetupSummary boolean { t | nil }
```

Description

Enables or disables automatic refresh of information in the *Setup Summary* section on the *Run Preview* tab.

The valid values are:

- `t`: Enables automatic refresh of the setup summary details on the *Run Preview* tab.
This is the default value.
- `nil`: Disables automatic refresh of the setup summary details on the *Run Preview* tab.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "enableAutoRefreshSetupSummary")  
envSetVal("adexl.gui" "enableAutoRefreshSetupSummary" 'boolean nil)
```

Related Topics

[Using the Run Preview](#)

enableAutoRefreshPointsTable

```
adexl.gui enableAutoRefreshPointsTable boolean { t | nil }
```

Description

Enables or disables automatic refresh of the points table on the *Run Preview* tab.

The valid values are given below:

- `t`: Enables automatic refresh of the points table on the *Run Preview* tab.
- `nil`: Disables automatic refresh of the points table on the *Run Preview* tab. This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "enableAutoRefreshPointsTable")
envSetVal("adexl.gui" "enableAutoRefreshPointsTable" 'boolean t)
```

Related Topics

[Using the Run Preview](#)

enableMonteCarloForRunPreview

```
adexl.gui enableMonteCarloForRunPreview boolean { t | nil }
```

Description

Enables or disables run preview for the Monte Carlo Sampling run mode. When enabled, the Run Preview table shows an additional column, *max_iteration*, to display the iteration numbers for each point. You can deselect the points that you do not want to consider for the Monte Carlo run.

Note: Run preview is enabled only when the *Run a fixed number of points* option is selected in the Monte Carlo run.

The default Value is `t`.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "enableMonteCarloForRunPreview")
envSetVal("adexl.gui" "enableMonteCarloForRunPreview" 'boolean nil)
```

Related Topics

[Using the Run Preview Table](#)

forceShowAutomaticExpressions

```
adexl.gui forceShowAutomaticExpressions boolean { t | nil }
```

Description

Enables or disables the automatic display of the results of intermediate expressions irrespective of the setting of the *Plot* check boxes corresponding to those expressions on the *Output Setup* tab. Using this variable, you can now choose to display the results of the final expressions only and hide the results of their intermediate expressions.

The valid values are:

- **t**: Displays the results of intermediate expressions automatically even if their corresponding *Plot* check boxes are not selected. The results are displayed in all the views on the *Results* tab, *Spec Summary* table, or datasheets.
- **nil**: The results of intermediate expressions are displayed only if the *Plot* check boxes corresponding to those measures are selected on the *Outputs Setup* tab.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "forceShowAutomaticExpressions")  
envSetVal("adexl.gui" "forceShowAutomaticExpressions" 'boolean t)
```

Related Topics

[Creating Dependent Expressions](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

formatSpecValues

```
adexl.gui formatSpecValues cyclic { "AsEntered" | "AsPrintNotationCdsenv" |  
    "SuffixNotation" }
```

Description

Specifies format of specification values for displaying results.

The valid values are:

- **AsEntered:** Sets the format as entered by you.
This is the default value.
- **AsPrintNotationCdsenv:** Sets the format as specified in the `auCore.userPref printNotation` environment variable.
- **SuffixNotation:** Sets the format as suffix notation.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "formatSpecValues")  
envSetVal("adexl.gui" "formatSpecValues" 'cyclic "SuffixNotation")  
envSetVal("adexl.gui" "formatSpecValues" 'cyclic "AsPrintNotationCdsenv")
```

Related Topics

[auCore.userPref printNotation](#)

filterCDFParamsWithZeroOrNegativeOneDefValue

```
adexl.gui filterCDFParamsWithZeroOrNegativeOneDefValue boolean { t | nil }
```

Description

Displays or hides CDF parameters in the Variables and Parameters assistant that have default value set as 0 or -1. By default, variables that have default values set to any one of t, "", 0, -1, 0, or -1 are not displayed in the Variables and Parameters assistant.

The valid values are:

- **t**: Hides or filters out the CDF parameters from the Variables and Parameters assistant that have default value set as 0 or -1.

This is the default value.

- **nil**: Displays the CDF parameters in the Variables and Parameters assistant that have default value set as 0 or -1.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "filterCDFParamsWithZeroOrNegativeOneDefValue")
envSetVal("adexl.gui" "filterCDFParamsWithZeroOrNegativeOneDefValue" 'boolean
nil)
```

headerAlignmentSide

`adexl.gui headerAlignmentSide string "textAlignment"`

Description

Controls the text alignment of the specification column headers in the *Detail-Transpose* view.

The valid values are:

- **Left:** Left aligns the column header.
This is the default value.
- **Right:** Right aligns the column header.
- **Center:** Center aligns the column header.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "headerAlignmentSide")
envSetVal("adexl.gui" "headerAlignmentSide" 'string "Right")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

headerTruncationDirection

adexl.gui headerTruncationDirection string "*directionForTruncatedColumnHeader*"

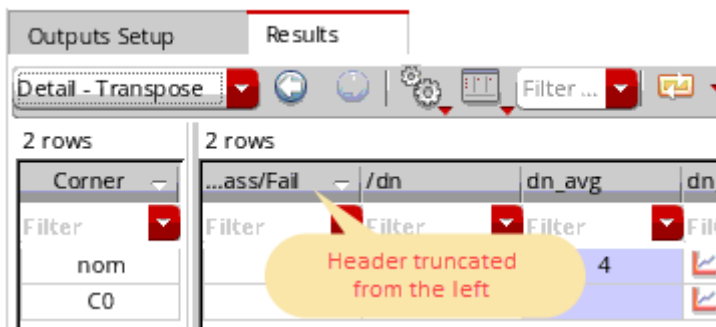
Description

Specifies the direction in which the column header needs to be truncated. ADE XL truncates the column header along the direction specified by this variable when this variable is used with the `headerTruncationWidth` variable, thus retaining the number of characters specified by `headerTruncationWidth`.

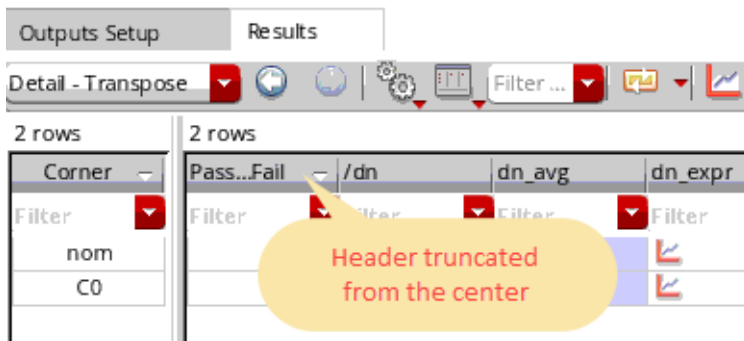
The valid values are:

- **Left:** Left aligns the column header. Truncates the column header from the left and leaves the characters from the right. For example, if `headerTruncationWidth` is set to 8 and `headerTruncationDirection` is set to `Left`, the column headers appear as shown below.

This is the default value.



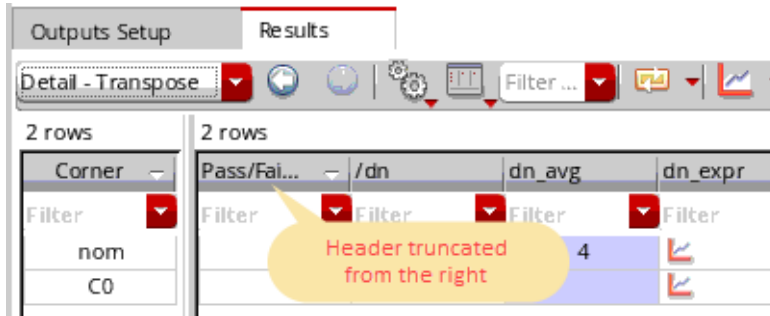
- **Right:** Truncates the column header from the middle and leaves the characters from left and right, as shown in the example below.



Virtuoso ADE Environment Variables Reference

Environment Variables

- **Center:** Truncates the column header from the right and leaves the characters from the left, as shown in the example below.



GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "headerTruncationDirection")  
envSetVal("adexl.gui" "headerTruncationDirection" 'string "Right")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

headerTruncationWidth

`adexl.gui headerTruncationWidth int maxCharacterLength`

Description

Specifies the maximum character limit for the test name that appears in the specification column headers in the Detail-Transpose view.

The valid value is a positive integer value.

The default value is 24.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "headerTruncationWidth")
envSetVal("adexl.gui" "headerTruncationWidth" 'int 10)
```

LimitModelSections

```
adexl.gui LimitModelSections cyclic { "InModelFile" | "LimitedList" | "No" }
```

Description

Specifies how to handle errors when the model section name specified for a corner is not found in the corresponding model file or PCF file.

The valid values are:

- **InModelFile:** If the section name specified for a corner is not present in model file, an error is displayed in Corners Setup form.
- **LimitedList:** If the specified section name is not present in the PCF file, an error is displayed in Corners Setup form.
- **No:** If the specified section name is not present in the model file or the PCF file, no error is displayed in Corners Setup form. However, an error is displayed during the simulation run.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "LimitModelSections")
envSetVal("adexl.gui" "LimitModelSections" 'cyclic "InModelFile")
envSetVal("adexl.gui" "LimitModelSections" 'cyclic "LimitedList")
```


Virtuoso ADE Environment Variables Reference

Environment Variables

maxNotesLength

`adexl.gui maxNotesLength int maxCharacterLimit`

Description

Specifies the maximum character limit for a note.

The valid value is a positive integer value between 1 and 5120.

The default value is 512.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "maxNotesLength")  
envSetVal("adexl.gui" "maxNotesLength" 'int 20)
```

Related Topics

[Adding Notes to a Test](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

maxNotesRowsDisplay

`adexl.gui maxNotesRowsDisplay int maxNumberOfNoteLines`

Description

Specifies the maximum number of lines of a note that can be displayed in a tooltip.

The valid value is a positive integer value.

The default value is 10.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "maxNotesRowsDisplay")
envSetVal("adexl.gui" "maxNotesRowsDisplay" 'int 20)
```

Related Topics

[Adding Notes to a Test](#)

mismatchPairs

```
adexl.gui mismatchPairs int maxDeviceParameters
```

Description

Specifies the default maximum number of device parameters for which mismatch results are displayed in the Show Mismatch form.

If the maximum number of device parameters in your design is lesser than this number, mismatch results are displayed for all the device parameters in your design. If the maximum number of device parameters in your design is greater than this number, mismatch results are displayed only for the number of device parameters specified using this environment variable.

For example, if you specify the value of the `mismatchPairs` variable as 20 and your design has 10 device parameters, mismatch results are displayed only for 10 device parameters. However, if your design has 25 design parameters, mismatch results are displayed only for the most sensitive 20 device parameters.

The valid value is a positive integer value.

The default value is 200.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "mismatchPairs")  
envSetVal("adexl.gui" "mismatchPairs" 'int 100)
```

modelSectionFilterFunction

```
adexl.gui modelSectionFilterFunction string "listOfModelSections"
```

Description

Specifies a function used to filter the list of model sections displayed in the *Section* drop-down list in the Add/Edit Model Files form (see Adding Model Files to a Corner) that is opened from the Corners Setup form.

The valid values is a string value containing the name of a defined function that has the signature:

```
(t_fileName l_initialSectionList)  
=> l_filteredSectionList
```

For example, if you have a model file named `mymodel.scs` that has the sections `tt`, `ss`, `fs`, and `unused`, do the following if you do not want the section `unused` to be displayed in *Section* drop-down list in the Add/Edit Model Files form that is opened from the Corners Setup form:

1. In your `.cdsinit` file or the CIW, define a function, say `CornerSectionFilt`, that specifies that the section `unused` must be filtered. For example:

```
procedure( CornerSectionFilt(model_file_name input_sections)  
  let( ((file_tail car(last(parseString(model_file_name "/"))))  
    output_sections)  
  if( file_tail == "mymodel.scs" then  
    output_sections = setof(name input_sections (name != "unused"))  
  else  
    output_sections = input_sections  
  output_sections))
```

2. Specify the `modelSectionFilterFunction` environment variable. For example, specify the following in your `.cdsenv` file:

```
adexl.gui modelSectionFilterFunction string "CornerSectionFilt"
```

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "modelSectionFilterFunction")  
  
envSetVal("adexl.gui" "modelSectionFilterFunction" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

Related Topics

[Adding Model Files to a Corner](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

numberOfBestPointsToView

`adexl.gui numberOfBestPointsToView int maxNoOfDesignPoints`

Description

Specifies the maximum number of best design points you want the program to display on the *Results* tab of the *Outputs Setup* tab.

The valid value is a positive integer value.

The default value is 10.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "numberOfBestPointsToView")
envSetVal("adexl.gui" "numberOfBestPointsToView" 'int 100)
```

omitUndefinedVarsAndParamsInCornersCSV

```
adexl.gui omitUndefinedVarsAndParamsInCornersCSV boolean { t | nil }
```

Description

Specifies whether to omit the variables and parameters that are not defined or found in the Data View assistant while exporting or importing corners from or to the Corners Setup form.

The valid values are:

- **t**: All undefined variables or parameters in Corners Setup are omitted while exporting corners to CSV file.

This is the default value.

- **nil**: All defined and undefined variables and parameters are while importing or exporting to CSV file.

GUI Equivalent

None

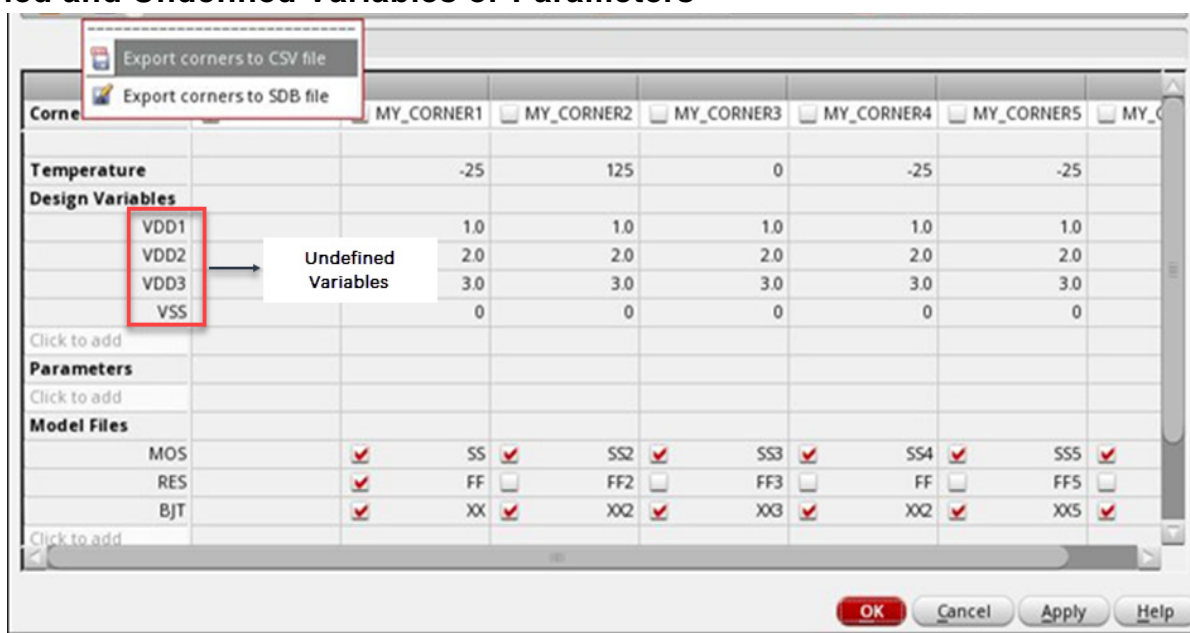
Examples

```
envGetVal("adexl.gui" "omitUndefinedVarsAndParamsInCornersCSV")
envSetVal("adexl.gui" "omitUndefinedVarsAndParamsInCornersCSV" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

Defined and Undefined Variables or Parameters



Suppose you have an SDB file that contains variables for VDD1, VDD2, VDD3 and VSS. These variables have not been defined as design variables or global variables, and can be referred to as undefined variables. The variables that exist in the design or that are defined as global variables can be referred to as defined variables.

When this SDB file is imported to the Corners Setup form, all variables and parameters are imported to the Corners Setup irrespective of their being defined or undefined.

However, during CSV export, when `omitUndefinedVarsAndParamsInCornersCSV` is set to `t` (default), the undefined variables are not exported as these variables do not exist in the design.

Sample CSV export when `envSetVal("adex1.gui"`
`"omitUndefinedVarsAndParamsInCornersCSV" 'boolean t):`

```
Corner,MY_CORNER1,MY_CORNER2,MY_CORNER3,MY_CORNER4,MY_CORNER5,MY_CORNER6
Enable,f,f,f,f,f,f
Temperature,-25,125,0,-25,-25,125
Modelfile::./MY_TEST_CORNER/my.scs,t SS,t SS2,t SS3,t SS4,t SS5,t SS6
Modelfile::./MY_TEST_CORNER/my.scs,t FF,f FF2,f FF3,f FF,f FF5,f FF6
Modelfile::./MY_TEST_CORNER/my2.scs,t XX,t XX2,t XX3,t XX2,t XX5,t XX6
t Test::opamps:OpAmp_lab1_AC_top:1,t,t,t,t,t
f Test::AC,t,t,t,t,t,t
t Test::TRAN,t,t,t,t,t,t
```


Virtuoso ADE Environment Variables Reference

Environment Variables

If `omitUndefinedVarsAndParamsInCornersCSV` is set to `nil`, all defined and undefined variables are exported from within the file.

Sample CSV export when `envSetVal("adexl.gui "`
`"omitUndefinedVarsAndParamsInCornersCSV" 'boolean nil):`

```
Corner,MY_CORNER1,MY_CORNER2,MY_CORNER3,MY_CORNER4,MY_CORNER5,MY_CORNER6
Enable,f,f,f,f,f,f
Temperature,-25,125,0,-25,-25,125
VDD1,1.0,1.0,1.0,1.0,1.0,1.0
VDD2,2.0,2.0,2.0,2.0,2.0,2.0
VDD3,3.0,3.0,3.0,3.0,3.0,3.0
VSS,0,0,0,0,0,0
Modelfile::./MY_TEST_CORNER/my.scs,t SS,t SS2,t SS3,t SS4,t SS5,t SS6
Modelfile::./MY_TEST_CORNER/my.scs,t FF,f FF2,f FF3,f FF,f FF5,f FF6
Modelfile::./MY_TEST_CORNER/my2.scs,t XX,t XX2,t XX3,t XX2,t XX5,t XX6
t Test::opamps:OpAmp_lab1_AC_top:1,t,t,t,t,t,t
```

The above CSV export contains the undefined variables `VDD1`, `VDD2`, `VDD3` and `VSS`.

openDesignAccessMode

```
adexl.gui openDesignAccessMode cyclic { "r" | "a" | "w" }
```

Description

Specifies the default mode for opening a design when you right-click a test in the Data View assistant and choose *Open Design in Tab*.

The valid values are:

- **r**: Opens designs in read mode.
This is the default value.
- **a**: Opens designs in append mode retaining the original design.
- **w**: Deletes the original design and opens a new design.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "openDesignAccessMode")  
envSetVal("adexl.gui" "openDesignAccessMode" 'cyclic "a")  
envSetVal("adexl.gui" "openDesignAccessMode" 'cyclic "w")
```

Related Topics

[Data View](#)

openDesignInNewTab

`adexl.gui openDesignInNewTab boolean { t | nil }`

Description

Controls whether a design is displayed in a new or current tab.

The valid values are:

- `t`: Opens designs in the current tab.
- `nil`: In config view, if no design window is open, the Open Configuration window is displayed. Whereas, if design window already open, then it is made current.

In schematic view, if no design window is open, the design is opened in a new tab. Whereas, if design window already open, then it is made current.

Other view type(s), Design is always opened in a new tab.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "openDesignInNewTab")
envSetVal("adexl.gui" "openDesignInNewTab" 'boolean t)
```

openSchInWin

```
adexl.gui openSchInWin boolean { t | nil }
```

Description

Controls whether a schematic opened from the *Outputs Setup* tab must be displayed in a new window, or in a new tab in the current window.

The valid values are:

- **t**: Displays the schematic opened from the *Outputs Setup* tab in a new window.
For example, if you right click a test name in the *Outputs Setup* tab and choose *To be Plotted*, the schematic is displayed in a new window.
- **nil**: Displays the schematic opened from the *Outputs Setup* tab in a new tab in the current window.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "openSchInWin")  
envSetVal("adexl.gui" "openSchInWin" 'boolean t)
```

openTerminalCommand

```
adexl.gui openTerminalCommand string "shellCommand"
```

Description

Specifies the shell command you want the program to use when you select *Open Terminal* from the context-sensitive menu for a history item on the Data Assistant. The program uses the shell command to open a terminal window in the directory containing results for the selected history item.

The default shell command when `openTerminalCommand` is not set (or when it is set to the empty string as shown above) is `xterm -T "historyResultsDirectory"`

where *historyResultsDirectory* is the name of the directory containing results for the selected history item (such as `Interactive.0` or `GlobalOpt.1` or, for *Improve Yield* history items, the *historychildren* item name, such as `ImproveYield.0.GlobalOpt.0`). The `xterm` command must be in your path.

Note: You must not put `&` at the end of the `openTerminalCommand` string.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "openTerminalCommand")
envSetVal("adexl.gui" "openTerminalCommand" 'string "")
```

Related Topics

[context-sensitive menu for a history item](#)

[Open Terminal](#)

optimizationViewShowDefault

```
adexl.gui optimizationViewShowDefault string "columnNameList"
```

Description

Specifies the default columns to be displayed in the *Optimization* results view.

The valid value is a list of space-separated column names for the *Optimization* results view.

By default, all the columns are displayed.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "optimizationViewShowDefault")  
envSetVal("adexl.gui" "optimizationViewShowDefault" 'string "")
```

outputTabsShowDefault

```
adexl.gui outputTabsShowDefault string "tabName"
```

Description

Controls the display of the *Run Preview* in the *Outputs Setup* tab.

- "\"Run Preview\\": Displays the *Run Preview* tab.
- " ": Empty string. Hides the *Run Preview* tab.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "outputTabsShowDefault")  
envSetVal("adexl.gui" "outputTabsShowDefault" 'string "\"Run Preview\\")
```

Related Topics

[Viewing Run Preview](#)

pcfPrependBasePath

```
adexl.gui pcfPrependBasePath boolean { t | nil }
```

Description

By default, when you import a process customization file (PCF) or design customization file (DCF) to create corners, the related process model file names are displayed in the Corners Setup form. However, you must specify the path to the directory containing the process models as an include path in the Simulation Files Setup form so that the simulator can read the process model files from the specified directory.

Use this environment variable to control whether the path to the process model files are included in the Corners Setup form so that you need not specify the path to the directory containing the process models as an include path in the Simulation Files Setup form.

The valid values are:

- `t`: Includes process model file paths in the Corners Setup form when you import PCF or DCF files.
- `nil`: Does not include process model file paths when you import PCF or DCF files.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "pcfPrependBasePath")
envSetVal("adexl.gui" "pcfPrependBasePath" 'boolean nil)
```

Related Topics

[Importing Corners From Customization Files](#)

[Simulation Files Setup form](#)

reEvalOnlyMostRecentHistory

```
adexl.gui reEvalOnlyMostRecentHistory boolean { t | nil }
```

Description

Specifies if the reevaluation of results can be done only for the recent history or for older history items as well.

The valid values are:

- `t`: Reevaluation of results is done only for the most recent history.
- `nil`: Reevaluation of results can also be done for older history items. For this, right-click a history and choose *View Results*. After the results are displayed on the *Results* tab, click *Re-evaluate* to evaluate the results according to the outputs defined on the *Outputs Setup* tab. If there are any changes in the output expressions and signals, the results are reevaluated according to those changes. The reevaluated results are written back to the results database of the history.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "reEvalOnlyMostRecentHistory")
envSetVal("adexl.gui" "reEvalOnlyMostRecentHistory" 'boolean nil)
```

reEvaluationAgeHoursThreshold

```
adexl.gui reEvaluationAgeHoursThreshold int thresholdAgeLimit
```

Description

Specifies the threshold age limit (in hours) against which ADE XL checks the age of the history before re-evaluating the results. If the age of a history is more than the specified threshold and the variable is set to `AgeHoursThresholdExceeded`, ADE XL prompts you to confirm that the results need to be reevaluated.

The valid value is a positive integer value specifying the threshold age in hours.

The default value is 168.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "reEvaluationAgeHoursThreshold")  
envSetVal("adexl.gui" "reEvaluationAgeHoursThreshold" 'int 100)
```

Related Topics

[confirmReEvaluationWhen](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

reEvaluationMode

```
adexl.gui reEvaluationMode cyclic { "incremental" | "full" }
```

Description

Specifies the scope of nets for which labels are to be generated.

The valid values are:

- `incremental`: Reevaluates the results of only the revised outputs.
- `full`: Reevaluates the results of all the outputs.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "reEvaluationMode")
envSetVal("adexl.gui" "reEvaluationMode" 'cyclic "incremental")
```

reEvaluationRemovingOutputsThreshold

`adexl.gui reEvaluationRemovingOutputsThreshold int thresholdLimit`

Description

Specifies the threshold limit for the difference in the number of outputs in the active maestro setup and the outputs in the history for which the results are being reevaluated. If the difference is more than the threshold specified by this environment variable and the `confirmReEvaluationWhen` variable is set to `RemovingOutputsThresholdExceeded`, this tool prompts you to confirm that the results need to be reevaluated.

The valid value is a positive integer value.

The default value is 2.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "reEvaluationRemovingOutputsThreshold")
envSetVal("adexl.gui" "reEvaluationRemovingOutputsThreshold" 'int 100)
```

Related Topics

[confirmReEvaluationWhen](#)

reEvaluationWhenActiveAndHistoryTestsDiffer

```
adexl.gui reEvaluationWhenActiveAndHistoryTestsDiffer cyclic { "Disallow" |  
    "removeDeletedTestsFromHistory" | "persistDeletedTestsInHistory" }
```

Description

Specifies the action to be taken when the tests that exist in the history for which you are re-evaluating the results are not found in the active maestro setup.

The valid values are:

- **Disallow:** If the tests in the active maestro setup and the history setup do not match, the results are not reevaluated for the history.

This is the default value.

- **removeDeletedTestsFromHistory:** The results are reevaluated for the history. The results for the tests not found in the active maestro setup are removed from the results database for the history. Only the new results are saved.
- **persistDeletedTestsInHistory:** The results are reevaluated for the history. If the tests in the history setup and the active maestro setup are same, new results are written back to the results database. If any test from the history setup is not found in the active setup, the previous results for those tests are retained in the results database for the history.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "reEvaluationWhenActiveAndHistoryTestsDiffer")  
envSetVal("adexl.gui" "reEvaluationWhenActiveAndHistoryTestsDiffer" 'cyclic  
"removeDeletedTestsFromHistory")  
envSetVal("adexl.gui" "reEvaluationWhenActiveAndHistoryTestsDiffer" 'cyclic  
"persistDeletedTestsInHistory")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

saveStateQuery

```
adexl.gui saveStateQuery cyclic { "Ask" | "saveIfPossible" | "Discard" }
```

Description

Specifies the requirement to save any unsaved changes in the active state before exiting a maestro session.

The valid values are:

- **Ask:** If there are any unsaved changes in the active state, this tool prompts you to confirm if the changes are to be saved in the state.

This is the default value.

- **saveIfPossible:** If there are any unsaved changes in the active state, this tool tries to save the state.

If the active state is read only, a warning message is displayed to indicate that the state cannot be saved.

- **Discard:** Discards any unsaved changes and exits this tool.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "saveStateQuery")
envSetVal("adexl.gui" "saveStateQuery" 'cyclic "saveIfPossible")
envSetVal("adexl.gui" "saveStateQuery" 'cyclic "Discard")
```

sendOutputsToEEFilter

```
adexl.gui sendOutputsToEEFilter cyclic { "All" | "Expressions" | "Signals" }
```

Description

Sets the default value for the *Send to Expression Editor* command on the *Outputs* toolbar. It specifies the type of outputs to be copied to the Expression Editor in ViVA XL Calculator.

The valid values are:

- **All**: Sends all the expressions and signals to the Expression Editor in ViVA XL Calculator.
- **Expressions**: Sends only expressions to the Expression Editor.

If the active state is read only, a warning message is displayed to indicate that the state cannot be saved.

This is the default value.

- **Signals**: Sends only signals to the Expression Editor.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "saveStateQuery")
envSetVal("adexl.gui" "saveStateQuery" 'cyclic "All")
envSetVal("adexl.gui" "saveStateQuery" 'cyclic "Signals")
```

setHistoryPrefixToSetupStateNameOnLoad

```
adexl.gui setHistoryPrefixToSetupStateNameOnLoad boolean { t | nil }
```

Description

Specifies if the name of the loaded setup state should be used as a prefix in the history name.

By default, when you load a setup state and run simulation, the history name takes the setup state name as a prefix. To use `Interactive` as a prefix, set this variable to `nil`.

The valid values are:

- `t`: Displays the setup state name as a prefix in the history name.
This is the default value.
- `nil`: Displays `interactive` as a prefix in the history name.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "setHistoryPrefixToSetupStateNameOnLoad")
envSetVal("adexl.gui" "setHistoryPrefixToSetupStateNameOnLoad" 'boolean nil)
```


Virtuoso ADE Environment Variables Reference

Environment Variables

setupFormDefaultEnabled

```
adexl.gui setupFormDefaultEnabled string "checkbox"
```

Valid Values:

all	All the check boxes are selected by default.
""	Empty string. All the check boxes are deselected by default.
tests vars parameters currentmode allsweepsenabled allcornersenabled defaultcornerenabled runoptions specs corners modelgroups extensions	List of option names separated by a comma, semicolon or space. The check boxes for the specified options are selected by default. For example, to select the <i>Tests</i> , <i>Variables</i> and <i>Parameters</i> check boxes, specify the value as: "tests, vars, parameters"

Default Value: all

Description

Specifies the check boxes that will be selected by default in the:

- *What to Import* group box in the Import Setup form.
- *What to Export* group box in the Export Setup form.
- *What to Save* group box in the Save Setup State form.

Virtuoso ADE Environment Variables Reference

Environment Variables

- *What to Load* group box in the Load Setup State form.

The valid values are:

- `all`: All the check boxes are selected by default.
- `""`: Empty string. All the check boxes are deselected by default.

This is the default value.

- Comma-separated option list: List of option names separated by a comma, semicolon or space. The check boxes for the specified options are selected by default.

For example, to select the *Tests*, *Variables* and *Parameters* check boxes, specify the value as:

```
"tests, vars, parameters"
```

This list includes valid values: `tests`, `vars`, `parameters`, `currentmode`, `allsweepsenabled`, `allcornersenabled`, `defaultcornerenabled`, `runoptions`, `specs`, `corners`, `modelgroups`, `extensions`.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "setupFormDefaultEnabled")
envSetVal("adexl.gui" "setupFormDefaultEnabled" 'string "")
```

Related Topics

[Importing the Simulation Setup](#)

[Exporting the Simulation Setup](#)

[Creating or Updating a Setup State](#)

[Loading a Setup State](#)

setupFormDefaultLoadOperation

```
adexl.gui setupFormDefaultLoadOperation cyclic { "retain" | "merge" | "overwrite" }
```

Description

Specifies the default value of the *Operation* drop-down list in the Load Setup State form and the Import Setup form.

The valid values are `retain`, `merge` and `overwrite`.

The default value is `retain`.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "setupFormDefaultLoadOperation")
envSetVal("adexl.gui" "setupFormDefaultLoadOperation" 'cyclic "merge")
envSetVal("adexl.gui" "setupFormDefaultLoadOperation" 'cyclic "overwrite")
```

Related Topics

[Loading a Setup State](#)

[Importing the Simulation Setup](#)

[Importing the Simulation Setup](#)

[Loading a Setup State](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

significantDigits

`adexl.gui significantDigits int numberOfSignificantDigits`

Description

Specifies the number of significant digits you want the program to display for values in the *Nominal* column on the *Results* tab.

The valid value is a positive integer value from 2 to 15.

The default value is 4.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "significantDigits")  
envSetVal("adexl.gui" "significantDigits" 'int 100)
```

Related Topics

[Nominal](#)

showSimLogForOnePointSim

```
adexl.gui showSimLogForOnePointSim boolean { t | nil }
```

Description

Opens the simulator log file for a single test and single point run.

The valid values are:

- `t`: Opens the simulator log file for a single test and single point run after the simulation is complete.
This is the default value.
- `nil`: Does not open the simulator log file by default. To view the output log for a point, right-click any result value for that point on the *Results* tab and choose *Output Log*.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "showSimLogForOnePointSim")  
envSetVal("adexl.gui" "showSimLogForOnePointSim" 'boolean nil)
```

specComparisonMode

```
adexl.gui specComparisonMode cyclic { "Histories" | "Design Points" }
```

Description

Specifies the default comparison mode in the Spec Comparison form.

The valid values are `Design Points` and `Histories`.

The default value is `Histories`.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "specComparisonMode")  
envSetVal("adexl.gui" "specComparisonMode" 'cyclic "Design Points")
```

Related Topics

[Comparing Results](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

statusViewShowDefault

```
adexl.gui statusViewShowDefault string "columnName"
```

Description

Specifies the default sections to be displayed in the *Status* results view.

The valid value is a list of space-separated column names for the *Status* result view.

By default, all the columns are displayed.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "statusViewShowDefault")  
envSetVal("adexl.gui" "statusViewShowDefault" 'string "\"Progress Bar\"")
```

summaryViewShowDefault

```
adexl.gui summaryViewShowDefault string "columnName"
```

Description

Specifies the default columns to be displayed in the *Summary* results view.

The valid value is a string with the list of space-separated column names for the *Summary* results view.

By default, all the columns are displayed.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "summaryViewShowDefault")  
envSetVal("adexl.gui" "summaryViewShowDefault" 'string "\"User-Defined Columns\"")
```


testsShownInOutputsSetup

```
adexl.gui testsShownInOutputsSetup cyclic { "none" | "enabled" | "disabled" }
```

Description

Controls the display of outputs for selected tests in the *Outputs Setup* tab.

The valid values are :

- **all**: Displays the outputs for all the tests defined in the *Data View* tab.
This is the default value.
- **none**: Hides the outputs for all the tests defined in the *Data View* tab.
- **enabled**: Displays the outputs only for the tests that are enabled in the *Data View* tab.
As you enable or disable tests in the *Data View* tab, ADE XL dynamically shows the outputs corresponding to the enabled tests.
- **disabled**: Displays the outputs only for the tests that are disabled in the *Data View* pane. As you enable or disable tests in the *Data View* tab, ADE XL dynamically shows the outputs corresponding to the disabled tests.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "testsShownInOutputsSetup")
envSetVal("adexl.gui" "testsShownInOutputsSetup" 'cyclic "none")
envSetVal("adexl.gui" "testsShownInOutputsSetup" 'cyclic "enabled")
```

Related Topics

[Hiding and Showing Outputs](#)



toolbarButtonStyle

```
adexl.gui toolbarButtonStyle cyclic { "icon" | "text" }
```

Description

Specifies whether the *Match Parameters* and *Ratio Matched Parameters* buttons on the *Parameters* tab of the Variables and Parameters assistant use an icon or text.

The valid values are :

- **icon:** If *icon*, the *Match Parameters* button uses the  icon and the *Ratio Matched Parameters* button uses the  icon.

This is the default value.

- **text:** If *text*, the *Match Parameters* button uses the text *Match* and the *Ratio Matched Parameters* button uses the text *Ratio*.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "toolbarButtonStyle")  
envSetVal("adexl.gui" "toolbarButtonStyle" 'cyclic "text")
```

Related Topics

[Variables and Parameters](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

yieldViewShowDefault

```
adexl.gui yieldViewShowDefault string "columnsNameList"
```

Description

Specifies the default columns to be displayed in the view for Monte Carlo results.

The valid value is a string with the list of space-separated column names.

The default value is `"\Min\" "\Target\" "\Max\" "\Mean\" "\Std Dev\" "\Cpk\" "\Errors\" "\User-Defined Columns\" "\Mean +- K-Sigma\""`

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "yieldViewShowDefault")  
envSetVal("adexl.gui" "yieldViewShowDefault" 'string "")
```

Related Topics

[yield](#)

zoomToProbedInstOrNet

```
adexl.gui zoomToProbedInstOrNet boolean { t | nil }
```

Description

Specifies if the net or instance that violates a check needs to be zoomed into when you probe it from the Checks/Asserts results view.

The valid values are:

- `t`: The schematic editor zooms into the probed net or instance. The zoom scale is controlled by the `autoZoomScale` environment variable.

This is the default value.

- `nil`: The schematic editor does not zoom into the probed net or instance.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "zoomToProbedInstOrNet")
envSetVal("adexl.gui" "zoomToProbedInstOrNet" 'boolean nil)
```

Related Topics

[autoZoomScale](#)

adexl.cpupdtr

copyResultsData on page 222

copyResultsData

```
adexl.cpupdtr copyResultsData boolean { t | nil }
```

Description

Copies the simulation results when you copy a maestro view.

The `copyResultsData` variable is used by both Virtuoso and a supporting utility. Therefore, it is recommended to set it in the `~/ .cdsenv` file that is read by both. If you set this variable in the `<current-working-directory>/ .cdsenv` file, you must also set the `CDS_LOAD_ENV` variable in the UNIX environment to `CSF`. The variable is not used when specified in the `.cdsinit` file.

The valid values are:

- `t`: Copies the simulation results data.
- `nil`: Do not copy the simulation results data.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.cpupdtr" "copyResultsData")
envSetVal("adexl.cpupdtr" "copyResultsData" 'boolean nil)
```

Related Topics

[Copying Everything Contained in a maestro Cellview](#)

adexl.datasheet

- [author](#) on page 224
- [CSSFile](#) on page 225
- [customFiles](#) on page 226
- [mainDocXSLFile](#) on page 227
- [testDocXSLFile](#) on page 228
- [waveformFileExtension](#) on page 229
- [whatToSaveDefault](#) on page 230

Virtuoso ADE Environment Variables Reference

Environment Variables

author

```
adexl.datasheet author string "authorName"
```

Description

Specifies the author name to be printed in the footer of the datasheet. By default, the UNIX login ID and name of the user is printed in the footer. You can use this variable to print a different author name.

The valid value is a string value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.datasheet" "author")  
envSetVal("adexl.datasheet" "author" 'string "")
```


Virtuoso ADE Environment Variables Reference

Environment Variables

CSSFile

`adexl.datasheet CSSFile string "directoryOrFilePath"`

Description

Specifies a custom Cascading Style Sheet (CSS) file for controlling the formatting of the main datasheet file and the datasheet files that contain the results information for each test.

The valid value is a string value containing the path to a custom CSS file for the datasheet pages.

GUI Equivalent

None

Examples

```
envGetVal("adexl.datasheet" "CSSFile")
envSetVal("adexl.datasheet" "CSSFile" 'string "")
```

Related Topics

[Customizing the Datasheet Format and Structure](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

customFiles

```
adexl.datasheet customFiles string "filePath"
```

Description

Specifies the files to be copied to the datasheet directory when a datasheet is created. If you have customized your datasheet format using custom XSLT stylesheets, you can use this environment variable to copy files such as the image file for your company logo and other support files that are required by the custom stylesheets.

The valid value is a string value containing the path to a file or directory.

- If the path to a file is specified, only that file is copied to the datasheet directory when a datasheet is created.
- If the path to a directory is specified, all the files and sub-directories in the directory are copied to the datasheet directory when a datasheet is created.

GUI Equivalent

None

Examples

```
envGetVal("adexl.datasheet" "customFiles")  
envSetVal("adexl.datasheet" "customFiles" 'string "")
```

Related Topics

[Customizing the Datasheet Format and Structure](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

mainDocXSLFile

adexl.datasheet mainDocXSLFile string "*filePath*"

Description

Specifies a custom XSLT stylesheet for controlling the structure of the main datasheet file.

The valid value is a string value containing the path to a custom XSLT file for the main datasheet page.

GUI Equivalent

None

Examples

```
envGetVal("adexl.datasheet" "mainDocXSLFile")  
envSetVal("adexl.datasheet" "mainDocXSLFile" 'string "")
```

Related Topics

[Customizing the Datasheet Format and Structure](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

testDocXSLFile

```
adexl.datasheet testDocXSLFile string "filePath"
```

Description

Specifies a custom XSLT file for controlling the structure of the datasheet files that contain the results information for each test.

The valid value is a string containing the path to a custom XSLT file for the datasheet pages for each test.

GUI Equivalent

None

Examples

```
envGetVal("adexl.datasheet" "testDocXSLFile")
envSetVal("adexl.datasheet" "testDocXSLFile" 'string "")
```

Related Topics

[Customizing the Datasheet Format and Structure](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

waveformFileExtension

```
adexl.datasheet waveformFileExtension string "fileExtension"
```

Description

Specifies the default file extension for the datasheet image files.

The valid value is any one of the valid formats: "bmp", "png", "tiff", "eps", "pdf", "ppm", "jpg", "jpeg", "svg", "xpm".

When set to " ", this tool uses the default image format from ViVA XL, which is png.

The default value is " " .

GUI Equivalent

None

Examples

```
envGetVal("adexl.datasheet" "waveformFileExtension")
envSetVal("adexl.datasheet" "waveformFileExtension" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

whatToSaveDefault

```
adexl.datasheet whatToSaveDefault string "checkBoxNames"
```

Description

Specifies the check boxes to be enabled by default in the *What to Save* section of the Create Datasheet form.

The valid value is a string value listing space-separated check box names.

The default values is "\"Results\" \"Tests\" \"Waveforms\" \"Variables\" \"Setup\" \"Corners\" \"Schematic Images\""

GUI Equivalent

None

Examples

```
envGetVal("adexl.datasheet" "whatToSaveDefault")  
envSetVal("adexl.datasheet" "whatToSaveDefault" 'string "Results")
```

ams.envOpts

exportOceanScriptWithNetlistDirSupport

exportOceanScriptWithNetlistDirSupport

```
ams.envOpts exportOceanScriptWithNetlistDirSupport boolean { t | nil }
```

Description

If this variable is set to `t`, the design command in the exported ocean script uses the netlist path instead of the library, cell, and view names to specify the design to be netlisted and simulated. And the `resultsDir` command, which specifies the directory where the netlisting result is saved, is added to the OCEAN script.

The valid values are:

- `t`: The following changes are done in the exported OCEAN script:
 - The `design` command uses the netlist path to specify the design to be netlisted and simulated, as shown below:

```
design("path-to-the-netlist-file / netlist")
```
 - The `resultsDir` command is added to the OCEAN script.
- `nil`: The `design` command uses `lib/cell/view` format to specify the design to be netlisted and simulated, as shown below:

```
design("libName" "cellName" "viewName")
```

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("ams.envOpts" "exportOceanScriptWithNetlistDirSupport")  
envSetVal("ams.envOpts" "exportOceanScriptWithNetlistDirSupport" 'boolean t)
```


asimenv

allowSignalsExpressionInSameSubwindow

allowSignalsExpressionInSameSubwindow

```
asimenv allowSignalsExpressionInSameSubwindow boolean { t | nil }
```

Description

Plots signals and expressions in the same subwindow. This variable works when you select some expressions and/or signals from the results, right-click them, and choose *Plot* or *Plot All options*.

The valid values are:

- **t**: Signals and expression waveforms are plotted in the same subwindow.
This is the default value.
- **nil**: Signals and expression waveforms are plotted in different subwindows.

GUI Equivalent

None

Examples

```
envGetVal("asimenv" "allowSignalsExpressionInSameSubwindow")  
envSetVal("asimenv" "allowSignalsExpressionInSameSubwindow" 'boolean nil)
```

asimenv.startup

copyDesignVarsFromCellview

copyDesignVarsFromCellview

```
asimenv.startup copyDesignVarsFromCellview boolean { t | nil }
```

Description

Controls copy of design variables from a cellview to the design variables of ADE XL test.

The valid values are:

- `t`: Enables copy of design variables from the cellview property to a test.
This is the default value.
- `nil`: Stops copying design variables from the cellview property.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.startup" "copyDesignVarsFromCellview")  
envSetVal("asimenv.startup" "copyDesignVarsFromCellview" 'boolean nil)
```

adexl.oceanxl

includeSimLogInJobLog

includeSimLogInJobLog

```
adexl.oceanxl includeSimLogInJobLog boolean { t | nil }
```

Description

Controls whether the simulation log is to be included in the job log generated by the ICRP for an OCEAN run. By default, the log for an OCEAN run does not include the simulator output because for large simulations, this can result in large job log files. To save the simulator log in the ICRP job log for an OCEAN run, set this variable to `t` before running a simulation.

The valid values are:

- `t`: Includes the simulation log in the job log for an OCEAN run.
- `nil`: Does not include the simulation log in the job log for an OCEAN run.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.oceanxl" "includeSimLogInJobLog")  
envSetVal("adexl.oceanxl" "includeSimLogInJobLog" 'boolean t)
```

adexl.plotting

- [histogramBins](#)
- [histogramType](#)
- [histogramQQPlot](#)
- [maxHistogramBins](#)
- [modelFilesAre](#)
- [histogramType](#) on page 241
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- [showHistogramPoints](#) on page 253
- [showHistogramPercentMarkers](#) on page 254

histogramBins

`adexl.plotting histogramBins int defaultValue`

Description

Specifies the default value for the *Number of Bins* field on the Plot Histogram form.

The valid value is a positive integer value.

The default value is 10.

GUI Equivalent

None

Examples

```
envGetVal("adexl.plotting" "histogramBins")  
envSetVal("adexl.plotting" "histogramBins" 'int 100)
```

Related Topics

[Plot Histogram form](#)

histogramType

```
adexl.plotting histogramType string "defaultGraphType"
```

Description

Sets the default value for the *Type* drop-down list on the Plot Histogram form.

The valid values are:

- `pass/fail`: Plots a standard histogram with pass/fail spec markers.
The default value is `pass/fail`.
- `standard`: Plots a standard histogram
- `cumulative line`: Plots a cumulative line histogram
- `cumulative box`: Plots a cumulative box histogram

GUI Equivalent

None

Examples

```
envGetVal("adexl.plotting" "histogramType")  
envSetVal("adexl.plotting" "histogramType" 'string "")
```

Related Topics

[Plot Histogram form](#)

histogramQQPlot

```
adexl.plotting histogramQQPlot boolean { t | nil }
```

Description

Specifies the default value for the *Normal Quantile Plot* annotation option on the Plot Histogram form.

The valid values are:

- `t`: Plots the quantile plots (Q-Q plots) along with the histogram.
- `nil`: Does not plot the quantile plots (Q-Q plots).

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.plotting" "histogramQQPlot")  
envSetVal("adexl.plotting" "histogramQQPlot" 'boolean t)
```

Related Topics

[Plot Histogram form](#)

maxHistogramBins

```
adexl.plotting maxHistogramBins int maxLimit
```

Description

Specifies the maximum limit for the *Number of Bins* field on the Plot Histogram form.

The valid value is a positive integer value.

The default value is 1000.

GUI Equivalent

None

Examples

```
envGetVal("adexl.plotting" "maxHistogramBins")  
envSetVal("adexl.plotting" "maxHistogramBins" 'int 100)
```

Related Topics

[Plot Histogram form](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

modelFilesAre

```
adexl.plotting modelFilesAre cyclic { "Omitted" | "IndividualModels" |  
    "ShownInFull" | "ReplacedWithCornerName" }
```

Description

Specifies how the model file paths are to be displayed in the plots and sweep visibility filter. Use this variable when the signal names and expressions contain long model file paths.

Specify this variable before running simulation, and use the same value while plotting results or re-evaluating results.

The valid values are:

- **ReplacedWithCornerName**: Replaces the model file paths with corner names.
- **ShownInFull**: Displays the actual model file path.
- **IndividualModels**: Displays each model file as if it was a corner parameter. This is usually used when you use the same model file across corners, but vary only the sections.
- **Shortened**: Displays shortened model file paths in the filename:sectionName format.
This is the default value.
- **Omitted**: Does not display model file paths in plots.

GUI Equivalent

None

Examples

```
envGetVal("adexl.plotting" "modelFilesAre")  
envSetVal("adexl.plotting" "modelFilesAre" 'cyclic "Omitted")  
envSetVal("adexl.plotting" "modelFilesAre" 'cyclic "IndividualModels")
```

plotScalarExpressions

```
adexl.plotting plotScalarExpressions boolean { t | nil }
```

Description

Controls whether expressions that evaluate to scalar values are automatically plotted after the simulation run is complete.

The valid values are:

- **t**: Enables automatic plotting of expressions that evaluate to scalar values after the simulation run is complete.
This is the default value.
- **nil**: Disables automatic plotting of expressions that evaluate to scalar values after the simulation run is complete.

GUI Equivalent

None

Examples

```
envGetVal("adexl.plotting " "plotScalarExpressions")  
envSetVal("adexl.plotting " "plotScalarExpressions" 'boolean nil)
```

Related Topics

[plotScalarsAsLine](#)

plotScalarsAsLine

```
adexl.plotting plotScalarsAsLine boolean { t | nil }
```

Description

Controls whether expressions that evaluate to scalar values are automatically plotted with dots or lines after the simulation run is complete.

The valid values are:

- **t**: Enables automatic plotting of dependent variables in expressions to lines that evaluate to scalar values after the simulation run is complete.

This is the default value.

- **nil**: Disables automatic plotting of expressions that evaluate to scalar values, with lines, after the simulation run is complete. These expressions may not contain dependent variables and may plot to lines or dots.

String parameters always plot as dots.

GUI Equivalent

None

Examples

```
envGetVal("adexl.plotting " "plotScalarsAsLine")
envSetVal("adexl.plotting " "plotScalarsAsLine" 'boolean nil)
```

Related Topics

[Plotting Dependent Expressions](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

plotSignals

```
adexl.plotting plotSignals boolean { t | nil }
```

Description

Controls whether signals are automatically plotted after the simulation run is complete.

The valid values are:

- `t`: Enables automatic plotting of signals after the simulation run is complete.
This is the default value.
- `nil`: Disables automatic plotting of signals after the simulation run is complete.

GUI Equivalent

None

Examples

```
envGetVal("adexl.plotting " "plotSignals")  
envSetVal("adexl.plotting " "plotSignals" 'boolean nil)
```

plotType

```
adexl.plotting plotType cyclic { "Auto" | "Refresh" | "None" }
```

Description

Specifies the default plotting type to be used for all tests.

The valid values are:

- **Auto**: Automatically plots outputs after the simulation run is complete. For every subsequent simulation run, a new graph replaces the existing graph.
This is the default value.
- **Refresh**: Automatically plots outputs after the simulation run is complete, but refreshes the existing graph in the same window.
- **None**: Disables automatic plotting of results after the simulation run.

GUI Equivalent

None

Examples

```
envGetVal("adexl.plotting" "plotType")  
envSetVal("adexl.plotting" "plotType" 'cyclic "Refresh")  
envSetVal("adexl.plotting" "plotType" 'cyclic "None")
```

Related Topics

[Setting Default Plotting Options for All Tests](#)

plotWaveExpressions

```
adexl.plotting plotWaveExpressions boolean { t | nil }
```

Description

Controls whether expressions that evaluate to waveforms are automatically plotted after the simulation run is complete.

The valid values are:

- **t**: Enables automatic plotting of expressions that evaluate to waveforms after the simulation run is complete.

This is the default value.
- **nil**: Disables automatic plotting of expressions that evaluate to waveforms after the simulation run is complete.

GUI Equivalent

None

Examples

```
envGetVal("adexl.plotting " "plotWaveExpressions")
envSetVal("adexl.plotting " "plotWaveExpressions" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

resultsCacheSize

`adexl.plotting resultsCacheSize int numberOfResults`

Description

By default, this tool saves the latest four plotting results from the root results directory to a dedicated cache. Caching the results improves performance. The `resultsCacheSize` variable defines the number of the results to be saved to this dedicated cache. Results are stacked based on the First In First Out (FIFO) strategy, hence the most recently opened result is cached. To disable dedicated caching, set this variable to zero or a negative integer.

In a scenario where `resultsCacheSize` is set to a high value, it will cache more directories resulting in improved performance, but due to this caching, the memory consumption will be higher too.

The valid value is a integer value if set to a value less than or equal to zero, no cache is maintained.

The default value is 4.

GUI Equivalent

None

Examples

```
envGetVal("adexl.plotting" "resultsCacheSize")
envSetVal("adexl.plotting" "resultsCacheSize" 'int 2)
```

showHistogramDensity

```
adexl.plotting showHistogramDensity boolean { t | nil }
```

Description

Specifies the default value for the *Density Estimator* annotation option on the Plot Histogram form.

The valid values are:

- `t`: Plots a curve on the histogram that estimates the distribution concentration.
This is the default value.
- `nil`: Does not plot the curve.

GUI Equivalent

None

Examples

```
envGetVal("adexl.plotting " "showHistogramDensity")  
envSetVal("adexl.plotting " "showHistogramDensity" 'boolean nil)
```

Related Topics

[Plot Histogram form](#)

showHistogramDeviation

```
adexl.plotting showHistogramDeviation boolean { t | nil }
```

Description

Specifies the default value for the *Std Dev Lines* annotation option on the Plot Histogram form.

The valid values are:

- `t`: Shows the standard deviation lines in the graph indicating the mean, mean – standard deviation, and mean + standard deviation values.

This is the default value.

- `nil`: Does not show the standard deviation lines with the histogram.

GUI Equivalent

None

Examples

```
envGetVal("adexl.plotting " "showHistogramDeviation")
envSetVal("adexl.plotting " "showHistogramDeviation" 'boolean nil)
```

Related Topics

[Plot Histogram form](#)

showHistogramPoints

```
adexl.plotting showHistogramPoints boolean { t | nil }
```

Description

Controls the display of data points on histograms to enable cross-selection between the ADE Explorer and the ADE Assembler results table and the histogram plotted in the waveform window.

By default, the histogram data points are visible and the bars are filled with a transparent or alpha color to make the points clearly visible. You can select a histogram point to cross-select the corresponding result in the Results tab. Set this variable to `nil` to disable cross-selection from histogram points. In this case, the bars are filled with solid color.

You can also show or hide the data points on histograms using the Trace Properties form or by selecting or clearing the *Symbols On* command in the context-sensitive menu of histograms.

The valid values are:

- `t`: Shows data points on histograms. The histogram bars are filled with a transparent or alpha color to make the data points clearly visible. You can change the style of data points by using the *Symbols* command on the context-sensitive menu of histogram.

This is the default value.

- `nil`: Hides data points on histograms. Histogram bars are filled with solid colors and points are not visible.

GUI Equivalent

None

Examples

```
envGetVal("adexl.plotting " "showHistogramPoints")
envSetVal("adexl.plotting " "showHistogramPoints" 'boolean nil)
```

Related Topics

[Cross-Probing Results from Histogram Plots](#)

showHistogramPercentMarkers

```
adexl.plotting showHistogramPercentMarkers boolean { t | nil }
```

Description

Specifies the default value for the % *Markers* annotation option on the Plot Histogram form.

The valid values are:

- `t`: Shows vertical marker lines in the histogram at percentages corresponding to 1, 2, and 3 standard deviations of a normal distribution. If the distribution of the output is normal, these lines will be in the same position as the sigma lines. You can display the marker lines to get an idea about the distribution of points.
- `nil`: Does not show the vertical marker lines.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.plotting " "showHistogramPercentMarkers")  
envSetVal("adexl.plotting " "showHistogramPercentMarkers" 'boolean t)
```

Related Topics

[Plot Histogram form](#)

asimenv.plotting

- [specMarkers](#) on page 256
- [useQPDataToCreateDataSheet](#) on page 257

Virtuoso ADE Environment Variables Reference

Environment Variables

specMarkers

```
asimenv.plotting specMarkers boolean { t | nil }
```

Description

Controls whether spec markers should be displayed in the graphs plotted after simulation.

The valid values are:

- `t`: Displays spec markers in the graphs. When this variable is set to `t`, the *Spec Markers* graph annotations option on the Printing/Plotting Options form is enabled.
- `nil`: Does not display spec markers in the graphs.
This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.plotting" "specMarkers")  
envSetVal("asimenv.plotting" "specMarkers" 'boolean t)
```

Related Topics

[Printing/Plotting Options form](#)

useQPDataToCreateDataSheet

```
asimenv.plotting useQPDataToCreateDataSheet boolean { t | nil }
```

Description

Determines whether quick plot data is to be used for printing waveforms in the datasheet.

The valid values are:

- `t`: Quick plot data is used for printing waveforms in the datasheet. In case quick plot data does not exist and this variable is set to `t`, quick plot data will be generated first.

The default value is `t`, which means quick plot data is used by default for printing waveforms in the datasheet.
- `nil`: Full waveform data is used and the *Use Quickplot data* option is disabled on the Create Datasheet form.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.plotting" "useQPDataToCreateDataSheet")  
envSetVal("asimenv.plotting" "useQPDataToCreateDataSheet" 'boolean t)
```

ADE Simulation Environment

Virtuoso ADE Environment Variables Reference

Environment Variables

adelExitQuery

```
asimenv adelExitQuery boolean { t | nil }
```

Description

While closing the ADE L session, if this variable and the `saveQuery` are set to `t`, a dialog box is displayed asking whether you want to save the state of your environment if it has not been saved.

The valid values are:

- `t`: This is the default value.
- `nil`: If the `saveQuery` variable is set to `nil`, a dialog box is displayed to confirm whether you want to close the maestro session.

If the `saveQuery` and `adelExitQuery` are set to `nil`, the ADE L session closes without showing any dialog box.

While closing the **maestro** session?

GUI Equivalent

None

Examples

```
envGetVal("asimenv" "adelExitQuery")
envSetVal("asimenv" "adelExitQuery" 'boolean nil)
```

Related Topics

[saveQuery](#)

[adelExitQuery](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

adePanicStatePath

```
asimenv adePanicStatePath string "dirPath"
```

Description

Specifies the path where the .ADE_Panic_State directory must be saved in case of an unexpected failure in Virtuoso. This directory contains the current simulation settings.

By default, the .ADE_Panic_State directory is saved in the simulation directory.

The valid value is a path of the directory.

The default value is " " .

GUI Equivalent

None

Examples

```
envGetVal("asimenv" "adePanicStatePath")  
envSetVal("asimenv" "adePanicStatePath" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

allowAdePanicStateSaving

```
asimenv allowAdePanicStateSaving boolean { t | nil }
```

Description

In case of an unexpected failure in Virtuoso, there are chances unsaved simulation settings. This variable lets you save these settings in the panic state of unexpected failure. By default, the variable is set to t and ADE saves the settings.

The default value is t.

To unset this variable in the .cdsinit file or CIW, use the call:

```
envSetVal("asimenv" "allowAdePanicStateSaving" 'boolean nil)
```

GUI Equivalent

None

Examples

```
envGetVal("asimenv" "allowAdePanicStateSaving")
envSetVal("asimenv" "allowAdePanicStateSaving" 'boolean nil)
```

allowInvalidObjectSelection

```
auCore.selection allowInvalidObjectSelection boolean { t | nil }
```

Description

If this variable is set to `t`, external signals (nets and terminals) specified in the outputs are included for netlisting. This is useful when simulation includes an external text netlist or a DSPF files in which internal nets and terminals are not mapped by ADE Explorer or ADE Assembler.

By default, the signals specified in the outputs are validated by ADE Explorer or ADE Assembler. If the signals are not found in the design hierarchy, they are disabled and highlighted in yellow in the *Outputs Setup* tab. You cannot select them for plotting and saving and they are not included in the simulation results.

If you are including an external text netlist such as a DSPF and you want to save or plot a signal within the file, write the signals and expressions in the format of that file. In this case, you can set this variable to `t` and this will allow you to select the save and plot check boxes for those signals and expressions. The tool does not validate these signals or expressions and directly passes them to the netlist in the same syntax. It also disables the yellow highlighting of such outputs.

Since signals that are not found in the design hierarchy are not validated by ADE Explorer or ADE Assembler, you must ensure that the signals are valid.

The default value is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("auCore.selection" "allowInvalidObjectSelection")
envSetVal("auCore.selection" "allowInvalidObjectSelection" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

appendLibNameToProjectDir

```
asimenv.startup appendLibNameToProjectDir boolean { t | nil }
```

Description

Lets you specify whether the library name should be appended to the simulation directory.

The default value is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.startup" "appendLibNameToProjectDir")
envSetVal("asimenv.startup" "appendLibNameToProjectDir" 'boolean t)
```

artistPlottingMode

```
asimenv.plotting artistPlottingMode string "plotSet"
```

Description

Specify the plotting mode for the default maestro session.

The valid values are Append, Replace, New Win, New SubWin.

The default value is Replace.

GUI Equivalent

The *Plotting Mode* drop-down list on the Plotting toolbar.

Examples

```
envGetVal("asimenv.plotting" "artistPlottingMode")
envSetVal("asimenv.plotting" "artistPlottingMode" 'string "New Win")
```

Acceptable Values

Append / Replace / New Win / New SubWin

GUI Equivalent

Plotting Mode drop-down listbox on the ADE L window

Related Topics

Selecting the Plot Mode

Virtuoso ADE Environment Variables Reference

Environment Variables

waveformReaderThreadCount

```
asimenv.plotting waveformReaderThreadCount string "numberOfThreads"
```

Description

Specifies the number of threads that are computed by SRR while reading a parametric waveform data. The purpose of this variable is to achieve maximum throughput during the loading of parametric waveform.

The valid value is any integer value.

The default value is `auto`.

It indicates that number of threads are computed automatically. When you specify an integer value, it directs the SRR to start the specified number of threads. When you specify 0, it disables the SRR threading while reading the parametric data.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.plotting" "waveformReaderThreadCount")
envSetVal("asimenv.plotting" "waveformReaderThreadCount" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

autoPlot

```
asimenv.plotting autoPlot cyclic { "Auto" | "None" | "Refresh" }
```

Description

Plots the entire plot set (including waveform expressions) automatically when each simulation run is finished.

The valid values are `Auto`, `None` and `Refresh`.

The default value is `Auto`.

GUI Equivalent

Command	Plotting option from the Plotting Option drop-down list.
Field	ADE Explorer Plotting/Printing Options form—Plot group box

Examples

```
envGetVal("asimenv.plotting" "autoPlot")
envSetVal("asimenv.plotting" "autoPlot" 'cyclic "Refresh")
envSetVal("asimenv.plotting" "autoPlot" 'cyclic "None")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

awvResizeWindow

```
awvResizeWindow( w_windowId l_bBox )  
=> t | nil
```

Resizes a window to the size of a bounding box. The bounding box is specified as a list of 2 x:y points, that represent the lower left and upper right corners of the box.

Variable Type	Boolean
Default Value	t
Acceptable Values	t/nil
Example	<pre>awvResizeWindow(window(4) list(391:288 1134:922))</pre>

Virtuoso ADE Environment Variables Reference

Environment Variables

browserCenterMode

```
asimenv.misc browserCenterMode boolean { t | nil }
```

Description

To keep the most recently expanded node in the results browser in the center of the window, set this variable to true. If you do not want the most recently expanded node to move automatically to the center of the window, you can turn off the centering mode by setting this variable to `nil`.

The default value is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.misc" "browserCenterMode")  
envSetVal("asimenv.misc" "browserCenterMode" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

createCDFdata

```
auCore.misc createCDFdata boolean { t | nil }
```

Description

If this variable is set to `t`, the fields *netlistProcedure*, *namePrefix*, and *componentName* in the CDF `simInfo` section are reset to their default values while generating the CDF information for the cellview. If this variable is set to `nil`, none of these fields are included while generating the CDF information.

The default value is `t`.

GUI Equivalent

None

Examples

```
envGetVal("auCore.misc" "createCDFdata")
envSetVal("auCore.misc" "createCDFdata" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

createCDFtermOrder

```
auCore.misc createCDFtermOrder boolean { t | nil }
```

Description

While creating a new cellview from an existing cellview, the terminal order of the new cellview is automatically generated and added to the CDF simulation information (`simInfo`) property `termOrder` in the CDF. To disable the auto-creation of terminal order for cellview-from-cellview creation, you can set this variable to `nil`.

The default value is `t`.

GUI Equivalent

None

Examples

```
envGetVal("auCore.misc" "createCDFtermOrder")
envSetVal("auCore.misc" "createCDFtermOrder" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

createComponentName

```
auCore.misc createComponentName string "componentName"
```

Description

Adds the specified string to the *componentName* field in the CDF *simInfo* section. You can use this variable to specify the component name.

The valid value is a string value.

The default value is "subcircuit".

GUI Equivalent

None

Examples

```
envGetVal("auCore.misc" "createComponentName")  
envSetVal("auCore.misc" "createComponentName" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

createNamePrefix

```
auCore.misc createNamePrefix boolean { t | nil }
```

Description

Adds the information related to the name prefix to the *namePrefix* field in the CDF *simInfo* section.

The default value is *t*.

GUI Equivalent

None

Examples

```
envGetVal("auCore.misc" "createNamePrefix")  
envSetVal("auCore.misc" "createNamePrefix" 'boolean nil)
```


Virtuoso ADE Environment Variables Reference

Environment Variables

createNetlistProc

```
auCore.misc createNetlistProc boolean { t | nil }
```

Description

Adds the information related to the netlisting procedure to the *netlistProcedure* field in CDF *simInfo* section.

The default value is *t*.

GUI Equivalent

None

Examples

```
envGetVal("auCore.misc" "createNetlistProc")  
envSetVal("auCore.misc" "createNetlistProc" 'boolean nil)
```

createOceanScriptBeforeSimulation

```
asimenv createOceanScriptBeforeSimulation boolean { t | nil }
```

Description

Creates an OCEAN script before running simulation and saves it in the netlist directory of the cellview. This increases the overall simulation time, therefore, the variable is set to `nil` by default. If you want to create an OCEAN script for debugging purposes, set this variable to `t` in the `.cdsinit` file.

The default value is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("auCore.misc" "createOceanScriptBeforeSimulation")  
envSetVal("auCore.misc" "createOceanScriptBeforeSimulation" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

defaultHierSave

```
asimenv defaultHierSave cyclic { "voltage" | "current" | "power" | "all" | "none" }
```

Description

Sets the default selected value of the voltage, current, or power for all the subcircuit instances in the *Save By Subckt Instances* tab of the simulation window. By default, the check boxes for only the voltage are selected for all the subcircuit instances.

The valid values are `voltage`, `current`, `power`, `all`, `none`.

The default value is `voltage`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv" "defaultHierSave")
envSetVal("asimenv" "defaultHierSave" 'cyclic "current"')
envSetVal("asimenv" "defaultHierSave" 'cyclic "power"')
```

Virtuoso ADE Environment Variables Reference

Environment Variables

defaultTools

```
auCore.toolFilter defaultTools string "variable"
```

Description

Specifies the list of simulators to be selected by default in the Tool Filter form.

The valid values are `spectre`, `auCdl`, `auLvs`.

The default value is "spectre auCdl auLvs"

GUI Equivalent

None

Examples

```
envGetVal("auCore.toolFilter" "defaultTools")  
envSetVal("auCore.toolFilter" "defaultTools" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

designName

```
asimenv.plotting designName boolean { t | nil }
```

Description

Displays the design name in the graph window.

The default value is `t`.

GUI Equivalent

Examples

```
envGetVal("asimenv.plotting" "designName")  
envSetVal("asimenv.plotting" "designName" 'boolean nil)
```

GUI Equivalent

*Virtuoso Analog Design Environment – Editing
Session Options – Design Name*

designVarSetting

```
asimenv designVarSetting string "designVariablesList"
```

Description

Specifies a list of design variables, with their respective values, to be added to a maestro session at the time of session creation or initialization. The list is specified as a string with space-separated name and value pairs. The design variables created with this variable are added in the *Design Variables* section of the Setup assistant.

GUI Equivalent

None

Examples

```
envGetVal("asimenv" "designVarSetting")  
envSetVal("asimenv" "designVarSetting" 'string "var1 10 var2 30")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

digitalHost

`asimenv.startup designVarSetting string "path"`

Description

The variable lets you specify a path to the host computer for a digital remote simulation. You must specify a complete path.

The valid value is the name of any machine in the network.

The default value is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.startup" "digitalHostMode")
envSetVal("asimenv.startup" "digitalHostMode" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

digitalHostMode

```
asimenv.startup digitalHostMode string "machineName"
```

Description

The variable `digitalHostMode` lets you choose default local or remote digital simulation.

The valid values are `local` and `remote`.

The default value is `local`.

GUI Equivalent

Command:

Field:

Examples

```
envGetVal("asimenv.startup" "digitalHostMode")
```

```
envSetVal("asimenv.startup" "digitalHostMode" 'string "remote")
```

GUI Equivalent

*Virtuoso Analog Design Environment –
Choosing Simulator/Directory/Host – Digital
Host Mode*

Virtuoso ADE Environment Variables Reference

Environment Variables

digits

`asimenv.noiseSummary digits int significantDigits`

Description

Number of significant digits with which the contributors are printed.

The valid value is any valid integer and the maximum limit is the limit of an integer.

The default value is 6.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.noiseSummary" "digits")
envSetVal("asimenv.noiseSummary" "digits" 'int 10)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

directPlotPlottingMode

```
asimenv.plotting directPlotPlottingMode string "machineName"
```

Description

Plots the entire plot set in the specified mode.

The valid values are Append, Replace, New Win, New SubWin.

The default value is Append.

GUI Equivalent

Command:

Field:

Examples

```
envGetVal("asimenv.plotting" "directPlotPlottingMode")
envSetVal("asimenv.plotting" "directPlotPlottingMode" 'string "remote")
```

GUI Equivalent

Cyclic is on the DirectPlot Main form

displayPcellNameCustomFormat

```
asimenv.netlist displayPcellNameCustomFormat boolean { t | nil }
```

Description

Displays the parameters in the netlist header, in comments associated with the Pcell name that is customized using the variable `pcellNameGenerationStyle`.

The default value is `t`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.netlist" "displayPcellNameCustomFormat")  
envSetVal("asimenv.netlist" "displayPcellNameCustomFormat" 'boolean nil)
```

Related Topics

[pcellNameGenerationStyle](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

displayPointNetlistTimeStamp

```
asimenv.netlist displayPointNetlistTimeStamp boolean { t | nil }
```

Description

Displays the time stamp of the point netlist generated. The netlist header contains the following information.

```
// Point Netlist Generated on: Oct 21 10:16:52 2019 // Generated for: spectre //  
Design Netlist Generated on: Oct 20 11:26:11 2019
```

The valid values are:

- `t`: Displays the time stamp on the point netlist header.
The default value is `t`.
- `nil`: Hides the time stamp on the point netlist header.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.netlist" "displayPointNetlistTimeStamp")  
envSetVal("asimenv.netlist" "displayPointNetlistTimeStamp" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

doNotOverwriteVarValuesWhileCopyingFromCV

```
asimenv doNotOverwriteVarValuesWhileCopyingFromCV boolean { t | nil }
```

Description

If this variable is set to a non-nil value, design variables are copied from cellview without overwriting the existing variables' values and only copies the new variables and their values.

By default, *Copy from Cellview* overwrites all existing variables' values.

The valid values are:

- `t`: Displays the time stamp on the point netlist header.
- `nil`: Hides the time stamp on the point netlist header.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("asimenv" "doNotOverwriteVarValuesWhileCopyingFromCV")  
envSetVal("asimenv" "doNotOverwriteVarValuesWhileCopyingFromCV" 'boolean t)
```

For default behavior, use the call:

```
envSetVal("asimenv" "doNotOverwriteVarValuesWhileCopyingFromCV"  
'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

drlBufferMemory

```
asimenv.plotting drlBufferMemory int bufferMemory
```

Description

Allocates a buffer memory of the specified size for Virtuoso.

In cases when Virtuoso reads huge simulation data or evaluates memory-intensive expressions, the process might consume all the available memory. When allocation of more memory fails, Virtuoso might terminate abnormally or it might behave inconsistently. In such cases, Virtuoso can use this buffer memory to make the process exit gracefully. By default, memory of size 10 million bytes is allocated. You may increase the size of this memory for better results.

Memory allocated using the `drlBufferMemory` variable helps in exiting Virtuoso gracefully in case of memory crunch. However, it may not be successful in all such scenarios.

The valid values are 10 to 25% of the total RAM size.

The default value is 10000000 .

GUI Equivalent

None

Examples

```
envGetVal("asimenv.plotting" "drlBufferMemory")
envSetVal("asimenv.plotting" "drlBufferMemory" 'int 100)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

findVariablesSkip

```
auCore.misc findVariablesSkip cyclic { "parasitic" | "extracted" | "none" }
```

Description

This environment variable can be used to ignore the design variables in the extracted cellviews or in the parasitic instances, thus improving the netlisting performance of extracted views.

The default value is `none`.

To ignore the design variables in the parasitic instances,

- Add the following call in the `.cdsenv` file:

```
auCore.misc findVariablesSkip cyclic "parasitic"
```

- Use the following call in the `.cdsinit` file or CIW:

```
envSetVal("auCore.misc" "findVariablesSkip" 'cyclic "parasitic")
```

The netlisting traversal in maestro cellviews uses a new traversal code that handles large iterated instances and extracted views more efficiently. This code identifies a cellview as `extracted`, if the *extractionCreatedBy* property is present in the cellview, but ignores the corresponding value. An external extracted view must have this property to benefit from the traversal code changes. The cellviews that have *findVariablesSkip* property set to `parasitic` or `extracted` are ignored during pre-simulation checks and the netlisting of Checks/Asserts to support performance improvement.

To ignore the design variables in the extracted cellviews,

- Add the following call in the `.cdsenv` file:

```
auCore.misc findVariablesSkip cyclic "extracted"
```

- Use the following call in the `.cdsinit` file or CIW:

```
envSetVal("auCore.misc" "findVariablesSkip" 'cyclic "extracted")
```

GUI Equivalent

None

Virtuoso ADE Environment Variables Reference

Environment Variables

Examples

```
envGetVal("auCore.misc" "findVariablesSkip")
envSetVal("auCore.misc" "findVariablesSkip" 'cyclic "parasitic")
envSetVal("auCore.misc" "findVariablesSkip" 'cyclic "extracted")
```


Virtuoso ADE Environment Variables Reference

Environment Variables

host

```
asimenv.startup host string "constraintName"
```

Description

Lets you specify a path to the host computer for remote simulation. You must specify a complete path.

The valid value is a name for any machine in the network.

The default value is " " .

GUI Equivalent

None

Examples

```
envGetVal("asimenv.startup" "host")  
envSetVal("asimenv.startup" "host" 'string "")
```

GUI Equivalent

*Virtuoso Analog Design Environment –
Choosing Simulator/Directory/Host – Host*

Virtuoso ADE Environment Variables Reference

Environment Variables

hostMode

```
asimenv.startup hostMode string "defaultSimulation"
```

Description

Lets you specify a default local, remote or distributed simulation.

The valid values are Local, remote, and distributed.

The default value is Local.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.startup" "hostMode")  
envSetVal("asimenv.startup" "hostMode" 'string "")
```

GUI Equivalent

*Virtuoso Analog Design Environment –
Choosing Simulator/Directory/Host – Host Mode*

Virtuoso ADE Environment Variables Reference

Environment Variables

icons

```
asimenv.plotting icons boolean { t | nil }
```

Description

This variable places icons in the graph window.

The default value is `t`.

GUI Equivalent

Command:

Field:

Examples

```
envGetVal("asimenv.plotting" "icons")  
envSetVal("asimenv.plotting" "icons" 'boolean nil)
```

GUI Equivalent

Virtuoso Analog Design Environment – Setting Plotting Options – Allow Icons

Virtuoso ADE Environment Variables Reference

Environment Variables

ignoreDesignCheckout

```
asimenv.loadstate ignoreDesignCheckout boolean { t | nil }
```

Description

If this variable is set to `t`, then while loading an ADE L state which is saved as a cellview using the Loading State form, the cellview is not checked out and is opened in read-only mode. By default, when an ADE L state which is saved as a cellview is loaded using the Loading State form, the Auto Checkout form that can be used to check out the cellview appears.

The default value is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.loadstate" "ignoreDesignCheckout")  
envSetVal("asimenv.loadstate" "ignoreDesignCheckout" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

ignoreSchModified

```
auCore.toolFilter ignoreSchModified boolean { t | nil }
```

Description

Set this variable to `t`, the schematic will not be modified. When this variable is set, you need not do a check and save after making changes to the toolFilter form.

The default value is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("auCore.toolFilter" "ignoreSchModified")
envSetVal("auCore.toolFilter" "ignoreSchModified" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

includeAsBundle

```
auCore.selection includeAsBundle boolean { t | nil }
```

Description

This variable specifies the default value of the *Include as bundle* check box that is displayed in the Select bits from bus form. If set to `t`, the *Include as bundle* check box is selected by default when you open the form.

The default value is `t`.

GUI Equivalent

None

Examples

```
envGetVal("auCore.selection" "includeAsBundle")
envSetVal("auCore.selection" "includeAsBundle" 'boolean nil)
```

innerSweepSwappableSizeLimit

```
asimenv.plotting innerSweepSwappableSizeLimit int stopLevel
```

Description

Specifies the limit for the number of simulation points up to which the `swapSweep` function can be successfully run.

The `swapSweep` function swaps the X-axis value with the specified sweep variable. If the number of points are more than the limit specified by this variable, you need to input a particular X-axis point to be used for swapping.

The valid value is any integer value greater than 0.

The default value is 500.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.plotting" "innerSweepSwappableSizeLimit")  
envSetVal("asimenv.plotting" "innerSweepSwappableSizeLimit" 'int 100)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

immediatePlot

```
asimenv.plotting immediatePlot boolean { t | nil }
```

Description

This variable refers to the commands located in the *Direct Plot* menu. If true, the plot is drawn after each node is selected. If nil, none of the plots are drawn until all the nodes have been selected. You can select more than one node and click the `Escape` key when finished, and all the selected nodes are plotted at the same time.

The default value is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.plotting" "immediatePlot")  
envSetVal("asimenv.plotting" "immediatePlot" 'boolean t)
```

GUI Equivalent

Virtuoso Analog Design Environment – Setting Plotting Options – Direct Plots Done After

Virtuoso ADE Environment Variables Reference

Environment Variables

immediatePrint

```
asimenv.plotting immediatePrint boolean { t | nil }
```

Description

This variable refers to the commands located in the Print menu. If true, the results are printed after each node is selected. If nil, none of the nodes is printed until all the nodes have been selected.

The default value is `t`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.plotting" "immediatePrint")
envSetVal("asimenv.plotting" "immediatePrint" 'boolean nil)
```

GUI Equivalent

Virtuoso Analog Design Environment – Setting Plotting Options – Print After

Virtuoso ADE Environment Variables Reference

Environment Variables

useHierarchicalSelection

```
auCore.selection useHierarchicalSelection boolean { t | nil }
```

Description

Enables you to use hierarchical selection for various ADE operation. When set to nil, the behavior does not change, which means selection in the navigator is ignored. When set to t, the selection in the navigator can be used in many places, including output to be plotted or saved in ADE L and ADE XL, as well as the places that include a *Select on Design* button, such as expressions and the calculator of ADE XL.

The default value is t.

GUI Equivalent

None

Examples

```
envGetVal("auCore.selection" "useHierarchicalSelection")  
envSetVal("auCore.selection" "useHierarchicalSelection" 'boolean nil)
```

inductorDeviceNames

```
auCore.selection inductorDeviceNames string "inductorDevicesList"
```

Description

Enables you to specify the initial conditions for the inductor current. You can define the list of space-separated inductor devices in the variable values. For example, if the value of this variable is set to `ind`, it enables the selection of pins of devices with names—`ind`, `ind1`, `ind2`, `inductor`, and so on.

The valid value is any string value.

The default value is `string "ind"`.

GUI Equivalent

None

Examples

```
envGetVal("auCore.selection" "inductorDeviceNames")
envSetVal("auCore.selection" "inductorDeviceNames" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

keepShellVarsInModelLibPath

```
asimenv.misc keepShellVarsInModelLibPath boolean { t | nil }
```

Description

This variable is used to retain the shell variables used in all file paths in the Model Library Setup form and the Simulation Files Setup form.

When set to `nil`, the file path is changed to an absolute path by expanding all the shell variables used in it. When set to `t`, the shell variables used in the file path are retained.

For example, If the following shell variables are available:

```
PROJECT=/projects/lrd_pe/users/user1/myblock
```

```
PDK=pdk_v1
```

```
tool=spectre
```

These variables are used in a model file path, as shown below.

```
$PROJECT/$PDK/models/$tool/models.scs
```

In this example, if you browse up to the `models` directory and choose another directory, the variables `$PROJECT` and `$PDK` will be retained, but, `$tool` will be removed from the path.

The default value is `t`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.misc" "keepShellVarsInModelLibPath")
```

```
envSetVal("asimenv.misc" "keepShellVarsInModelLibPath" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

netlistAccess

```
asimenv.netlist netlistAccess string "netlistAccessPermission"
```

Description

This variable is used to specify the access permissions for the netlist. By default, this variable is set to `User`. Therefore, while netlisting, only the creator of the netlist will be able to run simulation on it. You can also set the values of the variable to `Group` and `All`. By setting the value to `Group`, all the users in the same group as the `User` will be able to run the netlist. If you set the value to `All`, anybody can run the netlist.

The valid values are `User`, `Group`, and `All`.

The default value is `User`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.netlist" "netlistAccess")  
envSetVal("asimenv.netlist" "netlistAccess" 'string "")
```

includeSimLogInOCEAN

```
asimenv.misc includeSimLogInOCEAN boolean { t | nil }
```

Description

Controls whether the simulation log is to be included in the log for OCEAN script. By default, the log for an OCEAN run includes the simulator output. For large simulations, this can result in large log files. In such cases, before running a simulation, you can set this variable to `nil` to exclude the simulator output from the OCEAN job log.

The default value is `t`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.misc" "includeSimLogInOCEAN")
```

```
envSetVal("asimenv.misc" "includeSimLogInOCEAN" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

numberOfSavedRuns

asimenv.misc numberOfSavedRuns int *runData*

Description

Once set to value greater than 0, ADE L will retain the simulation run data for the last *numberOfSavedRuns* simulations. In case of Parametric, a single run may include multiple simulations. At the end of a simulation run, ADE L will save the current run data under:

<simulation_dir>/<cell_name>/<simulator_name>/<view_name> to a numbered directory under <simulation_dir>/<cell_name>/<simulator_name>.

The number used is one higher than the highest numbered directory name or 1 if none exist. If the maximum number of *Saved Runs* is reached, ADE L will save the current run data, but delete the smallest numbered directory, thus keeping the number of Saved Runs equal to the value set in the variable.

The default value is 0.

Example:

numberOfSavedRuns is set to 2

Under <simulation>/<ampTest>/<spectre>

1. At the end of first simulation run

1/ schematic/

2. At the end of second simulation run

1/ 2/ schematic/

3. At the end of third simulation run

2/ 3/ schematic/

In all the three cases above the schematic directory would have the current simulation results.

GUI Equivalent

None

Virtuoso ADE Environment Variables Reference

Environment Variables

Examples

```
envGetVal("asimenv.misc" "numberOfSavedRuns")  
envSetVal("asimenv.misc" "numberOfSavedRuns" 'int 10)
```


Virtuoso ADE Environment Variables Reference

Environment Variables

obsoleteWarnings

```
asimenv.netlist obsoleteWarnings int warningsLimit
```

Description

Number of warnings that are needed to be stored.

By default, this variable is set to 1. Therefore, while netlisting, one error is shown at a time. If it is desired that more number of errors are shown then change this variable to a larger number.

The valid value is any integer value. The maximum limit is the limit of an integer.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.netlist" "obsoleteWarnings")  
envSetVal("asimenv.netlist" "obsoleteWarnings" 'int 10)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

oceanScriptFile

```
asimenv.misc oceanScriptFile string "defaultLocation"
```

Description

Set this variable to specify the default location for saving OCEAN script files.

The default value is `"./oceanScript.ocn"`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.misc" "oceanScriptFile")  
envSetVal("asimenv.misc" "oceanScriptFile" 'string "")
```

outputsImportExportVersion

asimenv.misc outputsImportExportVersion float *exportOrImportOutput*

Description

If the value of this variable is greater than 1.0, then ADE exports or imports the outputs from the CSV file. You can change the value of this variable to less than 1.0 if you want to export or import the outputs from the text file.

The valid value is any floating value.

The default value is 1.1.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.misc" "outputsImportExportVersion")
envSetVal("asimenv.misc" "outputsImportExportVersion" 'float 2)
```

GUI Equivalent

*Virtuoso Analog Design Environment – Outputs
– Export.*

*Virtuoso Analog Design Environment – Outputs
– Import.*

Related Topics

[Export](#)

[Import](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

paraplotUpdateSimulatorLog

```
asimenv.misc paraplotUpdateSimulatorLog boolean { t | nil }
```

Description

When this variable is set to `t`, the simulator log appears in a new window, when a parametric analysis is run.

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.misc" "paraplotUpdateSimulatorLog")  
envSetVal("asimenv.misc" "paraplotUpdateSimulatorLog" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

pcellNameGenerationStyle

```
asimenv.netlist pcellNameGenerationStyle cyclic "pcellNames"
```

Description

Customizes the hierarchical Pcell names using the Unique key. If this variable is set to `UniqueKey`, the Pcell name is generated in a long UUID format. On setting the value as `CustomFormat`, this variable generates a Pcell name based on a user-defined format.

The valid values are `Default`, `UniqueKey` and `CustomFormat`.

The default value is `Default`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.netlist" "pcellNameGenerationStyle")  
envSetVal("asimenv.netlist" "pcellNameGenerationStyle" 'string "UniqueKey")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

pcellNameCustomFormat

```
asimenv.netlist pcellNameCustomFormat string "pcellNameFormat"
```

Description

Customizes the format of hierarchical Pcell names when CustomFormat is set as the value for the variable pcellNameGenerationStyle.

```
"paramNme:Name-%VALUE,paramName:Name-%VALUE..."
```

Here, paramName represents the parameter of the Pcell, %NAME specifies the name of the parameter and %VALUE specifies the value of the parameter.

For example,

Through this variable, set the Pcell name format as "r1:%NAME-%VALUE,num:%NAME-%VALUE".

The following subcircuit will be generated:

```
subckt pres_pcell_r10_num11_13840648026460803914
<...>
ends pres_pcell_r10_num11_13840648026460803914
```

Here, the parameters r1 and num and the values 0 and 11, respectively, are added to the subcircuit name.

Note: This variable also supports user-defined custom strings:

```
envSetVal("asimenv.netlist" "pcellNameCustomFormat" 'string
"r1:ResistorCustomName-%VALUE,num:NumCustomName-%VALUE")
```

The valid value is a user-defined customized format for Pcell names.

The default value is " " .

GUI Equivalent

None

Examples

```
envGetVal("asimenv.netlist" "pcellNameCustomFormat")
envSetVal("asimenv.netlist" "pcellNameCustomFormat" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

postSaveOceanScript

```
asimenv.misc postSaveOceanScript string ""
```

Description

This procedure is executed after the ocean script is created when the *Save Ocean Script* option is clicked. You can add your own customized code here. Use the following syntax to specify the SKILL functions/procedures:

```
MyLastProc( session fp )
```

In this syntax, `session` is the maestro session and `fp` is the file pointer to the OCEAN script. You do not need to set these; maestro session sets these for you. In this case, the value for the variable `postSaveOceanScript` will be `MyLastProc`.

The valid value is the name of a procedure.

The default value is " " .

GUI Equivalent

None

Examples

```
envGetVal("asimenv.misc" "postSaveOceanScript")  
envSetVal("asimenv.misc" "postSaveOceanScript" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

preferTermOrderOverPinOrder

```
asimenv.netlist preferTermOrderOverPinOrder boolean { t | nil }
```

Description

This variable is used to customize the termOrder printed in the netlist. As per the default order, if schematic pinOrder property is present, this pinOrder property is used. If schematic pinOrder property is not present, the default termOrder from CDF is used. When this variable is set to `t`, the CDF termOrder is used even if the schematic pinOrder property is present. When set to `nil`, the default order explained above is followed.

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.netlist" "preferTermOrderOverPinOrder")  
envSetVal("asimenv.netlist" "preferTermOrderOverPinOrder" 'boolean t)
```


Virtuoso ADE Environment Variables Reference

Environment Variables

preSaveOceanScript

```
asimenv.misc preSaveOceanScript string "customCode"
```

Description

This procedure is executed before the ocean script is created, when the *Save Ocean Script* option is enabled. You can add your own customized code here. Use the following syntax to specify the SKILL functions/procedures:

```
MYfirstProc( session fp )
```

In this syntax, `session` is the maestro session and `fp` is the file pointer to the OCEAN script. You do not need to set these. Maestro session sets these for you. In this case, the value for the variable `postSaveOceanScript` will be `MyfirstProc`.

The valid value is the name of a procedure.

The default value is " " .

GUI Equivalent

None

Examples

```
envGetVal("asimenv.misc" "preSaveOceanScript")  
envSetVal("asimenv.misc" "preSaveOceanScript" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

printCommentChar

```
asimenv.userPref printCommentChar string "commentCharacter"
```

Description

This variable sets the preferred comment character for the printvs data. The # sign is the default comment character. To set the preferred comment character, set the variable, *printCommentChar* to the character.

The valid value is an integer value. The maximum limit is the limit of an integer.

The default value is # .

GUI Equivalent

None

Examples

```
envGetVal("asimenv.userPref" "printCommentChar")  
envSetVal("asimenv.userPref" "printCommentChar" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

printInlines

```
asimenv.plotting printInlines boolean { t | nil }
```

Description

When this variable is set to `t`, data for all devices in a textual subcircuit will be printed. Refer to chapter 10. Searching for devices in a textual subcircuit may take some time. If you want to disable this feature, set this variable to `nil`.

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.plotting" "printInlines")  
envSetVal("asimenv.plotting" "printInlines" 'boolean t)
```

Window Menu

Results – Print – DC Operating Points

Results – print – Transient Operating points

Results – print – Model Parameters

Virtuoso ADE Environment Variables Reference

Environment Variables

printNotation

```
auCore.userPref printNotation cyclic { "engineering" | "scientific" | "suffix" }
```

Description

It is used to specify how numbers are printed in the tool environment. This applies only to *Results – Print* and *print/printvs* in the Calculator. Numbers are printed in the notation this variable is set to.

The default value is `suffix`.

The valid values are `engineering`, `scientific` and `suffix`.

GUI Equivalent

None

Examples

```
envGetVal("auCore.userPref" "printNotation")
envSetVal("auCore.userPref" "printNotation" 'cyclic "engineering")
envSetVal("auCore.userPref" "printNotation" 'cyclic "scientific")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

projectDir

```
asimenv.startup projectDir string "dirPath"
```

Description

Lets you specify the default simulation directory.

The valid value is a directory path.

The default value is "~/simulation".

GUI Equivalent

None

Examples

```
envGetVal("asimenv.startup" "projectDir")  
envSetVal("asimenv.startup" "projectDir" 'string "")
```

GUI Equivalent

*Virtuoso Analog Design Environment –
Choosing Simulator/Directory/Host – Project
Directory*

Virtuoso ADE Environment Variables Reference

Environment Variables

remoteDir

```
asimenv.startup remoteDir string "dirPath"
```

Description

Lets you specify a path to the run directory for remote simulation. The remote directory name should be same as the local simulation directory name. You must specify a complete path.

The valid value is the Unix path.

The default value is " ".

GUI Equivalent

None

Examples

```
envGetVal("asimenv.startup" "remoteDir")  
envSetVal("asimenv.startup" "remoteDir" 'string "")
```

GUI Equivalent

*Virtuoso Analog Design Environment –
Choosing Simulator/Directory/Host – Remote
Directory*

Virtuoso ADE Environment Variables Reference

Environment Variables

resizeMode

string "cgName"

Description

Specifies how the Virtuoso Visualization and Analysis XL graph window will be resized.

The valid values are manual and auto.

The default value is manual.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.plotting" "resizeMode")  
envSetVal("asimenv.plotting" "resizeMode" 'string "")
```

GUI Equivalent

*Virtuoso Analog Design Environment – Setting
Plotting Options – Resize Mode*

Related Topics

[Setting Plotting Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

retainDesignVarNotation

```
asimenv retainDesignVarNotation boolean { t | nil }
```

Description

By default, the value of a design variable is converted using the engineering notation and then displayed in the *Design Variables* pane of ADE L. If this environment variable is set to `t`, the values of the design variables are displayed in the same format that you used in the Editing Design Variables form.

The default value is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv" "retainDesignVarNotation")
envSetVal("asimenv" "retainDesignVarNotation" 'boolean t)
```


Virtuoso ADE Environment Variables Reference

Environment Variables

retainStateSettings

```
asimenv retainStateSettings cyclic { "partial" | "design" | "simulator" | "all" |  
    "yes" | "none" | "no" }
```

Description

This variable enables you to retain/ignore the current design or simulator settings in the new design or simulator.

The valid values are:

- `partial` – In case of simulator change, the analyses setup, simulator options, and stimuli information are retained. Other settings such as model files and switch view options are not retained. For these options, either the user-defined settings defined in the `.cdsenv` file are considered, if provided, or their default settings are used. In case of design change, the current design settings and simulator setup files are retained. This is the default value of the variable.

This is the default value.

- `design` – Retains all the current settings only when the design is changed.
- `simulator` – Retains all the current settings only when the simulator is changed.
- `all` – Retains the current design settings and simulator setup files. This is same as option `yes`.
- `yes` – Retains the current design settings and simulator setup files.
- `none` – Ignores the current design settings and simulator setup files. This is same as option `no`.
- `no` – Ignores the current design settings and simulator setup files.

It is recommended to use the options `all` or `none` in place of `yes` or `no`, respectively. The options `yes` and `no` are being maintained only for backward compatibility.

To change the design, choose *Setup – Design*. To change the simulator, choose *Setup – Simulator/Directory/Host*.

Note: Verify the retained settings, for example the simulator-specific model library files, before running the simulation. This is because some of the retained settings may not apply to the new design or the new simulator, which can result in simulation errors or incorrect simulation results.

Virtuoso ADE Environment Variables Reference

Environment Variables

GUI Equivalent

None

Examples

```
envGetVal("asimenv" "retainStateSettings")  
envSetVal("asimenv" "retainStateSettings" 'cyclic "all")  
envSetVal("asimenv" "retainStateSettings" 'cyclic "none")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

saveAsCellview

```
asimenv saveAsCellview boolean { t | nil }
```

Description

This variable lets you save ADE state into a cellview. State is saved and loaded from the cellview.

The default value is `nil`.

When set to `nil`, the states are saved and loaded from directories. When set to `t`, state is saved and loaded from the cellview.

GUI Equivalent

None

Examples

```
envGetVal("asimenv" "saveAsCellview")  
envSetVal("asimenv" "saveAsCellview" 'boolean t)
```

GUI Equivalent

*Virtuoso Analog Design Environment – Saving
State – Cellview*

*Virtuoso Analog Design Environment – Loading
State – Cellview*

Related Topics

[Loading State](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

saveDefaultsToOCEAN

```
asimenv.misc saveDefaultsToOCEAN boolean { t | nil }
```

Description

When this variable is turned on, in addition to what is normally saved, it saves the following:

- ☐ All non-blank options
- ☐ All non-blank envOptions
- ☐ All enabled analyses and their options (as opposed to all analyses).
- ☐ All keep options (save all nets / currents... etc.)
- ☐ The model path(s)
- ☐ Temperature
- ☐ Simulator/analysis defaults to ocean scripts generated from ADE L.

The default value is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.misc" "saveDefaultsToOCEAN")
```

```
envSetVal("asimenv.misc" "saveDefaultsToOCEAN" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

saveDir

```
asimenv saveDir string "dirPath"
```

Description

This variable identifies the directory in which the saved state file is to be copied. By default, saved state files are to be kept in the `.artist_states` directory in the home directory. You can change this path to another directory as needed.

The valid value is `dir path`.

The default value is `~/ .artist_states`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv" "saveDir")  
envSetVal("asimenv" "saveDir" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

saveStateWhenLibMarkedForDeletion

```
asimenv saveStateWhenLibMarkedForDeletion boolean { t | nil }
```

Description

If this variable is set to `t`, you can save an ADE L state, which is saved as a cellview, to another cellview in the same or different library, even when the library containing the original cellview is marked for deletion. By default, when a library is marked for deletion and you try to save an ADE L state saved as a cellview in that library to another cellview in the same or different library, an error message is displayed and the ADE L state cannot be saved.

The default value is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv" "saveStateWhenLibMarkedForDeletion")  
envSetVal("asimenv" "saveStateWhenLibMarkedForDeletion" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

saveQuery

```
layout vdrGenerateLabels boolean { t | nil }
```

Description

Lets you choose whether you want to be reminded to save the state of your environment before making a change. If the option is on, you are prompted to save the state before your environment is changed. If the option is off, you can save the state manually by choosing *Session - Save State*, but you will not be prompted to do so.

The default value is `t`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv" "saveQuery")  
envSetVal("asimenv" "saveQuery" 'boolean nil)
```

GUI Equivalent

*Virtuoso Analog Design Environment – Editing
Session Options – Query to Save State*

Virtuoso ADE Environment Variables Reference

Environment Variables

scalarOutputs

```
asimenv.plotting scalarOutputs boolean { t | nil }
```

Description

Specifies whether to annotate scalar outputs in the graph window for a single-point simulation.

The default value is `nil`. The settings take effect only when you open a new maestro view.

This environment variable does not override the initial state of the Scalar Outputs for Single-Point Simulation check box for an existing maestro view.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.plotting" "scalarOutputs")
envSetVal("asimenv.plotting" "scalarOutputs" 'boolean t)
```

Related Topics

[Setting Plotting Options](#)

[Annotating Scalar Outputs for Single-Point Simulation](#)

GUI Equivalent

Virtuoso Analog Design Environment – [Setting Plotting Options](#) – Scalar Outputs

sevResolveSymLinks

Description

When this variable is set to `t`, the model files are added after resolving symbolic links. If it is `nil`, symbolic links are not expanded. To prevent symbolic links from being expanded when browsing for model files using the Model Library Setup form, set this variable in the `.cdsinit` file as `nil`.

GUI Equivalent

None

Examples

Default Value	<code>t</code>
Acceptable Values	<code>t/nil</code>
Variable Type	Boolean

Virtuoso ADE Environment Variables Reference

Environment Variables

showConvertNotifyDialog

```
asimenv showConvertNotifyDialog boolean { t | nil }
```

Description

If you load a state from a previous release, the following dialog box is displayed asking you to convert the state files for the current release:



When you set the value of the `showConvertNotifyDialog` environment variable to `nil`, the state files from the previous release are converted for the current release without displaying the above dialog box.

The default value is `t`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv" "showConvertNotifyDialog")  
envSetVal("asimenv" "showConvertNotifyDialog" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

showWhatsNew

```
asimenv showWhatsNew string "releaseNumber"
```

Description

Set this variable to the release number for which you do not want to see the What's New window. For example, set this variable to 5.0.0 if you do not want to see the What's New window for 5.0.0.

The valid value is any existing release number.

The default value is "yes" .

GUI Equivalent

None

Examples

```
envGetVal("asimenv" "showWhatsNew")  
envSetVal("asimenv" "showWhatsNew" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

simulationDate

```
asimenv.plotting simulationDate boolean { t | nil }
```

Description

If true, displays the simulation run date in the graph window.

The default value is t.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.plotting" "simulationDate")  
envSetVal("asimenv.plotting" "simulationDate" 'boolean nil)
```

Related Topics

[Setting Plotting Options](#)

GUI Equivalent

Virtuoso Analog Design Environment – [Setting Plotting Options](#) – Simulation Date

Virtuoso ADE Environment Variables Reference

Environment Variables

simulator

```
asimenv.startup simulator string ""
```

Description

Sets the default simulator for the Analog Design Environment.

When this variable is set to `auto`:

- AMS is set as the default simulator if the view is a config view and it includes Verilog views, which are any text views like `.vams`, `.sv`, `.v`, and so on.
- Spectre is set as the default simulator if the view is not a config view or it does not include Verilog views.

The valid values are `spectre`, `ams`, `UltraSim`.

The default values is `spectre`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.startup" "simulator")  
envSetVal("asimenv.startup" "simulator" 'string "ams")
```

GUI Equivalent

*Virtuoso Analog Design Environment –
Choosing Simulator/Directory/Host – Simulator*

To set the default simulator as `ams`, use the following call:

```
envSetVal("asimenv.startup" "simulator" 'string "ams")
```

To set the default simulator automatically, use the following call:

```
envSetVal("asimenv.startup" "simulator" 'string "auto")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

skipModelSectionsRetrieval

```
asimenv.misc skipModelSectionsRetrieval boolean { t | nil }
```

Description

Allows you to skip parsing the model files in the Model Library Setup form. It is particularly helpful if you are working with large model files and parsing them takes significant time. If it is set as `t`, the Section drop-down list does not appear and you have to add sections manually.

By default, the model file specified in the Section drop-down list is parsed in ADE so that the sections are displayed.

The default value is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.misc" "skipModelSectionsRetrieval")
envSetVal("asimenv.misc" "skipModelSectionsRetrieval" 'boolean t)
```

To skip parsing the model files,

```
envSetVal("asimenv.misc" "skipModelSectionsRetrieval" 'boolean t)
```

GUI Equivalent

Virtuoso Analog Design Environment – Model Library Setup

Virtuoso ADE Environment Variables Reference

Environment Variables

smartViewDSPFDirectory

```
asimenv.netlist smartViewDSPFDirectory string "location"
```

Description

Specifies the location to save the DSPF file that is created by a SmartView.

The valid value is any string valid value.

The default value is `./simulation/<Lib>/<Cell>/<View>/results/maestro/SmartViewDSPF/.tmpADEDir_<login>/<lib_cell_view>/<subckt>.dspf`

GUI Equivalent

None

Examples

```
envGetVal("asimenv.netlist" "smartViewDSPFDirectory")
envSetVal("asimenv.netlist" "smartViewDSPFDirectory" 'string "/home/ SV_TEST/")
```

To save the DSPF generated by the SmartView to a directory, `/home/SV_TEST/<subckt>.dspf`

```
envSetVal("asimenv.netlist" "smartViewDSPFDirectory" 'string "/home/SV_TEST/")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

stateName

```
asimenv stateName string "stateName"
```

Description

This variable specifies the existing `stateName` which would be automatically loaded whenever ADE session is setup. By default, user will need to load state from Load State form. In this case, the state will be searched in the default state directory location specified by the existing `saveDir` variable. The state will be picked from:

```
<saveDir>/<current Lib>/<current Cell>/<Current simulator>/  
<stateName>
```

However, if the variable `saveAsCellview` is set, the state will be loaded as cellview from:

```
<current Lib>/<current Cell>/<stateName>
```

The valid value is the `dir` path.

The default value is " " .

GUI Equivalent

None

Examples

```
envGetVal("asimenv" "stateName")  
envSetVal("asimenv" "stateName" 'string "")
```


Virtuoso ADE Environment Variables Reference

Environment Variables

stateOverWriteSkipList

```
asimenv stateOverWriteSkipList string ""
```

Description

When you overwrite an existing state in ADE L, all the files and directories in the state directory are deleted before the new state is saved. This variable lets you specify the files and directories that must not be deleted in the state directory when an existing state is overwritten.

The valid values are the names of files or directories in the state directory, separated by spaces.

The default value is " " .

GUI Equivalent

None

Examples

```
envGetVal("asimenv" "stateOverWriteSkipList")  
envSetVal("asimenv" "stateOverWriteSkipList" 'string "dir1 dir2 file1 file2")
```

strictCDFparseAsNumber

```
auCore.misc strictCDFparseAsNumber boolean { t | nil }
```

Description

If this variable is set to `t`, only string CDF parameters are considered while retrieving design variables. If this variable is set to `nil`, all CDF parameters for which the *Parse As Number* option is set to `yes` in the Edit CDF form (or the equivalent attribute parseAsNumber is set to `yes`) are considered while retrieving design variables.

It is recommended that you set this variable to `t`, so that all incorrectly set up CDF parameters are ignored.

The default value is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("auCore.misc" "strictCDFparseAsNumber")
envSetVal("auCore.misc" "strictCDFparseAsNumber" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

temperature

```
asimenv.plotting temperature boolean { t | nil }
```

Description

If true, displays the temperature associated with the plotted results in the graph window.

The default value is `nil`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment –Setting Plotting Options – temperature*

Field: *temperature*

Examples

```
envGetVal("asimenv.plotting" "temperature")  
envSetVal("asimenv.plotting" "temperature" 'boolean t)
```

Related Topics

Setting Plotting Options

Virtuoso ADE Environment Variables Reference

Environment Variables

toolList

```
auCore.toolFilter toolList string "listName"
```

Description

Set this variable to the list of simulators integrated into ADE. If a new simulator is integrated, it has to be added to this list.

The valid value is `spectre auCdl auLvs`.

The default value is `string "spectre auCdl auLvs"`.

GUI Equivalent

None

Examples

```
envGetVal("auCore.toolFilter" "toolList")
envSetVal("auCore.toolFilter" "toolList" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

tryNFSSync

`asimenv.distributed tryNFSSync int maxDuration`

Description

Specifies the maximum duration (in seconds) for which the file system must poll for data to make it visible to the host system at a remote location. This prevents plotting failures that occur due to simulation data not being available. These issues often arise because of file system slowdowns across systems.

The valid value is a integer value.

The default value is 30.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.distributed" "tryNFSSync")  
envSetVal("asimenv.distributed" "tryNFSSync" 'int 30)
```

tryNFSSyncLocal

```
asimenv.startup tryNFSSyncLocal int stopLevel
```

Description

Specifies the maximum duration (in seconds) for which the file system must poll for data to make it visible to the local host system. This prevents plotting failures that occur due to simulation data not being available. These issues often arise because of file system slowdowns across systems.

The valid value is any integer value.

The default value is 0.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.startup" "tryNFSSyncLocal")  
envSetVal("asimenv.startup" "tryNFSSyncLocal" 'int 50)
```

updateCDFtermOrder

```
auCore.misc updateCDFtermOrder boolean { t | nil }
```

Description

If this variable is set to true, it allows updating of the CDF termOrder after a symbol update. The default setting is nil. The CDF updating only affects the termOrder information. Before any updating of the CDF occurs, a dialog box appears and confirms if it is OK to update the base cell CDF termOrder data. The dialog box displays the simulators whose termOrder it will update, and the new termOrder that will be set for each simulator.

The default value is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("auCore.misc" "updateCDFtermOrder")  
envSetVal("auCore.misc" "updateCDFtermOrder" 'boolean t)
```

updateCDFtermOrder

```
auCore.misc updateCDFtermOrder boolean { t | nil }
```

Description

If set to `t`, ADE L will automatically update the CDF termOrder when symbol changes that affect the terminal order are made. This will display additional dialog boxes asking you to accept or reject the change to the CDF termOrder.

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("auCore.misc" "updateCDFtermOrder")
envSetVal("auCore.misc" "updateCDFtermOrder" 'boolean t)
```


Virtuoso ADE Environment Variables Reference

Environment Variables

useDisplayDrf

```
asimenv.plotting useDisplayDrf boolean { t | nil }
```

Description

Specifies whether the display settings for trace signals and plotting graphs should be applied from the `display.drf` file or from the Virtuoso Visualization and Analysis XL color bank.

When set to `t`, the Analog Design Environment (ADE) uses the display settings from the `display.drf` file for color, style and thickness of trace signals, color highlighting of schematic probes, and plotting waveforms in Virtuoso Visualization and Analysis XL.

Important Points to Note:

- For traces plotted on the graph by using the results browser or calculator, the style, thickness and color bank from the Virtuoso Visualization and Analysis XL are used.
- The display settings from the `display.drf` files are not considered while running sweeps, corners, and parametric analysis in ADE.

When this environment variable is set to `nil`, all the display definitions from Virtuoso Visualization and Analysis XL are used.

The default is `t`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.plotting" "useDisplayDrf")
envSetVal("asimenv.plotting" "useDisplayDrf" 'boolean nil)
```

Related Topics

[Graph Environment Variables](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

useNamePrefix

```
asimenv useNamePrefix boolean { t | nil }
```

Description

Specifies whether the instance names in the netlist should have the `namePrefix` from the auCdl CDF simulation information or not.

When this environment variable is set to `t`, the `namePrefix` from the auCdl CDF `siminfo` is prefixed to the name of the instance. As a result, the name of the instance is same in the netlist generated from Spectre and auCdl CDF simulation information.

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv" "useNamePrefix")  
envSetVal("asimenv" "useNamePrefix" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

variables

```
asimenv.plotting variables boolean { t | nil }
```

Description

If true, displays the names and values of design variables in the graph window.

The default is `nil`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Setting Plotting Options – Design Variables*

Field: *Graph Window*

Examples

```
envGetVal("asimenv.plotting" "variables")  
envSetVal("asimenv.plotting" "variables" 'boolean t)
```

Related Topics

Setting Plotting Options

vaTemplateScript

```
auCore.misc vaTemplateScript string "headerInformation"
```

Description

Specifies the name of the template script, which is a shell script, used to customize the header information for new Verilog-A cellviews. The content returned by the template script is used to generate headers for new Verilog-A cellviews. The header generated by the default script has the following form:

```
//VerilogA for libname, cellname viewname
```

But you can customize this header by using a user-defined template script.

The template file must have executable permission.

The valid value is any valid string value.

The default value is "" .

For example,

Assume that `vaTemplateScript` is set to `myTemplateScript` by using the following call:

```
envSetVal("auCore.misc" "vaTemplateScript" 'string "/home/myTemplateScript")
```

And the specified template script, `myTemplateScript`, contains the following:

```
#!/bin/sh
echo "// Library: $1"
echo "// Cell: $2"
echo "// View: $3"
echo "// Date: `date`"
```

Now, assume that a new view `testView` is created in a cell called `test`, in the library `va_test_lib`. A new Verilog-A cell is generated with the following information:

```
// Library: va_test_lib
// Cell: test
// View: testView
// Date: Wed Nov 11 11:34:57 GMT 2015
```

GUI Equivalent

None

Virtuoso ADE Environment Variables Reference

Environment Variables

Examples

```
envGetVal("auCore.misc" "vaTemplateScript")  
envSetVal("auCore.misc" "vaTemplateScript" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

X

`asimenv.plotting x int simulationWindowPosition`

Description

Enables you to set the horizontal position of the left side of the Virtuoso Visualization and Analysis XL graph window.

The valid value is any number between 0 and 1200.

The default value is 557.

GUI Equivalent

Command: *Virtuoso Analog Design Environment –Setting Plotting Options–X Location*

Field:

Examples

```
envGetVal("asimenv.plotting" "x")
envSetVal("asimenv.plotting" "x" 'int 500)
```

Related Topics

[Setting Plotting Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

y

`asimenv.plotting y int positionOfGraphWindow`

Description

Enables you to set the vertical position of the top of the Virtuoso Visualization and Analysis XL graph window.

The valid values are between 0 and 1000.

The default value is 373.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Setting Plotting Options – Y Location*

Field:

Examples

```
envGetVal("asimenv.plotting" "y")
envSetVal("asimenv.plotting" "y" 'int 500)
```

Related Topics

[Setting Plotting Options](#)

ADE XL

defaultLibName

showMenu

showOpenViewDialog

viewNamePrefix

Virtuoso ADE Environment Variables Reference

Environment Variables

defaultLibName

```
adexl.launchFromTest defaultLibName string "libraryName"
```

Description

Use this variable to specify name of the library in which the new view is to be created while opening ADE XL or ADE GXL from ADE L. By default, this variable is not set. You can set a library name by using this variable.

This library name is used only when the `showOpenViewDialog` variable is set to `nil`.

GUI Equivalent

None

Examples

```
envGetVal("adexl.launchFromTest" "defaultLibName")  
envSetVal("adexl.launchFromTest" "defaultLibName" 'string "myDefaultLib")
```

Related Topics

[showOpenViewDialog](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

showMenu

```
adexl.launchFromTest showMenu boolean { t | nil }
```

Description

Use this variable to show or hide the *Launch* menu that is used to open ADE XL or ADE GXL from ADE L. By default, this variable is set to `t` and the *Launch* menu is visible. To hide the menu, set this variable to `nil`.

The default is `t`.

GUI Equivalent

None

Examples

```
envGetVal("adexl.launchFromTest" "showMenu")  
envSetVal("adexl.launchFromTest" "showMenu" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

showOpenViewDialog

```
adexl.launchFromTest showOpenViewDialog boolean { t | nil }
```

Description

Use this variable to stop the *Launch ADE (G)XL* form from appearing when you open ADE XL or ADE GXL from ADE L. By default, this variable is set to `t` and the *Launch ADE (G)XL* form appears. Using this form, you can either specify the choice to create new adexl view or to open an existing view. If you want to always create a new view when you run ADE XL/GXL from ADE L, set this variable to `nil`.

The default is `t`.

GUI Equivalent

None

Examples

```
envGetVal("adexl.launchFromTest" "showOpenViewDialog")
envSetVal("adexl.launchFromTest" "showOpenViewDialog" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

viewNamePrefix

```
adexl.launchFromTest viewNamePrefix string "defaultPrefix"
```

Description

Use this variable to add the default prefix to the names of new `adexl` views that are created when you run ADE XL or ADE GXL from ADE L.

By default, this variable is set to `adexl_imported_from_adel` and all the view names are prefixed with this string. You can set a different prefix using this variable.

This prefix value is used only when the variable `showOpenViewDialog` is set as `nil`.

GUI Equivalent

None

Examples

```
envGetVal("adexl.launchFromTest" "viewNamePrefix")
envSetVal("adexl.launchFromTest" "viewNamePrefix" 'string "XView")
```

Related Topics

[showOpenViewDialog](#)

AMS

AMS_IGNORE_IGNORE

Specifies that the AMS netlister should ignore the `nlAction=ignore` property set on terminals. Those terminals will be included in either the instance port list or the module port list (depending on whether the terminal in question is on an instance or on the cellview being netlisted). For more information about the `nlAction=ignore` property, see the [*Virtuoso NC Verilog Environment User Guide*](#).

To set this environment variable, enter the following command in the UNIX terminal:

```
setenv AMS_IGNORE_IGNORE true
```

Note: Unset this environment variable if you do not want the AMS netlister to ignore the `nlAction=ignore` property set on terminals.

disallowRedefinition

```
ams.ncverilogOpts disallowRedefinition boolean { t | nil }
```

Description

If this variable is set to `t`, UNL does not print the `-allowredefinition` option in the `xrunArgs` file.

The default is `nil`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – AMS Options– Disable -allowredefinition option*

Field:

Examples

```
envGetVal("ams.ncverilogOpts" "disallowRedefinition")
envSetVal("ams.ncverilogOpts" "disallowRedefinition" 'boolean t)
```

Related Topics

[AMS Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

dresolution

```
ams.elabOpts dresolution boolean { t | nil }
```

Description

If this variable is set to `t`, the elaborator uses the detailed discipline resolution method to determine the discipline of nets that do not otherwise have defined disciplines. It applies the `-dresolution` option on the `xmelab` command in the `runSimulation` file, if you are using AMS Cell Based Netlister, or the `xrunArgs` file, if you are using the or AMS Unified Netlister.

The default is `nil`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – AMS Options – Use detailed discipline resolution*

Field:

Examples

```
envGetVal("ams.elabOpts" "dresolution")  
envSetVal("ams.elabOpts" "dresolution" 'boolean t)
```

Related Topics

[AMS Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

enablePkgImport

```
ams.elabOpts enablePkgImport boolean { t | nil }
```

Description

This variable is used to set the default selection of field *Enable package importing in AMS Unified Netlister* on the *Netlister* tab of AMS Options form.

The default is `nil`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – AMS Options – Use detailed discipline resolution*

Field:

Examples

```
envGetVal("ams.netlisterOpts" "enablePkgImport")  
envSetVal("ams.netlisterOpts" "enablePkgImport" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

fglobalSignals

```
ams.netlisterOpts globalSignals string "signalsToGlobalSignals"
```

Description

Adds the signals to the Global Signals form for the AMS simulator.

The Global Signals form is auto populated after the AMS netlister extracts the signals from the schematic. AMS netlister cannot extract the signals when the signals are part of text views, or if some hierarchy inside the HED is not visible to AMS netlister. In such cases you need to add inaccessible signals to the Global Signals form.

The default value is " " .

The syntax for adding the signal is

```
; [origin]; globalSignalName; namespace; wireType; [discipline]; isGround; F; extractedWireType;
```

Where,

- **origin:** (optional) Specifies the origin of the signal. If the signal is extracted from the schematic, the value is D.

If you are adding the signal manually, leave this as blank.

- **globalSignalName:** Specifies the name of the signal.
- **namespace:** Specifies the namespace in which the signal was created.

The valid values are CDBA, Spectre, Spice, and Verilog-AMS.

- **wireType:** Specifies the wire type of the signal.

The valid values are wire, supply0, supply1, wreal, wor, wand, tri, tri0, tri1, triand, trior, and trireg.

- **discipline:** (optional) Specifies the discipline of the signal.
- **isGround:** Specifies if the global signal is used as a ground reference.

The valid values are YES and NO .

- **F:** It is an internally managed flag, and its value should always be F.
- **extractedWireType:** Specifies the wire type extracted by the netlister. It is also an internally managed flag, and its value should be same as wireType.

Virtuoso ADE Environment Variables Reference

Environment Variables

To set this variable in the `.cdsinit` file or CIW for adding the global signal `gnd!`, use the following call:

```
envSetVal("ams.netlisterOpts" "globalSignals" 'string  
";;gnd!;CDBA;wire;;YES;F;wire;")
```

To set this variable in the `.cdsinit` file or CIW for adding the global signals `gnd!` and `vdd12!`, use the following call:

```
envSetVal("ams.netlisterOpts" "globalSignals" 'string  
";;gnd!;CDBA;wire;;YES;F;wire; ;vdd12!;CDBA;wire;;NO;F;wire;")
```

Important Points to Note:

- Add a space if you are adding more than one signal. In the above example, a space is present after the values of `gnd!` signal.
- If you do not want to specify any value for the optional fields, do not replace them with a space. In the above example, the value for `discipline` is not specified.

To set this variable in the `.cdsenv` file for adding the global signal `gnd!`, use the following call:

```
ams.netlisterOpts globalSignals 'string ";;gnd!;CDBA;wire;;YES;F;wire;"
```

|

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Simulation – Options – AMS Simulator – Netlister tab – Global Signals*

Field:

Examples

```
envGetVal("ams.netlisterOpts" "globalSignals")  
envSetVal("ams.netlisterOpts" "globalSignals" 'string  
";;gnd!;CDBA;wire;;YES;F;wire;")
```

Related Topics

[Global Signals](#)

hnlVerilogIgnoreTermNameList

Description

Can be used to specify the terminals that the AMS UNL Environment must ignore when generating the logical netlist of a schematic. This variable eliminates the need to modify the schematic by specifying the signal type.

GUI Equivalent

None

Examples

To set this variable in the `.cdsinit` file, in CIW or in the `.simrc` file, use the call:

```
hnlVerilogIgnoreTermNameList=(list "ignoreTermName1"  
"ignoreTermName2" ...)
```

Variable Type	list of strings
Default Value	<code>nil</code>
Acceptable Values	List of terminals names
GUI Equivalent	--

Virtuoso ADE Environment Variables Reference

Environment Variables

ignorePrintNettype

```
ams.netlisterOpts ignorePrintNettype boolean { t | nil }
```

Description

Controls the printing of property `netType` from the design schematic to the `netlist.vams` file.

The default is `nil`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Simulation – Options – AMS Simulator – Netlister Tab*

Field:

Examples

```
envGetVal("ams.netlisterOpts" "ignorePrintNettype")  
envSetVal("ams.netlisterOpts" "ignorePrintNettype" 'boolean t)
```

Related Topics

[AMS Simulator](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

ITnetlistMaxWarn

```
ams.netlisterOpts netlistMaxWarn string "noOfWarningMessages"  
  
netlistMaxWarn
```

Description

Use the `netlistMaxWarn` environment variable to specify the maximum number of warning messages issued by the netlister before it stops processing the design.

The valid value is any integer value.

The default value is `-`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Simulation – Options – AMS Simulator – Netlister Tab*

Field:

Examples

```
envGetVal("ams.netlisterOpts" "netlistMaxWarn")  
envSetVal("ams.netlisterOpts" "netlistMaxWarn" 'string "30")
```

Related Topics

[AMS Simulator](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

netlistBlackboxWithExtHdl

```
ams.netlisterOpts netlistBlackboxWithExtHdl boolean { t | nil }
```

Description

If set to `t`, the netlist uses a symbol view to generate an instance line for a blackbox in an extracted view. This black box must have the external HDL properties set in the *HED* (*Hierarchy Editor*).

The default value is `nil`.

GUI Equivalent

Command: *Simulation – Options – AMS Simulator – AMS Options form – Use symbols for blackboxes bound to external HDL*

Field:

Examples

```
envGetVal("ams.netlisterOpts" "netlistBlackboxWithExtHdl")
envSetVal("ams.netlisterOpts" "netlistBlackboxWithExtHdl" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

netlistNoWarn

```
ams.netlisterOpts netlistNoWarn string "infoOrWarningMessages"
```

Description

You can suppress the information or warning messages issued by the netlister while processing the design by specifying a space-separated list of message IDs, such as AMS-2000 AMS-2171 AMS-2174, to the netlistNoWarn environment variable.

The valid value is a space-separated list of warning message IDs.

The default value is - .

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Simulation – Options – AMS Simulator – Netlister Tab*

Field:

Examples

```
envGetVal("ams.netlisterOpts" "netlistNoWarn")
envSetVal("ams.netlisterOpts" "netlistNoWarn" 'string "AMS-2000 AMS-2171 AMS-2174")
```

Related Topics

[AMS Simulator](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

print_control_vars

```
ams.netlisterOpts print_control_vars boolean { t | nil }
```

Description

Enables the AMS netlister to print a list of control variables for which the default AMS value has been changed in the `changedVarsSummary` file. This file is saved in the netlist directory.

The default is `t`.

If you do not want the `changedVarsSummary` file to be created, unset the variable in `.cdsinit` or `.cdsenv`.

GUI Equivalent

None

Examples

```
envGetVal("ams.netlisterOpts" "print_control_vars")
envSetVal("ams.netlisterOpts" "print_control_vars" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

shortInstanceList

```
ams.netlisterOpts shortInstanceList string "listOfLibrariesOrCells"
```

Description

You can use this environment variable to specify a list of libraries or cells in which devices are to be shorted. When you netlist the design, devices in the specified libraries or cells that meet the following criteria appear shorted in the generated netlist:

- The device must only have two terminals.
- It must be an analog instance.
- It must be a stopping device.

This environment variable is supported only for the AMS UNL netlister.

The valid value is a list of library names or library-cell pairs, each enclosed within parentheses.

The default value is " " .

GUI Equivalent

None

Examples

```
envGetVal("ams.netlisterOpts" "shortInstanceList")
envSetVal("ams.netlisterOpts" "shortInstanceList" 'string
"(library_name1) (library_name2 cell_name1) (library_name3)")
```

simOutputFormat

`ams.outputs simOutputFormat string "outputResultsFormat"`

Description

Use this variable to specify the format of output results.

The valid values are:

- `udb`: Unified Database (UDB) format. On specifying this format, the analog signals are saved in `psfx1` format while the digital signals are saved in `sst2` format. When the results with `udb` format are viewed using Virtuoso Visualization XL or SimVision, both analog and digital signals are displayed in one dataset.

This is the default value.

- `fsdb`: Fast Signal Database (FSDB) format.
- `wdf`: Waveform Data Format (WDF).

This format is supported only for transient analyses

- `sst2`: Signal Scan 2 (SST2) format. This format is supported only for transient analyses. Non-transient data cannot be generated in the SST2 format and is generated in Parameter Storage Format (PSF).
- `sst2+fsdb`: Signal Scan 2 (SST2) format and Fast Signal Database (FSDB) format. On specifying this output format, the analog and digital signals are saved as follows.
 - ☐ Analog signals are saved in `sst2` and `fsdb` format.
 - ☐ Digital signals are saved in `sst2` format only.
- `sst2+wdf`: Signal Scan 2 (SST2) format and Waveform Data Format (WDF). On specifying this output format, the analog and digital signals are saved as follows.
 - ☐ Analog signals are saved in `sst2` and `wdf` format.
 - ☐ Digital signals are saved in `wdf` format only.

GUI Equivalent

None

Virtuoso ADE Environment Variables Reference

Environment Variables

Examples

```
envGetVal("ams.outputs" "vdrConstraintGroupName")  
envSetVal("ams.outputs" "vdrConstraintGroupName" 'string "udb")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

tran_severity

```
ams.checkOpts tran_severity string "messagesSeverity"
```

Description

This variable changes the default severity of the messages displayed in the simulation log file and the Violations Display form, when device checks are violated and reported for the transient analysis.

The valid values are `None`, `Error`, `Warning`, `Notice` and `Fatal`.

The default value is `Warning`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Device Check Specification
 – Device Checking Options*

Field:

Examples

```
envGetVal("ams.checkOpts" "tran_severity")  
envSetVal("ams.checkOpts" "tran_severity" 'string "")
```

Related Topics

[Device Checking Options](#)

upgradeMsgSevError

```
ams.netlisterOpts upgradeMsgSevError string "warningMessageSeverity"
```

Description

Changes the severity of the specified warning messages to error while processing a design. The message IDs should be provided as a space-separated list, such as AMS-2171 AMS-2174.

The valid value is a space-separated list of warning message IDs.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Device Check Specification – Device Checking Options*

Field:

Examples

```
envGetVal("ams.netlisterOpts" "upgradeMsgSevError")
envSetVal("ams.netlisterOpts" "upgradeMsgSevError" 'string "AMS-2171 AMS-2174")
```

Related Topics

[AMS Simulator](#)

upgradeMsgSevWarn

```
ams.netlisterOpts upgradeMsgSevWarn string "warningMessageSeverity"
```

Description

Changes the severity of the specified information messages to warning while processing a design. The message IDs should be provided as a space-separated list, such as AMS-1244 AMS-1246.

The valid value is a space-separated list of warning message IDs.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Simulation – Options – AMS Simulator – Netlister Tab*

Field:

Examples

```
envGetVal("ams.netlisterOpts" "upgradeMsgSevWarn")
envSetVal("ams.netlisterOpts" "upgradeMsgSevWarn" 'string "AMS-1244 AMS-1246")
```

Related Topics

[AMS Simulator](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

useEffectiveCDF

```
ams.netlisterOpts useEffectiveCDF boolean { t | nil }
```

Description

When this variable is set to `t`, AMS in ADE uses effective CDF while netlisting. If set to `nil`, the base cell CDF will be used.

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("ams.netlisterOpts" "useEffectiveCDF")
envSetVal("ams.netlisterOpts" "useEffectiveCDF" 'boolean t)
```


ams.envOpts

- [amsIEsList](#)
- [autoConfigNameForConfigCreation](#)
- [connectRulesList](#)
- [constraintListForConfigCreation](#)
- [defaultVsupForVAR](#)
- [disableCompileVAAsVAMS](#)
- [disableRunModelInDP](#)
- [filesOnIrunCmdLineHDL](#)
- [ipExportHDLFiles](#)
- [irunIncDirHDL](#)
- [libDirsHDL](#)
- [libFilesHDL](#)
- [libraryListForConfigCreation](#)
- [maxNumSnapShots](#)
- [optsFileHDL](#)
- [saveAllSnapShots](#)
- [snapshotBaseName](#)
- [snapshotNameTimeUnit](#)
- [snapshotSaveMode](#)
- [stopListForConfigCreation](#)
- [strobeTime](#)
- [useIeSetup](#)
- [viewListForConfigCreation](#)

Calculator

Virtuoso ADE Environment Variables Reference

Environment Variables

dstack

```
calculator dstack boolean { t | nil }
```

Description

This field is set to display the contents of the stack. This is available only for the RPN mode. The default is `nil`.

GUI Equivalent

Calculator

Examples

```
envGetVal("calculator" "dstack")  
envSetVal("calculator" "dstack" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

eval

```
calculator eval boolean { t | nil }
```

Description

This field is set to evaluate the contents of a calculator buffer automatically. This is available only for the RPN mode.

The default is `nil`.

GUI Equivalent

Calculator

Examples

```
envGetVal("calculator" "eval")  
envSetVal("calculator" "eval" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

mode

```
calculator mode cyclic { "algebraic" | "RPN" }
```

Description

This variable sets the mode for creating expressions.

The valid values are RPN and algebraic.

The default value is RPN.

GUI Equivalent

Command: *Calculator – Options*

Field:

Examples

```
envGetVal("calculator" "mode")  
envSetVal("calculator" "mode" 'cyclic "algebraic")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

uimode

```
calculator uimode cyclic { "RF" | "standard" }
```

Description

This variable sets the mode of operation for the calculator.

The valid values are `RF` and `standard`.

The default value is `standard`.

GUI Equivalent

Command: *Tools – Voltage Dependent Rules*

Field:

Examples

```
envGetVal("calculator" "uimode")  
envSetVal("calculator" "uimode" 'cyclic "RF")
```

Distributed Processing

Virtuoso ADE Environment Variables Reference

Environment Variables

autoJobSubmit

```
asimenv.distributed autoJobSubmit boolean { t | nil }
```

Description

If this variable is set to a non-nil value, the *Job Setup* form is not displayed at job submit time. The default is `nil`.

GUI Equivalent

Command: *Setup – Simulator/Directory/Host*

Field:

Examples

```
envGetVal("asimenv.distributed" "autoJobSubmit")  
envSetVal("asimenv.distributed" "autoJobSubmit" 'boolean t)
```


Virtuoso ADE Environment Variables Reference

Environment Variables

block

```
asimenv.distributed block boolean { t | nil }
```

Description

If this variable is set to a non-nil value, the process is blocked until the job has completed.

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.distributed" "block")  
envSetVal("asimenv.distributed" "block" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

copyMode

```
asimenv.distributed copyMode boolean { t | nil }
```

Description

If this variable is set to a non-nil value, the input data for the job is copied to `/tmp` on the execution host, the job is run there locally (without network read/write), and the output data is copied back to the submission host.

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.distributed" "copyMode")  
envSetVal("asimenv.distributed" "copyMode" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

copyModeDir

```
asimenv.distributed copyModeDir string "workDirectory"
```

Description

Specifies the directory relative to the execution host, that will be used for setting up the working directory of a copy mode job.

The valid value is any string value.

The default value is `/tmp`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.distributed" "copyModeDir")  
envSetVal("asimenv.distributed" "copyModeDir" 'string "dirname")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

copyNetlist

```
asimenv.distributed copyNetlist boolean { t | nil }
```

Description

Specifies whether the netlist directory needs to be copied from the execution host to the submission host. This may be required if during simulation, some files are generated under the netlist directory.

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.distributed" "copyNetlist")  
envSetVal("asimenv.distributed" "copyNetlist" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

daysBeforeExpire

`asimenv.distributed daysBeforeExpire int daysForJobsTermination`

Description

Specifies the number of days after which terminated jobs will be deleted from the job server.

The valid value is any string value.

The default value is 3.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.distributed" "daysBeforeExpire")  
envSetVal("asimenv.distributed" "daysBeforeExpire" 'int 10)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

drmsCommandList

```
asimenv.distributed drmsCommandList drmsCommandList ""
```

Description

Enables you to specify multiple DRMS commands in the *command* drop-down list box of the *Virtuoso Analog Distributed Processing option Job Submit* form.

The DRMS command specified using the `drmsCommand` environment variable is set as the default value for the *command* drop-down list box. If the `drmsCommand` environment variable is not set, then the first command specified using the `drmsCommandList` variable is set as default.

The valid values are DRMS commands in correct syntax.

The default value is " " .

For more information, see *Submitting Jobs using the Command Mode*.

Important points to note:

- The DRMS commands specified in the example above are the resource strings generated from the farm. You can define multiple resource strings using this environment variable with each string separated by a semi-colon (;).

Only the first ten commands specified using the `drmsCommandList` variable are added to the *command* drop-down list box.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.distributed" "drmsCommandList")  
envSetVal("asimenv.distributed" "drmsCommandList" 'string "bsub -R \"OSNAME==Linux  
&& OSREL==EE80\"";bsub -R \"OSNAME==Linux && OSREL==EE60\"";bsub -R \"OSNAME==Linux  
&& OSREL==EE50 && SFIARCH==EM64T && OSBIT==64\"")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

emailNotify

```
asimenv.distributed emailNotify boolean { t | nil }
```

Description

If this variable is set to a non-nil value, an e-mail notification is provided, following job termination. For details, refer to the *Submitting a Job* section, of Chapter 2 of the *Virtuoso Analog Distributed Processing Option User Guide*.

The default is `t`.

GUI Equivalent

Command:

Field: *Job Submit Form*

Examples

```
envGetVal("asimenv.distributed" "emailNotify")  
envSetVal("asimenv.distributed" "emailNotify" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

expDay

```
asimenv.distributed expDay cyclic { "today" | "Sunday" | "Monday" "Tuesday"  
    "Wednesday" "Thursday" "Friday" "Saturday" }
```

Description

This variable sets the default expiration day for a job. If the expiration day is set as `today`, then the job will always run on the same day it is submitted. For details, refer to the *Submitting a Job* section, of Chapter 2 of the *Virtuoso Analog Distributed Processing Option User Guide*.

The valid values are `today`, `Sunday`, `Monday`, `Tuesday`, `Wednesday`, `Thursday`, `Friday` and `Saturday`.

The default value is `today`.

GUI Equivalent

Command:

Field: *Job Submit Form*

Examples

```
envGetVal("asimenv.distributed" "expDay")  
envSetVal("asimenv.distributed" "expDay" 'cyclic "Friday")  
envSetVal("asimenv.distributed" "expDay" 'cyclic "Monday")
```


Virtuoso ADE Environment Variables Reference

Environment Variables

expTime

```
asimenv.distributed expTime string "defaultTime"
```

Description

This variable sets the default expiration time for a job (in 24 hour format). If unspecified, the expiration time is based on the value of the `timeLimit` variable. For details, refer to the *Submitting a Job* section, of Chapter 2 of the *Virtuoso Analog Distributed Processing Option User Guide*.

The valid value is any string value (HH:MM).

The default value is " " .

GUI Equivalent

Command:

Field: *Job Submit Form*

Examples

```
envGetVal("asimenv.distributed" "expTime")
envSetVal("asimenv.distributed" "expTime" 'string "00:43")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

externalServer

```
asimenv.distributed externalServer boolean { t | nil }
```

Description

If this variable is set to a non-nil value, the job server is started remotely.

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.distributed" "externalServer")
envSetVal("asimenv.distributed" "externalServer" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

hostName

```
asimenv.distributed hostName string "hostName"
```

Description

This variable sets the default host name. If unspecified, the host is selected automatically. For details, refer to the *Submitting a Job* section, of Chapter 2 of the *Virtuoso Analog Distributed Processing Option User Guide*.

The valid value is any string value.

The default value is " ".

GUI Equivalent

Command:

Field: *Job Submit Form*

Examples

```
envGetVal("asimenv.distributed" "hostName")  
envSetVal("asimenv.distributed" "hostName" 'string "host")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

jobArgsInOceanScript

```
asimenv.distributed jobArgsInOceanScript boolean { t | nil }
```

Description

Indicates job arguments that should be added to run commands when an OCEAN script is generated.

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.distributed" "jobArgsInOceanScript")  
envSetVal("asimenv.distributed" "jobArgsInOceanScript" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

loginShell

```
asimenv.distributed loginShell cyclic { "none" | "csh" | "ksh" | "sh" }
```

Description

Specifies the login shell for the job. If it is specified as `none` then the users local environment is copied over to the execution host and used as the jobs environment.

The valid values are `none`, `csh`, `ksh` and `sh`.

The default value is `none`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.distributed" "loginShell")
envSetVal("asimenv.distributed" "loginShell" 'cyclic "csh")
envSetVal("asimenv.distributed" "loginShell" 'cyclic "ksh")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

logsInEmail

```
asimenv.distributed logsInEmail boolean { t | nil }
```

Description

If this variable is set to a non-nil value, `stdout` and `stderr` logs will be included in the termination E-mail.

The default is `t`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.distributed" "logsInEmail")  
envSetVal("asimenv.distributed" "logsInEmail" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

mailAllLogs

```
asimenv.distributed mailAllLogs boolean { t | nil }
```

Description

Sends out a mail after completion of all the tasks and each individual task (when set to `t`) .

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.distributed" "mailAllLogs")  
envSetVal("asimenv.distributed" "mailAllLogs" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

mailTo

```
asimenv.distributed mailTo string "listOfUsers"
```

Description

This variable sets the default list of users who will receive job termination notification e-mail. If unspecified and if *emailNotify* is `t`, then the default value is the user's ID. For details, refer to the *Submitting a Job* section, of Chapter 2 of the *Virtuoso Analog Distributed Processing Option User Guide*.

The valid value is any valid Id string value.

The default value is " ".

GUI Equivalent

Command:

Field: *Job Submit Form*

Examples

```
envGetVal("asimenv.distributed" "mailTo")  
envSetVal("asimenv.distributed" "mailTo" 'string "userId123@cadence.com")
```


Virtuoso ADE Environment Variables Reference

Environment Variables

numOfTasks

`asimenv.distributed numOfTasks int noOfTasks`

Description

Specifies the default number of tasks a job should be broken into. This is used by the Monte Carlo tool. If zero, then the number of tasks is based on queue and/or host settings.

The valid value is an integer value.

The default value is 0.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.distributed" "numOfTasks")
envSetVal("asimenv.distributed" "numOfTasks" 'int 10)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

puttogetherqueue

`asimenv.distributed puttogetherqueue string "queueName"`

Description

Specifies the queue to be used for the Put Together Job.

The valid value is any string value.

The default value is " ".

GUI Equivalent

None

Examples

```
envGetVal("asimenv.distributed" "puttogetherqueue")
envSetVal("asimenv.distributed" "puttogetherqueue" 'string "queueName")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

queueName

```
asimenv.distributed queueName string "queueName"
```

Description

The variable sets the default queue name. If unspecified, the system default is used. For details, refer to the *Submitting a Job* section, of Chapter 2 of the *Virtuoso Analog Distributed Processing Option User Guide*.

The valid value is any string value.

The default value is " ".

GUI Equivalent

Command:

Field: *Job Submit Form*

Examples

```
envGetVal("asimenv.distributed" "queueName")
envSetVal("asimenv.distributed" "queueName" 'string "myqueue")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

setupFunction

```
asimenv.distributed setupFunction string "values"
```

Description

Triggers the user-defined SKILL function to update the values in the *Virtuoso Analog Distributed Processing option Job Submit* form.

The SKILL function should return the values in a list of key-value format, such as `?drmsCommand command ?queueName myQueue`.

The user-defined SKILL function can return the following values:

Value	Data Type	Description
<i>queue</i>	string	The queue in which the job should be submitted.
<i>host</i>	string	The name of the machine on which the job should be launched.
<i>drmsCommand</i>	string	The DRMS command to submit the job.
<i>mail</i>	string	The e-mail addresses to which the e-mail should be sent after the job terminates.
<i>dependentOn</i>	string	The job dependency list.
<i>block</i>	Boolean	The blocking mode. Specifies whether the analog design environment or OCEAN should be blocked until all the jobs have completed.
<i>tasks</i>	integer	The number of tasks.
<i>lsfResourceStr</i>	string	The additional resource requirements for the job, such as <code>mem</code> (available memory), <code>swp</code> (available swap space), and <code>pg</code> (paging rate).
<i>lsfLicenseProject</i>	string	The name of the LSF license project.
<i>lsfNoOfProcessors</i>	string	The number of parallel processors to be used to run the submitted job in LSF.
<i>sgenNoOfProcessors</i>	string	The number of parallel processors to be used to run the submitted job in SGE.

Virtuoso ADE Environment Variables Reference

Environment Variables

<i>sgeSoftResourceStr</i>	string	The requirements for soft resources in SGE.
<i>sgeHardResourceStr</i>	string	The requirements for hard resources in SGE.
<i>sgePriority</i>	string	The priority for the job submitted in SGE.
<i>sgeParallelEnvName</i>	string	The name of a parallel environment in SGE.
<i>startTime</i>	string	The start time of the job in <code>?time</code> and <code>?day</code> format. <code>?time</code> is in 24-hour format. For example, 05:40, 15:30, or 17:25. <code>?day</code> has the following acceptable values: today, Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday.
<i>termTime</i>	string	The time after which the submitted job should be terminated in the <code>?time</code> and <code>?day</code> format. <code>?time</code> is in 24-hour format. For example, 05:40, 15:30, or 17:25. <code>?day</code> has the following acceptable values: today, Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday.
<i>jobName</i>	string	The name of the job to be submitted.

You can create the user-defined function named `myCustomSetup` as follows:

```
procedure (myCustomSetup ())
list (?drmsCommand "bsub -R \"OSNAME==Linux && OSREL==EE50\" \" ?jobName \"myJobName\")
)
```

You can dynamically redefine the `myCustomSetup` function in CIW as follows:

```
myCustomSetup
procedure (myCustomSetup ())
list (?drmsCommand "bsub -R \"OSNAME==Linux && OSREL==EE50\" \" ?startTime \"12:00\"
?jobName \"myJobNameStart\")
)

=>function myCustomSetup redefined
myCustomSetup
```

The valid value is a skill function name.

Virtuoso ADE Environment Variables Reference

Environment Variables

The default value is " ".

GUI Equivalent

None

Examples

```
envGetVal("asimenv.distributed" "setupFunction")
envSetVal("asimenv.distributed" "setupFunction" 'string "myCustomSetup")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

showMessages

```
asimenv.distributed showMessages boolean { t | nil }
```

Description

If this variable is set to a non-nil value, a message is displayed in the CIW or OCEAN terminal on the completion of a job.

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.distributed" "showMessages")  
envSetVal("asimenv.distributed" "showMessages" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

startDay

```
asimenv.distributed startDay cyclic { "Wednesday" | "Monday" | "Sunday" | "Tuesday"  
    | "Thursday" | "Friday" | "Saturday" | "today" }
```

Description

This variable sets the default start day for a job. If the start day is set as `today`, then the job will always run on the same day it is submitted.

The valid values are `today`, `Sunday`, `Monday`, `Tuesday`, `Wednesday`, `Thursday`, `Friday` and `Saturday`.

The default value is `today`.

GUI Equivalent

Command:

Field: *Job Submit Form*

Examples

```
envGetVal("asimenv.distributed" "startDay")  
envSetVal("asimenv.distributed" "startDay" 'cyclic "Wednesday")  
envSetVal("asimenv.distributed" "startDay" 'cyclic "Monday")
```


Virtuoso ADE Environment Variables Reference

Environment Variables

startTime

```
asimenv.distributed startTime string "jobStartTime"
```

Description

This variable sets the default start time for a job (in 24hour format). If unspecified, the job executes immediately. For details, refer to the *Submitting a Job* section, of Chapter 2 of the *Virtuoso Analog Distributed Processing Option User Guide*.

The valid value is a String Value (HH:MM).

The default value is " ".

GUI Equivalent

Command:

Field: *Job Submit Form*

Examples

```
envGetVal("asimenv.distributed" "startTime")
envSetVal("asimenv.distributed" "startTime" 'string "23:11")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

stateFile

```
asimenv.distributed startTime string "jobStartTime"
```

Description

This variable sets the filename containing the job server's state.

The valid value is a string value.

The default value is `~/ .adpState`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.distributed" "stateFile")  
envSetVal("asimenv.distributed" "stateFile" 'string "myStateFile")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

timeLimit

```
asimenv.distributed timeLimit cyclic { "unspecified" | "none" | "5 minutes" | " 15  
minutes" | "30 minutes" | "1 hour" | " 3 hours" | "6 hours" | "12 hours" | "1  
day" | "2 days" | "3 days" | "5 days" | "10 days" }
```

Description

This variable sets the default time limit for a job. If the time limit is set to `none`, then no time limit is imposed. If unspecified, then expiration time is based on value of `expTime` and `expDay` variables. For details, refer to the *Submitting a Job* section, of Chapter 2 of the *Virtuoso Analog Distributed Processing Option User Guide*.

The valid values are `unspecified`, `none`, `5 minutes`, `15 minutes`, `30 minutes`, `1 hour`, `3 hours`, `6 hours`, `12 hours`, `1 day`, `2 days`, `3 days`, `5 days` and `10 days`.

The default value is `none`.

GUI Equivalent

Command:

Field: *Job Submit Form*

Examples

```
envGetVal("asimenv.distributed" "timeLimit")  
envSetVal("asimenv.distributed" "timeLimit" 'cyclic "5 minutes")  
envSetVal("asimenv.distributed" "timeLimit" 'cyclic "unspecified")
```

Environment Variables for Advanced Run Modes

You can set the following environment variables in your `.cdsenv` or `.cdsinit` files to customize the settings for simulations or results:

- `ignoreFailedPointsInWCCRun`
- `digitsToShowForYieldInPercentage`
- `sortVariablesOpt`
- `stopManualTuningOnSessionExit`
- `useDoubleSidedSigma`
- `toleranceComparionRatiorForRSM`
- `useOptInWCD`
- `yieldProbability`
- `WCCEnableNewlyCreatedCorners`

ignoreFailedPointsInWCCRun

```
adexl.simulation ignoreFailedPointsInWCCRun boolean { t | nil }
```

Description

Controls whether to filter failed points during the worst case corners run. While searching Worst Case Corner for a specification, by default a corner is created for a failed point if it exists. If you set this variable, the failed points are ignored while creating corner.

The valid values are:

- `t`: When set to `t`, the failed points are filtered out.
- `nil`: When set to `nil`, the failed points are not filtered out.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "ignoreFailedPointsInWCCRun")  
envSetVal("adexl.simulation" "ignoreFailedPointsInWCCRun" 'boolean t)
```

digitsToShowForYieldInPercentage

`adexl.gui digitsToShowForYieldInPercentage int displayedDigits`

Description

Specifies the number of digits to be displayed for values in the *Yield In Percentage* column on the *Results* tab for High Yield Estimation run.

The valid value is a positive integer value.

The default value is 10.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "digitsToShowForYieldInPercentage")
envSetVal("adexl.gui" "digitsToShowForYieldInPercentage" 'int 20)
```

sortVariablesOpt

adexl.algorithm sortVariablesOpt boolean { t | nil }

Description

Specifies if the variables and parameters should be sorted before generating random samples for an optimization run. By default, the variables are not sorted before the run is started. However, you can sort them by setting this variable to `t` so as to ensure that the result of different optimization runs is same irrespective of the order of variables and parameters.

The valid values are:

- `t`: Sorts the variables and parameters before generating random samples.
- `nil`: Does not sort the variables and parameters before generating random samples. This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.algorithm" "sortVariablesOpt")  
envSetVal("adexl.algorithm" "sortVariablesOpt" 'boolean t)
```

stopManualTuningOnSessionExit

```
adexl.simulation stopManualTuningOnSessionExit boolean { t | nil }
```

Description

Specifies if the Manual Tuning run mode should be stopped when the tool GUI is closed while that run is in progress.

The valid values are:

- **t**: Stops the currently running Manual Tuning run when the tool GUI is closed. In the next session, the Run Simulation button is green in color and you can either start a new Manual Tuning run or submit new points in the previous Manual Tuning run.
- **nil**: Does not stop the currently running Manual Tuning run when the tool GUI is closed. When you open a new maestro session, the Run Simulation button is yellow in color and you can continue with the same Manual Tuning run that was running earlier.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.simulation" "stopManualTuningOnSessionExit")
envSetVal("adexl.simulation" "stopManualTuningOnSessionExit" 'boolean t)
```


useDoubleSidedSigma

```
adexl.algorithm useDoubleSidedSigma boolean { t | nil }
```

Description

Specifies whether the K-sigma statistical corner is single-sided or double-sided. You can set this variable while creating K-sigma statistical corner from the following methods:

- ❑ K-sigma corner from Monte Carlo
- ❑ K-sigma corner from High Yield Estimation

This variable indicates how the yield number is presented in sigma. When it is set to `t`, K-sigma means that yield is represented as probability integration from $-K$ sigma to $+K$ sigma in Gaussian distribution.

When set to `nil`, K-sigma means that yield is represented as probability integration from $-\infty$ to $+K$ sigma in Gaussian distribution.

The setting of this variable does not impact the number of statistical corners created, instead, it impacts the High Yield Estimation results report (number of sigma), the High Yield statistical corner, the fast K-sigma results report, and the fast K-sigma statistical corner. To create fast K-sigma statistical corners, select *K-Sigma Corners* autostop method in the Monte Carlo run options and provide the target sigma value. The sigma information is displayed in the Monte Carlo run log.

The valid values are:

- `t`: When this variable is set to `t`, the double-sided K-sigma statistical corner is created.
- `nil`: When this variable is set to `nil`, the single-sided K-sigma statistical corner is created.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.algorithm" "useDoubleSidedSigma")
envSetVal("adexl.algorithm" "useDoubleSidedSigma" 'boolean t)
```

toleranceComparionRatiorForRSM

`adexl.gui toleranceComparionRatiorForRSM float rsmModelCoefficient`

Description

Ignores the RSM model coefficient if its ratio to the maximum coefficient value is less than the specified limit.

The valid value is a floating point number.

The default is `1e-6`.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "toleranceComparionRatiorForRSM")
envSetVal("adexl.gui" "toleranceComparionRatiorForRSM" 'float 1e-6)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

useOptInWCD

```
adexl.algorithm useOptInWCD boolean { t | nil }
```

Description

Controls whether to use the optimization search option for the Worst Case Distance method in the High Yield Estimation run mode.

The valid values are:

- `t`: When this variable is set to `t`, the optimization search option is used.
- `nil`: When this variable is set to `nil`, the optimization is not used.

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("adexl.algorithm" "useOptInWCD")
envSetVal("adexl.algorithm" "useOptInWCD" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

yieldProbability

`adexl.monte yieldProbability float Percentagelevel`

Description

Defines the significance level in percentage. Probability values closer to 100% require more simulations before the yield estimate is determined to be lower or higher than the target. Smaller probability values require less simulations before the autostop is triggered.

The valid value is a value between 0 and 100.

The default is 95.0.

GUI Equivalent

None

Examples

```
envGetVal("adexl.monte" "yieldProbability")
envSetVal("adexl.monte" "yieldProbability" 'float 90)
```

WCCEnableNewlyCreatedCorners

```
adexl.gui WCCEnableNewlyCreatedCorners boolean { t | nil }
```

Description

Specifies whether to enable or disable the corners created after the worst case corner simulation run.

The valid values are:

- `t`: When this variable is set to `t`, the corners are enabled.
- `nil`: When this variable is set to `nil`, the corners are disabled.

This is the default value.

GUI Equivalent

None

Examples

```
envGetVal("adexl.gui" "WCCEnableNewlyCreatedCorners")
envSetVal("adexl.gui" "WCCEnableNewlyCreatedCorners" 'boolean t)
```

HspiceD

checkOutLicenseDuringNetlistAndRun

```
hspiceD.envOpts checkOutLicenseDuringNetlistAndRun boolean { t | nil }
```

Description

If set to `t`, the license 32760 “Virtuoso Analog HSPICE Interface Option” only remains checked out during netlisting and simulation. After these tasks are completed, the license gets checked back in to the license server.

The default value is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("hspiceD.envOpts" "checkOutLicenseDuringNetlistAndRun")
envSetVal("hspiceD.envOpts" "checkOutLicenseDuringNetlistAndRun" 'boolean t)
```

hspiceMaxLineLength

Not available on cdsenv editor and same goes with the next variable. What should be the tool name for these variables?

Description

Controls the maximum limit on the number of characters to be printed in a line of netlist output from the default. The maximum limit value can be increased or decreased as required. This variable overrides the OSS variable, `maxLineLength`.

The `hspiceSoftLineLength` value can never be greater than `hspiceMaxLineLength` value.

The valid value is an integer value. The maximum limit is the limit of an integer.

The default value is 1024.

To set this variable in the `.cdsinit` file or CIW, use the call:

```
hspiceMaxLineLength=1024
```

For more information, see the [Customizing the Hierarchical Netlister \(HNL\)](#) chapter of the *Open Simulation System Reference*.

hspiceSoftLineLength

This variable controls the maximum number of characters in a line of netlist output after which the line is automatically split into multiple lines for reading effortlessly. This variable overrides the OSS variable, `softLineLength`, which is set to 1024 characters by default.

To set this variable in the `.cdsinit` file or CIW, use the call:

```
hspiceSoftLineLength=80
```

Variable Type	int
Default Value	1024
Acceptable Values	Any integer less than or equal to 1024

Virtuoso ADE Environment Variables Reference

Environment Variables

mapGndNetToZero

```
hspiceD.envOpts mapGndNetToZero boolean { t | nil }
```

Description

Use this variable to control mapping of `gnd!` nets. By default, its value is set to `t` which implies `gnd!` nets are mapped to 0. To stop the mapping of `gnd!` nets to 0, set the variable to `nil`.

The default is `t`.

GUI Equivalent

None

Examples

```
envGetVal("hspiceD.envOpts" "mapGndNetToZero")  
envSetVal("hspiceD.envOpts" "mapGndNetToZero" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

netlistModelFileFirst

```
hspiceD.envOpts netlistModelFileFirst boolean { t | nil }
```

Description

Use this variable to control sequence of netlisting of design variables and include files. By default, the design variables are netlisted before the include files. To netlist the include files before the design variables, set the value of `netlistModelFileFirst` variable to `t`.

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("hspiceD.envOpts" "netlistModelFileFirst")
envSetVal("hspiceD.envOpts" "netlistModelFileFirst" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

setTopLevelAsSubckt

```
hspiceD.envOpts setTopLevelAsSubckt boolean { t | nil }
```

Description

This variable controls whether the top-level schematic should be netlisted as a subcircuit or not. If it is set to `t`, the top-level schematic is netlisted as a subcircuit; otherwise, it is not netlisted as a subcircuit.

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("hspiceD.envOpts" "setTopLevelAsSubckt")  
envSetVal("hspiceD.envOpts" "setTopLevelAsSubckt" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

userCmdLineOption

hspiceD.envOpts hspiceD.envOpts string *"commandLineOptions"*

Description

Use this variable to pass command-line options in hspice. For example, to set multi-threading to 3, you need to pass `-mt 3` as the value.

The valid value is a string value.

The default value is `" "`.

GUI Equivalent

None

Examples

```
envGetVal("hspiceD.envOpts" "userCmdLineOption")  
envSetVal("hspiceD.envOpts" "userCmdLineOption" 'string "-mt 3")
```

Analysis

Virtuoso ADE Environment Variables Reference

Environment Variables

relxpert_gradual_aging

```
layout vdrGenerateLabels boolean { t | nil }
```

putprop is tool name, right? Please let me know about
_amsUISimFeatures? I am unable to frame it in syntax.

Description

If this variable is set, the *Gradual Aging* tab is removed from the Simulation – – Setup form.

The default is t.

GUI Equivalent

Command: *Simulation – – Setup*

Field:

Examples

```
envGetVal("layout" "vdrGenerateLabels")  
envSetVal("layout" "vdrGenerateLabels" 'boolean nil)
```

To set this variable in the .cdsinit file or CIW, use the call
putprop _amsUISimFeatures nil 'relxpert_gradual_aging

spectre_analysis_

```
layout vdrGenerateLabels boolean { t | nil }
```

Description

If this variable is set, the *RelXpert* option is set as default Simulation Mode instead of *Spectre Native* in the *Simulation – – Setup* form.

The default is `t`.

GUI Equivalent

Command: *Simulation – – Setup*

Field:

Examples

```
envGetVal("layout" "vdrGenerateLabels")
envSetVal("layout" "vdrGenerateLabels" 'boolean nil)
```

Related Topics

`putprop` is the tool name? what is `_amsUISimFeatures`?

To set this variable in the `.cdsinit` file or CIW, use the call

```
putprop _amsUISimFeatures nil'spectre_analysis_
```


Spectre

AC Match Analysis Environment Variables

The table below lists all the environment variables that you can set in the `.cdsenv` file or CIW to modify the setup and options for the AC Match analysis.

Note: The values displayed in the variable syntax are the default values.

Virtuoso ADE Environment Variables Reference

Environment Variables

dec

```
spectre.acmatch dec string "points"
```

Description

Sets points per decade.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatch" "dec")  
envSetVal("spectre.acmatch" "dec" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

lin

```
spectre.acmatch lin string "noOfSteps"
```

Description

Sets the number of steps for a linear sweep.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatch" "lin")  
envSetVal("spectre.acmatch" "lin" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

log

```
spectre.acmatch log string "noOfSteps"
```

Description

Sets the number of steps for a log sweep.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatch" "log")  
envSetVal("spectre.acmatch" "log" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

mtb

`spectre.acmatch mth string "thresholdOfRelativeContribution"`

Description

Sets the threshold of the relative contribution to be exported in output file.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatch" "mtb")  
envSetVal("spectre.acmatch" "mtb" 'string "')
```

Virtuoso ADE Environment Variables Reference

Environment Variables

oprobe

```
spectre.acmatch oprobe string "signalVariations"
```

Description

Specifies the mismatch variations of the current signal, based on this, component is chosen as the output.

The valid values are `vsource`, `inductor`, `switch`, `tline`, `iprobe`, `ccvs`, `vcvs`, `pccvs`, and `pvcvs`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatch" "oprobe")  
envSetVal("spectre.acmatch" "oprobe" 'string "switch")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

annotate

```
spectre.acmatchOpts annotate string "annotationDegree"
```

Description

Sets the degree of annotation.

The valid values are no, title, sweep, status, and steps.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatchOpts" "annotate")  
envSetVal("spectre.acmatchOpts" "annotate" 'string "sweep")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

force

```
spectre.acmatchOpts force string "initialConditions"
```

Description

Sets the set of initial conditions to be used.

The valid values are `none`, `node`, `dev`, and `all`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatchOpts" "force")  
envSetVal("spectre.acmatchOpts" "force" 'string "none")
```


Virtuoso ADE Environment Variables Reference

Environment Variables

groupby

```
spectre.acmatchOpts force string "totalSigma"
```

Description

Determines how to group total sigma. The total sigma of each contributor can be grouped either by statistics parameters or by subckt instances.

The valid values are `param` and `inst`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatchOpts" "groupBy")  
envSetVal("spectre.acmatchOpts" "groupBy" 'string "param")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

oppoint

```
spectre.acmatchOpts oppoint string "operatingPointInformation"
```

Description

Determines whether operating point information should be computed. If yes, specifies where should it be printed (screen or file). Operating point information is not printed if the operating point computed in the previous analysis remains unchanged.

The valid values are `no`, `screen`, `logfile`, and `rawfile`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatchOpts" "oppoint")  
envSetVal("spectre.acmatchOpts" "oppoint" 'string "no")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

prevoppoint

spectre.acmatchOpts prevoppoint string *"computedOperatingPoint"*

Description

Determines whether to use the operating point computed in the previous analysis.

The valid values are `yes` and `no`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatchOpts" "prevoppoint")  
envSetVal("spectre.acmatchOpts" "prevoppoint" 'string "no")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

readns

```
spectre.acmatchOpts readns string fileName
```

Description

Specified the file that contains an estimate of DC solution (nodeset).

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatchOpts" "readns")  
envSetVal("spectre.acmatchOpts" "readns" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

restart

```
spectre.acmatchOpts restart string "dcSolution"
```

Description

Restarts the DC solution from scratch if any condition has changed. If not, use the previous solution as an initial guess.

The valid values are `yes` and `no`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatchOpts" "restart")  
envSetVal("spectre.acmatchOpts" "restart" 'string "yes")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

save

```
spectre.acmatchOpts save string "signalLevels"
```

Description

Specified the signal levels to be saved in output.

The valid values are `all`, `lvl`, `allpub`, `lvlpub`, `selected`, `none`, and `nooutput`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatchOpts" "save")  
envSetVal("spectre.acmatchOpts" "save" 'string "none")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

skipdc

```
spectre.acmatchOpts skipdc string "dcAnalysis"
```

Description

Skips DC analysis.

The valid values are `yes` and `no`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatchOpts" "skipdc")  
envSetVal("spectre.acmatchOpts" "skipdc" 'string "no")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

useprevic

```
spectre.acmatchOpts useprevic string "convergedInitialCondition"
```

Description

If set to `yes` or `ns`, use the converged initial condition from the previous analysis as `ic` or `ns`.

The valid values are `yes`, `no` and `ns`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatchOpts" "useprevic")  
envSetVal("spectre.acmatchOpts" "useprevic" 'string "no")
```


Virtuoso ADE Environment Variables Reference

Environment Variables

where

```
spectre.acmatchOpts where string "resultsLocation"
```

Description

Specifies where the results should be printed.

The valid values are `screen`, `logfile`, `file` and `rawfile`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatchOpts" "where")  
envSetVal("spectre.acmatchOpts" "where" 'string "screen")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

additionalParams

`spectre.acmatchOpts additionalParams string "additionalParameters"`

Description

Specifies the additional parameters.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatchOpts" "additionalParams")
envSetVal("spectre.acmatchOpts" "additionalParams" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

incrType

```
spectre.acmatch incrType string "sweepType"
```

Description

Sets the sweep type for AC Match.

The valid values are Automatic, Linear and Logarithmic.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatch" "incrType")  
envSetVal("spectre.acmatch" "incrType" 'string "Automatic")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

outType

```
spectre.acmatch outType string "outputType"
```

Description

Sets the output type.

The valid values are `voltage` and `probe`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatch" "outType")  
envSetVal("spectre.acmatch" "outType" 'string "voltage")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

rangeType

`spectre.acmatch rangeType string "sweepRange"`

Description

Sets the frequency sweep range.

The valid values are `Start-Stop`, `Center-Span` and `Single-Point`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatch" "rangeType")
envSetVal("spectre.acmatch" "rangeType" 'string "Start-Stop")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

span

```
spectre.acmatch span string "sweepLimitSpan"
```

Description

Sets the sweep limit span.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatch" "span")  
envSetVal("spectre.acmatch" "span" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

center

```
spectre.acmatch center string "sweepCenter"
```

Description

Specifies the center of the sweep.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatch" "center")  
envSetVal("spectre.acmatch" "center" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

start

```
spectre.acmatch start string "sweepStartValue"
```

Description

Specifies the start value for the sweep limit.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatch" "start")  
envSetVal("spectre.acmatch" "start" 'string "")
```


Virtuoso ADE Environment Variables Reference

Environment Variables

stop

```
spectre.acmatch stop string "sweepStopValue"
```

Description

Specifies the stop value for the sweep limit.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatch" "stop")  
envSetVal("spectre.acmatch" "stop" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

step

```
spectre.acmatch step string "linearSweep"
```

Description

Sets the step size for the linear sweep.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatch" "step")  
envSetVal("spectre.acmatch" "step" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

useDiscrete

```
spectre.acmatch useDiscrete boolean { t | nil }
```

Description

Determines whether to add specific points.

The default value is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatch" "useDiscrete")  
envSetVal("spectre.acmatch" "useDiscrete" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

values

```
spectre.acmatch values string "specificPointsValue"
```

Description

Specifies the value of specific points.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatch" "values")  
envSetVal("spectre.acmatch" "values" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

P

```
spectre.acmatch P string "positiveOutputNode"
```

Description

Specifies the value of positive output node.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatch" "P")  
envSetVal("spectre.acmatch" "P" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

n

`spectre.acmatch n string "negativeOutputNode"`

Description

Specifies the value of negative output node.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatch" "n")  
envSetVal("spectre.acmatch" "n" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

stepTypeLin

```
spectre.acmatch stepTypeLin string "linearStepType"
```

Description

Specifies the step type for Linear.

The valid values are `Step Size` and `Number of Steps`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatch" "stepTypeLin")  
envSetVal("spectre.acmatch" "stepTypeLin" 'string "Step Size")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

stepTypeLog

```
spectre.acmatch stepTypeLog string "logarithmicStepType"
```

Description

Specifies the step type for Logarithmic.

The valid values are `Points Per Decade` and `Number of Steps`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.acmatch" "stepTypeLog")  
envSetVal("spectre.acmatch" "stepTypeLog" 'string "Points Per Decade")
```


Virtuoso ADE Environment Variables Reference

Environment Variables

analysisOrder

```
spectre.checkOpts ac_severity string "analysisRunOrder"
```

Description

Determines the order in which the analyses would be run by the simulator.

The valid values are names of analysis in the desired order.

The default value is " " .

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Device Check Specification
 – Device Checking Options*

Field:

Examples

```
envGetVal("spectre.envOpts" "analysisOrder")  
envSetVal("spectre.envOpts" "analysisOrder" 'string "tran ac dc")
```

Related Topics

[Environment Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

apsplus

```
spectre.turboOpts apsplus boolean { t | nil }
```

Description

This variable controls the value of the *Use ++aps* check box that is displayed in the High Performance Simulation Options form. If set to `t`, it enables Fast APS mode for Spectre simulator.

The default is `nil`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Setup – High-Performance Simulation – APS – Use ++aps*

Field:

Examples

```
envGetVal("spectre.turboOpts" "apsplus")  
envSetVal("spectre.turboOpts" "apsplus" 'boolean t)
```

Related Topics

[High-Performance Simulation](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

assert_severity_default

```
spectre.checkOpts assert_severity_default string "messageSeverity"
```

Description

This variable changes the default severity of the messages displayed in the simulation log file and the Violations Display form, when the device checks are violated.

The valid values are `None`, `Error`, `Warning`, `Notice` and `Fatal`.

The default value is `Warning`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Device Check Specification_*

Field:

Examples

```
envGetVal("spectre.checkOpts" "assert_severity_default")  
envSetVal("spectre.checkOpts" "assert_severity_default" 'string "None")
```

Related Topics

[Device Check Specification](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

autoDisplay

```
spectre.envOpts autoDisplay boolean { t | nil }
```

Description

This variable is used to set/reset the *Automatic output log* option. When on, the output log opens and displays simulator messages as they are generated.

The default is `t`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Environment Options – Automatic output log*

Field:

Examples

```
envGetVal("spectre.envOpts" "autoDisplay")  
envSetVal("spectre.envOpts" "autoDisplay" 'boolean nil)
```

Related Topics

[Environment Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

autoDisplayBBox

```
spectre.envOpts autoDisplayBBox string "windowSize"
```

Description

This variable is used to control the size of the `spectre.out` window.

The valid value is `window coordinates`.

The default value is `0 0 515 700`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.envOpts" "autoDisplayBBox")  
envSetVal("spectre.envOpts" "autoDisplayBBox" 'string "10 10 525 800")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

checkpoint

```
spectre.envOpts checkpoint string "cgName"
```

Description

Y runs spectre with the `+checkpoint` option, which turns on the checkpoint capability. N runs spectre with the `-checkpoint` option, which turns off the checkpoint capability.

The valid values are Y and N.

The default value is " ".

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Environment Options–
Create Checkpoint File(cp)*

Field:

Examples

```
envGetVal("spectre.envOpts" "checkpoint")  
envSetVal("spectre.envOpts" "checkpoint" 'string "Y")
```

Related Topics

[Environment Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

controlMode

```
spectre.envOpts controlMode string "spectreInModes"
```

Description

Used to run Spectre in batch or interactive modes depending on the value of the variable.

The valid values are `interactive` and `batch`.

The default value is `interactive`.

All the Spectre simulator options are documented under `spectre -h` options and there is one-to-one correspondence between `spectre.<optName>` and `<optName>`

All the analysis options are documented under `spectre -h <analysisName>`

The following variables are deprecated:

```
spectre.init remoteDir 'string ""
```

```
spectre.init hostmode 'string "local"
```

```
spectre.init host 'string ""
```

```
spectre.init settableResultsDirectory 'boolean t
```

```
spectre.init processPriority int 0 0 20
```

GUI Equivalent

None

Examples

```
envGetVal("spectre.envOpts" "controlMode")
```

```
envSetVal("spectre.envOpts" "controlMode" 'string "batch")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

currents

```
spectre.outputs currents string "settings"
```

Description

The currents parameter of the options statement computes and saves terminal currents. Use it to create settings for currents that apply to all terminals in the netlist.

The valid values are `selected`, `all`, and `nonlinear`.

The default value is `" "`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Save Options – Select device currents (currents)*

Field:

Examples

```
envGetVal("spectre.outputs" "currents")  
envSetVal("spectre.outputs" "currents" 'string "selected")
```

Related Topics

[Save Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

dc_severity

```
spectre.checkOpts dc_severity string "severityOfMessages"
```

Description

This variable changes the default severity of the messages displayed in the simulation log file and the Violations Display form, when device checks are violated and reported for the DC sweep analysis.

The valid values are `None`, `Error`, `Warning`, `Notice` and `Fatal`.

The default value is `Warning`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Device Check Specification
 – Device Checking Options*

Field:

Examples

```
envGetVal("spectre.checkOpts" "dc_severity")  
envSetVal("spectre.checkOpts" "dc_severity" 'string "None")
```

Related Topics

[Save Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

dcOp_severity

```
spectre.checkOpts dcOp_severity string "severityOfMessages"
```

Description

This variable changes the default severity of the messages displayed in the simulation log file and the Violations Display form, when device checks are violated and reported for the DC analysis.

The valid values are `None`, `Error`, `Warning`, `Notice` and `Fatal`.

The default value is `Warning`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Device Check Specification
 – Device Checking Options*

Field:

Examples

```
envGetVal("spectre.checkOpts" "dcOp_severity")  
envSetVal("spectre.checkOpts" "dcOp_severity" 'string "None")
```

Related Topics

[Device Checking Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

definitionFiles

spectre.envOpts definitionFiles string "*nameOrFilePath*"

Description

Type the full UNIX path or the name of one or more files. A definitions file contains function definitions and definitions of parameters that are not displayed in the Design Variables section of the simulation window.

The valid values is a unix path or name of one or more files.

The default value is " ".

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Simulation Files Setup – Definition Files*

Field:

Examples

```
envGetVal("spectre.envOpts" "definitionFiles")  
envSetVal("spectre.envOpts" "definitionFiles" 'string "./file1")
```

Related Topics

[Simulation Files Setup](#)

displayToolTip

```
spectre.envOpts displayToolTip boolean { t | nil }
```

Description

Controls whether the tooltips for various fields are displayed on the Options forms for various analyses supported by Spectre. For example, AC Options, DC Options, Periodic Steady State Options and so on.

The default is `t`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.envOpts" "displayToolTip")  
envSetVal("spectre.envOpts" "displayToolTip" 'boolean nil)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

dochecklimit

```
spectre.opts dochecklimit string "deviceChecking"
```

Description

When set to `yes`, enables device checking without selecting the check box in form *Simulation – Device Checking – Enable Device checking*.

The valid values are `yes` and `no`.

The default values are `yes`.

You can alternatively choose *Simulation – Options – Analog(Spectre) – Check – Device Checking Options*.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Simulation/Device Checking – Use Enable Device Checking*

Field:

Examples

```
envGetVal("spectre.opts" "dochecklimit")  
envSetVal("spectre.opts" "dochecklimit" 'string "yes")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

dspfFile

```
spectre.envOpts dspfFile string "filePath"
```

Description

This variable is used to set the path of the parasitic DSPF file.

The valid value is a unix path.

The default value is " " .

Here, the file `dspfFile1.dspf` will be disabled.

This line is taken from examples: Here, the file `dspfFile1.dspf` will be disabled. Can I remove it?

GUI Equivalent

Command: *Virtuoso Analog Design Environment L– Simulation Files Setup – Parasitics File (DSPF)*

Field:

Examples

```
envGetVal("spectre.envOpts" "dspfFile")  
envSetVal("spectre.envOpts" "dspfFile" 'string "./dspfFile1.dspf")
```

Related Topics

Simulation Files Setup

Virtuoso ADE Environment Variables Reference

Environment Variables

emLayerMap

```
spectre.envOpts emLayerMap string "./file1"
```

Description

Specifies the path of the Layer Map file to be used for EM/IR Analysis.

The valid value is a unix path.

The default value is `nil`.

GUI Equivalent

Command: *Setup – EM/IR Analysis – Layer Map File*

Field:

Examples

```
envGetVal("spectre.envOpts" "emLayerMap")  
envSetVal("spectre.envOpts" "emLayerMap" 'string "")
```

Related Topics

[EM/IR Analysis](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

emirEnable

```
spectre.envOpts emirSumList boolean { t | nil }
```

Description

Enables the EMIR analysis.

The default is `t`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.envOpts" "emirSumList")  
envSetVal("spectre.envOpts" "emirSumList" 'boolean nil)
```


Virtuoso ADE Environment Variables Reference

Environment Variables

emirLCVDisable

```
spectre.envOpts emirLCVDisable boolean { t | nil }
```

Description

Disables the *Library*, *Cell*, and *Views* drop-down list boxes that appear in the Spectre EMIR / Voltus-Fi XL Analysis Setup form when the *TMI Selfheating* check box is selected.

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.envOpts" "emirLCVDisable")  
envSetVal("spectre.envOpts" "emirLCVDisable" 'boolean t)
```

emirSumList

```
spectre.envOpts emirSumList string "optionValue"
```

Description

Defines the default values for the options in the *EMIR Analysis Setup* form.

For a list of values and their options that can be set using this environment variable, see the *EMIR Analysis* section in *Spectre Circuit Simulator and Accelerated Parallel Simulator User Guide*.

The valid value is a list of (option value) pair with each option separated by space.

The default value is " ".

GUI Equivalent

None

Examples

```
envGetVal("spectre.envOpts" "emirSumList")  
envSetVal("spectre.envOpts" "emirSumList" 'string "")
```

Related Topics

[EMIR Analysis](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

emTechFile

```
spectre.envOpts emTechFile string "optionValue"
```

Description

Specifies the technology file containing the EM current limits per layer or via.

The valid value is a filename containing the EM current limits per layer. The formats supported are `emdatafile`, `qrctechfile`, and `ictfile`.

The default value is `" "`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.envOpts" "emTechFile")  
envSetVal("spectre.envOpts" "emTechFile" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

enableArclength

```
spectre.envOpts enableArclength boolean { t | nil }
```

Description

When this variable is set to true, the homotopy convergence option is visible, else this is not visible.

The default is `nil`.

GUI Equivalent

Command: *Tools – Voltage Dependent Rules –*
 ■ *Create Labels/Markers From Simulation Voltages*
 ■ *Create Labels/Markers From Net Voltages*
Field: *Generate Voltage Labels*

Examples

```
envGetVal("spectre.envOpts" "enableArclength")  
envSetVal("spectre.envOpts" "enableArclength" 'boolean t)
```

fastViewOption

```
spectre.outputs fastViewOption boolean { t | nil }
```

Description

Enables the fast waveform viewing format for PSF output.

Using the PSF output in the fast waveform viewing format, Virtuoso Visualization and Analysis XL can render extremely large datasets (where signals have a large number of data points, for example 10 million) within seconds.

Use this environment variable if the value of the `simOutputFormat` environment variable is set to `psf`, `psf` with `floats`, or `psfxl`.

The default is `nil`.

GUI Equivalent

Command: *Outputs – Save All – Use Fast Viewing Extensions*

Field:

Examples

```
envGetVal("spectre.outputs" "fastViewOption")  
envSetVal("spectre.outputs" "fastViewOption" 'boolean t)
```

Related Topics

[simOutputFormat](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

finalTimeOp

```
spectre.tranOpts finalTimeOp boolean { t | nil }
```

Description

If this variable is set to `t`, the info statements for final operating point are generated in the control file, `amsControlSpectre.scs`, and the related data is generated in the psf file, `finalTimeOp.info`. If you do not want the results to be saved, set this variable to `nil`. If this variable is set to `nil`, no final operating point data is generated.

This environment variable is supported for both Spectre and AMS simulators. Replace `spectre.outputs` with `ams.outputs` in the syntax given below to set this variable for AMS simulator.

The default is `nil`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Transient Options – Save Final Op Pt*

Field:

Examples

```
envGetVal("spectre.tranOpts" "finalTimeOp")  
envSetVal("spectre.tranOpts" "finalTimeOp" 'boolean t)
```

Related Topics

[Transient Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

firstRun

```
spectre.envOpts firstRun boolean { t | nil }
```

Description

Set this variable to false if you do not want the *Welcome to Spectre* window to pop up when you run a simulation.

The default is `t`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.envOpts" "firstRun")  
envSetVal("spectre.envOpts" "firstRun" 'boolean nil)
```

ignorePortOrderMismatch

```
spectre.envOpts ignorePortOrderMismatch boolean { t | nil }
```

Description

When set to `t`, the netlister will not generate any warning when a `portOrder` mismatch occurs.

When set to the default value `nil`, any `portOrder` mismatch will result in following warning:

```
"Mismatch was found between the terminals in the cellView and those
on the pin order property on the schematic, or on the termOrder
property on the CDF. The internal default order is being used.
Eliminate the mismatch if any of the above properties must be used
for netlisting."
```

The default is `nil`.

GUI Equivalent

None

Examples

infoOptions

```
spectre.outputs infoOptions string ""
```

Description

Loads the specified parameters in the *Save circuit information analysis* table in the Save Options form, along with the specified values of the related fields that are displayed in the table. You can add multiple parameters to the *Save circuit information analysis* table using this variable. The same parameters and field values are loaded in the form when you click the *Defaults* button in the form.

While specifying the value of this variable, ensure that there is no newline character in between the parameters or the related fields as it may cause errors.

This environment variable is supported for both Spectre and AMS simulators. Replace `spectre.outputs` with `ams.outputs` in the syntax given below to set this variable for AMS simulator.

The default value for Spectre is:

```
"modelParameter;models;rawfile;;;true element;inst;rawfile;;;true
outputParameter;output;rawfile;;;true
designParamVals;parameters;rawfile;;;true
primitives;primitives;rawfile;;;true
subckts;subckts;rawfile;;;true asserts;assert;rawfile;;;false
extremeinfo;all;logfile;;yes;;false
<Click_To_Add>;none;rawfile;;;false"
```

The default value for AMS is:

```
"modelParameter;models;rawfile;;;true element;inst;rawfile;;;true
outputParameter;output;rawfile;;;true
designParamVals;parameters;rawfile;;;false
primitives;primitives;rawfile;;;false
subckts;subckts;rawfile;;;false asserts;assert;rawfile;;;false
extremeinfo;all;logfile;;yes;;false
<Click_To_Add>;none;rawfile;;;false"
```

The valid value is a list that specify the values of the following fields in the *Save circuit information analysis* table:

- **Name**—Name of the parameter.
- **What**—The parameters that are to be saved. possible values are `none`, `inst`, `models`, `input`, `output`, `nodes`, `all`, `terminals`, `oppoint`, `captab`, `parameters`,

Virtuoso ADE Environment Variables Reference

Environment Variables

primitives, subckts, assert, allparameters, netlist, options, and dumpall.

- **Where**—File in which the parameters are to be saved.

Note: Asserts can be saved only in a rawfile. possible values are nowhere, file, logfile, and rawfile.

- **File**—When Where is set to file, this field is used to specify the name of the file in which parameters are to be saved.
- **Extremes**—Specifies whether the minimum or maximum values are to be saved. possible values are no, yes, and only.
- **Others**—When the What field is set to captab, the options located at the bottom of the table become active and the values specified in the Sort and Threshold fields are populated in the *Others* field
- **Enabled**—Select this check box to save the corresponding parameter.

GUI Equivalent

Command:

Field: *Virtuoso Analog Design Environment – Save Options – Save circuit information analysis*

Examples

```
envGetVal("spectre.outputs" "infoOptions")
envSetVal("spectre.outputs" "infoOptions" 'string
"modelParameter;models;rawfile;;;true element;inst;rawfile;;;true
outputParameter;output;rawfile;;;true designParamVals;parameters;rawfile;;;true
primitives;primitives;rawfile;;;true subckts;subckts;rawfile;;;true
asserts;assert;rawfile;;;false extremeinfo;all;logfile;;yes;;false
<Click_To_Add>;none;rawfile;;;false")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

liclog

```
spectre.envOpts liclog boolean { t | nil }
```

Description

If this variable is set to `t`, the check-in/check-out information of the license is added to the log file.

The default is `nil`.

GUI Equivalent

Command: *Setup – Environment – Trace License Check-in/Check-out*

Field:

Examples

```
envGetVal("spectre.envOpts" "liclog")  
envSetVal("spectre.envOpts" "liclog" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

licQueueSleep

```
spectre.envOpts licQueueSleep string "sleepTime"
```

Description

This variable specifies the sleep time between two attempts to check out a license when queuing. Setting the value to a positive number overrides the default sleep time of 30 seconds. The option '+lqsleep <value>' is not passed to Spectre unless given a value. If it is not passed to *Spectre*, *Spectre* uses a default value of 30.

The default value is " ".

GUI Equivalent

None

Examples

```
envGetVal("spectre.envOpts" "licQueueSleep")  
envSetVal("spectre.envOpts" "licQueueSleep" 'string "20")
```

licQueueTimeOut

```
spectre.envOpts licQueueSleep string "licenseQueuing"
```

Description

This variable enables queuing for a license. You have to set the time required to wait for a license (in seconds). The option `'+lqtimeout <value>'` is always passed to the simulator, unless set to 0. It is passed with a value of 900 or any other value that is specified.

The default value is "900" (15 min).

GUI Equivalent

Command: *Setup – Environment – License Queue Time Out*

Field:

Examples

```
envGetVal("spectre.envOpts" "licQueueTimeOut")  
envSetVal("spectre.envOpts" "licQueueTimeOut" 'string "900")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

licQueueToken

```
spectre.envOpts vdrGenerateLabels boolean { t | nil }
```

Description

Registers a token request with the license server and creates a queue for a license.

When set to `t`, Spectre registers the token request with the license server and waits for authorization. Spectre ignores all non-token licenses during the wait time because only token licenses are queued.

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.envOpts" "licQueueToken")  
envSetVal("spectre.envOpts" "licQueueToken" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

includePath

```
spectre.envOpts includePath string "fileName"
```

Description

Use this field for relative filenames. The simulator resolves a relative filename by first searching in a directory where the file is located. Subsequently, it searches for the file in each of the directories specified by the include path, from left to right.

The valid value is unix directory names, separated with spaces.

The default value is " " .

GUI Equivalent

Command: *Virtuoso Analog Design Environment –Simulation Files Setup –
include Path*

Field:

Examples

```
envGetVal("spectre.envOpts" "includePath")  
envSetVal("spectre.envOpts" "includePath" 'string "./dir1 ../dir2")
```

Related Topics

[Simulation Files Setup](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

modelFiles

```
spectre.envOpts modelFiles string "fileName"
```

Description

Specifies the default model files to be used during simulation. You can also use this variable to disable a model file.

This variable is supported for both Spectre and AMS simulators. Replace `spectre.envOpts` in the code given below to set this variable for AMS simulator.

To set this variable,

In the `.cdsinit` file or CIW, use the call:

```
envSetVal("spectre.envOpts" "modelFiles" 'string "./models/  
model1.scs ./models/model2.scs")
```

- In the `.cdsenv` file, use the call:

```
spectre.envOpts modelFiles 'string "./models/model1.scs ./models/  
model2.scs"
```

To specify a section of a model file,

- In the `.cdsinit` file or CIW, use the call:

```
envSetVal("spectre.envOpts" "modelFiles" 'string  
"qpdK045.scs;mc")
```

- In the `.cdsenv` file or CIW, use the call:

```
spectre.envOpts modelFiles string "qpdK045.scs;mc"
```

To disable model files,

- In the `.cdsinit` file CIW, use the call:

```
envSetVal("spectre.envOpts" "modelFiles" 'string "#;./models/  
model1.scs ./models/model2.scs")
```

- In the `.cdsenv` file, use the call:

```
spectre.envOpts modelFiles 'string "#;./models/model1.scs ./  
models/model2.scs"
```


Virtuoso ADE Environment Variables Reference

Environment Variables

Here, the file `model11.scs` will be disabled.

The valid value is list of paths to model files.

The default value is " " .

GUI Equivalent

Command: *Virtuoso Analog Design Environment - Model File Setup.*

Field:

Examples

```
envGetVal("spectre.envOpts" "modelFiles")
envSetVal("spectre.envOpts" "modelFiles" 'string "./models/model11.scs ./models/
model12.scs")
```

Related Topics

[Model File Setup](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

modelParamInfo

```
spectre.outputs modelParamInfo boolean { t | nil }
```

Description

This variable sets/resets the *Save model parameters Info* option.

The default is `t`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Save Options – Save model parameters info*

Field: *Generate Voltage Labels*

Examples

```
envGetVal("spectre.outputs" "modelParamInfo")  
envSetVal("spectre.outputs" "modelParamInfo" 'boolean nil)
```

Related Topics

[Save Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

nestlvl

```
spectre.outputs nestlvl string "signals"
```

Description

This variable is used to save groups of signals as results and when signals are saved in subcircuits. The `nestlvl` parameter also specifies how many levels deep into the subcircuit hierarchy you want to save signals.

The default value is " " .

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Save Options – Set level of subcircuit to output (nestlvl)*

Field:

Examples

```
envGetVal("spectre.outputs" "nestlvl")  
envSetVal("spectre.outputs" "nestlvl" 'string "")
```

Related Topics

[Save Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

netlistBBox

```
spectre.envOpts netlistBBox string "netlistWindowSize"
```

Description

This variable is used to control the size of the netlist window.

The valid values are window coordinates.

The default values are "0 0 515 700".

GUI Equivalent

None

Examples

```
envGetVal("spectre.envOpts" "netlistBBox")  
envSetVal("spectre.envOpts" "netlistBBox" 'string "10 10 525 800")
```

nport_default_interp

```
spectre.opts nport_default_interp string "globalDefaults"
```

Description

Specifies the global defaults for `interp`.

- If `nport_default_interp` is set to `auto_switch`, `nport` automatically switches the interpolation method based on the analysis. It chooses *bbspice* for pss shooting Newton analysis, and *linear* for analyses, such as ac, dc, and sp. See `spectre -h nport` for information on how `nport_default_interp` works for your particular version of Spectre.

All `nport` elements in the netlist that do not have `interp` set will have `interp` set to the value specified in the global option `nport_default_interp`. If an `nport` instance has the `interp` option explicitly specified, the instance option takes priority over the global option.

- When *linear* is selected as the interpolation method, linear interpolation is used to get a data point needed in the sample that is not directly in the S-parameter file.
- **Spline** uses a cubic spline algorithm. Cubic spline can occasionally introduce errors when there are rapid changes in the transfer functions defined in the S-parameter file near the sample point.
- **Bbspice** is used to do the rational fit. Bbspice uses a rational model to represent the S-parameter data.

The default is "auto_switch".

The valid values are auto-switch, linear and SplineBbspice.

GUI Equivalent

None

Examples

```
envGetVal("spectre.opts" "nport_default_interp")
envSetVal("spectre.opts" "nport_default_interp" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

Related Topics

[Interpolation Method](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

nportirfiledir

```
spectre.opts nportirfiledir string "fileLocation"
```

Description

This environment variable controls the location of the cached impulse response files. By default, these files are saved in following directory: `/home/<username>/.cadence/mmsim`. When you specify a directory path with this environment variable or in the *nportirfiledir* field on the GUI, the impulse response files are cached in that directory.

You can specify a shared directory only if all users who can access it have write permissions on it.

The valid value is the path of cached impulse response file.

The default value is " " .

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Simulator Options*

Field:

Examples

```
envGetVal("spectre.opts" "nportirfiledir")  
envSetVal("spectre.opts" "nportirfiledir" 'string "filePath")
```

Related Topics

[Simulator Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

outputParamInfo

```
spectre.outputs outputParamInfo boolean { t | nil }
```

Description

This variable sets/reset the *Save output Parameters Info* option.

The default is `t`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Save Options – Save output parameters info*

Field:

Examples

```
envGetVal("spectre.outputs" "outputParamInfo")  
envSetVal("spectre.outputs" "outputParamInfo" 'boolean nil)
```

Related Topics

[Save Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

osc_accuracy

```
spectre.pspOpts osc_accuracy string "controlLevelAccuracy"
```

Description

Specifies the accuracy control level for small-signal analyses, such as PAC, PNoise, PXF, PSTB, and PSP when `osc_version` is set to `dts`. The higher the value, the more iterations the Generalized Minimal Residual Method (GMRES) solver takes to generate more accurate results.

The valid values are 1, 2, 3, 4 and 5.

The default value is " ".

GUI Equivalent

None

Examples

```
envGetVal("spectre.pspOpts" "osc_accuracy")  
envSetVal("spectre.pspOpts" "osc_accuracy" 'string "0")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

osc_version

```
spectre.pspOpts osc_version string "signalAnalysis"
```

Description

Specifies the method to use for small-signal analysis such as PAC, PNoise, PXF, PSTB, and PSP.

The valid values are:

- **floquet**: Can be used when the perturbation frequency is close to the oscillating frequency, and when the phase deviation is dominant and the amplitude variation can be ignored. When the perturbation frequency gets higher, the accuracy may be lost.
- **augmented**: Can be used when the oscillators have long time constants, which cannot be accurately predicted by the **floquet** method.
- **dto**: Can be used for any perturbation frequency. It generates results as accurate as the HB engine on all perturbation frequencies.

The default value is " " .

GUI Equivalent

None

Examples

```
envGetVal("spectre.pspOpts" "osc_version")  
envSetVal("spectre.pspOpts" "osc_version" 'string "dto")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

GUI Equivalent

- *Virtuoso Analog Design Environment -
Choosing Analyses - PAC Options - TD
Noise Algorithm Version*
- *Virtuoso Analog Design Environment -
Choosing Analyses - PNoise Options - TD
Noise Algorithm Version*
- *Virtuoso Analog Design Environment -
Choosing Analyses - PXF Options - TD
Noise Algorithm Version*
- *Virtuoso Analog Design Environment -
Choosing Analyses - PSTB Options - TD
Noise Algorithm Version*
- *Virtuoso Analog Design Environment -
Choosing Analyses - PSP Options - TD
Noise Algorithm Version*

Note: This option is available only when the Shooting engine is selected and Oscillator mode is enabled in the Choosing Analyses form for Periodic Steady State analysis.

paramRangeCheckFile

```
spectre.envOpts paramRangeCheckFile string "filePath"
```

Description

Specifies the path to a file that contains the correct ranges for component parameters. If this file is present, the simulator checks the values of all component parameters in the circuit against the specified parameter range checking file and prints a warning if any parameter value is out of range.

This variable is supported for both Spectre and AMS simulators. For AMS it is supported only when Spectre is selected as the solver. Replace `spectre.envOpts` by `ams.envOpts` in the code given below to set this variable for AMS simulator.

The valid value is the path of the file.

The default value is " ".

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Environment Options – Parameter Range Checking File*

Field:

Examples

```
envGetVal("spectre.envOpts" "paramRangeCheckFile")  
envSetVal("spectre.envOpts" "paramRangeCheckFile" 'string "./param.file")
```

Related Topics

[Environment Options](#)

preserveSubcktTermNamesByOrder

```
spectre.envOpts preserveSubcktNamesByOrder boolean { t | nil }
```

Description

Enables the generation of save statements with the instance ports in name format instead of the default index format.

The default is `nil`.

GUI Equivalent

Command: *Setup – Environment – Preserve Subckt Terminal by Names*

Field:

Examples

```
envGetVal("spectre.envOpts" "preserveSubcktNamesByOrder")  
envSetVal("spectre.envOpts" "preserveSubcktNamesByOrder" 'boolean t)
```

printComments

Prints the name mapping of the terminals in the netlist as comments.

You can print the mapping of the schematic terminal name with the netlist terminal name for the subcircuits and the mapping of schematic device names with simulator devices names by setting the value of the first toggle to `t`.

For each subcircuit, you can print the connection of each terminal with the net it is connected to by setting the second toggle to `t`.

To set this variable in the `.cdsinit` file or CIW for printing comments for name mapping and subcircuit port connection, use the following call:

```
envSetVal("spectre.envOpts" "printComments" 'toggle '(t t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

pwr

`spectre.outputs pwr string "powerSignals"`

Description

This variable is used to select the power signals to output.

The valid values are `none`, `total`, `devices`, `subckts` and `all`.

The default value is `" "`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Save Options – Select power signals to output (pwr)*

Field:

Examples

```
envGetVal("spectre.outputs" "pwr")  
envSetVal("spectre.outputs" "pwr" 'string "all")
```

Related Topics

[Save Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

recover

```
spectre.envOpts recover string "simulationFromCheckpointFile"
```

Description

Y runs spectre with the `+recover` option, which restarts the simulation from the checkpoint file, if it exists. N runs spectre with the `-recover` option, which does not restart the simulation, even if a checkpoint file exists.

The valid values are Y and N.

The default value is " " .

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Environment Options – Start from Checkpoint File(rec)*

Field:

Examples

```
envGetVal("spectre.envOpts" "recover")  
envSetVal("spectre.envOpts" "recover" 'string "Y")
```


resetSpectreApsSharedOptions

```
asimenv.misc resetSpectreApsSharedOptions string "optionsValue"
```

Description

When you change the simulation performance mode from *Spectre* to *APS* or vice versa, this environment variable resets the values of options `reltol`, `vabstol`, and `iabstol` in the Simulator Options form to their default values. These options are common for both simulation performance modes and the default values of these options change according to the specified simulation performance mode. By default, when you change the Simulation Performance Mode, the values of these shared options that you specified do not change.

The valid values are `"reltol vabstol iabstol"`

The default value is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("asimenv.misc" "resetSpectreApsSharedOptions")
envSetVal("asimenv.misc" "resetSpectreApsSharedOptions" 'string "reltol vabstol
iabstol")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

save

```
spectre.outputs save string "signals"
```

Description

This variable selects signals to be saved.

The valid values are `none`, `selected`, `lvlpub`, `allpub` and `all`.

The default value is `allpub`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Save Options – Select signals to output (save)*

Field:

Examples

```
envGetVal("spectre.outputs" "save")  
envSetVal("spectre.outputs" "save" 'string "all")
```

Related Topics

[Save Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

saveahdlvars

```
spectre.outputs saveahdlvars string "ahdlVariables"
```

Description

If you want to save all the `ahdl` variables belonging to all the `ahdl` instances in the design, set the *saveahdlvars* option to `all` using a Spectre options command. For example:

```
Saveahdl options saveahdlvars=all
```

The valid values are `selected` and `all`.

The default value is `" "`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Save Options – Save AHDL variables (saveahdlvars)*

Field:

Examples

```
envGetVal("spectre.outputs" "saveahdlvars")  
envSetVal("spectre.outputs" "saveahdlvars" 'string "all")
```

Related Topics

[Save Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

setEngNotation

```
spectre.envOpts setEngNotation boolean { t | nil }
```

Description

Specifies how the instance parameters in the netlist are printed. If set to `t`, the instance parameters in the netlist are printed in pure engineering notation. If set to `nil`, the instance parameters are printed in their default notation.

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.envOpts" "setEngNotation")  
envSetVal("spectre.envOpts" "setEngNotation" 'boolean t)
```

Virtuoso ADE Environment Variables Reference

Environment Variables

simExecName

```
spectre.envOpts simExecName string "pathOfSpectreExecutable"
```

Description

This variable can be set to point to the path of the desired spectre executable.

When distributing jobs in ADE XL, do not set the `simExecName` `cdsenv` variable. Instead, set the Distribution method on the Job Policy Setup form to `LBS`, and specify resource strings in the *Hard Resource Req* and *Soft Resource Req* fields.

Change this variable with caution. It is advisable not to change this variable unless required.

The valid value is the path or name of the spectre executable.

The default value is `spectre`.

GUI Equivalent

None

Examples

```
envGetVal("spectre.envOpts" "simExecName")  
envSetVal("spectre.envOpts" "simExecName" 'string "<path-to-the-spectre-  
executable>")
```

I assume I can remove the following text, right?

Here, it is assumed that the executable is in the `PATH` variable.

To set this variable in `.cdsenv`, add:

```
spectre.envOpts simExecName 'string "<path-to-the-spectre-  
executable>"
```

simOutputFormat

```
spectre.outputs simOutputFormat string "outputResultsFormat"
```

Description

Use this variable to specify the format of output results. If you specify values other than those supported by ADE, Spectre generates an error. The `psf with floats` format is a single-precision format that uses only half the disk space that `psf` uses. Setting the value to `sst2` causes Spectre to generate the output for transient analyses in the SignalScan Turbo 2 (SST2) format. Non-transient data cannot be generated in the SST2 format and is generated in parameter storage format (PSF) format.

The valid values are `psf`, `psf with floats`, `sst2` and `psfxl`.

The default value is `psfxl`.

GUI Equivalent

Command: *Outputs – Save All – Output Format*

Field:

Examples

```
envGetVal("spectre.outputs" "simOutputFormat")  
envSetVal("spectre.outputs" "simOutputFormat" 'string "psf")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

stimulusFile

```
spectre.envOpts stimulusFile string "filePath"
```

Description

This variable is used to set the path for stimulus file.

The valid value is unix path.

The default value is " ".

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Simulation Files Setup – Stimulus File*

Field:

Examples

```
envGetVal("spectre.envOpts" "stimulusFile")  
envSetVal("spectre.envOpts" "stimulusFile" 'string "./file")
```

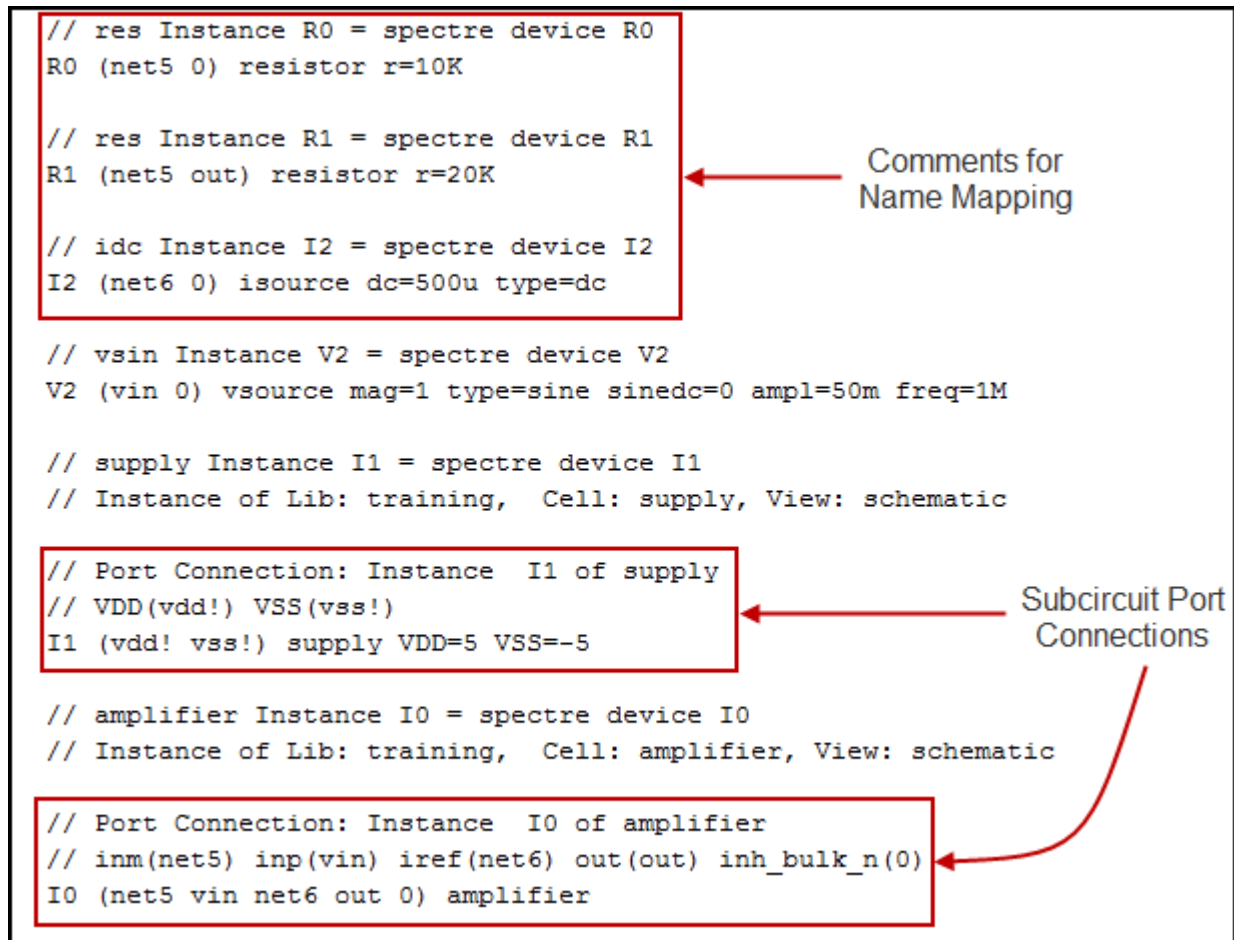
Related Topics

[Simulation Files Setup](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

The following figure shows the comments for name mapping and the subcircuit port connections printed in the netlist.



To set this variable in the `.cdsinit` file or CIW for printing comments for only name mapping, use the following call:

```
envSetVal("spectre.envOpts" "printComments" 'toggle '(t nil))
```


Virtuoso ADE Environment Variables Reference

Environment Variables

The following figure shows the comments for name mapping in the netlist.

```
// Library name: training
// Cell name: amplifier
// View name: schematic
// terminal mapping: inm      = inm
//                      inp      = inp
//                      iref      = iref
//                      out      = out
//                      [@bulk_n:%:gnd!] = inh_bulk_n
subckt amplifier inm inp iref out inh_bulk_n

// npn Instance Q1 = spectre device Q1
//   Q1 (net10 net10 vss! inh_bulk_n) trnnpn

// npn Instance Q0 = spectre device Q0
//   Q0 (out net15 net10 inh_bulk_n) trnnpn

// cap Instance C0 = spectre device C0
//   C0 (net13 out) capacitor c=CAP

// res Instance R0 = spectre device R0
//   R0 (net15 net13) resistor r=2.5K

// nmos4 Instance M5 = spectre device M5
//   M5 (gnode gnode vss! vss!) trnmos w=100u l=10u

// nmos4 Instance M2 = spectre device M2
//   M2 (net15 gnode vss! vss!) trnmos w=100u l=10u
```

Comments for Name Mapping

To set this variable in the `.cdsenv` file for printing comments for name mapping and subcircuit port connections, use the following call:

```
spectre.envOpts printComments 'toggle '(t t)
```

Variable Type	toggle
Default Value	nil nil
Acceptable Values	t t, t nil, nil t, nil nil
GUI Equivalent	<i>Virtuoso Analog Design Environment – Environment Options – Print Comments</i>

stopViewList

```
spectre.envOpts stopViewList string "defaultStopViewList"
```

Description

Specifies the default stop view list. It is a list of views that identify the stopping view to be netlisted. The same stop view list is displayed in the *Stop View List* field in the Environment Options form.

This variable is supported for both Spectre and AMS simulators. Replace `spectre.envOpts` by `ams.envOpts` in the code given below to set this variable for AMS simulator.

The valid values are view names separated with spaces.

The default value is `spectre`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Environment Options – Stop View List*

Field:

Examples

```
envGetVal("spectre.envOpts" "stopViewList")
envSetVal("spectre.envOpts" "stopViewList" 'string "spectre verilog")
```

Related Topics

[Environment Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

subcktprobelvl

```
ayout subcktprobelvl string "terminalCurrentCalculation"
```

Description

This variable is used to control the calculation of terminal currents for subcircuits. Current probes are added to the terminals of each subcircuit (up to subcktprobelvl deep).

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Save Options – Set subcircuit probe level (subcktprobelvl)*

Field:

Examples

Related Topics

[Save Options](#)

switchViewList

```
spectre.envOpts switchViewList cyclic { "schematic spectre" }
```

Description

Specifies the default view list. It is a list of the views for ADE to switch when searching for design variables and when netlisting. The same view list is displayed in the *Switch View List* field on the Environment Options form.

The valid values are view names, separated by spaces.

The default value is `spectre cmos_sch cmos.sch schematic veriloga`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Environment Options – Switch View List.*

Field:

Examples

```
envGetVal("spectre.envOpts" "switchViewList")  
envSetVal("spectre.envOpts" "switchViewList" 'cyclic "schematic spectre")
```

Related Topics

[Environment Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

tran_severity

```
spectre.checkOpts tran_severity string "messageSeverity"
```

Description

This variable changes the default severity of the messages displayed in the simulation log file and the Violations Display form, when device checks are violated and reported for the transient analysis.

The valid values are `None`, `Error`, `Warning`, `Notice` and `Fatal`.

The default value is `Warning`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Device Check Specification
 – Device Checking Options.*

Field:

Examples

```
envGetVal("spectre.checkOpts" "tran_severity")  
envSetVal("spectre.checkOpts" "tran_severity" 'string "None")
```

Related Topics

[Device Checking Options](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

uniMode

```
spectre.turboOpts uniMode string "spectreModes"
```

Description

This variable is used to set the simulation performance modes for Spectre. The available modes are Spectre (default), APS, and XPS MS.

The valid values are Spectre, APS and XPS MS.

The default value is Spectre.

GUI Equivalent

Command: *Virtuoso Analog Design Environment L – Running a Simulation – Specifying Performance and Post-Layout Optimization Options for the Spectre Simulator*

Field:

Examples

```
envGetVal("spectre.turboOpts" "uniMode")  
envSetVal("spectre.turboOpts" "uniMode" 'string "APS")
```

Related Topics

[Running a Simulation](#)

[Specifying Performance and Post-Layout Optimization Options for the Spectre Simulator](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

useprobes

spectre.outputs useprobes string "acTerminalCurrentOption"

Description

This variable is used to set the *Select AC terminal currents (useprobes)* option.

The valid values are `yes` and `no`.

The default value is `" "`.

GUI Equivalent

Command: *Virtuoso Analog Design Environment – Save Options – Select AC terminal currents (useprobes)*

Field:

Examples

```
envGetVal("spectre.outputs" "useprobes")  
envSetVal("spectre.outputs" "useprobes" 'string "no")
```

Related Topics

[Save Options](#)

OSS

Generating Customized Cellnames

Netlister changes cellname during netlisting in the following cases:

- When cellname contains an illegal character
- When cellname length exceeds maximum simulator supported length
- When multiple instances of cell are present in design with different library or viewname
- When multiple instances of same cell are present with occurrence binding

By default cell names are generated in the following order.

- `Cellname`
- `Cellname_viewname`
- `Libname_cellname_viewname`
- `_sub0`
- `_sub1`
- `_sub2`

After generating a cell name, a check has been made to ensure that the generated cellname is unique, which means it has not been generated previously and the generated cellname is legal. If the cellname is not unique or contains illegal characters, a new cellname is generated as per the order explained above.

For example, if the first cellname is generated as `cellname` and if it is not unique or is illegal, then the next cellname that gets generated is `cellname_viewname`. Similarly, the sequence is followed.

Other than the default cellnames, you can also generate the customized cellnames in the following order.

- `cellname`
- `cellname_viewname`
- `libname_cellname_viewname`

Virtuoso ADE Environment Variables Reference

Environment Variables

- `customizecellname0`
- `customizecellname1`
- `customizecellname2`

To generate these customized names, you need to set the following variables in the `.simrc` or `.cdsinit` file:

- `hnlGenerateCustomizedCellName`
- `hnlCustomizedModulePrefix`

Virtuoso ADE Environment Variables Reference

Environment Variables

hnlCustomizedModulePrefix

Set this variable to specify the customized cellname that you want to use for the subcircuit. It contains the value in the following format:

```
hnlCustomizedModulePrefix = myPrefix%L%C%V%N%mypostPreifx
```

If % is followed by L, C, V, N (specified only in uppercase), then L/C/V/N is replaced by lib/cell/view/number. Otherwise, % is treated as a separator and a "_" is inserted. The number is generated by the netlister in a sequential order starting from 0.

It is not necessary to use % as separator. Alternatively, you can also insert an underscore character "_".

Consider the case where library name is 70WSM, cellname is RES, and viewname=schematic. The table below shows the corresponding cellnames that are generated when you specify a particular prefix:

Prefixes	Generated CellNames
yoursub0	yoursub01
your%sub0	your_sub02
abc%L%C%V%N%XYZ	abc_70WSM_RES_schematic_3_XYZ
abc%L%C%V%NXYZ	abc_70WSM_RES_schematic_4XYZ
abc%L%C%V%N_XYZ	abc_70WSM_RES_schematic_5_XYZ
abc%l%c%v%n_XYZ	abc_l_c_v_n_XYZ6
NPDK%L%C%V%N%NPD	NPDK_70WSM_RES_schematic_2_2PD

If you want that N does not replace with a number in the NPD prefix, use _ instead of %. For example:

NPDK%L%C%V%N_NPD will generate NPDK_70WSM_RES_schematic_2_NPD.

When the hnlCustomizedModulePrefix variable is not defined, the default cellnames are used.

If an invalid name is specified in the hnlCustomizedModulePrefix variable, an error message is displayed and netlisting is stopped.

Virtuoso ADE Environment Variables Reference

Environment Variables

hnlGenerateCustomizedCellName

Set this variable to `true` if you want to generate a cellname of your choice. Before generating a cellname, a check is done to find whether this variable is enabled. If it is enabled, it indicates that the naming convention defined in the `hnlCustomizedModulePrefix` variable is used for generating the cellnames instead of the default names.

If the `hnlGenerateCustomizedCellName` variable is set to `nil` or `hnlCustomizedModulePrefix` is not set, the default cellnames are used.

Ultrasim

fastViewOptionI

```
UltraSim.outputs fastViewOption boolean { t | nil }
```

Description

Enables the fast waveform viewing format for PSF output.

Using the PSF output in the fast waveform viewing format, Virtuoso Visualization and Analysis XL can render extremely large datasets (where signals have a large number of data points, for example 10 million) within seconds.

Use this environment variable if the value of the `wf_format` environment variable is set to `psf`.

The default value is `nil`.

GUI Equivalent

Command: *Outputs – Save All – Use Fast Viewing Extensions*

Field:

Examples

```
envGetVal("UltraSim.outputs" "fastViewOption")  
envSetVal("UltraSim.outputs" "fastViewOption" 'boolean t)
```

Related Topics

[wf_format](#)

useOtherOutputFormat

```
UltraSim.opts useOtherOutputFormat boolean { t | nil }
```

Description

When this variable is set to `t`, PSF, PSFXL, SST2, FSDB, and WDF is displayed for Output Format field of Simulator Options form. If set to `nil`, PSF and SST2 is displayed as Output Format.

The default is `nil`.

GUI Equivalent

None

Examples

```
envGetVal("UltraSim.opts" "useOtherOutputFormat")
envSetVal("UltraSim.opts" "useOtherOutputFormat" 'boolean t)
```

Related Topics

[Appendix A](#)

[Virtuoso AMS Environment User Guide](#)

Virtuoso ADE Environment Variables Reference

Environment Variables

wf_format

```
UltraSim.outputs wf_format string "cgName"
```

Description

Use this variable to specify the format of output results. If you specify values other than those supported by ADE, UltraSim generates an error. Setting the value to `sst2` causes UltraSim to generate the output for transient analyses in the SignalScan Turbo 2 (SST2) format. Non-transient data cannot be generated in the SST2 format and is generated in parameter storage format (PSF) format.

The valid values are `psf`, `psfx1` and `sst2`.

The default value is `sst2`.

GUI Equivalent

Command: *Outputs – Save All – Output Format*

Field:

Examples

```
envGetVal("UltraSim.outputs" "wf_format")
envSetVal("UltraSim.outputs" "wf_format" 'string "psf")
```

Virtuoso ADE Environment Variables Reference

Environment Variables

Environment Variables for Spectre Simulator Options Form

This section describes the environment variables that you can set in the `.cdsenv` file to specify default values for Spectre simulator options or analysis options.

Important

The default values specified for the variables in this document indicate the default values specified for these variables in the `$CDSHOME/tools/dfll/etc/tools/spectre/.cdsenv` file.

If the default value of a variable is specified as an empty string value(`" "`) or as `"default"`, Spectre uses the in-built default value for that variable.

For example, the default value for `spectre.hb noiseout` is `" "`. If you do not modify this value in Virtuoso, while running the simulation, Spectre internally sets it to the in-built default value `"usb"`.

For more details, refer [*Spectre Circuit Simulator Reference Guide*](#).

You can set or customize the Spectre simulation options using the *Simulator Options* form in ADE. This appendix provides details of all available options on the following tabs of the *Simulator Options* form and their respective environment variables:

- [Simulator Options - Main Tab](#)
- [Simulator Options - Algorithm Tab](#)
- [Simulator Options - Component Tab](#)
- [Simulator Options - Check Tab](#)
- [Simulator Options - Annotation Tab](#)
- [Simulator Options - Miscellaneous Tab](#)

spectre.opts

Simulator Options - Main Tab

- | | |
|---|--|
| ■ <u>generalnoiseinst</u> | ■ <u>generalnoiseinstonoff</u> |
| ■ <u>highvoltage</u> | ■ <u>iabstol</u> |
| ■ <u>multithread</u> | ■ <u>noiseOffType</u> |
| ■ <u>noiseOnType</u> | ■ <u>nthreads</u> |
| ■ <u>reltol</u> | ■ <u>residualtol</u> |
| ■ <u>temp</u> | ■ <u>tempeffects</u> |
| ■ <u>tnom</u> | ■ <u>vabstol</u> |

Simulator Options - Algorithm Tab

- | | |
|---|---|
| ■ <u>convdbg</u> | ■ <u>dc_pivot_check</u> |
| ■ <u>dptran_gmethod</u> | ■ <u>gmethod</u> |
| ■ <u>gmin</u> | ■ <u>gmin_check</u> |
| ■ <u>gmindc</u> | ■ <u>homotopy</u> |
| ■ <u>icpriority</u> | ■ <u>limit</u> |
| ■ <u>nonconv_topnum</u> | ■ <u>pivabs</u> |
| ■ <u>pivotdc</u> | ■ <u>pivrel</u> |
| ■ <u>preorder</u> | ■ <u>rabsclamp</u> |
| ■ <u>rabsshort</u> | ■ <u>rebuild_matrix</u> |
| ■ <u>rforce</u> | ■ <u>rthresh</u> |
| ■ <u>try_fast_op</u> | |

Simulator Options - Component Tab

- | | |
|-------------------------------------|--|
| ■ <u>approx</u> | ■ <u>auto_minductor</u> |
| ■ <u>vth_vdsmin</u> | ■ <u>ivthl</u> |
| ■ <u>ivthn</u> | ■ <u>ivthp</u> |
| ■ <u>ivthw</u> | ■ <u>macromodels</u> |
| ■ <u>maxrsd</u> | ■ <u>nport_default_passivity</u> |

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

- | | |
|--|---|
| ■ <u>nportcompress</u> | ■ <u>nportcompressfiledir</u> |
| ■ <u>nportirfiledir</u> | ■ <u>nportirreuse</u> |
| ■ <u>nportunusedportgmin</u> | ■ <u>nportunusedportrmin</u> |
| ■ <u>minr</u> | ■ <u>scale</u> |
| ■ <u>scalefactor</u> | ■ <u>scalem</u> |
| ■ <u>tmevthmod</u> | ■ <u>vthmod</u> |

Simulator Options - Check Tab

- | | |
|---|---|
| ■ <u>checklimitdest</u> | ■ <u>checklimitfile</u> |
| ■ <u>checklimitskipfile</u> | ■ <u>checklimitskipsubs</u> |
| ■ <u>diagnose</u> | ■ <u>iccheck</u> |
| ■ <u>ignshorts</u> | ■ <u>redefinedparams</u> |
| ■ <u>opptcheck</u> | ■ <u>topcheck</u> |

Simulator Options - Annotation Tab

- | | |
|--|--|
| ■ <u>audit</u> | ■ <u>cols</u> |
| ■ <u>colslog</u> | ■ <u>debug</u> |
| ■ <u>digits</u> | ■ <u>error</u> |
| ■ <u>info</u> | ■ <u>inventory</u> |
| ■ <u>maxnotes</u> | ■ <u>maxnotestologfile</u> |
| ■ <u>maxnotestologfile</u> | ■ <u>maxwarns</u> |
| ■ <u>notation</u> | ■ <u>note</u> |
| ■ <u>narrate</u> | ■ <u>printstep</u> |
| ■ <u>simstat</u> | ■ <u>title</u> |
| ■ <u>warn</u> | |

Simulator Options - Miscellaneous Tab

- | | |
|---|--------------------------------------|
| ■ <u>additionalArgs</u> | ■ <u>ahdllint</u> |
| ■ <u>ahdllint_maxwarn</u> | ■ <u>ahdllint_on</u> |
| ■ <u>flow</u> | ■ <u>quantities</u> |
| ■ <u>sensbinparam</u> | ■ <u>sensfile</u> |

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

- sensfileonly
- senstype
- sensformat
- value1

Simulator Options - Main

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

generalnoiseinst

```
spectre.opts generalnoiseinst string "noiseContribution"
```

Description

List of instances to be considered for noise contribution.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Main</i>
Field	<i>Instance List:</i>

Examples

```
envGetVal("spectre.opts" "generalnoiseinst")  
envSetVal("spectre.opts" "generalnoiseinst" 'string "")
```

generalnoiseinstonoff

```
spectre.opts generalnoiseinstonoff string "noiseContribution"
```

Description

Specify whether to enable ("on") or disable ("off") the noise contribution for the instance list given in the `generalnoiseinst cdsenv`.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Main</i>
Field	<i>Noise Contribution</i>

Examples

```
envGetVal("spectre.opts" "generalnoiseinstonoff")  
envSetVal("spectre.opts" "generalnoiseinstonoff" 'string " ")
```

highvoltage

```
spectre.opts highvoltage string "spectreSettings"
```

Description

Enables optimized Spectre settings for high voltage designs including voltage, and current binning, excluding VerilogA and dangling nodes from convergence checks, and optimized large capacitance handling.

The valid values are 'no' and 'yes'.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Main</i>
Field	<i>highvoltage</i>

Examples

```
envGetVal("spectre.opts" "highvoltage")  
envSetVal("spectre.opts" "highvoltage" 'string "no")
```


Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

iabstol

```
spectre.opts iabstol string "any_string_value"
```

Description

Convergence criterion for absolute current tolerance.

The default value is $1e-12$.

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Main</i>
Field	<i>iabstol</i>

Examples

```
envGetVal("spectre.opts" "iabstol")  
envSetVal("spectre.opts" "iabstol" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

multithread

```
spectre.opts multithread string "multithreadCapability"
```

Description

Enable or disable multithreading capability. When multithreading is enabled but the number of threads (nThreads) is not specified, Spectre will automatically detect the number of processors and select the proper number of threads to use.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Main</i>
Field	<i>multithread</i>

Examples

```
envGetVal("spectre.opts" "multithread")  
envSetVal("spectre.opts" "multithread" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

noiseOffType

```
spectre.opts noiseOffType toggle { thermal | flicker | shot | ign | all }
```

Description

Disable specific noise sources for the list of instances given with the cdsenv generalnoiseinst.

The default value is (nil nil nil nil nil).

Example:

```
envSetVal("spectre.opts" "noiseOffType" 'toggle '(t nil t nil nil))
```

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Main</i>
Field	<i>noiseoff_type</i>

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

noiseOnType

```
spectre.opts noiseOnType toggle { thermal | flicker | shot | ign | all }
```

Description

Enable specific noise sources for the list of instances given with the cdsenv generalnoiseinst.

The default value is (nil nil nil nil nil).

Example:

```
envSetVal("spectre.opts" "noiseOnType" 'toggle '(t nil t nil nil))
```

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Main</i>
Field	<i>noiseon_type</i>

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

nthreads

`spectre.opts nthreads string "numberOfThreads"`

Description

Specifies the number of threads for multithreading.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Main</i>
Field	<i>nthreads</i>

Examples

```
envGetVal("spectre.opts" "nthreads")
envSetVal("spectre.opts" "nthreads" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

reitol

```
spectre.opts reitol string "any_string_value"
```

Description

Relative convergence criterion.

The default value is 1.00E-03.

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Main</i>
Field	<i>reitol</i>

Examples

```
envGetVal("spectre.opts" "reitol")  
envSetVal("spectre.opts" "reitol" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

residualtol

spectre.opts residualtol string "*any_string_value*"

Description

Tolerance ratio for residual (multiplies reltol).

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Main</i>
Field	<i>residualtol</i>

Examples

```
envGetVal("spectre.opts" "residualtol")  
envSetVal("spectre.opts" "residualtol" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

temp

```
spectre.opts temp string "temperature"
```

Description

Specifies the temperature.

The default value is "27".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Main</i>
Field	<i>temp</i>

Examples

```
envGetVal("spectre.opts" "temp")  
envSetVal("spectre.opts" "temp" 'string "")
```


Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

tempeffects

```
spectre.opts tempeffects string "any_string_value"
```

Description

Temperature effect selector. If tempeffect = vt, only thermal voltage varies with temperature; if tempeffect = tc, parameters that start with tc are active and thermal voltage is dependent on temperature; and if tempeffect = all, all built-in temperature models are enabled.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Main</i>
Field	<i>tempeffects</i>

Examples

```
envGetVal("spectre.opts" "tempeffects")  
envSetVal("spectre.opts" "tempeffects" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

tnom

```
spectre.opts tnom string "any_string_value"
```

Description

Temperature measurement of the default component parameter.

The default value is "27".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Main</i>
Field	<i>tnom</i>

Examples

```
envGetVal("spectre.opts" "tnom")  
envSetVal("spectre.opts" "tnom" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

vabstol

spectre.opts vabstol string *"any_string_value"*

Description

Convergence criterion for absolute voltage tolerance.

The default value is 1.00E-06.

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Main</i>
Field	<i>vabstol</i>

Examples

```
envGetVal("spectre.opts" "vabstol")  
envSetVal("spectre.opts" "vabstol" 'string "")
```

Simulator Options - Algorithm

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

convdbg

```
spectre.opts convdbg string "convergenceIssues"
```

Description

Specifies the option to diagnose convergence issues and identify problem areas.

The valid values are "none", "status" and "detailed".

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Algorithm</i>
Field	<i>convdbg</i>

Examples

```
envGetVal("spectre.opts" "convdbg")  
envSetVal("spectre.opts" "convdbg" 'string "none")
```

dc_pivot_check

```
spectre.opts dc_pivot_check string "any_string_value"
```

Description

During DC analysis, the numeric pivoting is only performed when bad pivot is detected.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Algorithm</i>
Field	<i>dc_pivot_check</i>

Examples

```
envGetVal("spectre.opts" "dc_pivot_check")  
envSetVal("spectre.opts" "dc_pivot_check" 'string "")
```

dptran_gmethod

spectre.opts dptran_gmethod string *"any_string_value"*

Description

Stamp gdev, gnode, or both in the dptran (homotopy) methods.

The valid values are 'dev', 'node' and 'both'.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Algorithm</i>
Field	<i>dptran_gmethod</i>

Examples

```
envGetVal("spectre.opts" "dptran_gmethod")
envSetVal("spectre.opts" "dptran_gmethod" 'string "node")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

gmethod

spectre.opts gmethod string *"any_string_value"*

Description

Stamp gdev, gnode, or both in the homotopy methods (other than dptran).

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Algorithm</i>
Field	<i>gmethod</i>

Examples

```
envGetVal("spectre.opts" "gmethod")  
envSetVal("spectre.opts" "gmethod" 'string "")
```


Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

gmin

```
spectre.opts gmin string "simulationNonConvergence"
```

Description

`gmin` (conductance) is added to each nonlinear branch of the device to prevent simulation non-convergence. Large `gmin` impacts accuracy of current probe, small `gmin` may cause circuit convergence issue. For circuit that is sensitive to leakage current, it is recommended to set `gmin` to a small value or zero.

The default value is "1e-12".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Algorithm</i>
Field	<i>gmin</i>

Examples

```
envGetVal("spectre.opts" "gmin")  
envSetVal("spectre.opts" "gmin" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

gmin_check

```
spectre.opts gmin_check string "gminEffect"
```

Description

Specifies that effect of `gmin` should be reported if significant.

The valid values are 'no', 'max_v_only', 'max_only' and 'all'.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options- Algorithm</i>
Field	<i>gmin_check</i>

Examples

```
envGetVal("spectre.opts" "gmin_check")  
envSetVal("spectre.opts" "gmin_check" 'string "no")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

gmindc

```
spectre.opts gmindc string "any_string_value"
```

Description

Minimum conductance across each non-linear device in DC analysis. If `gmindc` is not specified, the value of `gmindc` will be equal to `gmin`.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Algorithm</i>
Field	<i>gmindc</i>

Examples

```
envGetVal("spectre.opts" "gmindc")  
envSetVal("spectre.opts" "gmindc" 'string " ")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

homotopy

spectre.opts homotopy string *"any_string_value"*

Description

Method used when there is no convergence on initial attempt of DC analysis.

The valid values are 'none', 'gmin', 'source', 'dptran', 'ptran', and 'all'.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Algorithm</i>
Field	<i>homotopy</i>

Examples

```
envGetVal("spectre.opts" "homotopy")  
envSetVal("spectre.opts" "homotopy" 'string "none")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

icpriority

```
spectre.opts icpriority string "icPriorityOrder"
```

Description

Set the ic priority order. If set to `netlist`, the order from lowest to highest is readNS, netlist NS, readIC, netlist IC. If set to `file`, the order from lowest to highest is netlist NS, readNS, netlist IC readIC.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Algorithm</i>
Field	<i>icpriority</i>

Examples

```
envGetVal("spectre.opts" "icpriority")  
envSetVal("spectre.opts" "icpriority" 'string "")
```

limit

spectre.opts limit string "dcConvergence"

Description

Limiting algorithms to aid DC convergence.
The valid values are 'delta', 'log' and 'dev'.
The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options- Algorithm</i>
Field	<i>limit</i>

Examples

```
envGetVal("spectre.opts" "limit")  
envSetVal("spectre.opts" "limit" 'string "log")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

nonconv_topnum

spectre.opts nonconv_topnum string "*any_string_value*"

Description

Top number of non-convergence nodes to be printed.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Algorithm</i>
Field	<i>nonconv_topnum</i>

Examples

```
envGetVal("spectre.opts" "nonconv_topnum")  
envSetVal("spectre.opts" "nonconv_topnum" 'string " ")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

pivabs

```
spectre.opts pivabs string "pivotThreshold"
```

Description

Specifies the absolute pivot threshold.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Algorithm</i>
Field	<i>pivabs</i>

Examples

```
envGetVal("spectre.opts" "pivabs")  
envSetVal("spectre.opts" "pivabs" 'string "")
```


Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

pivotdc

```
spectre.opts pivotdc string "dcAnalysis"
```

Description

Use numeric pivoting on every iteration of DC analysis.

The valid values are "no" and "yes".

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Algorithm</i>
Field	<i>pivotdc</i>

Examples

```
envGetVal("spectre.opts" "pivotdc")  
envSetVal("spectre.opts" "pivotdc" 'string "no")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

pivrel

```
spectre.opts pivrel string "pivotThreshold"
```

Description

Specifies the relative pivot threshold.

The default value is 1.00E-03.

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Algorithm</i>
Field	<i>pivrel</i>

Examples

```
envGetVal("spectre.opts" "pivrel")  
envSetVal("spectre.opts" "pivrel" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

preorder

```
spectre.opts preorder string "amountOfMatrixPreordering"
```

Description

Try this option when simulation runs out of memory or if the simulation is unreasonably slow for the size of your design. It controls the amount of matrix pre-ordering that is done and may lead to much fewer matrix fill-ins in some cases. Known cases include designs with very large number of small resistors and large number of behavioral instances containing voltage based equations.

The valid values are "partial" and "full".

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Algorithm</i>
Field	<i>preorder</i>

Examples

```
envGetVal("spectre.opts" "preorder")  
envSetVal("spectre.opts" "preorder" 'string "full")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

rabsclamp

```
spectre.opts rabsclamp string "any_string_value"
```

Description

When rabsclamp=value is specified, all instance resistors with absolute R<value are clamped to value.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Algorithm</i>
Field	<i>rabsclamp</i>

Examples

```
envGetVal("spectre.opts" "rabsclamp")  
envSetVal("spectre.opts" "rabsclamp" 'string "")
```

rabsshort

`spectre.opts rabsshort string "any_string_value"`

Description

When this option is set, all fixed value resistors with absolute value of $R \leq \text{rabsshort}$ are shorted.

Default value is 0 for Spectre, and 1m for APS. Rabsshort can additionally be applied to variable resistors using the option 'short_cut_var_elem=yes'.

The default is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Algorithm</i>
Field	<i>rabsshort</i>

Examples

```
envGetVal("spectre.opts" "rabsshort")
envSetVal("spectre.opts" "rabsshort" 'string "')
```

rebuild_matrix

```
spectre.opts rebuild_matrix string "circuitMatrix"
```

Description

If set to `yes`, rebuild circuit matrix at the beginning of ac, dc, dcmatch, montecarlo, pz, stb, sweep, tdr, and tran analyses. This is to ensure consistent matrix ordering at the beginning of the analyses for consistent results. Notice that rebuild circuit matrix can result in performance overhead.

The valid values are "no" and "yes".

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Algorithm</i>
Field	<i>rebuild_matrix</i>

Examples

```
envGetVal("spectre.opts" "rebuild_matrix")  
envSetVal("spectre.opts" "rebuild_matrix" 'string "no")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

rforce

```
spectre.opts rforce string "nodesetsAndNodeBasedConditions"
```

Description

Resistance used when forcing nodesets and node-based initial conditions.

The default value is "1".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Algorithm</i>
Field	<i>rforce</i>

Examples

```
envGetVal("spectre.opts" "rforce")  
envSetVal("spectre.opts" "rforce" 'string "")
```

rthresh

```
spectre.opts rthresh string "any_string_value"
```

Description

All instance resistors that have resistance smaller than global `rthresh` will use resistance form, unless their instance parameter or model parameter overwrites it. Note that resistance form of any resistor is set at the beginning of simulation and cannot be changed later, so altering the value of `rthresh` is of no use. You will have to start a new run if you want a different `rthresh` for your circuit.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Algorithm</i>
Field	<i>rthresh</i>

Examples

```
envGetVal("spectre.opts" "rthresh")  
envSetVal("spectre.opts" "rthresh" 'string " ")
```


try_fast_op

```
spectre.opts try_fast_op string "dcSolution"
```

Description

Speed up the DC solution. For hard-to-converge designs, this feature fails and other methods are applied. In corner cases, this feature may have negative effects. If the DC analysis is unusually slow, the memory usage of the processes keeps increasing, or if DC analysis gets stuck even before homotopy methods start, set this option to "no".

The default is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Algorithm</i>
Field	<i>try_fast_op</i>

Examples

```
envGetVal("spectre.opts " "try_fast_op")  
envSetVal("spectre.opts " "try_fast_op" 'string "")
```

Simulator Options - Component

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

approx

```
spectre.opts approx string "approximateModels"
```

Description

Specifies the use of approximate models. Difference between approximate and exact models. The valid values are 'yes' and 'no'.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>approx</i>

Examples

```
envGetVal("spectre.opts" "approx")  
envSetVal("spectre.opts" "approx" 'string "no")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

auto_minductor

```
spectre.opts auto_minductor string "inductorCoupling"
```

Description

Automatic insertion of missing mutual inductor coupling.

The valid values are 'yes' and 'no'.

The default is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>auto_minductor</i>

Examples

```
envGetVal("spectre.opts" "auto_minductor")  
envSetVal("spectre.opts" "auto_minductor" 'string "no")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

vth_vdsmin

```
spectre.opts ivth_vdsmin string "any_string_value"
```

Description

Minimum Vds in constant current Vth calculation.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>ivth_vdsmin</i>

Examples

```
envGetVal("spectre.opts" "ivth_vdsmin")  
envSetVal("spectre.opts" "ivth_vdsmin" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

ivthl

```
spectre.opts ivthl string "any_string_value"
```

Description

Length offset for constant current Vth.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>ivthl</i>

Examples

```
envGetVal("spectre.opts" "ivthl")  
envSetVal("spectre.opts" "ivthl" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

ivthn

```
spectre.opts ivthn string "any_string_value"
```

Description

NMOS Vth current parameter.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>ivthn</i>

Examples

```
envGetVal("spectre.opts" "ivthn")  
envSetVal("spectre.opts" "ivthn" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

ivthp

`spectre.opts ivthp string "any_string_value"`

Description

PMOS Vth current parameter.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>ivthp</i>

Examples

```
envGetVal("spectre.opts" "ivthp")
envSetVal("spectre.opts" "ivthp" 'string "")
```


Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

ivthw

```
spectre.opts ivthw string "any_string_value"
```

Description

Width offset for constant current Vth.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>ivthw</i>

Examples

```
envGetVal("spectre.opts" "ivthw")  
envSetVal("spectre.opts" "ivthw" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

macromodels

```
spectre.opts macromodels string "any_string_value"
```

Description

Determine whether circuit contains macromodels; at times, setting this parameter to yes helps improve performance

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>macromodels</i>

Examples

```
envGetVal("spectre.opts" "macromodels")  
envSetVal("spectre.opts" "macromodels" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

maxrsd

```
spectre.opts maxrsd string "any_string_value"
```

Description

Use approximation for drain/source parasitic resistors which are less than maxrsd. Applies to bsim3v3, bsim4 mosfet models.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>maxrsd</i>

Examples

```
envGetVal("spectre.opts" "maxrsd")  
envSetVal("spectre.opts" "maxrsd" 'string "")
```

nport_default_passivity

```
spectre.opts nport_default_passivity string "s-parameterPassivity"
```

Description

Check and enforce passivity of S-parameter for all nport instances. Default is "disable", which means this global option has no effect. If set to a value other than "disable", all nport elements in the netlist without a value for 'passivity' explicitly set, will have their 'passivity' argument set to the same value as specified in this global option. If an nport instance already has the 'passivity' option specified, the instance option will take priority if both are present.

The valid values are "no", "check", "enforce", "fit_weak_enforce", "fit_enforce" and "disable".

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>nport_default_passivity</i>

Examples

```
envGetVal("spectre.opts" "nport_default_passivity")
envSetVal("spectre.opts" "nport_default_passivity" 'string "no")
```

nportcompress

```
spectre.opts nportcompress string "any_string_value"
```

Description

Nport compression improves the efficiency of S-parameter simulation of large nport files when a certain percentage of the ports is unused, i.e., open or short circuited. Nport compression does not impact simulation accuracy. This option turns off compression if set to no and attempts to force compression if set to yes. If left unspecified, compression is on if $N \geq 10$ and the ratio of used ports is less than or equal to 0.8.

The valid values are "no" and "yes".

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>nportcompress</i>

Examples

```
envGetVal("spectre.opts" "nportcompress")  
envSetVal("spectre.opts" "nportcompress" 'string "no")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

nportcompressfiledir

```
spectre.opts nportcompressfiledir string "directoryPath"
```

Description

The directory where the compressed nport S-parameter file is written to. If unspecified, it is stored in outdir.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>nportcompressfiledir</i>

Examples

```
envGetVal("spectre.opts" "nportcompressfiledir")  
envSetVal("spectre.opts" "nportcompressfiledir" 'string "")
```

nportirfiledir

```
spectre.opts nportirfiledir string "impulseResponseFile"
```

Description

The directory to which the nport impulse response file will be written. If it is not specified, the file will be written to /home/<username>/.cadence/mmsim/. If a relative path is specified, the path is relative to the current working directory.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>nportirfiledir</i>

Examples

```
envGetVal("spectre.opts" "nportirfiledir")  
envSetVal("spectre.opts" "nportirfiledir" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

nportirreuse

```
spectre.opts nportirreuse string "impulseResponseData"
```

Description

Reuses impulse responses data for all `nport` instances. If set to "no", disables this feature. The valid values are "no" and "yes".

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>nportirreuse</i>

Examples

```
envGetVal("spectre.opts" "nportirreuse")  
envSetVal("spectre.opts" "nportirreuse" 'string "no")
```


nportunusedportgmin

`spectre.opts nportunusedportgmin string "any_string_value"`

Description

Default is 0, which leaves the port open-circuited. A small value loads open-circuited ports with a finite but large resistance. This introduces a small error in the response, but it induces losses which help obtain a passive response.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>nportunusedportgmin</i>

Examples

```
envGetVal("spectre.opts" "nportunusedportgmin")
envSetVal("spectre.opts" "nportunusedportgmin" 'string "")
```

nportunusedportrmin

```
spectre.opts nportunusedportrmin string "any_string_value"
```

Description

Default is 0, which leaves the port short-circuited. A small value will insert a small resistance in place of short circuited ports. This introduces a small error in the response, but it induces losses which help obtain a passive response.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>nportunusedportrmin</i>

Examples

```
envGetVal("spectre.opts" "nportunusedportrmin")  
envSetVal("spectre.opts" "nportunusedportrmin" 'string " ")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

minr

```
spectre.opts minr string "deviceResistors"
```

Description

All parasitic resistors inside devices less than global `minr` will be removed. The order of checking devices is the follows:

1. Check if resistors are smaller than local `minr`. If yes, check if it is a MOSFET or BJT. If it is a MOSFET, drop the resistor, if it is BJT, clamp to the `minr` value, and give a warning message for both cases.
2. Check global `minr`, All Parasitic resistors less than global `minr` are removed and a warning message is issued.
3. If the resistor is not removed and is smaller than 0.001, issue a warning.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>minr</i>

Examples

```
envGetVal("spectre.opts" "minr")  
envSetVal("spectre.opts" "minr" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

scale

spectre.opts scale string "any_string_value"

Description

Device instance scaling factor.

The default value is "1".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>scale</i>

Examples

```
envGetVal("spectre.opts" "scale")  
envSetVal("spectre.opts" "scale" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

scalefactor

```
spectre.opts scalefactor string "deviceModelTechnology"
```

Description

ScaleFactor for Device Model Technology Scaling. The options parameter `scalefactor` enables device model providers to scale device technology independent of the design dimension scaling done by circuit designers. The resulting device instance scaling is defined by `'scale * scalefactor'`. If the foundry uses a technology scale factor of 0.9 (`scalefactor=0.9`), and the circuit designer uses a design scale factor of 1e-6 (`scale=1e-6`), then the compounded scaling of the device instance dimension is 0.9e-6. Unlike options parameter `scale`, `scalefactor` cannot be used as a netlist parameter and cannot be altered or used in sweep statements.

The default value is `" "`.

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>scalefactor</i>

Examples

```
envGetVal("spectre.opts" "scalefactor")  
envSetVal("spectre.opts" "scalefactor" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

scalem

spectre.opts scalem string *"any_string_value"*

Description

Model scaling factor.

The default value is "1".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>scalem</i>

Examples

```
envGetVal("spectre.opts" "scalem")  
envSetVal("spectre.opts" "scalem" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

tmevthmod

spectre.opts tmevthmod string *"any_string_value"*

Description

TSMC constant vth calculation. By default it is not activated.

The valid values are "0" and "1".

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>tmevthmod</i>

Examples

```
envGetVal("spectre.opts" "tmevthmod")  
envSetVal("spectre.opts" "tmevthmod" 'string "1")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

vthmod

```
spectre.opts vthmod string "any_string_value"
```

Description

Vth output selector. 'std' outputs model equation Vth; 'vthcc' outputs constant current Vth and may impact simulation performance.

The valid values are "std" and "vthcc".

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Component</i>
Field	<i>vthmod</i>

Examples

```
envGetVal("spectre.opts" "vthmod")  
envSetVal("spectre.opts" "vthmod" 'string "std")
```


Simulator Options - Check

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

checklimitdest

```
spectre.opts checklimitdest string "destination"
```

Description

Destinations where violations are written.

The valid values are 'file', 'psf' and 'both'.

The default value is "psf".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Check</i>
Field	<i>checklimitdest</i>

Examples

```
envGetVal("spectre.opts" "checklimitdest")  
envSetVal("spectre.opts" "checklimitdest" 'string "file")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

checklimitfile

spectre.opts checklimitfile string *any_string_value*

Description

File to which assert violations are written.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Check</i>
Field	<i>checklimitfile</i>

Examples

```
envGetVal("spectre.opts" "checklimitfile")  
envSetVal("spectre.opts" "checklimitfile" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

checklimitskipfile

spectre.opts checklimitskipfile string *any_string_value*

Description

Specifies the file which contains the subcircuit masters or subcircuit master patterns to be skipped in device checking. Patterns can have any wildcard symbols.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Check</i>
Field	<i>checklimitskipfile</i>

Examples

```
envGetVal("spectre.opts" "checklimitskipfile")
envSetVal("spectre.opts" "checklimitskipfile" 'string " ")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

checklimitskipsubs

spectre.opts checklimitskipsubs string *any_string_value*

Description

Specifies the array of subcircuit masters or subcircuit master patterns to be skipped in device checking. Patterns can have any wildcard symbols.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Check</i>
Field	<i>checklimitskipsubs</i>

Examples

```
envGetVal("spectre.opts" "checklimitskipsubs")
envSetVal("spectre.opts" "checklimitskipsubs" 'string " ")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

diagnose

```
spectre.opts diagnose string "accuracyAndConvergenceProblems"
```

Description

Print additional information that might help diagnose accuracy and convergence problems. The valid values are 'no', 'yes' and 'detailed'.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Check</i>
Field	<i>diagnose</i>

Examples

```
envGetVal("spectre.opts" "diagnose")  
envSetVal("spectre.opts" "diagnose" 'string "no")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

iccheck

```
spectre.opts iccheck string "any_string_value"
```

Description

Check if nodes with initial conditions have capacitive path to ground or connected to the ground by vsource. IC for such node is treated as nodeset.

The valid values are 'no', 'vsource', 'cap' and 'all'.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Check</i>
Field	<i>iccheck</i>

Examples

```
envGetVal("spectre.opts" "iccheck")  
envSetVal("spectre.opts" "iccheck" 'string "all")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

ignshorts

```
spectre.opts ignshorts string "shortedComponents"
```

Description

Silently ignore shorted components.

The valid values are 'no' and 'yes'.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Check</i>
Field	<i>ignshorts</i>

Examples

```
envGetVal("spectre.opts" "ignshorts")  
envSetVal("spectre.opts" "ignshorts" 'string "no")
```


redefinedparams

```
spectre.opts redefinedparams string "parameters"
```

Description

Specify whether parameters can be redefined in the netlist. When set to warning or ignore, the simulator allows you to redefine parameters in the netlist. However, it honors only the last definition of the redefined parameter. Depending on the value set, the simulator displays warning messages for the redefined parameters or does not display any message. When set to error, the simulator does not allow you to redefine parameters in the netlist and displays an error message.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Check</i>
Field	<i>redefinedparams</i>

Examples

```
envGetVal("spectre.opts" "redefinedparams")  
envSetVal("spectre.opts" "redefinedparams" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

opptcheck

```
spectre.opts opptcheck string "pointParameters"
```

Description

Checks operating point parameters against soft limits.

The valid values are "no" and "yes".

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Check</i>
Field	<i>opptcheck</i>

Examples

```
envGetVal("spectre.opts" "opptcheck")  
envSetVal("spectre.opts" "opptcheck" 'string "no")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

topcheck

```
spectre.opts topcheck string "circuitTopology"
```

Description

Check circuit topology for errors.

The valid values are "no", "min", "full", "fixall", "errmin" and "errfull".

The default is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Check</i>
Field	<i>topcheck</i>

Examples

```
envGetVal("spectre.opts" "topcheck")  
envSetVal("spectre.opts" "topcheck" 'string "no")
```

Simulator Options - Annotation

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

audit

`spectre.opts audit string "any_string_value"`

Description

Print time required by various parts of the simulator.

The valid values are 'no', 'brief' or 'detailed'.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Annotation</i>
Field	<i>audit</i>

Examples

```
envGetVal("spectre.opts" "audit")  
envSetVal("spectre.opts" "audit" 'string "no")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

cols

`spectre.opts cols string "screenWidth"`

Description

Width of screen in characters.

The default value is "80".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Annotation</i>
Field	<i>cols</i>

Examples

```
envGetVal("spectre.opts" "cols")  
envSetVal("spectre.opts" "cols" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

colslog

```
spectre.opts colslog string "logFile"
```

Description

Width of log-file in characters.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Annotation</i>
Field	<i>colslog</i>

Examples

```
envGetVal("spectre.opts" "colslog")  
envSetVal("spectre.opts" "colslog" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

debug

```
spectre.opts debug string "debuggingMessages"
```

Description

Give debugging messages.

The valid values are 'no' and 'yes'.

The default is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Annotation</i>
Field	<i>debug</i>

Examples

```
envGetVal("spectre.opts" "debug")  
envSetVal("spectre.opts" "debug" 'string "no")
```


Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

digits

```
spectre.opts digits string "numbers"
```

Description

Number of digits used when printing numbers.

The default value is "5".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Annotation</i>
Field	<i>digits</i>

Examples

```
envGetVal("spectre.opts" "digits")  
envSetVal("spectre.opts" "digits" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

error

```
spectre.opts error string "errorMessages"
```

Description

Generate error messages.

The valid values are 'no' and 'yes'.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Annotation</i>
Field	<i>error</i>

Examples

```
envGetVal("spectre.opts" "error")  
envSetVal("spectre.opts" "error" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

info

```
spectre.opts info string "infoMessages"
```

Description

Give informational messages.

The valid values are 'no' and 'yes'.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Annotation</i>
Field	<i>info</i>

Examples

```
envGetVal("spectre.opts" "info")  
envSetVal("spectre.opts" "info" 'string " ")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

inventory

```
spectre.opts inventory string "componentsSummary"
```

Description

Print summary of components used.

The possible values are 'brief', 'detailed' and 'no'.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Annotation</i>
Field	<i>inventory</i>

Examples

```
envGetVal("spectre.opts" "inventory")  
envSetVal("spectre.opts" "inventory" 'string " ")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

maxnotes

```
spectre.opts maxnotes string "noOfNotices"
```

Description

Maximum number of times a notice is issued per analysis. Note that this option has no effect on notices issued as part of parsing the netlist. Use the `-maxnotes` command-line option to control the number of all notices issued.

The default value is "5".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Annotation</i>
Field	<i>maxnotes</i>

Examples

```
envGetVal("spectre.opts" "maxnotes")  
envSetVal("spectre.opts" "maxnotes" 'string "")
```

maxnotestologfile

```
spectre.opts maxnotestologfile string "noOfPrintedNotices"
```

Description

Maximum number of times a notice message is printed to the log file per analysis. Note that this option has no effect on notices printed as part of parsing the netlist. Use the -maxnotestolog command-line option to control the number of all notices printed to the log file.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Annotation</i>
Field	<i>maxnotestologfile</i>

Examples

```
envGetVal("spectre.opts" "maxnotestologfile")  
envSetVal("spectre.opts" "maxnotestologfile" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

maxwarns

spectre.opts maxwarns string "issuedWarningMessages"

Description

Maximum number of times a warning message is issued per analysis. Note that this option has no effect on warnings issued as part of parsing the netlist. Use the `-maxwarns` command-line option to control the number of all warnings issued.

The default value is "5".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Annotation</i>
Field	<i>maxwarns</i>

Examples

```
envGetVal("spectre.opts" "maxwarns")
envSetVal("spectre.opts" "maxwarns" 'string "')
```

maxwarnstologfile

```
spectre.opts maxwarnstologfile string "noOfWarnings"
```

Description

Maximum number of times a warning message is printed to the log file per analysis. Note that this option has no effect on warnings printed as part of parsing the netlist. Use the -maxwarnstolog command-line option to control the number of all warnings printed to the log file.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Annotation</i>
Field	<i>maxwarnstologfile</i>

Examples

```
envGetVal("spectre.opts" "maxwarnstologfile")  
envSetVal("spectre.opts" "maxwarnstologfile" 'string "")
```


Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

notation

`spectre.opts notation string "numbersOnScreen"`

Description

The notation to be used to display real numbers to the screen.

The valid values are 'eng', 'sci' and 'float'.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Annotation</i>
Field	<i>notation</i>

Examples

```
envGetVal("spectre.opts" "notation")
envSetVal("spectre.opts" "notation" 'string " ")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

note

```
spectre.opts note string "noticeMessages"
```

Description

Give notice messages.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Annotation</i>
Field	<i>note</i>

Examples

```
envGetVal("spectre.opts" "note")  
envSetVal("spectre.opts" "note" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

narrate

```
spectre.opts narrate string "simulation"
```

Description

Narrate the simulation.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Annotation</i>
Field	<i>narrate</i>

Examples

```
envGetVal("spectre.opts" "narrate")  
envSetVal("spectre.opts" "narrate" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

printstep

```
spectre.opts printstep string "results"
```

Description

Enables Spectre to print results by equal step defined in .tran statement.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Annotation</i>
Field	<i>printstep</i>

Examples

```
envGetVal("spectre.opts" "printstep")  
envSetVal("spectre.opts" "printstep" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

simstat

spectre.opts simstat string *any_string_value*

Description

Print simulation phase statistics report.

The valid values is "basic" or "detailed".

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Annotation</i>
Field	<i>print statistics report</i>

Examples

```
envGetVal("spectre.opts" "simstat")  
envSetVal("spectre.opts" "simstat" 'string " ")
```

title

```
spectre.opts title string "circuitTitle"
```

Description

Specifies the circuit title.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Annotation</i>
Field	<i>title</i>

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

warn

```
spectre.opts warn string "warningMessages"
```

Description

Display warning messages.

The valid values are "no" and "yes".

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Annotation</i>
Field	<i>warn</i>

Examples

```
envGetVal("spectre.opts" "warn")  
envSetVal("spectre.opts" "warn" 'string "")
```

Simulator Options - Miscellaneous

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

additionalArgs

```
spectre.opts additionalArgs string "options"
```

Description

Specifies a string that adds options that are not supported through the ADE GUI.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Miscellaneous</i>
Field	<i>Additional arguments</i>

Examples

```
envGetVal("spectre.opts" "additionalArgs")  
envSetVal("spectre.opts" "additionalArgs" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

ahdllint

```
spectre.opts ahdllint string "verilog-aLinterCheck"
```

Description

Specifies the Spectre command line argument to enable Verilog-A linter check.

The valid values are 'warn', 'error', and 'force'.

This option is not available in Spectre base. It is available only in APS or XPS.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Miscellaneous</i>
Field	<i>Warning type</i>

Examples

```
envGetVal("spectre.opts" "ahdllint")  
envSetVal("spectre.opts" "ahdllint" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

ahdllint_maxwarn

```
spectre.opts ahdllint_maxwarn string "noOfLintWarningMessages"
```

Description

Specifies the maximum number of Verilog-A linter warning messages to be reported by the simulator for each message ID.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Miscellaneous</i>
Field	<i>Max warning</i>

Examples

```
envGetVal("spectre.opts" "ahdllint_maxwarn")  
envSetVal("spectre.opts" "ahdllint_maxwarn" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

ahdllint_on

```
spectre.opts ahdllint_on string "linterFeature"
```

Description

When set to "on", enables the AHDL Linter feature.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Miscellaneous</i>
Field	<i>Linter check</i>

Examples

```
envGetVal("spectre.opts" "ahdllint_on")  
envSetVal("spectre.opts" "ahdllint_on" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

flow

```
spectre.opts flow string "flowQuantity"
```

Description

Specifies the default flow quantity.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Miscellaneous</i>
Field	<i>flow</i>

Examples

```
envGetVal("spectre.opts" "flow")  
envSetVal("spectre.opts" "flow" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

quantities

```
spectre.opts quantities string "quantities"
```

Description

Print quantities. If quantities=min, the simulator prints out all defined quantities; if quantities=full, the simulator also prints a list of nodes and their quantities.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Miscellaneous</i>
Field	<i>quantities</i>

Examples

```
envGetVal("spectre.opts" "quantities")  
envSetVal("spectre.opts" "quantities" 'string "")
```

sensbinparam

spectre.opts sensbinparam string "*binningModels*"

Description

Sensitivity for binning models.

The valid values are "no", "uncorrelated" and "correlated"

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Miscellaneous</i>
Field	<i>sensbinparam</i>

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

sensfile

```
spectre.opts sensfile string "fileName"
```

Description

Output sensitivity data file name.

The default value is "`../psf/sens.output`".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Miscellaneous</i>
Field	<i>sensfile</i>

Examples

```
envGetVal("spectre.opts" "sensfile")  
envSetVal("spectre.opts" "sensfile" 'string "")
```


Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

sensfileonly

spectre.opts sensfileonly string *any_string_value*

Description

Enable or disable raw output of sensitivity results.

The valid values are "no" and "yes".

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Miscellaneous</i>
Field	<i>sensfileonly</i>

Examples

```
envGetVal("spectre.opts" "sensfileonly")  
envSetVal("spectre.opts" "sensfileonly" 'string " ")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

sensformat

```
spectre.opts sensformat string "sensitivityData"
```

Description

Format of sensitivity data.

The valid value is "tabular" or "list".

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Miscellaneous</i>
Field	<i>sensformat</i>

Examples

```
envGetVal("spectre.opts" "sensformat")  
envSetVal("spectre.opts" "sensformat" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

senstype

spectre.opts senstype string *"sensitivityType"*

Description

Type of sensitivity being calculated.

The valid values is "partial" or "normalized".

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Miscellaneous</i>
Field	<i>senstype</i>

Examples

```
envGetVal("spectre.opts" "senstype")  
envSetVal("spectre.opts" "senstype" 'string "")
```

Virtuoso ADE Environment Variables Reference

Environment Variables for Spectre Simulator Options Form

value1

spectre.opts value1 string "defaultValueQuantity"

Description

Specifies the default value quantity.

The default value is " ".

GUI Equivalent

Command	<i>Options - Analog - Simulator Options - Miscellaneous</i>
Field	<i>value</i>

Examples

```
envGetVal("spectre.opts" "value1")  
envSetVal("spectre.opts" "value1" 'string "")
```