

EXOSTIV Dashboard

Tcl User's Reference Guide

Rev. 1.0.2 - February 26, 2019



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Revision History

Revision	Modifications
1.0.0	<ul style="list-style-type: none">• Initial revision
1.0.2	<ul style="list-style-type: none">• Legal name and brand update

Introduction

The present guide provides the help text of the procedures provided in the Exostiv Dashboard software TCL interface. Exostiv Dashboard TCL interface provides a command line interface for running all the Exostiv Dashboard software functionalities.

Using: **>> help**

returns the 'short help text'.

Using **>> help <procedure name>**

returns the 'long help text' for each procedure.

The lists below provide the procedure by name, sorted alphabetically.

Short Help text

Procedure	Short help text
add_cu	: Adds a new capture unit
add_data_group	: Adds a new data group to the active capture unit
add_probe	: Adds a new probe input to the active data group
add_qualification_and_signal	: Adds signal to the data qualification AND equation sensitivity list
add_qualification_or_signal	: Adds signal to the data qualification OR equation sensitivity list
add_trigger_and_signal	: Adds signal to the trigger AND equation sensitivity list
add_trigger_or_signal	: Adds signal to the trigger OR equation sensitivity list
clock_output	: Enables / Disables Exostiv Probe output clock generation
close_project	: Closes the active project
connect_probe	: Connects the Exostiv Probe through USB
console	: Switches to 'TCL console' mode only - no GUI
dialogs	: Enables / Disables Exostiv Dashboard dialogs
disconnect_probe	: Disconnects the Exostiv Probe from USB
get_all_cu_names	: Returns all the defined capture units names
get_all_data_group_names	: Returns all the defined data group names for the active capture unit
get_all_probe_names	: Returns all the defined probes for the active data group
get_allow_drc_check	: Returns if DRC check is enabled for Exostiv IP implementation
get_auto_export	: Returns the status of captured data automatic export
get_auto_export_file_format	: Returns the automatic export of captured data file format
get_auto_export_file_name	: Returns the file name to which the captured data is automatically exported
get_auto_export_output_folder	: Returns the output folder for captured data automatic export
get_auto_export_radix	: Returns the radix encoding for the auto-exported captured data
get_capture_status	: Returns the status of the running capture
get_clock_output_status	: Returns the usage status of the Exostiv Probe output clock
get_clock_transceiver_bank	: Returns the number of the FPGA bank chosen for the transceiver clock
get_cu_name	: Returns the name of the selected capture unit
get_data_group_name	: Returns the name of the selected data group
get_debugging_cu_name	: Returns the name of the capture unit selected for capture in the Exostiv Dashboard Analyzer
get_debugging_data_group_name	: Returns the name of the data group selected for capture in the Exostiv Dashboard Analyzer
get_design_rules_check	: Checks whether DRC is enabled or disabled after Exostiv IP insertion
get_disable_wave_viewer	: Checks whether the usage of the waveform viewer is enabled or disabled
get_down_transceiver_lane	: Returns the location of the lane used for the downstream transceiver
get_family	: Returns the chosen FPGA family for Exostiv IP
get_fifo_depth	: Returns the size of the FIFO of the active capture unit
get_generate_bitstream	: Returns whether bitstream generation is part of Exostiv IP generation flow
get_i2c_io_standard	: Returns the chosen IO standard for the downstream I2C interface on the 'HDMI' connector type
get_implement_design	: Returns whether implementation is enabled or disabled after Exostiv IP generation and synthesis
get_implementation_name	: Returns the name of the FPGA implementation

Procedure	Short help text
get_instance_name	: Returns the instance name chosen for Exostiv IP
get_is_probe_trigger	: Returns whether the designated probe of Exostiv IP is used as a trigger line
get_link_clock_frequency	: Returns the clock frequency of the transceivers link
get_nr_of_data_groups	: Returns the total number of data groups for the active capture unit
get_nr_of_data_only_probes	: Returns the number of 'data only' probes for the selected data group
get_nr_of_data_probes	: Returns the number of probes for the selected data group
get_nr_of_pipes	: Returns the number of pipeline stages inserted in the path between the probed nodes and Exostiv IP
get_number_of_captures	: Returns the number of captures for Exostiv Dashboard Analyzer
get_output_folder	: Returns the output folder where the generated Exostiv IP files are stored. Applies to RTL insertion mode.
get_package	: Returns the target FPGA package for Exostiv IP
get_part	: Returns the target FPGA part number for Exostiv IP
get_pll_type	: Returns the type of PLL used for the Exostiv IP transceivers
get_probe_name	: Returns the name of the currently selected probe of the active data group in the active capture unit
get_qualification_and_equation_enable	: Returns whether the active signal is used in the data qualification AND equation
get_qualification_and_invert_enable	: Returns whether the inverter located at the output of the data qualification AND equation is enabled
get_qualification_and_operation	: Returns the operation for the selected signal in the AND equation of the data qualification
get_qualification_combine_enable	: Returns the type of combination used at the output of the data qualification equation (AND or OR)
get_qualification_combine_invert_enable	: Returns whether the inverter located at the output of the data qualification combination is enabled or disabled
get_qualification_or_equation_enable	: Returns whether the active signal is used in the data qualification OR equation
get_qualification_or_invert_enable	: Returns whether the inverter located at the output of the data qualification OR equation is enabled
get_qualification_or_operation	: Returns the operation for the selected signal in the OR equation of the data qualification
get_qualification_selected_tab_property	: Returns whether the data qualification tab is selected in Exostiv Dashboard Analyzer GUI
get_quartus_installation_folder	: Returns installation folder designated for Quartus software executable
get_samples_per_capture	: Returns the chosen number of samples per capture in Exostiv Analyzer
get_sampling_clock	: Returns the name of the node selected as sampling clock for the active capture unit
get_selected_signal_name_qualification_and_equation	: Returns the name of the active signal of the qualification AND equation
get_selected_signal_name_qualification_or_equation	: Returns the name of the active signal of the qualification OR equation
get_selected_signal_name_trigger_and_equation	: Returns the name of the active signal of the trigger AND equation
get_selected_signal_name_trigger_or_equation	: Returns the name of the active signal of the trigger OR equation
get_speed_grade	: Returns the target FPGA speed grade
get_status	: Returns the status of the running IP insertion
get_storage_qualification	: Checks whether storage qualification is enabled for the selected capture unit

Procedure	Short help text
get_stored_captures	: Returns the number of captures stored in the Exostiv Probe memory
get_stored_samples	: Returns the number of samples stored in the Exostiv Probe memory
get_transfer_mode	: Returns the selected capture transfer mode
get_trigger_and_equation_enable	: Returns whether the active signal is used in the trigger AND equation
get_trigger_and_invert_enable	: Returns whether the inverter located at the output of the trigger AND equation is enabled
get_trigger_and_operation	: Returns the operation defined for the active signal in the trigger AND equation
get_trigger_combine_enable	: Returns the type of combination used at the output of the trigger equation (AND or OR)
get_trigger_combine_invert_enable	: Returns whether the inverter located at the output of the trigger combination is enabled or disabled
get_trigger_or_equation_enable	: Returns whether the active signal is used in the data qualification OR equation
get_trigger_or_invert_enable	: Returns whether the inverter located at the output of the trigger OR equation is enabled
get_trigger_or_operation	: Returns the operation defined for the active signal in the trigger OR equation
get_trigger_position	: Returns the trigger position in each capture (sample index)
get_trigger_selected_tab_property	: Returns whether the trigger tab is selected in the graphical user interface
get_trigger_unit_type	: Returns the type of the trigger unit for the selected capture unit
get_up_line_rate	: Returns the upstream line rate
get_up_link_rate	: Returns the upstream link rate
get_up_transceiver_bank	: Returns the selected bank for the transceivers used upstream
get_up_transceiver_lanes	: Returns the selected lanes for the transceivers used upstream
get_use_cache	: Check whether the Exostiv IP cache is used for IP generation or insertion
get_use_qualification_for_trigger	: Returns whether the result of the data qualification equation is used as part of the trigger equation
get_vcc_gxb	: Returns the chosen vcc_gxb parameter value
get_vivado_installation_folder	: Returns installation folder designated for Vivado software executable
gui	: Displays the Exostiv Dashboard graphical user interface
has_license	: Checks whether a license is available for Exostiv Dashboard software
is_probe_connected	: Checks whether the Exostiv Probe is connected
is_qualification_selected	: Returns whether the qualification tab is selected in the Exostiv Dashboard Analyzer GUI
is_running	: Returns whether the Exostiv IP generation / insertion is running
is_trigger_selected	: Returns whether the trigger tab is selected in the Exostiv Dashboard Analyzer GUI
make_probe_bus	: Makes bus of the designated probes in the Exostiv Dashboard Analyzer
new_project	: Creates new project in Exostiv Dashboard
open_project	: Opens an existing project in Exostiv Dashboard
project_changed	: Check whether the active project has been modified since it was opened
remove_cu	: Removes the selected capture unit from Exostiv IP
remove_data_group	: Removes the selected data group from the selected capture unit
remove_probe	: Removes the selected probe from the selected data group
remove_qualification_and_signal	: Removes a signal from the data qualification AND equation sensitivity list
remove_qualification_or_signal	: Removes a signal from the data qualification OR equation sensitivity list
remove_trigger_and_signal	: Removes a signal from the trigger AND equation sensitivity list

Procedure	Short help text
<code>remove_trigger_or_signal</code>	: Removes a signal from the trigger OR equation sensitivity list
<code>rename_probe</code>	: Edits the name of the designated probe in the selected data group
<code>restore_probe</code>	: Restores the original name of the designated probe(s)
<code>save_project</code>	: Saves the current project
<code>select_capture_configuration</code>	: Selects the capture configuration page in Exostiv Dashboard GUI
<code>select_cu</code>	: Selects a capture unit in Exostiv Dashboard Core Inserter
<code>select_data_group</code>	: Selects a data group in Exostiv Dashboard Core Inserter
<code>select_debugging_cu</code>	: Selects a capture unit in Exostiv Dashboard Analyzer
<code>select_debugging_data_group</code>	: Selects a data group in Exostiv Dashboard Analyzer
<code>select_design_debugging</code>	: Selects the Exostiv Dashboard 'Design Debugging' window (Analyzer)
<code>select_insertion</code>	: Selects the Exostiv Dashboard 'Core Insertion' window (Core Inserter)
<code>select_link_configuration</code>	: Selects the Exostiv Dashboard 'Link Configuration window (Core Inserter)
<code>select_probe</code>	: Selects the designated probe in the active capture unit
<code>select_qualification</code>	: Selects the data qualification tab in Exostiv Dashboard Analyzer GUI
<code>select_qualification_and_signal</code>	: Selects one signal in the data qualification AND equation sensitivity list
<code>select_qualification_or_signal</code>	: Selects one signal in the data qualification OR equation sensitivity list
<code>select_trigger</code>	: Selects the trigger tab in Exostiv Dashboard Analyzer GUI
<code>select_trigger_and_signal</code>	: Selects one signal in the trigger AND equation sensitivity list
<code>select_trigger_or_signal</code>	: Selects one signal in the trigger OR equation sensitivity list
<code>set_allow_drc_check</code>	: Makes the DRC check option (un)available to the user in the Exostiv IP insertion flow
<code>set_auto_export</code>	: Enables / Disables captured data automatic export
<code>set_auto_export_file_format</code>	: Sets the captured data automatic export file format
<code>set_auto_export_file_name</code>	: Sets the captured data automatic export file name
<code>set_auto_export_output_folder</code>	: Sets the captured data automatic export file output folder
<code>set_auto_export_radix</code>	: Sets the radix format for the captured data automatic export
<code>set_clock_transceiver_bank</code>	: Selects the bank of the Exostiv IP transceivers clock
<code>set_connector_type</code>	: Selects the Exostiv Probe connector type
<code>set_data_group_name</code>	: Defines the name of the active data group
<code>set_design_rules_check</code>	: Enables or disables design rules check in the Exostiv IP insertion flow
<code>set_disable_wave_viewer</code>	: Disables / Enable the usage of the waveform viewer for the captured data
<code>set_down_transceiver_lane</code>	: Sets the location of the transceiver used downstream
<code>set_family</code>	: Selects the target FPGA family
<code>set_fifo_depth</code>	: Selects the depth of the FIFO for the active capture unit
<code>set_generate_bitstream</code>	: Enables / Disable bitstream generation with Exostiv IP core insertion
<code>set_i2c_io_standard</code>	: Selects the IO standard for the I2C downstream channel (HDMI connector type)
<code>set_i2c_pins</code>	: Selects the FPGA pin locations for the I2C downstream channel (HDMI connector type)
<code>set_implement_design</code>	: Enables / disables design implementation with Exostiv IP core insertion
<code>set_implementation_name</code>	: Selects the name of the design implementation when inserting Exostiv IP
<code>set_instance_name</code>	: Defines the name of the Exostiv IP instance inserter into the target design
<code>set_link_clock_frequency</code>	: Sets the clock frequency of the transceiver link
<code>set_link_clock_source</code>	: Defines the location of the transceiver clock in the selected bank
<code>set_nr_of_data_groups</code>	: Defines the number of data groups for Exostiv IP

Procedure	Short help text
set_nr_of_data_only_probes	: Defines the number of 'data only probes' for the active data group
set_nr_of_data_probes	: Defines the number of data probes for the active data group (RTL insertion mode)
set_nr_of_pipes	: Defines the number of pipeline stages in the path between probes and Exostiv IP
set_number_of_captures	: Sets the number of captures for the next Exostiv Dashboard Analyzer run
set_output_folder	: Sets the output folder where the generated Exostiv IP files are stored. Applies to RTL insertion mode.
set_package	: Selects the target FPGA package
set_part	: Selects the target FPGA part
set_pll_type	: Selects the PLL type for the transceivers (Intel FPGA)
set_probe_as_trigger	: Sets whether the selected probe can be used as trigger for Exostiv IP
set_qualification_and_equation	: Enables / disables the AND equation for the data qualification in Exostiv Dashboard Analyzer
set_qualification_and_invert	: Enables or disables the inverter located at the output of the data qualification AND equation
set_qualification_and_operation	: Defines the AND operation for the selected signal in the data qualification operation in Exostiv Dashboard Analyzer
set_qualification_combine	: Defines the type of combination (and / or) used at the output of the data qualification equation
set_qualification_combine_invert	: Enables / disables the inverter located at the output of the data qualification combination
set_qualification_or_equation	: Enables or disables the active signal OR equation for the data qualification
set_qualification_or_invert	: Enables or disables the inverter located at the output of the data qualification OR equation
set_qualification_or_operation	: Defines the OR operation for the selected signal in the data qualification operation in Exostiv Dashboard Analyzer
set_quartus_installation_folder	: Designates the installation folder of the Quartus software executable
set_samples_per_capture	: Defines the number of samples per captures for the Exostiv Dashboard Analyzer
set_sampling_clock	: Defines the sampling clock for the selected capture unit
set_speed_grade	: Selects the target FPGA speed grade
set_storage_qualification	: Enables / Disables storage qualification for the active capture unit
set_transfer_mode	: Selects the capture transfer mode
set_trigger_and_equation	: Enables / disables the AND equation for the trigger in Exostiv Dashboard Analyzer
set_trigger_and_invert	: Enables or disables the inverter located at the output of the trigger AND equation
set_trigger_and_operation	: Defines the AND operation for the selected signal in the trigger operation in Exostiv Dashboard Analyzer
set_trigger_combine	: Defines the type of combination (and / or) used at the output of the trigger equation
set_trigger_combine_invert	: Enables / disables the inverter located at the output of the trigger combination
set_trigger_or_equation	: Enables / disables the OR equation for the trigger in Exostiv Dashboard Analyzer
set_trigger_or_invert	: Enables or disables the inverter located at the output of the trigger OR equation
set_trigger_or_operation	: Defines the OR operation for the selected signal in the trigger operation in Exostiv Dashboard Analyzer
set_trigger_position	: Sets the trigger position in each capture

Procedure	Short help text
set_trigger_unit_type	: Defines the type of trigger unit for the active capture unit in Exostiv Core Inserter
set_up_line_rate	: Sets the upstream line rate
set_up_transceiver_bank	: Selects the bank for the upstream transceivers
set_up_transceiver_lanes	: Selects the upstream transceivers that will be used
set_use_cache	: Enables / disables IP cache for Exostiv IP generation and insertion
set_use_qualification_for_trigger	: Defines whether the result of the data qualification equations has to be valid for the trigger equation
set_vcc_gxb	: Sets the 'vcc_gxb' parameter
set_vivado_installation_folder	: Designates the installation folder of the Vivado software executable
split_probe_bus	: Splits the designated probe bus
start_capture	: Starts a capture with the Exostiv Probe
start_insertion	: Starts Exostiv IP core generation and insertion
start_single_capture	: Starts a single capture without trigger or data qualification
stop_capture	: Stops the running Exostiv Analyzer capture
stop_insertion	: Stops the running Exostiv Dashboard core insertion

Long help text

`add_cu`: Usage: `add_cu <string cu name>`

Applies to Exostiv Dashboard Core Inserter / Exostiv IP core configuration.

Adds a new capture unit of name '`<string cu name>`' to Exostiv IP.

`add_data_group`: Usage: `add_data_group <string data_group_name>`

Applies to Exostiv Dashboard Core Inserter / Exostiv IP core configuration.

Adds a new data group of name '`<string data_group_name>`' to the active capture unit of Exostiv IP.

`add_probe`: Usage: `add_probe <probe_name> <optional range>`

Applies to Exostiv Dashboard Core Inserter / Exostiv IP core configuration.

Adds a probe to the current data group. Bus range is added with '[MSBit..LSBit]' syntax.

! TCL syntax forces using '{}' around the procedure parameter ! - Examples:

> `add_probe my_probe_name`

> `add_probe {my_probe_name[15..0]}`

`add_qualification_and_signal`: Usage: `add_qualification_and_signal <signal name>`

Applies to Exostiv Dashboard Analyzer.

Adds the designated probe to the data qualification AND equation sensitivity list

`add_qualification_or_signal`: Usage: `add_qualification_or_signal <signal name>`

Applies to Exostiv Dashboard Analyzer.

Adds the designated probe to the data qualification OR equation sensitivity list

`add_trigger_and_signal`: Usage: `add_trigger_and_signal <signal name>`

Applies to Exostiv Dashboard Analyzer.

Adds the designated probe to the trigger AND equation sensitivity list

`add_trigger_or_signal`: Usage: `add_trigger_and_signal <signal name>`

Applies to Exostiv Dashboard Analyzer.

Adds the designated probe to the trigger OR equation sensitivity list

`clock_output`: Usage: `clock_output <true/false>`

Applies to Exostiv Dashboard Core Inserter - link configuration.

Enables or disables the generation of an output reference clock signal by Exostiv Probe.

`close_project`: Usage: `close_project`

Closes the active Exostiv Dashboard project.

`connect_probe`: Usage: `connect_probe`

When the Exostiv Probe is physically connected to the PC establishes a connection with it over USB.

`console`: Usage: `console`

Switches the Exostiv Dashboard software interace to 'console only' type

`dialogs`: Usage: `dialogs <true / false>`

Enables or disables the dialogs in Exostiv Dashboard interface. 'true' enables the dialogs - 'false' disables the dialogs.

`disconnect_probe`: Usage: `disconnect_probe`

Disconnects the USB link between the PC and Exostiv Probe.

`get_all_cu_names`: Usage: `get_all_cu_names`

Applies to Exostiv Dashboard Core Inserter.

Returns the list of the capture units defined for Exostiv IP.

`get_all_data_group_names`: Usage: `get_all_data_group_names`

Applies to Exostiv Dashboard Core Inserter.

Returns the list of the data groups defined for the active capture unit.

`get_all_probe_names`: Usage: `get_all_probe_names`

Applies to Exostiv Dashboard Core Inserter.

Returns the list of probe names (node names) defined for the active data group in the active capture unit.

`get_allow_drc_check`: Usage: `get_allow_drc_check`
Applies to Exostiv Dashboard Core Inserter.
Returns if DRC check is enabled for Exostiv IP implementation. true= 'DRC check enabled'; false='DRC check disabled'

`get_auto_export`: Usage: `get_auto_export`
Applies to Exostiv Dashboard Analyzer.
Returns 'true' when the automatic export of the captured waves is enabled; returns 'false' otherwise.

`get_auto_export_file_format`: Usage: `get_auto_export_file_format`
Applies to Exostiv Dashboard Analyzer.
Returns selected file format for the waves auto export. Values can be 'comma_separated' or 'binary'

`get_auto_export_file_name`: Usage: `get_auto_export_file_name`
Applies to Exostiv Dashboard Analyzer.
Returns a string with the file name used for auto-exporting the waves.

`get_auto_export_output_folder`: Usage: `get_auto_export_output_folder`
Applies to Exostiv Dashboard Analyzer.
Returns a string with the output folder where the auto-exported waves file is stored.

`get_auto_export_radix`: Usage: `get_auto_export_radix`
Applies to Exostiv Dashboard Analyzer.
Returns the radix used for encoding the waves data when auto-exporting them. Applies to 'comma_separated' (csv) file format only.
Valid values: 'Hexadecimal' - 'Binary' - 'Unsigned Integer'

`get_capture_status`: Usage: `get_capture_status`
Applies to Exostiv Dashboard Analyzer.
Returns the capture status - valid values:

- Idle
- Prefetching
- Capturing
- EXOSTIV IP transferring
- Transferring and Encoding Data
- Aborted
- Done
- Failed
- Link Overflow
- '-' (when no probe is connected)

`get_clock_output_status`: Usage: `get_clock_output_status`
Returns whether the output reference clock generated by Exostiv Probe is enabled ('true') or disabled ('false')

`get_clock_transceiver_bank`: Usage: `get_clock_transceiver_bank`
Applies to Exostiv Dashboard Analyzer.
Returns the transceiver clock bank number.

`get_cu_name`: Usage: `get_cu_name`
Applies to Exostiv Dashboard Core Inserter.
Returns the name of the active capture unit when configuring Exostiv IP.

`get_data_group_name`: Usage: `get_data_group_name`
Applies to Exostiv Dashboard Core Inserter.
Returns the name of the active data group when configuring Exostiv IP.

`get_debugging_cu_name`: Usage: `get_debugging_cu_name`
Applies to Exostiv Dashboard Analyzer.
Returns the name of the active capture unit when capturing data with the Exostiv Probe.

`get_debugging_data_group_name`: Usage: `get_debugging_data_group_name`
Applies to Exostiv Dashboard Analyzer.
Returns the name of the active data group when capturing data with the Exostiv Probe.

get_design_rules_check: Usage: get_design_rules_check

Applies to Exostiv Dashboard Core Inserter.

Returns whether the DRC is enabled ('true') or disabled ('true') in the Exostiv IP generation and insertion flow.

get_disable_wave_viewer: Usage: get_disable_wave_viewer

Applies to Exostiv Dashboard Analyzer.

Returns whether the usage of Exostiv Dashboard waveform viewer is disabled ('true') or enabled ('false'). 'Disabling' the waveform viewer results in the captured data not being encoded as waves.

get_down_transceiver_lane: Usage: get_down_transceiver_lane

Applies to Exostiv Dashboard Core Inserter.

Returns the location of the transceiver used as downstream channel.

get_family: Usage: get_family

Applies to Exostiv Dashboard Core Inserter.

Returns the target FPGA family.

get_fifo_depth: Usage: get_fifo_depth

Applies to Exostiv Dashboard Core Inserter.

Returns the size of the FIFO (in number of samples / words) for the active capture unit.

get_generate_bitstream: Usage: get_generate_bitstream

Applies to Exostiv Dashboard Core Inserter.

Returns whether bitstream generation is enabled ('true') or disabled ('false') for Exostiv IP generation and insertion flow.

get_i2c_io_standard: Usage: get_i2c_io_standard

Applies to Exostiv Dashboard Core Inserter.

Returns the chosen IO standard for the downstream I2C interface (in number IO samples / words) for the active capture unit.

get_implement_design: Usage: get_implement_design

Applies to Exostiv Dashboard Core Inserter.

Returns whether FPGA implementation is enabled ('true') or disabled ('false') in the Exostiv IP generation and insertion flow.

get_implementation_name: Usage: get_implementation_name

Applies to Exostiv Dashboard Core Inserter.

Returns the name of the FPGA implementation in the Exostiv IP generation and insertion flow.

get_instance_name: Usage: get_instance_name

Applies to Exostiv Dashboard Core Inserter.

Returns the name of the Exostiv IP instance inserted in the target FPGA.

get_is_probe_trigger: Usage: get_is_probe_trigger

Applies to Exostiv Dashboard Core Inserter.

Returns whether the selected node/probe is used as a trigger ('true') or as a 'data only' ('false') in Exostiv IP.

get_link_clock_frequency: Usage: get_link_clock_frequency

Applies to Exostiv Dashboard Core Inserter.

Returns the value of the transceiver clock frequency in Hz.

get_nr_of_data_groups: Usage: get_nr_of_data_groups

Applies to Exostiv Dashboard Core Inserter.

Returns the number of data groups for the active capture unit.

get_nr_of_data_only_probes: Usage: get_nr_of_data_only_probes

Applies to Exostiv Dashboard Core Inserter.

Returns the number of 'data only' probes for the selected data group

get_nr_of_data_probes: Usage: get_nr_of_data_probes

Applies to Exostiv Dashboard Core Inserter.

Returns the number of probes for the selected data group

`get_nr_of_pipes`: Usage: `get_nr_of_pipes`
Applies to Exostiv Dashboard Core Inserter.
Returns the number of pipeline stages inserted in the path between the probed nodes and Exostiv IP

`get_number_of_captures`: Usage: `get_number_of_captures`
Applies to Exostiv Dashboard Analyzer.
Returns the number of captures for Exostiv Dashboard Analyzer

`get_output_folder`: Usage: `get_output_folder`
Applies to Exostiv Dashboard Core Inserter.
Returns the output folder where the generated Exostiv IP files are stored. Applies to RTL insertion mode.

`get_package`: Usage: `get_package`
Applies to Exostiv Dashboard Core Inserter.
Returns the target FPGA package for Exostiv IP

`get_part`: Usage: `get_part`
Applies to Exostiv Dashboard Core Inserter.
Returns the target FPGA part number for Exostiv IP

`get_pll_type`: Usage: `get_pll_type`
Applies to Exostiv Dashboard Core Inserter.
Returns the type of PLL used for the Exostiv IP transceiver clocking. The PLL type depends on the target FPGA vendor.

`get_probe_name`: Usage: `get_probe_name`
Applies to Exostiv Dashboard Core Inserter.
Returns the name of the currently selected probe of the active data group in the active capture unit

`get_qualification_and_equation_enable`: Usage: `get_qualification_and_equation_enable`
Applies to Exostiv Dashboard Analyzer.
Returns whether the active signal (and the accompanying equation) is enabled (true) or disabled (false) in the AND equation of the data qualification condition.

`get_qualification_and_invert_enable`: Usage: `get_qualification_and_invert_enable`
Applies to Exostiv Dashboard Analyzer.
Returns whether the inverter located at the output of the AND equation of the data qualification condition is enabled (true) or disabled (false).

`get_qualification_and_operation`: Usage: `get_qualification_and_operation`
Applies to Exostiv Dashboard Analyzer.
Returns the operation for the selected signal in the AND equation of the data qualification. Refer to 'select_qualification_and_signal' procedure for signal selection.

`get_qualification_combine_enable`: Usage: `get_qualification_combine_enable`
Applies to Exostiv Dashboard Analyzer.
Returns the type of combination used at the output of the data qualification equation. Valid values:
- and
- or

`get_qualification_combine_invert_enable`: Usage: `get_qualification_combine_invert_enable`
Applies to Exostiv Dashboard Analyzer.
Returns whether the inverter located at the output of the data qualification combination is enabled or disabled

`get_qualification_or_equation_enable`: Usage: `get_qualification_or_equation_enable`
Applies to Exostiv Dashboard Analyzer.
Returns whether the active signal (and the accompanying equation) is enabled (true) or disabled (false) in the OR equation of the data qualification condition.

`get_qualification_or_invert_enable`: Usage: `get_qualification_or_invert_enable`
Applies to Exostiv Dashboard Analyzer.
Returns whether the inverter located at the output of the OR equation of the data qualification condition is enabled (true) or disabled (false).

`get_qualification_or_operation`: Usage: `get_qualification_or_operation`

Applies to Exostiv Dashboard Analyzer.

Returns the operation for the selected signal in the OR equation of the data qualification. Refer to 'select_qualification_or_signal' procedure for signal selection.

get_qualification_selected_tab_property: Usage: get_qualification_select_tab_property

Applies to Exostiv Dashboard Analyzer.

Returns whether the data qualification tab is selected ('true') or not ('false') in Exostiv Dashboard Analyzer GUI.

get_quartus_installation_folder: Usage: get_quartus_installation_folder

Applies to Exostiv Dashboard Core Inserter.

Returns installation folder designated for Quartus software executable

get_samples_per_capture: Usage: get_samples_per_capture

Applies to Exostiv Dashboard Analyzer.

Returns the chosen number of samples per capture in Exostiv Analyzer

get_sampling_clock: Usage: get_sampling_clock

Applies to Exostiv Dashboard Core Inserter.

Returns the name of the node selected as sampling clock for the active capture unit

get_selected_signal_name_qualification_and_equation: Usage:

Usage:

get_selected_signal_name_qualification_and_equation

Applies to Exostiv Dashboard Analyzer.

Returns the name of the active signal of the qualification AND equation.

get_selected_signal_name_qualification_or_equation: Usage: get_selected_signal_name_qualification_or_equation

Applies to Exostiv Dashboard Analyzer.

Returns the name of the active signal of the qualification OR equation.

get_selected_signal_name_trigger_and_equation: Usage: get_selected_signal_name_trigger_and_equation

Applies to Exostiv Dashboard Analyzer.

Returns the name of the active signal of the trigger AND equation.

get_selected_signal_name_trigger_or_equation: Usage: get_selected_signal_name_trigger_or_equation

Applies to Exostiv Dashboard Analyzer.

Returns the name of the active signal of the trigger OR equation.

get_speed_grade: Usage: get_speed_grade

Applies to Exostiv Dashboard Core Inserter.

Returns the target FPGA speed grade

get_status: Usage: get_status

Returns the status of the running IP insertion.

get_storage_qualification: Usage: get_storage_qualification

Applies to Exostiv Dashboard Core Inserter.

Checks whether storage qualification is enabled ('true') or disabled ('false') for the selected capture unit.

get_stored_captures: Usage: get_stored_captures

Applies to Exostiv Dashboard Analyzer.

Returns the number of captures stored in the Exostiv Probe memory

get_stored_samples: Usage: get_stored_samples

Applies to Exostiv Dashboard Analyzer.

Returns the number of samples stored in the Exostiv Probe memory

get_transfer_mode: Usage: get_transfer_mode

Applies to Exostiv Dashboard Analyzer.

Returns the selected capture transfer mode

get_trigger_and_equation_enable: Usage: get_trigger_and_equation_enable

Applies to Exostiv Dashboard Analyzer.

Returns whether the active signal (and the accompanying equation) is enabled (true) or disabled (false) in the AND equation of the trigger condition.

`get_trigger_and_invert_enable`: Usage: `get_trigger_and_invert_enable`
Applies to Exostiv Dashboard Analyzer.
Returns whether the inverter located at the output of the AND equation of the trigger condition is enabled (true) or disabled (false).

`get_trigger_and_operation`: Usage: `get_trigger_and_operation`
Applies to Exostiv Dashboard Analyzer.
Returns the operation for the selected signal in the AND equation of the trigger. Refer to 'select_trigger_and_signal' procedure for signal selection.

`get_trigger_combine_enable`: Usage: `get_trigger_combine_enable`
Applies to Exostiv Dashboard Analyzer.
Returns the type of combination used at the output of the trigger equation. Valid values:
- and
- or

`get_trigger_combine_invert_enable`: Usage: `get_trigger_combine_invert_enable`
Applies to Exostiv Dashboard Analyzer.
Returns whether the inverter located at the output of the trigger combination is enabled or disabled

`get_trigger_or_equation_enable`: Usage: `get_trigger_or_equation_enable`
Applies to Exostiv Dashboard Analyzer.
Returns whether the active signal (and the accompanying equation) is enabled (true) or disabled (false) in the OR equation of the trigger condition.

`get_trigger_or_invert_enable`: Usage: `get_trigger_or_invert_enable`
Applies to Exostiv Dashboard Analyzer.
Returns whether the inverter located at the output of the OR equation of the trigger condition is enabled (true) or disabled (false).

`get_trigger_or_operation`: Usage: `get_trigger_or_operation`
Applies to Exostiv Dashboard Analyzer.
Returns the operation for the selected signal in the OR equation of the trigger. Refer to 'select_trigger_or_signal' procedure for signal selection.

`get_trigger_position`: Usage: `get_trigger_position`
Applies to Exostiv Dashboard Analyzer.
Returns the trigger position in each capture (sample index)

`get_trigger_selected_tab_property`: Usage: `get_trigger_selected_tab_property`
Applies to Exostiv Dashboard Analyzer.
Returns whether the trigger tab is selected ('true') or not selected ('false') in Exostiv Dashboard GUI.

`get_trigger_unit_type`: Usage: `get_trigger_unit_type`
Applies to Exostiv Dashboard Core Inserter.
Returns the type of the trigger unit for the active capture unit. Values: 'basic' (levels and edges) or 'basic_with_comparisons' (levels / edges and comparisons)
The trigger unit type affects the complexity of the active capture unit.

`get_up_line_rate`: Usage: `get_up_line_rate`
Applies to Exostiv Dashboard Core Inserter.
Returns the upstream line rate

`get_up_link_rate`: Usage: `get_up_link_rate`
Applies to Exostiv Dashboard Core Inserter.
Returns the upstream link rate

`get_up_transceiver_bank`: Usage: `get_up_transceiver_bank`
Applies to Exostiv Dashboard Core Inserter.
Returns the selected bank for the transceivers used upstream

`get_up_transceiver_lanes`: Usage: `get_up_transceiver_lanes`
Applies to Exostiv Dashboard Core Inserter.

Returns the selected lanes for the transceivers used upstream

`get_use_cache`: Usage: `get_use_cache`

Applies to Exostiv Dashboard Core Inserter.

Returns whether the IP cache is enabled ('true') or disabled ('false') for Exostiv IP core generation.

Enabling the cache allows reusing previously generated Exostiv IPs with that have the same parameters.

`get_use_qualification_for_trigger`: Usage: `get_use_qualification_for_trigger`

Applies to Exostiv Dashboard Analyzer.

Returns whether the trigger equation uses the data qualification ('true') or not ('false').

When the data qualification equation is used for the trigger, the condition defined for the data qualification is used mask the trigger condition equation (trigger is always false if data qualification is false).

`get_vcc_gxb`: Usage: `get_vcc_gxb`

Applies to Exostiv Dashboard for Intel - Core Inserter.

Returns the value in volts of the VCC_GXB voltage for the transceivers. Please refer to the FPGA documentation for details about this parameter.

`get_vivado_installation_folder`: Usage: `get_vivado_installation_folder`

Applies to Exostiv Dashboard Core Inserter.

Returns installation folder designated for Vivado software executable

`gui`: Usage: `gui`

Displays the Exostiv Dashboard graphical user interface

`has_license`: Usage: `has_license`

Checks whether a license is available for Exostiv Dashboard software-'true' shows that license is available

`is_probe_connected`: Usage: `is_probe_connected`

Returns the connection status of Exostiv Probe ('true'=connected).

`is_qualification_selected`: Usage: `is_qualification_selected`

Returns whether the qualification tab is selected ('true') in the Exostiv Dashboard Analyzer GUI.

`is_running`: Usage: `is_running`

Returns whether the Exostiv IP generation & insertion is running.

`is_trigger_selected`: Usage: `is_trigger_selected`

Returns whether the trigger tab is selected ('true') in the Exostiv Dashboard Analyzer GUI.

`make_probe_bus`: Usage: `make_probe_bus` <probe_offset> <bus_width> <bus_name>

Applies to Exostiv Dashboard Analyzer. RTL project mode.

Makes a bus of 'bus_name' from the probes designated by their offset index and width.

`new_project`: Usage: `new_project` <type> <name> <path>

Creates a new .epf project file in Exostiv Dashboard. Parameters:

- type: rtl or netlist

- name: project name

- path: project path

`open_project`: Usage: `open_project` <project_name_with_path>

Opens an existing .epf project file in Exostiv Dashboard. The procedure parameter can include a full pathname.

`project_changed`: Usage: `project_changed`

Returns whether the project has been modified ('true') or not ('false') since it was opened.

`remove_cu`: Usage: `remove_cu` <string cu name>

Applies to Exostiv Dashboard Core Inserter / Exostiv IP core configuration.

Removes capture unit designated with name '<string cu name>' from Exostiv IP.

`remove_data_group`: Usage: `remove_data_group` <string data_group_name>

Applies to Exostiv Dashboard Core Inserter / Exostiv IP core configuration.

Removes the data groupe designated with name '<string data_group_name>' from the active capture unit of Exostiv IP.

remove_probe: Usage: `remove_probe <probe_name[<optional range>]>`
Applies to Exostiv Dashboard Core Inserter / Exostiv IP core configuration.
Removes a probe from the current data group. Bus range is specified with '[MSBit..LSBit]' syntax.
! TCL syntax forces using '{}' around the procedure parameter ! - Examples:
> `remove_probe my_probe_name`
> `remove_probe {my_probe_name[15..0]}`

remove_qualification_and_signal: Usage: `remove_qualification_and_signal <signal name>`
Applies to Exostiv Dashboard Analyzer.
Removes the designated signal from the data qualification AND equation.

remove_qualification_or_signal: Usage: `remove_qualification_or_signal <signal name>`
Applies to Exostiv Dashboard Analyzer.
Removes the designated signal from the data qualification OR equation.

remove_trigger_and_signal: Usage: `remove_trigger_and_signal <signal name>`
Applies to Exostiv Dashboard Analyzer.
Removes the designated signal from the trigger AND equation.

remove_trigger_or_signal: Usage: `remove_trigger_or_signal <signal name>`
Applies to Exostiv Dashboard Analyzer.
Removes the designated signal from the trigger OR equation.

rename_probe: Usage: `rename_probe <probe offset> <new probe name>`
Applies to Exostiv Dashboard Analyzer - RTL project.
Renames the probe designated by its offset ('probe offset') index to the value of 'new probe name'.

restore_probe: Usage: `restore_probe <probe offset>`
Applies to Exostiv Dashboard Analyzer - RTL project.
Restores the name of the probe designated by its offset index to its original value.

save_project: Usage: `save_project <optimal name>`
Saves the current project. Saves to a new project name if a name parameter is provided.

select_capture_configuration: Usage: `select_capture_configuration`
Makes the 'Capture Configuration' window active in the Exostiv Dashboard GUI.

select_cu: Usage: `select_cu <capture unit name>`
Applies to Exostiv Dashboard Core Inserter.
Makes the designated capture unit active.

select_data_group: Usage: `select_data_group <data group name>`
Applies to Exostiv Dashboard Core Inserter.
Makes the designated data group active.

select_debugging_cu: Usage: `select_debugging_cu <capture unit name>`
Applies to Exostiv Dashboard Analyzer.
Makes the designated capture unit active.

select_debugging_data_group: Usage: `select_data_group <data group name>`
Applies to Exostiv Dashboard Analyzer.
Makes the designated data group active.

select_design_debugging: Usage: `select_design_debugging`
Makes the 'Design Debugging' window active (Analyzer) in the Exostiv Dashboard GUI.

select_insertion: Usage: `select_insertion`
Makes the 'Core Insertion' window active in the Exostiv Dashboard GUI.

select_link_configuration: Usage: `select_link_configuration`
Makes the 'Link Configuration' window active in the Exostiv Dashboard GUI.

select_probe: Usage: `select_probe <probe name>`

Applies to Exostiv Dashboard Core Inserter.
Makes the designated probe (node) active in the capture unit configuration for Exostiv IP.

select_qualification: Usage: select_qualification
Applies to Exostiv Dashboard Analyzer.
Makes the data qualification tab active in Exostiv Dashboard Analyzer GUI.

select_qualification_and_signal: Usage: select_qualification_and_signal <signal name>
Applies to Exostiv Dashboard Analyzer.
Makes the designated signal of the data qualification AND equation sensitivity list active.

select_qualification_or_signal: Usage: select_qualification_and_signal <signal name>
Applies to Exostiv Dashboard Analyzer.
Makes the designated signal of the data qualification OR equation sensitivity list active.

select_trigger: Usage: select_trigger
Applies to Exostiv Dashboard Analyzer.
Makes the trigger tab active in Exostiv Dashboard Analyzer GUI.

select_trigger_and_signal: Usage: select_trigger_and_signal <signal name>
Applies to Exostiv Dashboard Analyzer.
Makes the designated signal of the trigger AND equation sensitivity list active.

select_trigger_or_signal: Usage: select_qualification_and_signal <signal name>
Applies to Exostiv Dashboard Analyzer.
Makes the designated signal of the data qualification OR equation sensitivity list active.

set_allow_drc_check: Usage: set_allow_drc_check <enable>
Applies to Exostiv Dashboard Core Inserter.
Makes the DRC option available ('true') or unavailable ('false') in Exostiv Dashboard insertion flow.

set_auto_export: Usage: set_auto_export <enable>
Applies to Exostiv Dashboard Analyzer.
Enables ('true') or disables ('false') the captured data automatic export.

set_auto_export_file_format: Usage: set_auto_export_file_format <file_format>
Applies to Exostiv Dashboard Analyzer.
Defines the automatic data export file format. Valid values:
- comma_separated
- binary

set_auto_export_file_name: Usage: set_auto_export_file_name <file_name>
Applies to Exostiv Dashboard Analyzer.
Sets the automatic export file name.

set_auto_export_output_folder: Usage: set_auto_export_output_folder <output folder>
Applies to Exostiv Dashboard Analyzer.
Sets the automatic export file output folder.

set_auto_export_radix: Usage: set_auto_export_radix <data radix>
Applies to Exostiv Dashboard Analyzer.
Defines the automatic data export data radix for the 'comma separated' file format. Valid values:
- hexadecimal
- binary
- unsigned integer

set_clock_transceiver_bank: Usage: set_clock_transceiver_bank <bank>
Applies to Exostiv Dashboard Core Inserter.
Selects the bank for the transceiver(s) clock.

set_connector_type: Usage: set_connector_type <type>
Applies to Exostiv Dashboard Core Inserter.
Selects the connector on Exostiv Probe. Valid values: 'HDMI' and 'SFP' (upper case)

set_data_group_name: Usage: set_data_group_name <name>

Applies to Exostiv Dashboard Core Inserter.

Defines the name of the active data group.

set_design_rules_check: Usage: set_design_rules_check <enable>

Applies to Exostiv Dashboard Core Inserter.

Enables ('true') or disables ('false') DRC for Exostiv IP core insertion.

set_disable_wave_viewer: Usage: set_disable_wave_viewer <disable>

Applies to Exostiv Dashboard Analyzer.

Disables ('true') or enables ('false') the wave encoding and wave viewer use after a capture.

This is used in conjunction with waves auto-export, in case there is no need to display the waves in the waveform viewer.

set_down_transceiver_lane: Usage: set_down_transceiver_lane <lane>

Applies to Exostiv Dashboard Core Inserter.

Defines the lane location of the transceiver used downstream.

When the SFP connector type is used one of the transceivers in the selected bank must be used.

The 'lane' parameter is encoded as a vector of '0' and '1' - each digit corresponding to a transceiver.

Example: if the FPGA has a quad transceiver bank (4 transceivers in the bank) using:

>set_down_transceiver 0010 will enable transceiver at position '1'.

>set_down_transceiver 1000 will enable transceiver at position '3'.

If the FPGA has 6 transceivers in the bank the usage is - e.g.: set_down_transceiver 010000

A transceiver used downstream must be used upstream as well.

set_family: Usage: set_family <FPGA family>

Applies to Exostiv Dashboard Core Inserter.

Sets the FPGA family for Exostiv IP core definition.

set_fifo_depth: Usage: set_fifo_depth <fifo depth>

Applies to Exostiv Dashboard Core Inserter.

Selects the size of the FIFO for the active capture unit.

Valid values: 1024 - 2048 - 4096 - 8192.

Example: set_fifo_depth 2048.

set_generate_bitstream: Usage: set_generate_bitstream <enable>

Applies to Exostiv Dashboard Core Inserter.

Enables ('true') or disables ('false') bitstream generation in Exostiv IP insertion flow (netlist project mode).

set_i2c_io_standard: Usage: set_i2c_io_standard <scl_standard> <sda_standard>

Applies to Exostiv Dashboard Core Inserter.

Defines the io standard for the I2C ios used downstream with the HDMI connector type.

This procedure requires 2 parameters - respectively for scl and sda.

Valid values:

Xilinx FPGA: LVCMOS33 - LVCMOS25 - LVCMOS18 - LVCMOS15 - LVCMOS12

Intel FPGA: 3.0 V LVCMOS - 2.5 V LVCMOS - 1.8 V LVCMOS - 1.2 V LVCMOS

set_i2c_pins: Usage: set_i2c_pins <scl pin> <sda pin>

Applies to Exostiv Dashboard Core Inserter.

Defines the pin locations of the I2C interface used downstream with the HDMI connector.

set_implement_design: Usage: set_implement_design <enable>

Applies to Exostiv Dashboard Core Inserter.

Enables ('true') or disables ('false') the implementation of the target design after Exostiv IP core insertion (netlist project mode).

set_implementation_name: Usage: set_implementation_name <name>

Applies to Exostiv Dashboard Core Inserter.

Selects the name of the implementation for the target design (netlist project).

set_instance_name: Usage: set_instance_name <name>

Applies to Exostiv Dashboard Core Inserter.

Defines the name of the target design implementation.

set_link_clock_frequency: Usage: set_link_clock_frequency <frequency>
 Applies to Exostiv Dashboard Core Inserter.
 Defines the frequency in Hz of the transceivers reference clock. Range: 60 MHz to 660 MHz

set_link_clock_source: Usage: set_link_clock_source <clock0 or clock1>
 Applies to Exostiv Dashboard Core Inserter.
 Selects of the possible clock sources for the transceivers (2 choices possible for the chosen transceiver bank). Valid values are: 'clock0' and 'clock1'.

set_nr_of_data_groups: Usage: set_nr_of_data_groups <number of data groups>
 Applies to Exostiv Dashboard Core Inserter - for RTL project mode only
 Defines the total number of data groups for the active capture unit. Max: 16.

set_nr_of_data_only_probes: Usage: set_nr_of_data_only_probes <number of data only probes>
 Applies to Exostiv Dashboard Core Inserter - for RTL project mode only
 Defines the number of probes (nodes) that have to be used as 'data only' (not used as trigger and data).

set_nr_of_data_probes: Usage: set_nr_of_data_probes <number of data probes>
 Applies to Exostiv Dashboard Core Inserter - for RTL project mode only
 Defines the total number of probes inputs for the active capture unit.

set_nr_of_pipes: Usage: set_nr_of_pipes <number of pipeline stages>
 Applies to Exostiv Dashboard Core Inserter
 Defines the total number of additional pipes inputs in the path capture unit. By default, the Exostiv IP generation engine includes pipelining. This parameter is for additional stages.

set_number_of_captures: Usage: set_number_of_captures <number of captures>
 Applies to Exostiv Dashboard Analyzer.
 Defines the number for the next Analyzer run.

set_output_folder: Usage: set_output_folder <output folder>
 Applies to Exostiv Dashboard Core Inserter - for RTL project mode only.
 Defines the destination folder for the generated Exostiv IP files.

set_package: Usage: set_package <FPGA package>
 Applies to Exostiv Dashboard Core Inserter.
 Sets the target FPGA package.

set_part: Usage: set_part <FPGA part>
 Applies to Exostiv Dashboard Core Inserter.
 Sets the target FPGA part.

set_pll_type: Usage: set_pll_type <Intel FPGA pll type>
 Applies to Exostiv Dashboard Core Inserter - Intel FPGA only
 Sets the type of pll used for the FPGA transceivers. Valid values: 'ATX PLL' or 'fPLL'

set_probe_as_trigger: Usage: set_probe_as_trigger <enable>
 Sets whether the active probe can be used as a trigger ('true') or nor ('false').

set_qualification_and_equation: Usage: set_qualification_and_equation <enable>
 Applies to Exostiv Dashboard Analyzer.
 Enables / disables the AND equation of the active signal for the data qualification in Exostiv Dashboard Analyzer

set_qualification_and_invert: Usage: set_qualification_and_invert <enable>
 Applies to Exostiv Dashboard Analyzer.
 Enables ('true') or disables ('false') the inverter located at the output of the data qualification AND equation

set_qualification_and_operation: Usage: set_qualification_and_operation <operation> <value1> <value2>
 Applies to Exostiv Dashboard Analyzer.
 Defines the equation for the active signal in the AND equation of the data qualification.

Example:
 set_qualification_and_operation != 1 0.
 All parameters must be provided a value

`set_qualification_combine`: Usage: `set_qualification_combine <combination type>`
 Applies to Exostiv Dashboard Analyzer.
 Defines the type of combination (valid values: 'and' / 'or') used at the output of the data qualification equation

`set_qualification_combine_invert`: Usage: `set_qualification_combine_invert <enable>`
 Applies to Exostiv Dashboard Analyzer.
 Enables ('true')/ disables ('false') the inverter located at the output of the data qualification combination

`set_qualification_or_equation`: Usage: `set_qualification_or_equation <enable>`
 Applies to Exostiv Dashboard Analyzer.
 Enables / disables the OR equation of the active signal for the data qualification in Exostiv Dashboard Analyzer

`set_qualification_or_invert`: Usage: `set_qualification_or_invert <enable>`
 Applies to Exostiv Dashboard Analyzer.
 Enables ('true') or disables ('false') the inverter located at the output of the data qualification OR equation.

`set_qualification_or_operation`: Usage: `set_qualification_or_operation <operation> <value1> <value2>`
 Applies to Exostiv Dashboard Analyzer.
 Defines the equation for the active signal in the OR equation of the data qualification.
 Example:
`set_qualification_or_operation != 1 0.`
 All parameters must be provided a value

`set_quartus_installation_folder`: Usage: `set_quartus_installation_folder <installation folder>`
 Applies to Exostiv Dashboard for Intel.
 Designates the installation folder of the Quartus software executable.

`set_samples_per_capture`: Usage: `set_samples_per_capture <number of samples>`
 Applies to Exostiv Dashboard Analyzer.
 Sets the number of samples to be collected for each capture.

`set_sampling_clock`: Usage: `set_sampling_clock <sampling clock name>`
 Applies to Exostiv Dashboard Core Inserter.
 Defines the sampling clock for the active capture unit.

`set_speed_grade`: Usage: `set_speed_grade <speed grade>`
 Applies to Exostiv Dashboard Core Inserter.
 Selects the speed grade of the target FPGA device.

`set_storage_qualification`: Usage: `set_storage_qualification <enable>`
 Applies to Exostiv Dashboard Core Inserter.
 Enables ('true') or disables ('false') the usage of data qualification (storage qualification) for the generated Exostiv IP.

`set_transfer_mode`: Usage: `set_transfer_mode <transfer mode>`
 Applies to Exostiv Dashboard Analyzer.
 Defines the transfer mode for the next capture. Valid values:
 - 'stream': Stream to probe
 - 'burst': Burst to probe

`set_trigger_and_equation`: Usage: `set_trigger_and_equation <enable>`
 Applies to Exostiv Dashboard Analyzer.
 Enables / disables the AND equation of the active signal for the trigger in Exostiv Dashboard Analyzer

`set_trigger_and_invert`: Usage: `set_trigger_and_invert <enable>`
 Applies to Exostiv Dashboard Analyzer.
 Enables ('true') or disables ('false') the inverter located at the output of the trigger AND equation

`set_trigger_and_operation`: Usage: `set_trigger_and_operation <operation> <value1> <value2>`
 Applies to Exostiv Dashboard Analyzer.
 Defines the equation for the active signal in the AND equation of the trigger.
 Example:
`set_trigger_and_operation != 1 0.`
 All parameters must be provided a value

set_trigger_combine: Usage: set_trigger_combine <combination type>
 Applies to Exostiv Dashboard Analyzer.
 Defines the type of combination (valid values: 'and' / 'or') used at the output of the trigger equation

set_trigger_combine_invert: Usage: set_trigger_combine_invert <enable>
 Applies to Exostiv Dashboard Analyzer.
 Enables ('true')/ disables ('false') the inverter located at the output of the trigger combination

set_trigger_or_equation: Usage: set_trigger_or_equation <enable>
 Applies to Exostiv Dashboard Analyzer.
 Enables / disables the OR equation of the active signal for the trigger in Exostiv Dashboard Analyzer

set_trigger_or_invert: Usage: set_trigger_or_invert <enable>
 Applies to Exostiv Dashboard Analyzer.
 Enables ('true') or disables ('false') the inverter located at the output of the trigger OR equation.

set_trigger_or_operation: Usage: set_trigger_or_operation <operation> <value1> <value2>
 Applies to Exostiv Dashboard Analyzer.
 Defines the equation for the active signal in the OR equation of the trigger.
 Example:
 set_trigger_or_operation != 1 0.
 All parameters must be provided a value

set_trigger_position: Usage: set_trigger_position <position as sample index>
 Applies to Exostiv Dashboard Analyzer.
 Sets the trigger position in each capture.

set_trigger_unit_type: Usage: set_trigger_unit_type <trigger unit type>
 Applies to Exostiv Dashboard Core Inserter.
 Defines whether a basic or complex trigger unit has to be used for the active capture unit. Valid values:
 - basic: levels and edges
 - basic_with_comparison: levels and edges and comparisons

set_up_line_rate: Usage: set_up_line_rate <line rate>
 Applies to Exostiv Dashboard Core Inserter.
 Selects the line rate for the upstream transceivers. Unit: bit/s
 Example (10 Gbps): > set_up_line_rate 10000000000

set_up_transceiver_bank: Usage: set_up_transceiver_bank <bank>
 Applies to Exostiv Dashboard Core Inserter.
 Selects the bank for the upstream transceivers.

set_up_transceiver_lanes: Usage: set_up_transceiver_lanes <lanes>
 Applies to Exostiv Dashboard Core Inserter.
 Selects the upstream transceivers that will be used by Exostiv IP.
 The 'lanes' parameter is encoded as a vector of '0' and '1' - each digit corresponding to a transceiver.
 Example: if the FPGA has a quad transceiver bank (4 transceivers in the bank) using:
 >set_up_transceiver 0110 will enable transceivers at position '2 and 1'.
 >set_up_transceiver 1000 will enable transceiver at position '3'.
 If the FPGA has 6 transceivers in the bank the usage is - e.g.: set_down_transceiver 011110
 Up to 4 transceivers can be used upstream.

set_use_cache: Usage: set_use_cache <enable>
 Applies to Exostiv Dashboard Core Inserter.
 Enables ('true') or Disables ('false') the usage of the Exostiv IP cache.

set_use_qualification_for_trigger: Usage: set_use_qualification_for_trigger <enable>
 Applies to Exostiv Dashboard Analyzer.
 Defines whether the result of the data qualification equations has to be valid for the trigger equation

set_vcc_gxb: Usage: set_vcc_gxb <vcc_gxb value>
 Applies to Exostiv Dashboard Core Inserter - Intel FPGA.
 Sets the value of the 'VCC_GXB' parameter for the transceivers.

set_vivado_installation_folder: Usage: set_vivado_installation_folder
Applies to Exostiv Dashboard for Xilinx.
Designates the installation folder of the Vivado software executable.

split_probe_bus: Usage: split_probe_bus <index>
Applies to Exostiv Dashboard Analyzer - RTL project.
Splits the bus designated with its index.

start_capture: Usage: start_capture
Applies to Exostiv Dashboard Analyzer.
Starts a capture with Exostiv Probe according to the chosen capture parameters.

start_insertion: Usage: start_insertion
Applies to Exostiv Dashboard Core Inserter.
Starts Exostiv IP generation and insertion.

start_single_capture: Usage: start_single_capture
Applies to Exostiv Dashboard Analyzer.
Starts a signal capture without trigger or data qualification.

stop_capture: Usage: stop_capture
Applies to Exostiv Dashboard Analyzer.
Stops the running capture.

stop_insertion: Usage: stop_insertion
Applies to Exostiv Dashboard Core Inserter.
Stops the running Exostiv IP core insertion process.
