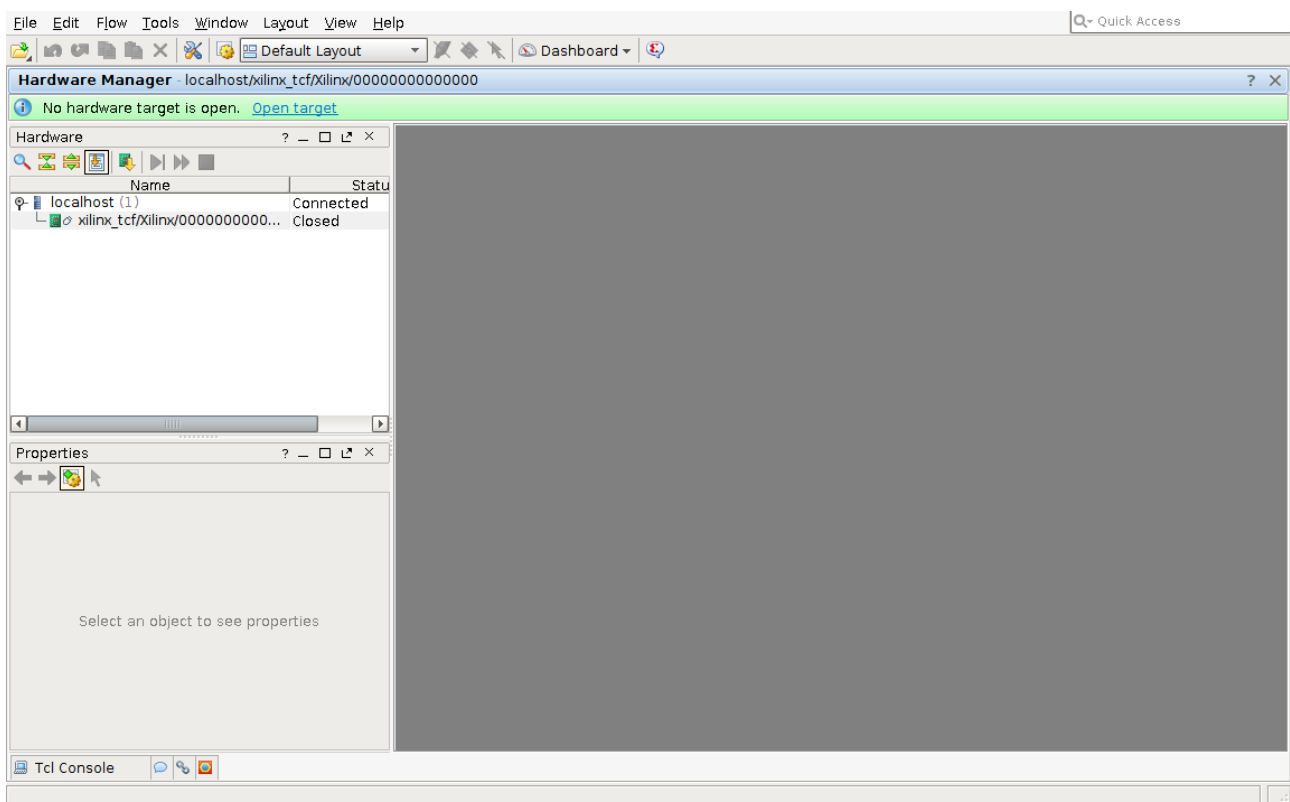


AFC / AFCK JTAG SCANSTA Configuration Guide

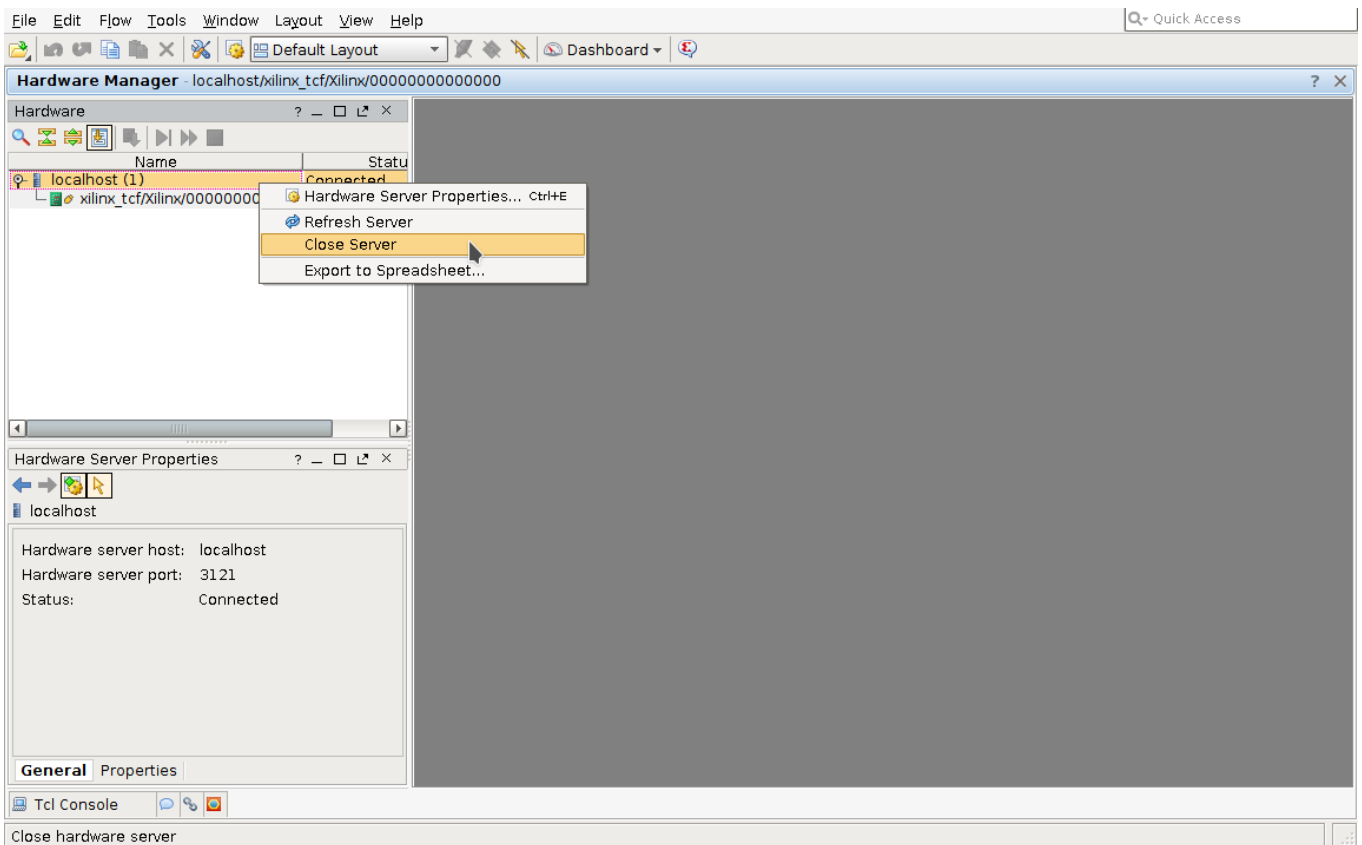
To access FPGA using JTAG on AFC / AFCK cards it is necessary to set SCANSTA bridge in appropriate mode. This can be done with a simple TCL script.

Steps

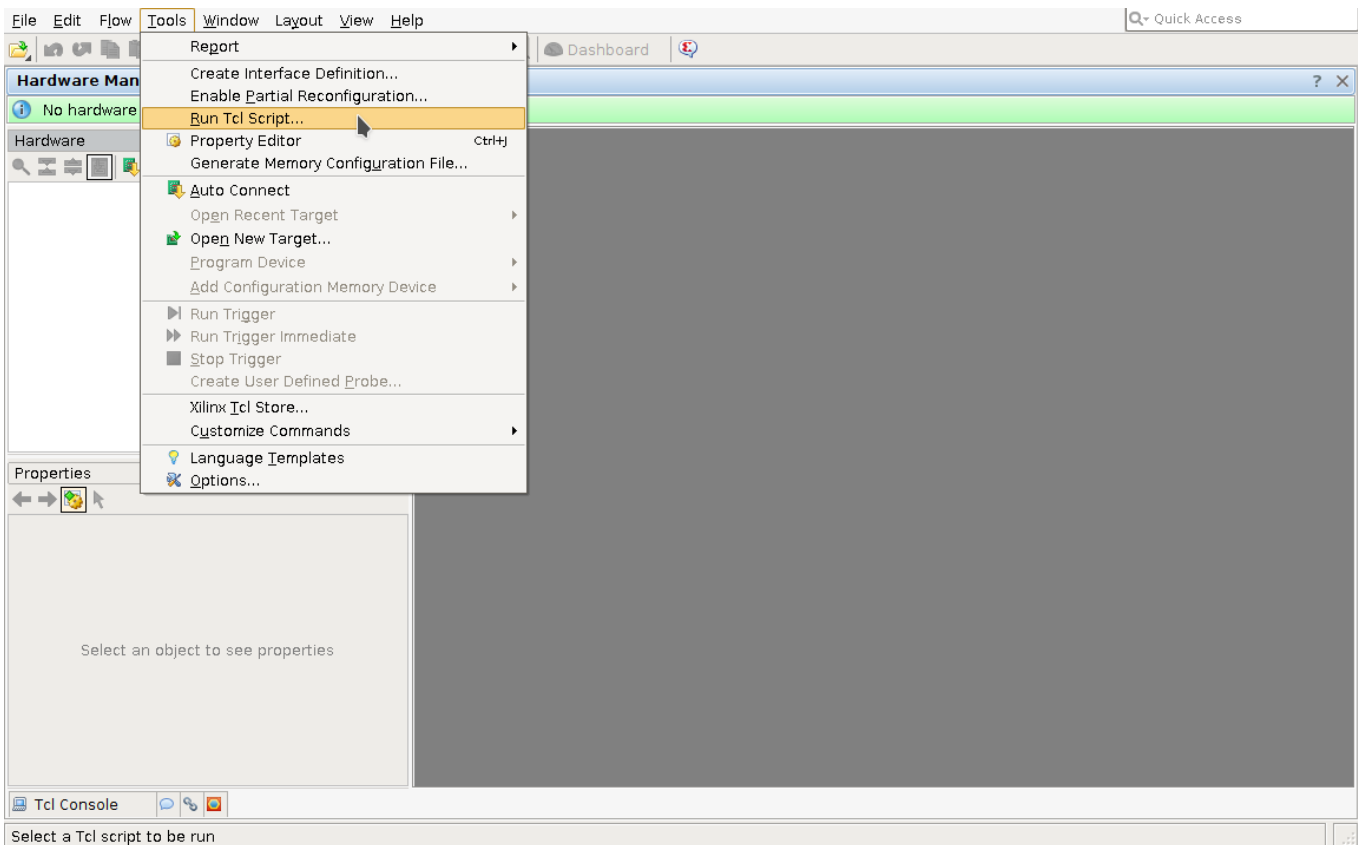
1. Make sure Platform Cable device is connected both to the computer and AFC/AFCK.
2. Run Vivado. If you have Hardware Manager opened, you should see something like:



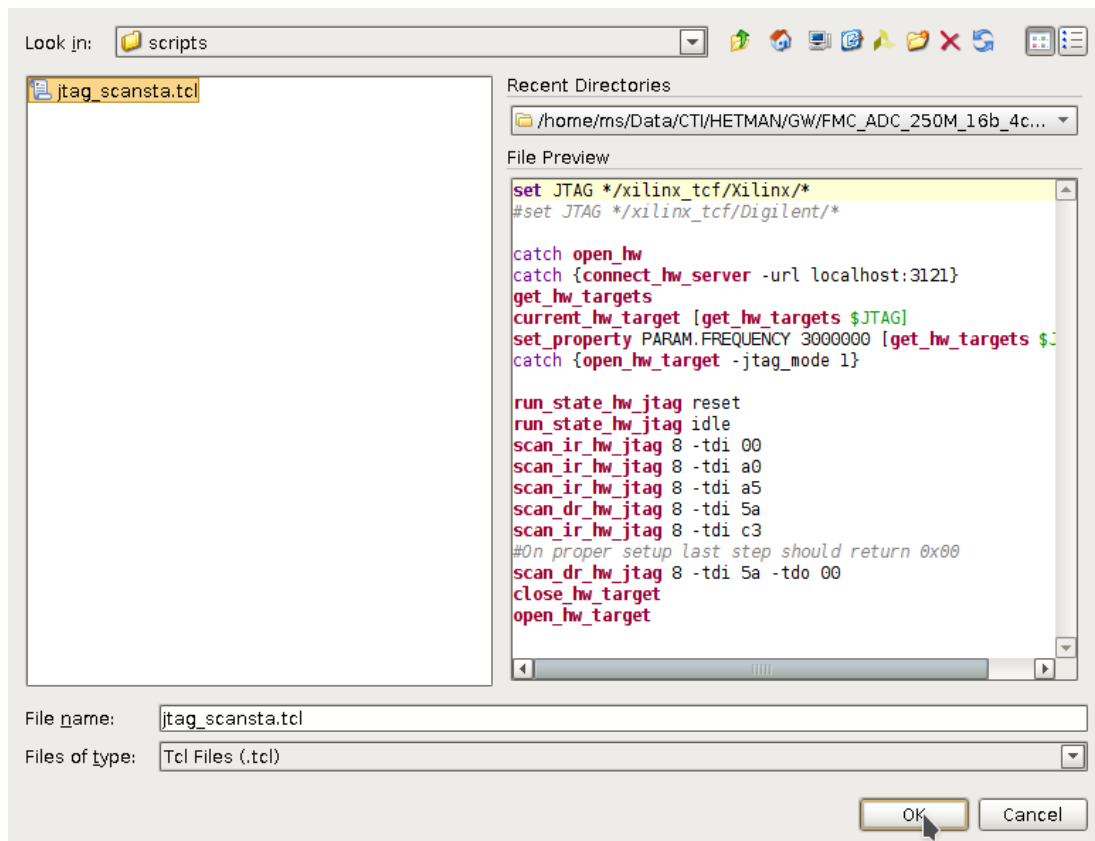
3. Select *localhost* and then *Close Server*



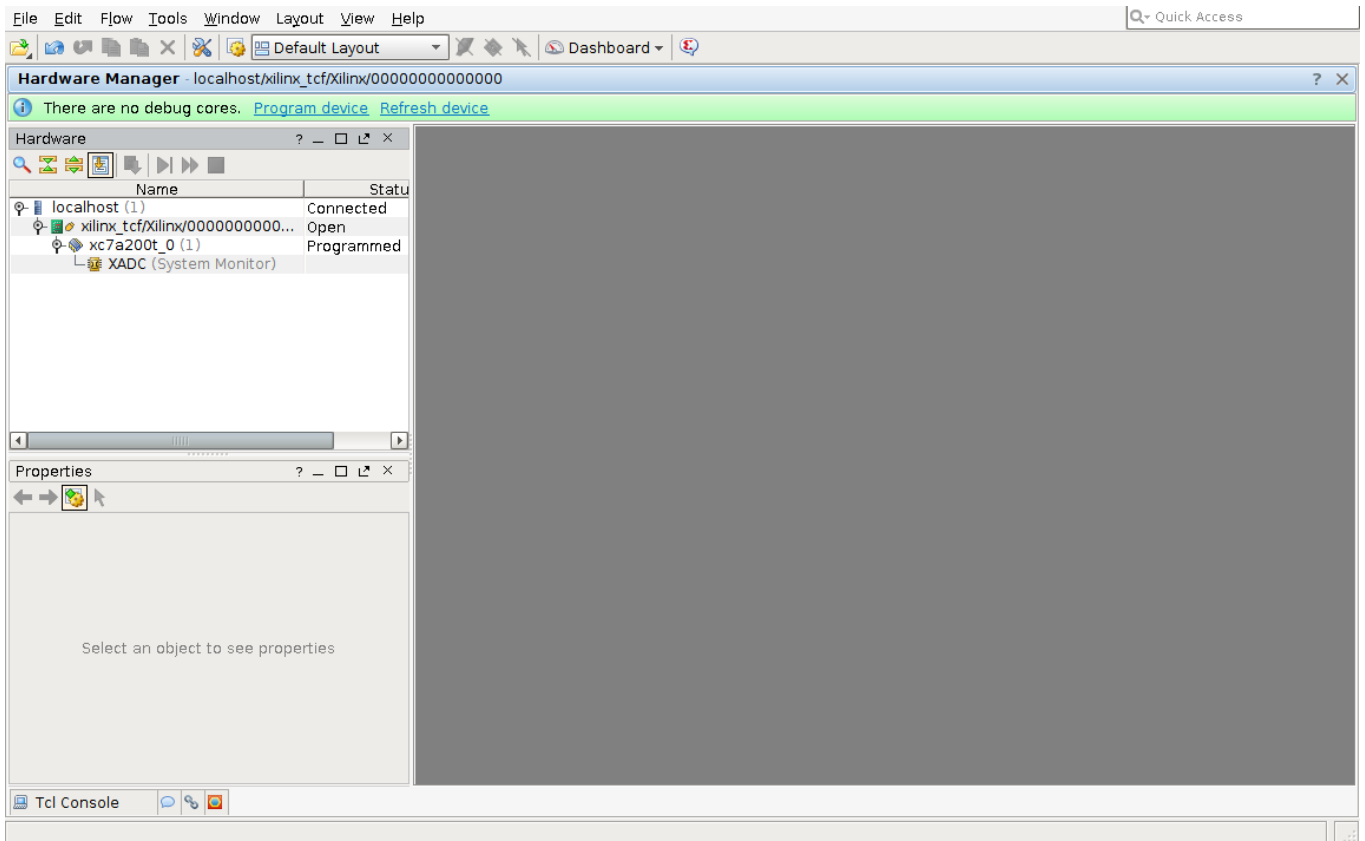
4. Then, from the top menu, select *Tools* → *Run TCL Script...*



5. Select *jtag_scansta.tcl* script file and click OK.

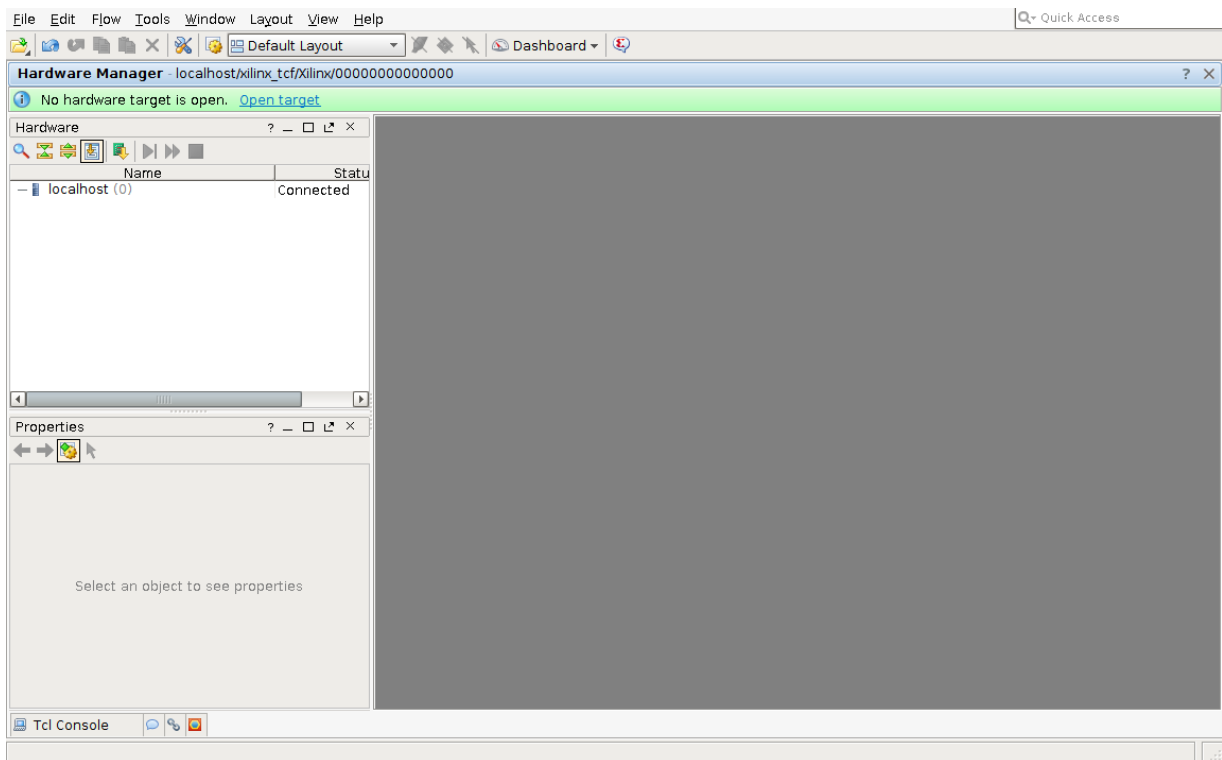


6. Vivado window should look like beneath and you should be able to program FPGA.



Troubleshooting

- If you get ERROR: [Labtoolstcl 44-127] hw_target property 'PARAM.FREQUENCY' is read-only. It probably means that you did not close Hardware Server before running *jtag_scansca.tcl* script.
- There is no device related to the Hardware Server:



Check connection between Platform Cable and AFC/AFCK.

- On repeating failure try restarting computer and repeat all the steps.

jtag_scansta.tcl listing

```
set JTAG */xilinx_tcf/Digilent/*

catch open_hw
catch {connect_hw_server -url localhost:3121}
get_hw_targets
current_hw_target [get_hw_targets $JTAG]
set_property PARAM.FREQUENCY 3000000 [get_hw_targets $JTAG]
catch {open_hw_target -jtag_mode 1}

run_state_hw_jtag reset
run_state_hw_jtag idle
scan_ir_hw_jtag 8 -tdi 00
scan_ir_hw_jtag 8 -tdi a0
scan_ir_hw_jtag 8 -tdi a5
scan_dr_hw_jtag 8 -tdi 5a
scan_ir_hw_jtag 8 -tdi c3
#On proper setup last step should return 0x00
scan_dr_hw_jtag 8 -tdi 5a -tdo 00
close_hw_target
open_hw_target
```