How to create an XDC from Vivado

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Blog post: https://soceame.wordpress.com/2025/03/09/how-to-create-an-xdc-from-vivado/

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In previous posts I explained how to make an XDC by hand, now I'll explain how you can create your own from Vivado.

The first thing you have to do is implement it. With the implementation done, open the profile and in the upper tab of Window an option called I/O Ports appears.

In this tab you have to follow what the schematic of the board dictates.

Here you can select the pin you want for the port, and the voltage of the pin, in our case 3.3V.

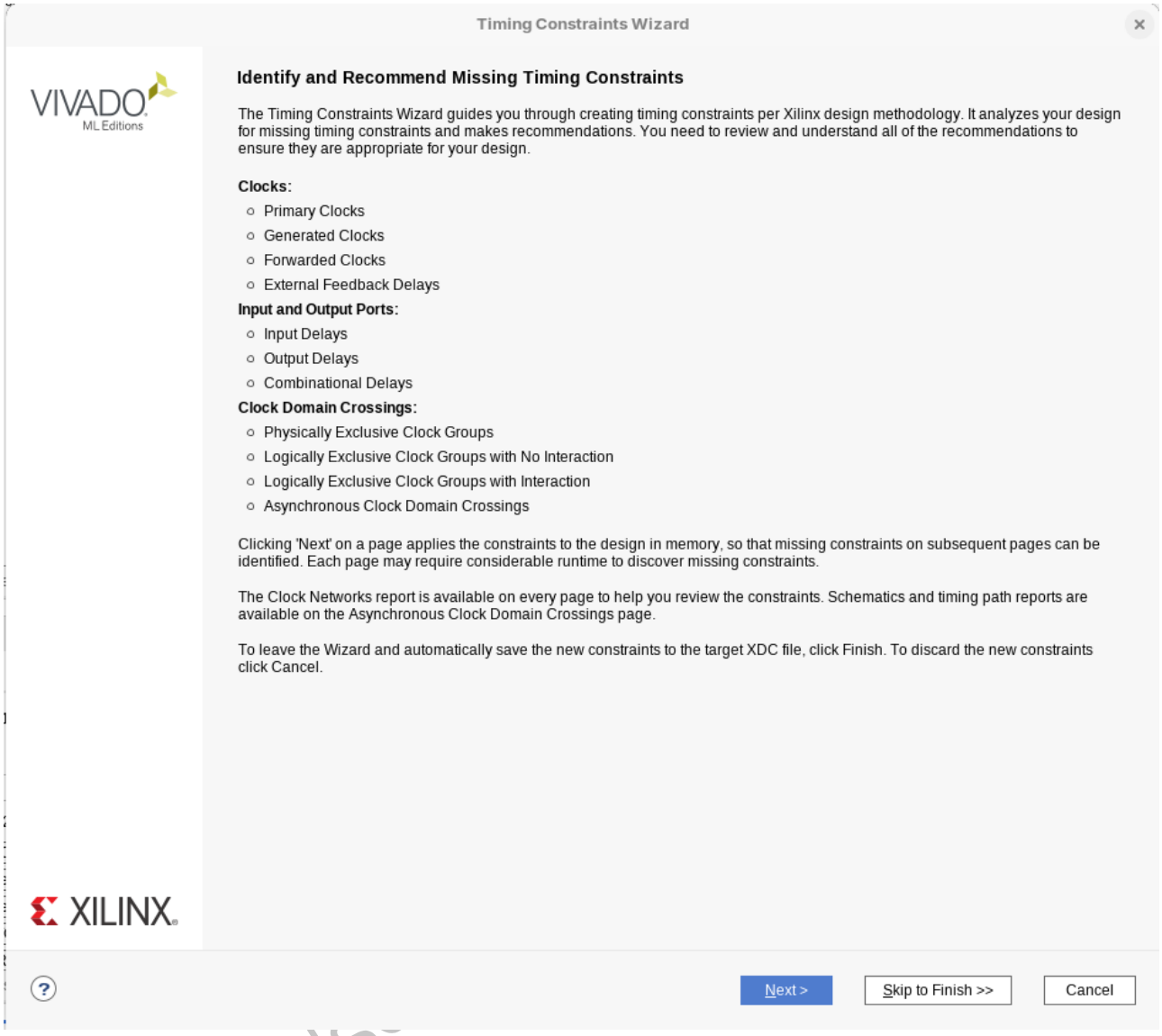
Once you have the pins created you have to save them.

Then, Vivado will ask you if you want to create a new one, or overwrite an XDC you already have.

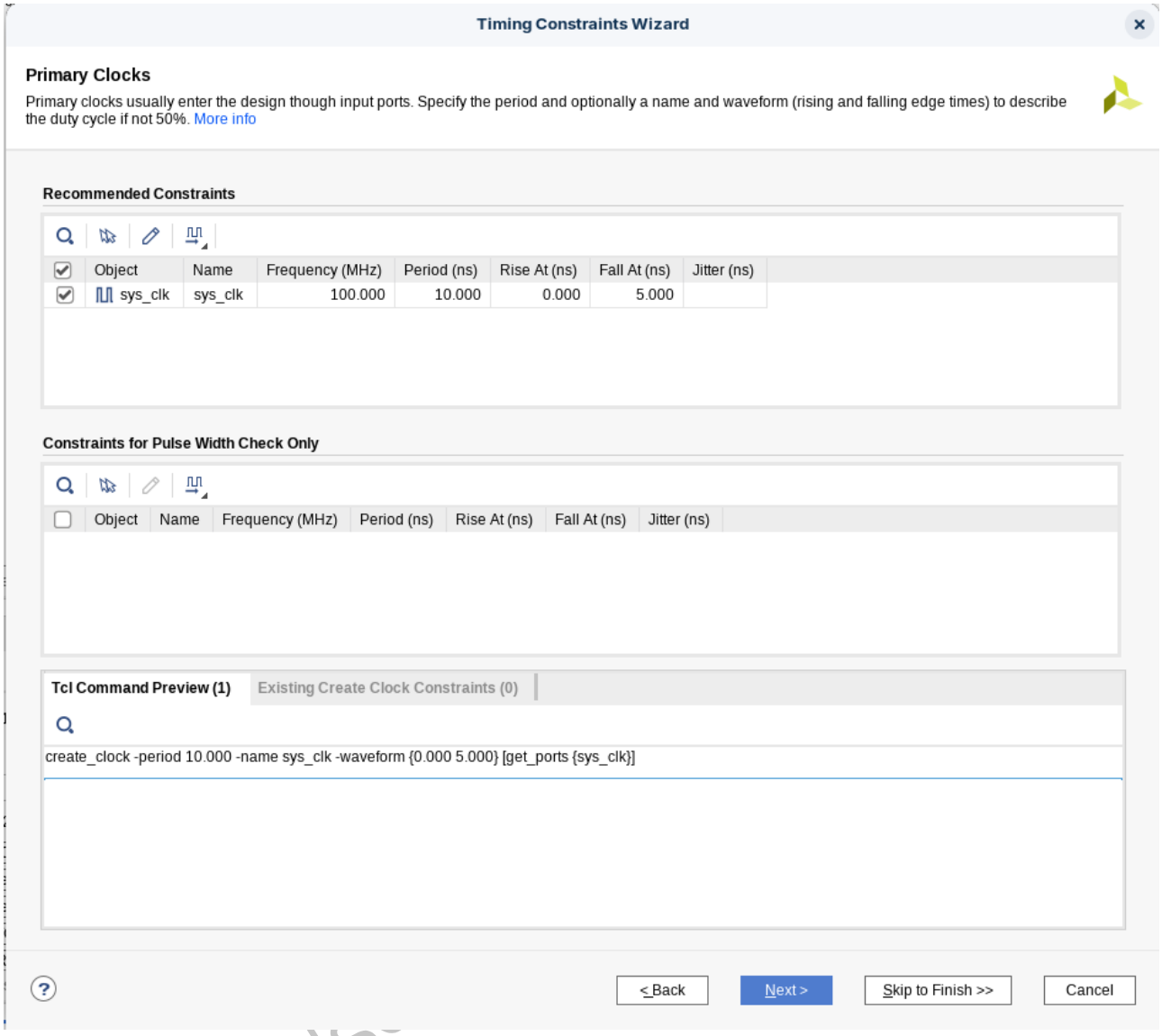
Create a clock

To create a clock and just like in the previous step, in Tools, an option called **Timing Constraints Wizard** appears.

When you click on it, a tab opens, to configure the profile you want.



In this tab you choose the primary clocks you want



It also allows you to add delays to the clock, although it is not necessary to give it delays.

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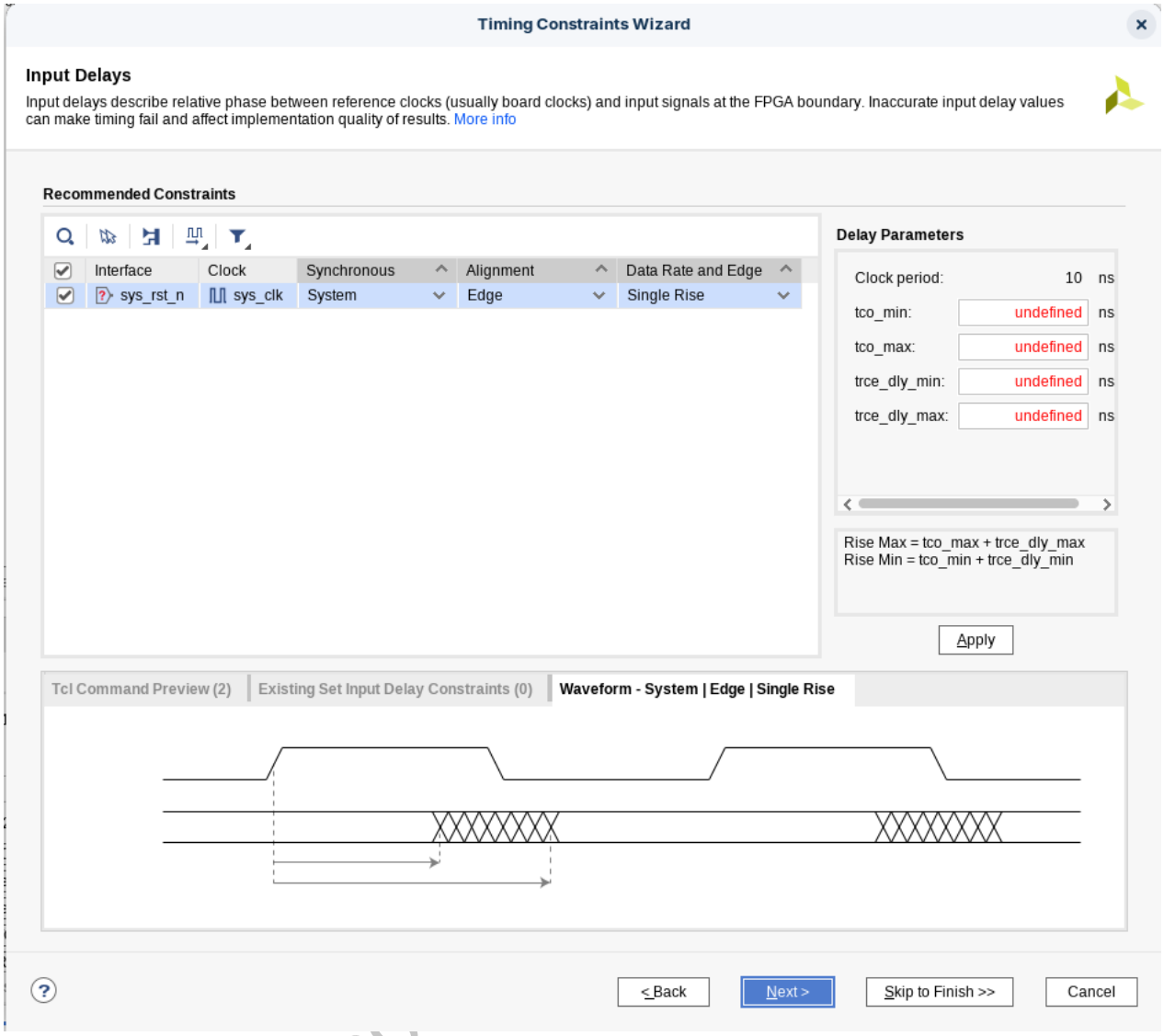

Once done in Timing Constraints the created clock will appear

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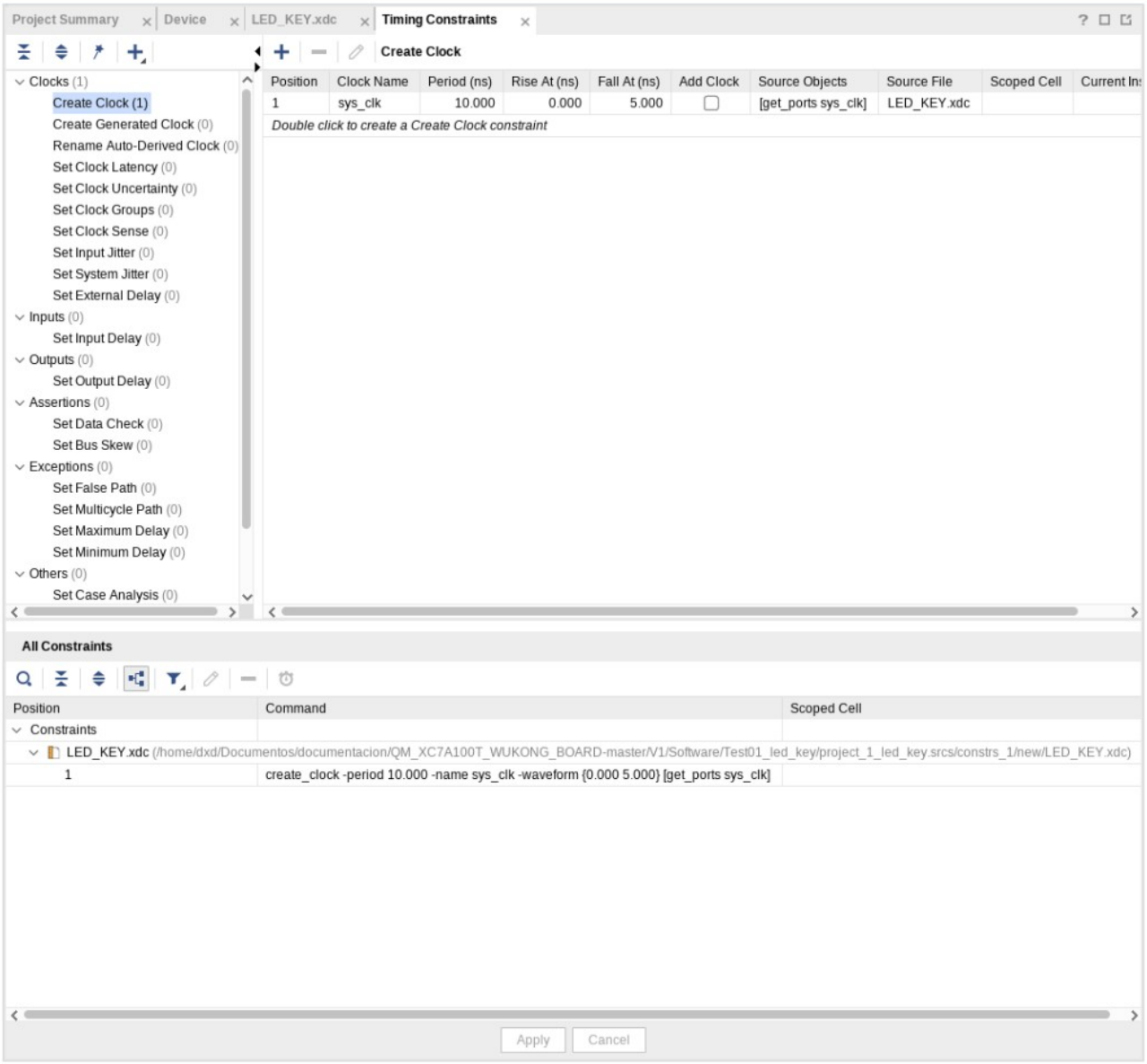

And in the XDC the clock that has been created will appear

```
13
14 create_clock -period 10.000 -name sys_clk -waveform {0.000 5.000} [get_ports sys_clk]
15
```