TD Release Notes

========== February 2019 (r4.4.433) ==========

New Features:

1. Support EF3 devices.
2. New design summary format to show hierarchical information.
3. Clock intersection report: show the timing information between different clock domains in a more intuitive way.
4. Text Editor enhancement: statement block folding, bookmark, keyword recognition, etc.
5. Schematic viewer: be able to show the schematic for major previous step of the flow.
6. Optimize the structure of device database, so the demand disk space of TD is reduced.

Updates & fixes:

1. Device setting will take effect correctly while launching TD by double click .al file.
2. Project hierarchy information could be still retained even when some syntax errors are found in source files.
3. IP Gen: fix a bug of PLL setting while the duty cycle of C0 is set to 90%.
4. IP Gen: fix a bug in PLL fractional amplitude calculation.
5. IP Gen: fix a bug in RAMFIFO model.
6. IP Gen: fix a bug that TD may crash during generating divider IP in some circumstances.
7. IP Gen: now TD will always import the right device database while generating BRAM/ADC IPs.
8. IP Gen: some other GUI improvements in RAM, PLL, etc.
9. Fix some bugs in RTL optimization (opt_arith/infer_gsr).
10. Fix bugs in estimating PHY_BRAM and DRAM area.
11. Optimize mapping bufif1/0 that drives multiple pads.
12. SDC: improve the implement of set_clock_groups and clock-to-clock false path constraints.
13. SDC: fix a bug while there are multiple constraints on the same PI/PO.
14. Enhance timing report to have detailed breakdown datas for ‘required time’.
15. Improve the routability for AST related application on EF2 device.
16. Improve hold violation fixer functions.
17. Fix a routing error while ADC module is not instantiated in the top module.
18. Download: disable “erasing flash” button while there is no device connected.
19. Download: improve progress bar of JTAG programming.
20. Device chain: fix a bug that svf for SRAM may program failed after erasing flash.
21. Device chain: change the default frequency for tde.
22. Device chain: allow to merge svf files without level index.
23. BRAM Editor will send error messages correctly if there is no device connected in Linux.
24. ChipWatcher: no longer needs to rerun the flow while re-opening project.
25. ChipWatcher: fix a bug that cannot be triggered without project sometimes.
26. Schematic viewer: inout port will display correctly now.
27. Chip viewer: fix bugs about zoom in(out) and delete unused node.

28. Chip viewer: fix for displaying the pad name correctly.