

DT-TREx ver.2.0.0

DT-TREx, a plug-in tool for Dynamic Test Tool DT10 or DT-Win, displays comparing 2 Test Reports.

Installation

Please execute "setup.exe" in any folder. After completing the installation, the menu item to start DT-TREx plug-in will be added to each menu of DT10 and DT-Win.

Then, the following version of the applications is needed to start the plug-in application. It is recommended that its installation is completed before installation of the plug-in.

- DT10 ver.12.1.0 or latter
- DT-Win ver.3.1.0 or latter
- DT10 Automotive Edition ver.12.0.0 or latter

Attention

Please install the plug-in after closing DT10 or DT-Win. The menu item for plug-in is not registered if the installation is executed while DT10 or DT-Win is opening.

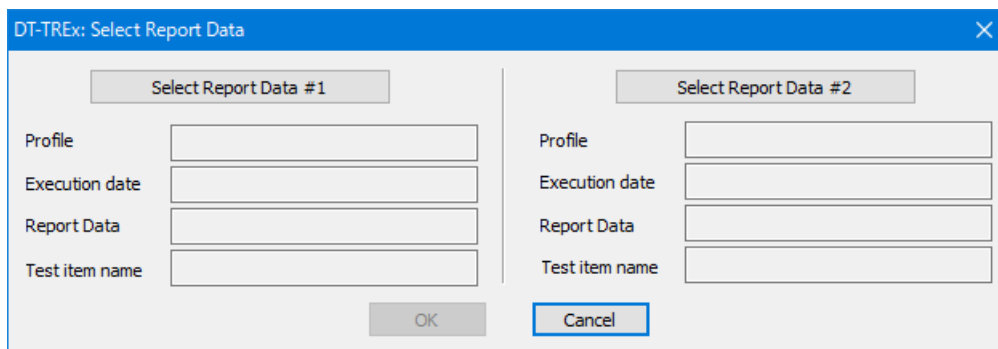
In case the menu item "DT-TREx" is not displayed in the "Tool" menu of DT10 or DT-Win after the installation of the plug-in, it is available after registering command according to be hereinafter described "Manual registration of plug-in".

How to start

Please start the item "DT-TREx" from the "Tool" menu with opening a project of DT10 or DT-Win.

How to operate

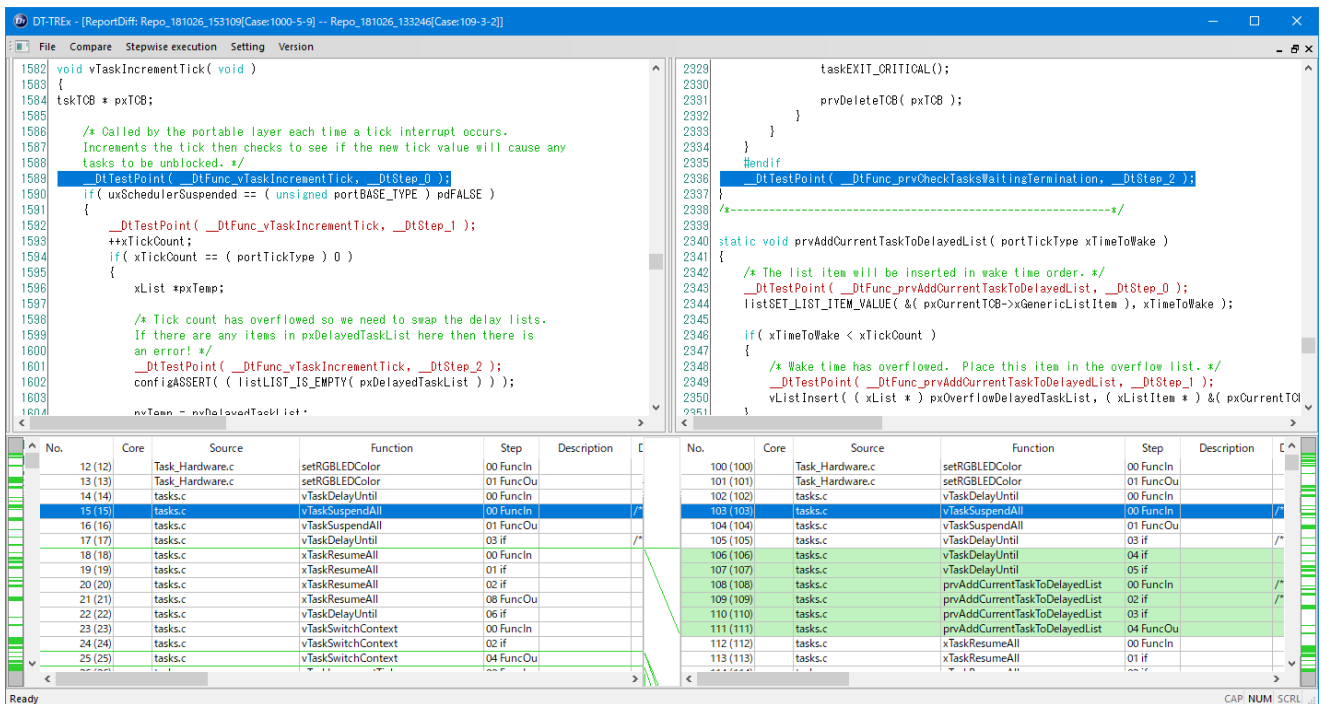
"Select Report Data" is opened after starting DT-TREx.



Please select the Report Data to compare by clicking the buttons "Select Report Data #1" and "Select Report Data #2".

Analysis of each Report Data will be executed after clicking "OK" button.

After the analysis, Report Data comparison window is displayed.



Report Data comparison window shows the difference between the Reports, and the source code corresponding to the Reports.

Report Data lines have the difference between right side and the left side is highlighted with the background color in green and linked line.

The comparison of the Report Data can also be executed by [Report Data comparison] item of [Compare] menu.

Report Data list is displayed in synchronization between the left side and the right side.

Stepwise execution is available by [To the next step] item of the [Stepwise execution] menu (or F10 key), and [To the previous step] item (or Shift + F10 key)

And stepwise execution for only the differences, which moves to the first line of the next or the previous difference lines is available by [To the next difference] item of the [Stepwise execution] menu (or F8 key), and [To the previous difference] item (or F7 key).

Show or hide of a Report Data line can be switched by the filter functionality like the Test Report filter of DT10 or DT-Win application. In case the filter setting is enabled, the comparison is executed to the Report Data applied the filter.

The filter setting is applied only to DT-TREx, and it is applied and saved per a profile.

The filter setting window is displayed by selecting the item per a profile in [Filter settings] of [Setting] menu.

After the setting of the filter, the difference analysis is necessary again by selecting [Report Data Comparison] item of [Compare] menu.

Source file	Function	#1. Prof_181026_093316 / Repo_181026_153109 [Case:1000-5-9]	#2. Prof_181026_093316 / Repo_181026_133246 [Case:109-3-2]
DisplayRenderer.c	DRenderer_BeginScene	Execution time: Ave. 10,249,740ns / Max. 10,249,750ns / Min. 10,249,740ns [Execution count:10]	Execution time: Ave. 10,249,730ns / Max. 10,249,750ns / Min. 10,249,680ns [E
DisplayRenderer.c	DRenderer_EndScene	Execution time: Ave. 60,150ns / Max. 60,160ns / Min. 60,150ns [Execution count:11]	Execution time: Ave. 60,150ns / Max. 60,160ns / Min. 60,150ns [Execution co
DisplayRenderer.c	DRenderer_DrawDeviceFormatima	Execution time: Ave. 25,150ns / Max. 31,340ns / Min. 17,000ns [Execution count:44]	Execution time: Ave. 24,770ns / Max. 36,480ns / Min. 14,490ns [Execution coi
DisplayRenderer.c	DRenderer_Present	Execution time: Ave. 10,833,670ns / Max. 10,836,910ns / Min. 10,827,890ns [Execution count:10]	Execution time: Ave. 10,830,410ns / Max. 10,836,590ns / Min. 10,826,610ns [E
Task_Hardware.c	getDistance	Execution time: Ave. 0ns / Max. 0ns / Min. 0ns [Execution count:32]	Execution time: Ave. 0ns / Max. 0ns / Min. 0ns [Execution count:33]
Task_Hardware.c	getDMSVoltage	Execution time: Ave. 0ns / Max. 0ns / Min. 0ns [Execution count:11]	Execution time: Ave. 0ns / Max. 0ns / Min. 0ns [Execution count:11]
Task_Hardware.c	setLEDState	Execution time: Ave. 14,400ns / Max. 14,400ns / Min. 14,400ns [Execution count:11]	Execution time: Ave. 14,390ns / Max. 14,400ns / Min. 14,390ns [Execution coi
Task_Hardware.c	setBuzzerPitch	Execution time: Ave. 28,890ns / Max. 28,900ns / Min. 28,890ns [Execution count:10]	Execution time: Ave. 28,890ns / Max. 28,900ns / Min. 28,890ns [Execution coi
Task_Hardware.c	getColorVolume	Execution time: Ave. 0ns / Max. 0ns / Min. 0ns [Execution count:219]	Execution time: Ave. 0ns / Max. 0ns / Min. 0ns [Execution count:219]
Task_Hardware.c	setRGBLEDColor	Execution time: Ave. 14,490ns / Max. 14,500ns / Min. 14,490ns [Execution count:219]	Execution time: Ave. 14,490ns / Max. 14,500ns / Min. 14,490ns [Execution coi
Task_Hardware.c	procHardware_LED_AD	Execution time: Ave. 10,971,110ns / Max. 10,974,350ns / Min. 10,965,320ns [Execution count:10]	Execution time: Ave. 10,967,840ns / Max. 10,974,020ns / Min. 10,964,040ns [E
tasks.c	vTaskDelayUntil	Execution time: Ave. 666,040ns / Max. 1,171,970ns / Min. 177,010ns [Execution count:239]	Execution time: Ave. 663,340ns / Max. 1,171,980ns / Min. 177,010ns [Executio
tasks.c	vTaskSuspendAll	Execution time: Ave. 15,980ns / Max. 104,000ns / Min. 14,330ns [Execution count:273]	Execution time: Ave. 14,330ns / Max. 14,340ns / Min. 14,330ns [Execution coi

The image shows a dialog box titled "Analysis option settings". It contains two checkboxes: "Process Analysis Mode" which is checked, and "Analysis considers cores" which is unchecked. Below the checkboxes is a text note: "* Apply the same setting as the analysis setting of environment setting of DT10/DT-Win". At the bottom right are "OK" and "Cancel" buttons.

Moreover, if the execution count of the function is 0 in the Reports of both sides, or if the function is registered only in one side, these functions are not displayed in the list.

DT-TREX

File Compare Setting View Version

Difference view

Source file	Function	#1. Prof_181026_093316 / Repo_181026_153109 [Case:1000-5-9]	#2. Prof_181026_093316 / Repo_181026_133246 [Case:109-3-2]
Display.Renderer.c	DRenderer_BeginScene	Execution time: Ave. 10,249,740ns / Max. 10,249,750ns / Min. 10,249,740ns [Execution count:10]	Execution time: Ave. 10,249,730ns / Max. 10,249,750ns / Min. 10,249,680ns [Execution count:10]
Display.Renderer.c	DRenderer_EndScene	Execution time: Ave. 60,150ns / Max. 60,160ns / Min. 60,150ns [Execution count:11]	Execution time: Ave. 60,150ns / Max. 60,160ns / Min. 60,150ns [Execution count:11]
Display.Renderer.c	DRenderer_DrawDeviceFormatInfo	Execution time: Ave. 25,150ns / Max. 31,340ns / Min. 17,000ns [Execution count:44]	Execution time: Ave. 24,770ns / Max. 36,480ns / Min. 14,490ns [Execution count:44]
Display.Renderer.c	DRenderer_Present	Execution time: Ave. 10,833,670ns / Max. 10,836,910ns / Min. 10,827,890ns [Execution count:10]	Execution time: Ave. 10,830,410ns / Max. 10,836,590ns / Min. 10,826,610ns [Execution count:10]
Task_Hardware.c	getDistance	Execution time: Ave. 0ns / Max. 0ns / Min. 0ns [Execution count:32]	Execution time: Ave. 0ns / Max. 0ns / Min. 0ns [Execution count:33]
Task_Hardware.c	getDMSVoltage	Execution time: Ave. 0ns / Max. 0ns / Min. 0ns [Execution count:11]	Execution time: Ave. 0ns / Max. 0ns / Min. 0ns [Execution count:11]
Task_Hardware.c	setLEDState	Execution time: Ave. 14,400ns / Max. 14,400ns / Min. 14,400ns [Execution count:11]	Execution time: Ave. 14,390ns / Max. 14,400ns / Min. 14,390ns [Execution count:11]
Task_Hardware.c	setBuzzerPitch	Execution time: Ave. 28,890ns / Max. 28,900ns / Min. 28,890ns [Execution count:10]	Execution time: Ave. 28,890ns / Max. 28,900ns / Min. 28,890ns [Execution count:10]
Task_Hardware.c	getColorVolume	Execution time: Ave. 0ns / Max. 0ns / Min. 0ns [Execution count:219]	Execution time: Ave. 0ns / Max. 0ns / Min. 0ns [Execution count:219]
Task_Hardware.c	setRGBLEDColor	Execution time: Ave. 14,490ns / Max. 14,500ns / Min. 14,490ns [Execution count:219]	Execution time: Ave. 14,490ns / Max. 14,500ns / Min. 14,490ns [Execution count:219]
Task_Hardware.c	procHardware_LED_AD	Execution time: Ave. 10,971,110ns / Max. 10,974,350ns / Min. 10,965,320ns [Execution count:10]	Execution time: Ave. 10,967,840ns / Max. 10,974,020ns / Min. 10,964,040ns [Execution count:10]
tasks.c	vTaskDelayUntil	Execution time: Ave. 666,040ns / Max. 1,171,970ns / Min. 177,010ns [Execution count:239]	Execution time: Ave. 663,340ns / Max. 1,171,980ns / Min. 177,010ns [Execution count:239]
tasks.c	vTaskSuspendAll	Execution time: Ave. 15,980ns / Max. 104,000ns / Min. 14,330ns [Execution count:273]	Execution time: Ave. 14,330ns / Max. 14,340ns / Min. 14,330ns [Execution count:273]

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The list of execution time for all routes of the function is displayed by the double-click of any line of the analysis result comparison list.

Moreover, the window shows the source file and the Report Data is displayed by the double-click of the any line of the execution time list. This window is "Step tracer".

The multiple display of the window of Step tracer is available in the same time, and all windows of Step tracer can be traced in synchronization by selecting "To the next Step"(F10) or "To the previous Step"(Shift+F10) items from "Stepwise execution" menu.

By this functionality, checking of the difference of execution route between the different 2 Reports is available.

(Trace synchronization is displayed by dividing the Report Data by each route and by synchronizing of the offset time from starting position. The Report to be its basis is the currently activated window)

The screenshot displays the DT-TREx application window. The main window shows a list of execution times for various functions. A 'Step tracer' window is open, showing the source code for the 'vTaskDelayUntil' function. Below the source code, there are two tables showing execution data for different cores and functions. The 'Difference view' window at the bottom compares the execution times of two different reports, showing the average, maximum, and minimum execution times for various functions.

No.	Core	Source	Function	Step	Description	Description2(C...
1 (459)	tasks.c	tasks.c	vTaskDelayUntil	00 FuncIn		
2 (460)	tasks.c	tasks.c	vTaskSuspendAll	00 FuncIn		/* A critical section
3 (461)	tasks.c	tasks.c	vTaskSuspendAll	01 FuncOu		
4 (462)	tasks.c	tasks.c	vTaskDelayUntil	01 FuncIn		

No.	Core	Source	Function	Step	Description	Description2(C...
1 (110)	tasks.c	tasks.c	vTaskDelayUntil	00 FuncIn		
2 (111)	tasks.c	tasks.c	vTaskSuspendAll	00 FuncIn		/* A critical section
3 (112)	tasks.c	tasks.c	vTaskSuspendAll	01 FuncOu		
4 (113)	tasks.c	tasks.c	vTaskDelayUntil	01 FuncIn		

Source file	Function	#1. Prof_181026_093316 / Repo_181026_153109 [Case:1000-5-9]	#2. Prof_181026_093316 / Repo_181026_133246 [Case:10...
DisplayRenderer.c	DRenderBeginScene	Execution time: Ave. 10,249,740ns / Max. 10,249,750ns / Min. 10,249,740ns [Execution count:10]	Execution time: Ave. 10,249,730ns / Max. 10,249,750ns / Min. 10,249,730ns [Execution count:10]
DisplayRenderer.c	DRenderEndScene	Execution time: Ave. 60,150ns / Max. 60,160ns / Min. 60,150ns [Execution count:11]	Execution time: Ave. 60,150ns / Max. 60,160ns / Min. 60,150ns [Execution count:11]
DisplayRenderer.c	DRenderDrawDeviceFormatma	Execution time: Ave. 25,150ns / Max. 31,340ns / Min. 17,000ns [Execution count:44]	Execution time: Ave. 24,770ns / Max. 36,480ns / Min. 14,770ns [Execution count:44]
DisplayRenderer.c	DRenderPresent	Execution time: Ave. 10,833,670ns / Max. 10,836,910ns / Min. 10,827,890ns [Execution count:10]	Execution time: Ave. 10,830,410ns / Max. 10,836,590ns / Min. 10,827,890ns [Execution count:10]
Task_Hardware.c	getDistance	Execution time: Ave. 0ns / Max. 0ns / Min. 0ns [Execution count:32]	Execution time: Ave. 0ns / Max. 0ns / Min. 0ns [Execution count:32]
Task_Hardware.c	getDMSVoltage	Execution time: Ave. 0ns / Max. 0ns / Min. 0ns [Execution count:11]	Execution time: Ave. 0ns / Max. 0ns / Min. 0ns [Execution count:11]
Task_Hardware.c	setLEDState	Execution time: Ave. 14,400ns / Max. 14,400ns / Min. 14,400ns [Execution count:11]	Execution time: Ave. 14,390ns / Max. 14,400ns / Min. 14,380ns [Execution count:11]
Task_Hardware.c	setBuzzerPitch	Execution time: Ave. 28,890ns / Max. 28,900ns / Min. 28,890ns [Execution count:10]	Execution time: Ave. 28,890ns / Max. 28,900ns / Min. 28,890ns [Execution count:10]
Task_Hardware.c	getColorVolume	Execution time: Ave. 0ns / Max. 0ns / Min. 0ns [Execution count:219]	Execution time: Ave. 0ns / Max. 0ns / Min. 0ns [Execution count:219]
Task_Hardware.c	setRGBLEDColor	Execution time: Ave. 14,490ns / Max. 14,500ns / Min. 14,490ns [Execution count:219]	Execution time: Ave. 14,490ns / Max. 14,500ns / Min. 14,490ns [Execution count:219]
Task_Hardware.c	procHardware_LED_AD	Execution time: Ave. 10,971,110ns / Max. 10,974,350ns / Min. 10,965,320ns [Execution count:10]	Execution time: Ave. 10,967,840ns / Max. 10,974,020ns / Min. 10,965,320ns [Execution count:10]
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tasks.c	vTaskSuspendAll	Execution time: Ave. 15,980ns / Max. 104,000ns / Min. 14,330ns [Execution count:273]	Execution time: Ave. 14,330ns / Max. 14,340ns / Min. 14,330ns [Execution count:273]

Manual registration of plug-in

Please register the plug-in according to the following steps in case plug-in is registered manually because the registration to the menu was failed as DT10 or DT-Win was being executed when the installation.

1. Select the item "Register or exclude a plug-in..." from the "Tool" menu.
2. Click the "Add" button in "Register or exclude a plug-in" window.
3. Input the followings in "Register a plug-in" and click "Register" button.
 - Menu Command : DT-TREx
 - Executable file : Full path of DT-TREx.exe
 - Command parameter : \$(ProjectFile) 10 (DT-Win : \$(ProjectFile) win , AutomotiveEdition : \$(ProjectFile) AE)
4. Click the "OK" button in "Register or exclude a plug-in" window.