



Migrating from Atollic TrueSTUDIO[®] to IAR Embedded Workbench[®] for Arm

Use this guide as a guideline when converting project files from TrueSTUDIO and source code written for TrueSTUDIO for Arm to IAR Embedded Workbench for Arm.

	Product	Version number
Migrating from	TrueSTUDIO	V 5.4.0 and newer
Migrating to	IAR Embedded Workbench for Arm	V 8.10 and newer

Migration overview

Migration of an existing project from TrueSTUDIO requires that you collect information about your current project and then apply this information to the new IAR Embedded Workbench project. In addition, you need to make some changes in the actual source code. The information in this guide simplifies this process.

Note: A basic introduction to IAR Embedded Workbench and how to work in the IDE can be found in the *IDE Project Management and Building Guide for Arm* available in the Information Center and on the **Help** menu.

Project conversion

To migrate existing TrueSTUDIO applications to IAR Embedded Workbench there is a tool called **IAR Project Converter**. This is a GUI application included with IAR Embedded Workbench, available via the **Tools** menu.

The **IAR Project Converter** tool converts TrueSTUDIO project files into IAR Embedded Workbench project files without changing the original files. Information about source files, include paths, defined symbols, and build configuration is transferred. As an additional option, source code substitutions are performed and you can add your own substitution rules, including support for regular expressions.

Procedure

- 1. Start IAR Embedded Workbench.
- 2. Choose Tools>IAR Project Converter.
- Navigate to the top of the TrueSTUDIO project directory structure to convert (not necessarily the directory containing the project file) by clicking the browse button.
- 4. Choose **TrueSTUDIO for Arm** as the project type.
- Click the Execute button and a new IAR Embedded Workbench project file will be created.
- 6. Open the new workspace by choosing **File>Open>Workspace**.
- Set the relevant project options by choosing Project>Options.

Hint: Open the original project in TrueSTUDIO, walk through the options and set the corresponding options in IAR Embedded Workbench as suggested in the section *Important tool settings* below.

IAR Project Converter - 4.0.2	×
Root directory of source project	
C:\Example\TrueSTUDIO	
Project file conversion	
Project type TrueSTUDIO for Arm	
File extension(s)	
*.project	
Source code substitution	
□ Enable @ □ Tag changed code with comments	
Substitution rules (the rules will be applied as ordered in the list)	
Nr From To	Add
	Сору
A	Edi <u>t</u>
T	Remove
	Import
	Export
Perform substitutions on file(s) with extension(s)	,
.c;.cpp;*.h;*.hpp;*.asm;*.s	
Execute	Close

Important tool settings

The converter does not transfer all options. You might need to go through some settings manually. One important setting is to select your device. For a hint on which device to choose, see the **Report** window that is shown after the conversion.

IAR Embedded Work	kbench
Project Options	
Options for node "Example"	×
Category: General Options Static Analysis Runtime Checking C/C++ Compiler Assembler Output Converter Custom Build Build Actions Linker Debugger Simulator CADI CMSIS DAP GOB Server I-jet/JTAGjet J-Link/D-Trace TI Stellaris Nu-Link PE micro ST-LINK Thrid-Party Driver TI MSP-FET TI XDS	Library Options 2 MISRA-C:2004 MISRA-C:1998 Target Output Library Configuration Library Options 1 Processor variant Ogre Device None CMSIS-Back None Endian mode Ploating point settings Big BE32 BE32 BE32 OLSP Extension TrustZone DK Cancel

Source code migration

C source files that use compiler-specific extensions (like startup code) and assembler source files need to be reviewed and migrated manually. Device-specific startup files are in many cases included in the example projects provided with IAR Embedded Workbench.

Building your project

After successfully converting the TrueSTUDIO project and considering the basic code differences, you will still most likely need to fine-tune parts of the source code so that it follows the IAR Embedded Workbench syntax.

- 1. Select your device under **Project>Options>General Options**.
- 2. Choose **Project>Make**.
- 3. To find the errors/warnings, press **F4** (Next Error/Tag).
- This will bring you to the location in the source code that generated this error/warning.
- 4. For each error/warning, modify the source code to match the IAR Embedded Workbench syntax. Note: You might have to consult the *IAR C/C++ Development Guide for Arm* for this step.
- 5. After correcting one or more errors/warnings, repeat the procedure.

Note: It is always a good idea to start by correcting the first errors/warnings in different source files, because errors and warnings later in the source code might just be effects of incorrect syntax at the beginning of the source code.

IAR Systems, IAR Embedded Workbench, IAR Connect, C-SPY, C-RUN, C-STAT, IAR Visual State, visualSTATE, IAR KickStart Kit, I-jet, I-jet Trace, I-scope, IAR Academy, IAR, and the logotype of IAR Systems are trademarks or registered trademarks owned by IAR Systems AB.

All information is subject to change without notice. IAR Systems assumes no responsibility for errors and shall not be liable for any damage or expenses.

© 2018 IAR Systems AB. Part number: EWARM_MigratingFromTrueSTUDIO-1. First edition: January 2018