Migration guide



Migrating from Keil µVision® for ARM to IAR Embedded Workbench® for ARM

Use this guide as a guideline when converting project files from the μ Vision IDE and source code written for Keil toolchains for ARM to IAR Embedded Workbench for ARM.

	Product	Version number
Migrating from	Keil µVision IDE	V5.x
Migrating to	IAR Embedded Workbench for ARM	V7.60 and newer

Migration overview

Migration of an existing project from Keil μ Vision 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 guide <u>Getting Started with IAR Embedded Workbench</u> available in the Information Center and in the tutorials.



Project conversion

To migrate existing Keil μ Vision applications to IAR Embedded Workbench there is a tool called **Convert To IAR**. This is a GUI application included with IAR Embedded Workbench, available via the **Tools** menu.

The **Convert To IAR** tool converts μ Vision 5 project files into IAR Embedded Workbench project files without changing the original file. 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. There are a number of predefined substitution rules.

Procedure

- 1. Start IAR Embedded Workbench.
- 2. Choose Tools>Project Converter.
- 3. Navigate to the μVision project to convert by clicking the browse button.
- 4. Choose **Keil uVision5 for ARM** as the project type.
- Click the Execute button and a new IAR Embedded Workbench project file will be created.
- 6. Add the new workspace by choosing **File>Open>Workspace**.
- 7. Set the relevant project options by choosing **Project>Options**.

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

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Root directory of source pr	oject		
C:\keil\examples			
Project file conversion			
🔽 Enable 😢			
Project type			
Kell UVISIONS for ARM		•	
File extension(s)			
*.uvprojx			
Source code substitution			
Enable 🕡			
Substitution rules (the r	ules will be applied as ord	lered in the list)	
Nr From	-		
	10		Add
	10		Add Copy
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	10		Add Copy Edi <u>t</u>
	10		Add Copy Edi <u>t</u> Remove
	10		Add Copy Edi <u>t</u> Remove Import
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Perform substitutions o *.c;*.cpp;*.h;*.hpp;*	n file(s) with extension(s, *.asm;*.s	▼ Execute	Add Copy Edit Remove Import Export

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.



Building your project

After successfully converting the Keil µVision 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 <u>IAR C/C++ Development Guide</u> 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.

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