

Abstract

This application note describes how to update ARM compilation tools without updating MDK-ARM.

Contents

Abstract.....	1
Directory structure.....	1
Obtain new ARM Compilation Tools.....	1
Configuration (prior MDK-ARM V5.12).....	2
Configuration (MDK-ARM V5.12 and newer).....	4
Revision History.....	5

Directory structure

Assuming the default directory layout, the ARM compilation tools are installed in **C:\Keil_V5\ARM\ARMCC**, which contains the sub-folders and executables listed in the table below.

Sub-Folder	Description
\bin	Contains ARM Compilation Tools binaries: <ul style="list-style-type: none">- armar.exe – Librarian Manager- armasm.exe – Assembler- armcc.exe – C\C++ Compiler (Version 5)- armclang.exe – C\C++ Compiler (Version 6)- armlink.exe – Linker- fromelf.exe – Image Converter
\include	C and C++ library header files
\lib	ARM Standard C and C++ library files and the Microlib library files
\sw	License mapping definition files

Obtain new ARM Compilation Tools

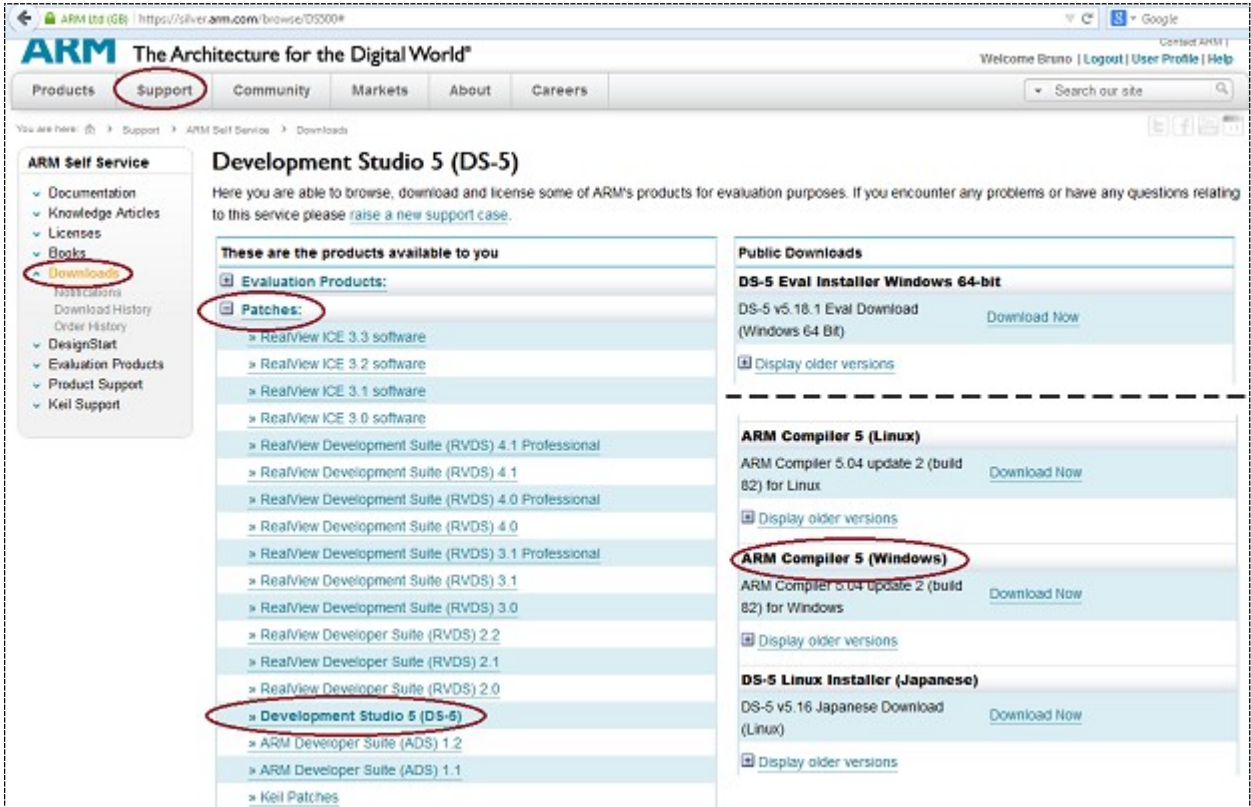
New ARM compilation tools can be obtained from different resources:

- **ARM Self Service Portal**

ARM compilation tools can be downloaded in a stand-alone installer. Go to <https://silver.arm.com/browse/DS500> and download the **ARM Compiler (Windows)** package.

Note: You need to register to access the download area.

On the web page: Click on **Support – Downloads – (expand) Patches – Development Studio 5 (DS-5)**. In **Public Downloads** (right side) scroll down and find **ARM Compile x (Windows)**.



Extract the downloaded ZIP file to a temporary directory and run the **setup.exe** located in the **Installer** folder. Follow the instructions and when prompted for a destination directory enter `<Keil_Installation_Path>\ARM\ARMCC_XX\` where **XX** is the version and build number, and `<Keil_Installation_Path>` is `C:\Keil_V5\` by default. For example `C:\Keil_V5\ARM\ARMCC_504_b49`.

Note: The new compilation tools must be installed in a sub-folder of `<Keil_Installation_Path>\ARM`

Configuration (prior MDK-ARM V5.12)

µVision must be configured to point to the new compilation tools.

- **Configure µVision IDE**

µVision maintains the path to the compilation tools in the `TOOLS.INI` file located in the `<Keil_Installation_Path>` folder. Open `TOOLS.INI` with a text editor and find the `[ARMADS]` section.

The entry `PATH1` points relatively to the compilation tool `\bin\` folder. `PATH1` needs to be changed to point to the new directory. For example: `.\ARMCC_504_b49\bin\`

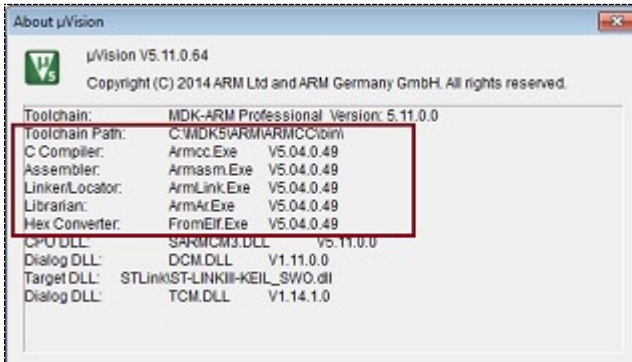
Make your changes and save `TOOLS.INI`. The new entry might look like the snippet below:

```

...
[ARMADS]
...
PATH1=".\ARMCC_504_b49\bin\"
...

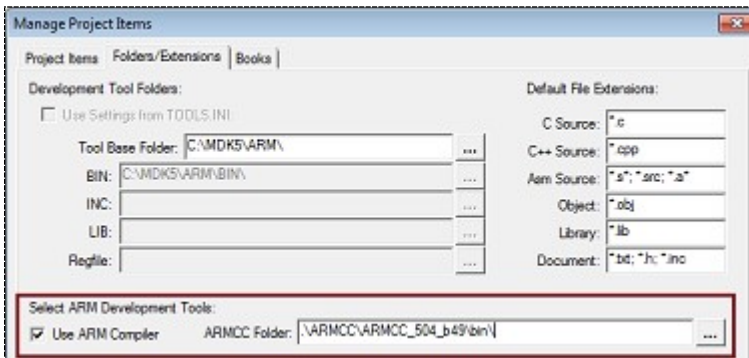
```

Open μ Vision and make sure an ARM project is loaded. Check the compilation tool version with the menu **Help - About μ Vision**. The dialog should show the new version, for example:



- **Alternative configuration**

It is also possible to change the path to the ARM Development Tools binaries via the μ Vision dialog field **Project - Manage - Components, Environment, Books... Folder/Extensions tab - ARMCC Folder**. Here you can enter the path <Keil_Installation_Path>\ARM\ARMCC_504_b49\bin\ to point to the new binary directory of the new version.



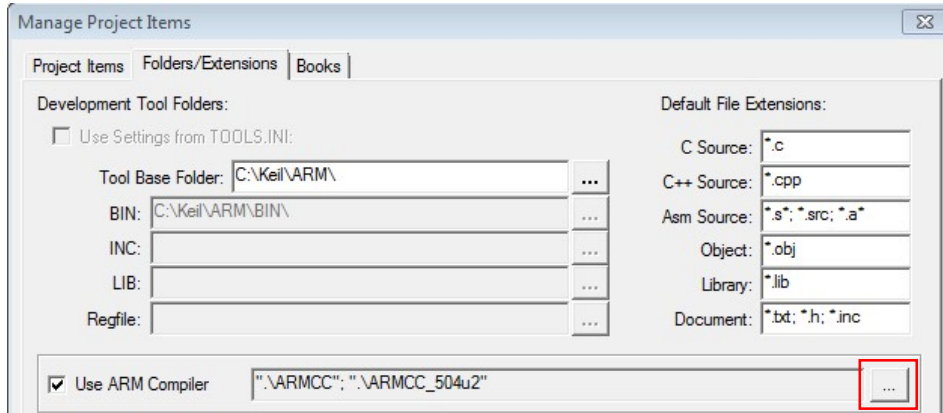
Note: This works only if an ARM project is currently opened in μ Vision.

Configuration (MDK-ARM V5.12 and newer)

The new compilation tools must be registered in μ Vision.

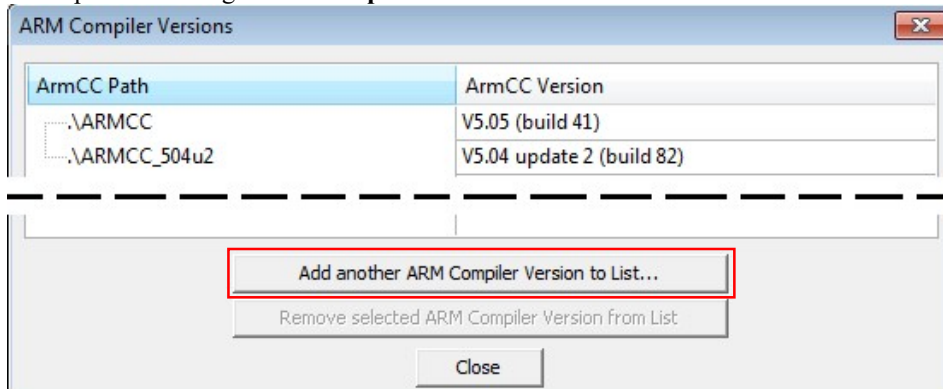
- **Configure μ Vision IDE**

Open the μ Vision dialog **Project - Manage – Project Items, Folder/Extensions** tab.



Click the browse button to add the version of an installed ARM Compilation Tools.

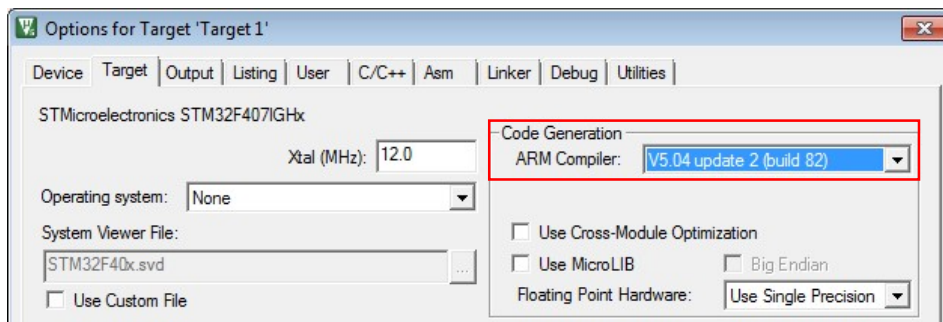
This opens the dialog **ARM Compiler Versions**.



Click **Add another ARM Compiler Version to List...** and select the folder where you installed the compilation tools.

Click **Close** to finish adding compilation tools.

Now you can select the compilation tools version for your project in the dialog **Project – Options for Target – Target**.



Revision History

- July 2014: Initial Version
- November 2014: Update description to reflect changes in MDK V5.12
- May 2018: Released V1.1 for MDK V5.12 and later.