

Q&A Session of the CMSIS Overview Webinar

Q: Is there any experience using CMSIS components in Rust environments?

A: Some have been used by the Rust community. Arm has not explored Rust in detail. CMSIS v6 fully supports LLVM which is also used in Rust – so the common ground is laid out. Depending on the usage of Rust in IoT devices, we might investigate further.

Q: Where do I find more information about the breaking changes in CMSIS v6?

A: We maintain a list of breaking changes at the end of this web page: https://arm-software.github.io/CMSIS_6/main/Core/core_revisionHistory.html

Q: What do I need to do if I maintain a device family pack and want to support CMSIS v6?

A: Please check the learning path that talks about pack migration: <https://learn.arm.com/learning-paths/microcontrollers/pack-migration-cmsis-v6/>

Q: When will CMSIS v6 be rolled out to STM32ubeMX?

A: Please check with STMicroelectronics.

Q: Can I upgrade the CMSIS-Packs with other tools/IDEs than μ Vision?

A: The CMSIS-Toolbox contains the `cpackget` command-line tool that you can use to update CMSIS-Packs. Other IDEs (such as IAR EWARM) might have their own package management service.

Q: If I encounter problems during project migration, where can I find help?

A: Please check the learning path that talks about project migration: <https://learn.arm.com/learning-paths/microcontrollers/project-migration-cmsis-v6/>

Q: What are your plans to add C++ APIs to CMSIS?

A: C++ interfaces have typically compiler dependencies and are therefore not portable at object level. The CMSIS project that supports today Arm Compiler, GCC, IAR, and LLVM. Adding a C++ API has therefore some complexity, but you may propose some clever interfaces on GitHub – we always welcome innovative contributions that scale to the different use cases of CMSIS.

Q: Some of my projects still use CMSIS-RTOS version 1. Is there a way to use CMSIS v6 as the RTOS version 1 has been removed?

A: CMSIS-RTOS2 was introduced 7 years ago and by now it is rarely used. To use RTX5 you may manually add this compatibility header file to your project:

https://github.com/ARM-software/CMSIS_5/tree/develop/CMSIS/RTOS2/RTX/Include1/cmsis_os.h