nRF52 Instructions

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#### SISÄLLYS

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# PREREQUISITE

Follow the installation instructions found [here](https://developer.nordicsemi.com/nRF_Connect_SDK/doc/2.4.2/nrf/getting_started/assistant.html) (1) to install nRF Connect SDK and Visual Studio Code (VS Code) extension pack for the SDK.

## Setting SDK in VS Code

To set the SKD in VS Code, go to the side panel and choose the nRF extension tab.

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In the extension tab click on “Manage toolchains” in the “Welcome” section.

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Click “Set Active Toolchain” and on the next page select a toolchain or browse for toolchain location.

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Next click on “Manage SDKs”.

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Then click “Set Active SDK” and choose an SDK from the given list.

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# BUILDING WITH VS CODE

This section will go over how to create a new project or use an existing project, how to add build configuration and how to build and flash the project.

## Adding a new project

To add a new project in VS Code, go to the side panel and choose the nRF extension tab.

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In the extension tab select “Create a new application”.

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Then you can select either to create a blank application or use a sample.

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After this you will be asked to select a save location for the application. Once you have chosen a location for the application you will be asked to give the application a name. The application will then be created in a folder in the selected location with the name you provided.

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You will then be notified that the application was created and asked if you would like to open the application, select “Open” or “Open in New Window” to continue.

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## Adding an existing project

If you already have an existing project, for example cloned from GitHub or you did not open it in the last step you can open it manually by selecting “Open an existing application”.

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Once you click on “Open an existing application” you will have to navigate to the project root folder, this folder should have folder called “src” and at least two files called “CMakeLists.txt” and “prj.conf”. If the file endings are hidden you won’t see the “.txt” and “.conf” endings.

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## Creating a build configuration

Once you have project open you should see the application name in the applications list in the nRF Connect extension tab

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You can now create the first build configuration either by clicking on the “Create new build configuration” or hovering over the application name and selecting the icon for adding a new build configuration . Selecting either one should bring up a new main view with the following content. The “Board” field should be empty if you have never created a build configuration before.

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Select the board you are developing for (in this case it will be nrf52840dk\_nrf52840 for the nRF52840 development kit) in the board list and change the build directory name if needed. We will leave everything else as default. If you want, you can hover over the question marks to get information on the other fields and edit them for your needs. You can then click on “Build Configuration”.

## Building and flashing the project

Now that the project has been created and it has a build configuration we can build and flash the project to a development kit. You should see three new sections now in the nRF Connect extension tab.

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And the application should now have a build folder in the application section. If the above three sections won’t show you may need to click on the build folder to set it as the active build configuration.

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To build the application without flashing it click on build in the actions section.

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Clicking on flash will check if the application needs to be rebuilt and then flash it to a connected development kit.

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# REFERENCES

1. Nordic Semiconductor 2023. nRF Connect SDK. Installing automatically. Search date 18.10.2023. <https://developer.nordicsemi.com/nRF_Connect_SDK/doc/2.4.2/nrf/getting_started/assistant.html>.