

# BMW FSC Certificate Extraction Guide

## Technical Documentation

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## Introduction

This guide provides detailed instructions for extracting the FSC (Freischaltcode or Activation Code) certificate from BMW NBT (Next Big Thing), NBT EVO, and CIC (Car Information Computer) systems. The FSC certificate is essential for various coding tasks, including map updates and feature activation. This guide covers the steps for NBT, NBT EVO, and CIC systems using the E-sys software. Different methods are outlined for F-chassis and E-chassis vehicles to ensure compatibility and accuracy in the extraction process.

## Instructions

### Preparing for FSC Extraction

Before beginning the FSC extraction process, ensure you have the following:

- E-sys software installed on your computer.
- A connection to your BMW vehicle using an appropriate OBD cable.
- Your vehicle's VIN (Vehicle Identification Number).

### Extracting the DE or 1B File

Follow the steps below to extract the necessary files using E-sys.

### General Steps

1. Start E-sys:
  - Launch the E-sys software.
  - Ensure you are connected to the F20 (not F20\_Direct) via your VIN.
  - Select FSC Extended from the left-hand vertical menu.

### For NBT (DE File)

1. In the Parameter Section, enter:
  - Diagnostic Address (hex): `0x63`
  - Click on the Identify button to populate the Base variant with `HU\_NBT`.

- Application ID for NBT: `0xDE`
- Upgrade Index: `0x1`

### For NBT EVO (DE File)

1. In the Parameter Section, enter:
  - Diagnostic Address (hex): `0x63`
  - Click on the Identify button to populate the Base variant with `HU\_NBT`.
  - Application ID for NBT EVO: `0xF0`
  - Upgrade Index: `0x1`

### For CIC (1B File) - F-chassis

1. In the Parameter Section, enter:
  - Diagnostic Address (hex): `0x63`
  - Click on the Identify button to populate the Base variant with `HU\_CIC`.
  - Application ID for CIC: `0x1B`
  - Upgrade Index: `0x1`
  - Note: This method is applicable only for F-chassis BMW models.

### For CIC (1B File) - E-chassis

1. Prepare a FAT32 formatted USB drive:
  - Format a USB drive to FAT32.
  - Download the `copie\_scr.sh` script from [https://git.davidpetric.com/almostm4/BMW\\_coding/src/branch/main/tools/copie\\_scr.sh](https://git.davidpetric.com/almostm4/BMW_coding/src/branch/main/tools/copie_scr.sh) and place it on the formatted USB drive.
2. Extracting the FSC file:
  - Plug the USB drive into the glovebox USB port while the car is turned on.
  - Wait 30 seconds, then remove the USB drive.
  - The 1B file should be on the USB drive.

### In the Action Section

1. Select Store FSC and move from left to right.
2. Click on the Read button.
3. Click Save and name the file in the format `XXXXXXX.fsc`, where `XXXXXXX` is the last seven letters/numbers of your VIN or your donor NBT VIN if you have retrofitted the NBT.
4. [Optional] You can now disconnect E-sys from your car as the next stages can be performed offline.

### Conclusion

Following these instructions will allow you to extract the necessary DE or 1B files for generating BMW maps and other coding tasks. Ensure you follow the correct steps for your specific BMW model and map type to avoid any issues during the extraction process.