



Exercise Requirements

- What are the actions done by EcuM in the preOS sequence ?

Exercise – preOS sequence



1. “Callout EcuM_AL_SetProgrammableInterrupts” which is asynchronous API , so If the configuration parameter EcuMSetProgrammableInterrupts is set to true, this callout EcuM_AL_SetProgrammableInterrupts is executed and shall set the interrupts on ECUs with programmable interrupts. “EcuMSetProgrammableInterrupts has a multiplicity of 0 or 1 ”.
2. “Callout EcuM_AL_DriverInitZero ” , to initialize the “DET & DEM” Modules firstly and then initialize any other drivers that need post build configuration “pre OS”.
3. “Callout EcuM_DeterminePbConfiguration” which is synchronous , to evaluate some conditions to determine which post-build configuration shall be used in the remainder of the startup process.
4. “Check consistency of configuration data” synchronously , to make sure that all the configuration parameters “ link time parameters – pre compile parameters – post build parameters ” are consistent with each other to obtain a stable ECU, If check fails the “EcuM_ErrorHook” is called.
5. “Callout EcuM_AL_DriverInitOne ” which is synchronous , to provide driver initialization and other hardware-related startup activities in case of a power on reset.

Exercise – preOS sequence



6. Get reset reason by calling “Mcu_GetResetReason”, which reads the reset type from the hardware, if supported which mapped to the EcuMWakeupSource configuration containers and return it back.
7. Select default shutdown target , The ECU Manager module shall call “EcuM_GetValidatedWakeupEvents” with the configured default shutdown target
8. “Callout EcuM_LoopDetection” which is synchronous , If Loop Detection is enabled, this callout is called on every startup.
9. Start OS, shall initialize all basic software modules that are needed to start the OS



Exercise Requirements

- What are the actions done by EcuM during OffPreOS ?

Exercise – preOS sequence



1. “Callout EcuM_OnGoOffTwo” which is synchronous API ,that allows the system designer to notify that the GO OFF II state is about to be entered.
2. “Callout EcuM_AL_Reset or Callout EcuM_AL_SwitchOff”, Depends on the selected shutdown target (RESET or OFF)