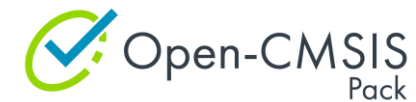


# Open-CMSIS-Pack

Technical Project Meeting 2021-12-07

This meeting is recorded !



# Agenda

- Activities from last two weeks
- Progress on Project Manager
- Progress on Complex Reference Software
- Progress on `cpackget`
- Blog Post
- Wrap Up – decide next meeting

## Activities from last two weeks

- New issues:
  - CMSIS-Pack conditions:
    - CMSIS-pack conditions : is the spec clear enough ? ([#56](#))
    - only 1 condition per component ? ([#57](#))
  - CMSIS-Pack file attribute “copy” not documented ([#58](#))
  - Common message format for error/warning/info ([#59](#))
  - CMSIS-Pack spec : more hyperlinks ([#61](#))

# Project Manager (projmgr) – Progress (Daniel)

## Implemented features:

- Automatic implicit context generation by combining projects, build-types and target-types
- for-type and not-for-type handling (include/exclude components/groups/files mechanism)
- defines, undefines, add-paths and del-paths at solution/project level
- Enhanced component selection considering the “defaultVariant” attribute
- Extended YAML parser validation and reworked errors/warnings

## Suggestion:

- Add a degree of freedom to (build)-types to handle a wider number of variable combinations

## Open question:

- What's the best way to describe project interdependencies?

## Latest binaries:

<https://github.com/brondani/devtools/tree/mvp-prototype/tools/projmgr/bin>

```
types:
- type: target
  options:
- option: CM0           # Generated permutations:
  | device: ARMCM0      # CM0 BE Release
- option: CM3           # CM0 BE Debug
  | device: ARMCM3      # CM0 LE Release
- type: endianess      # CM0 LE Debug
  options:              # CM3 BE Release
- option: BE            # CM3 BE Debug
- option: LE            # CM3 LE Release
- type: config         # CM3 LE Debug
  options:
- option: Release
- option: Debug
```

## Complex Reference Software

- ST (Frederic) worked on a private repository
  - Existing ST software stack described as CMSIS-Packs
  - MDK projects for 3 contexts for each of the two boards

=> Status: Successful build + execution validated on one board
- Arm (Daniel) works on reproducing these builds
  - Mapping workspace of projects to the new yml format
  - Using 'projmgr' to generate cprj files and CMSIS-Build to build the images
- Gap analysis: (ongoing)
  - Pre- / Postbuild commands including:
    - File reference into Pack directory
    - File references across projects

## Progress on 'cpackget' (Charles)

- Major changes:

Separation of concern between cpackget and cbuildgen:

- 'cpackget' determines the url for download a pack version
  - Based on packID, index.pidx, latest pdsc file and local packs
- 'cbuildgen' is only concerned with installed packs

Replace 'cp\_init.sh'

- `$cpackget index <url>`
- Demo
- Digital Signatures for CMSIS-Packs

## Blog Post – Open-CMSIS-Pack

- [Open+CMSIS+Pack+Blog+Post+Dec+2021](#)
- 6 months into the project ...
- Please review and provide your feedback in case you have any comments or objections
- Publishing is targeted for this Thursday December 9th 2021

# Wrap Up

- Action all:
  - suggest agenda points ahead of the next meeting
- Proposal: X-mas / New Year break
  - First meeting in 2022 on Tuesday 11.01.2022
  - No meetings on 21.12., 28.12., 04.01.2022
- Next Open-CMSIS-Pack meeting: 14th Dec. 2021 @ 16:00 CET (15:00 UK)



Thank you

