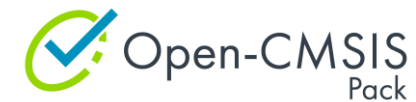


Open-CMSIS-Pack

Technical Project Meeting 2021-08-17

This meeting is recorded !



Agenda

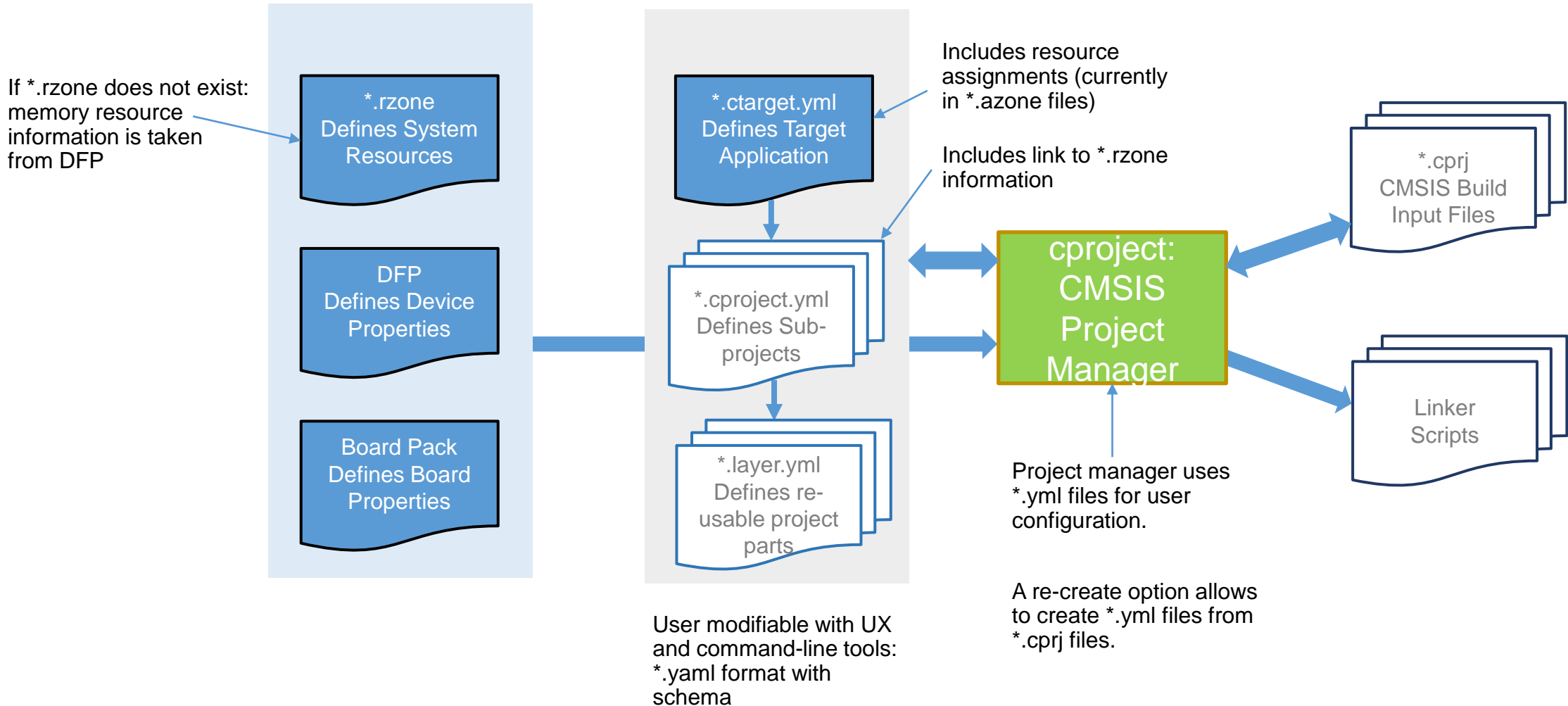
- Welcome and review of the agenda
- Tools that will be published
- Tool Flow for Project Generation
- Generator components
- Wrap Up

Open-CMSIS-Pack: Tools that will be published

| Tool | Description | Repository | Language | Status |
|----------------------------------|---|---|----------|---------------|
| vidx2pidx | Pack infrastructure: generate flat package index file from vendor package description files | Open-CMSIS-Pack/vidx2pidx | GO | done |
| cpackget | Pack installer: Download, Install, Uninstall packs | Open-CMSIS-Pack/cpackget | GO | in progress |
| <u>cbuildgen</u> | Build manager: reads CMSIS project file and creates CMakeLists.txt | Open-CMSIS-Pack/cli/tools/buildmgr | C++ | e/o Aug. 2021 |
| data model + libs | CMSIS-Pack data model and helper libraries | Open-CMSIS-Pack/cli/libs/ rtemodel, rteutils, rtefsutils xmltree, xmltreeslim, xmlreader crossplatform, errlog | C++ | e/o Aug. 2021 |
| packgen | assists in the generation of CMSIS-Pack from CMakeLists | Open-CMSIS-Pack/cli/tools/packgen | C++ | e/o Aug. 2021 |
| packchk | CMSIS-Pack validation utility | Open-CMSIS-Pack/cli/tools/packchk | C++ | Sep. 2021 |
| cproject | Project manager: creates, reads and modifies CMSIS project files manipulating board, device, build options, files and components. | Open-CMSIS-Pack/cli/tools/cproject | C++ | Q4 2021 |
| svdconv | System Viewer Description validation and device header generation utility | Open-CMSIS-Pack/cli/tools/svdconv | C++ | TBD |

[github/open-cmsis-pack/open-cmsis-pack/issues](https://github.com/open-cmsis-pack/open-cmsis-pack/issues)

cproject: Tool Flow for Project Generation (#12)

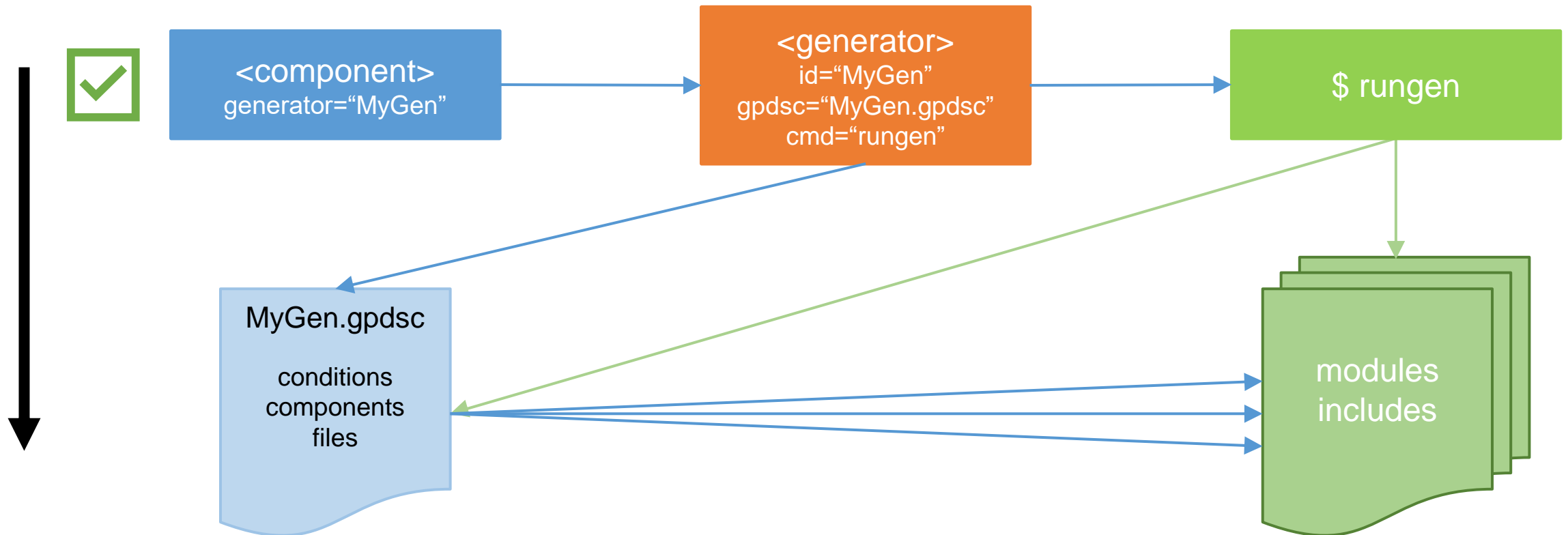


CMSIS-Pack Generator Component ([#20](#))

- [Specification](#) (CMSIS_5)
- CMSIS-Pack component consists of:
 - read-only files located in the pack
 - application specific configuration files copied into the project
 - editable by developer
- A 'generator' is a tool that creates and configures files in the project space
 - information passed to generator via command line
 - generated files are included into project via *.gpdsc file
- <component> links to <generator> specifying a command which generates the specified **gpdsc**

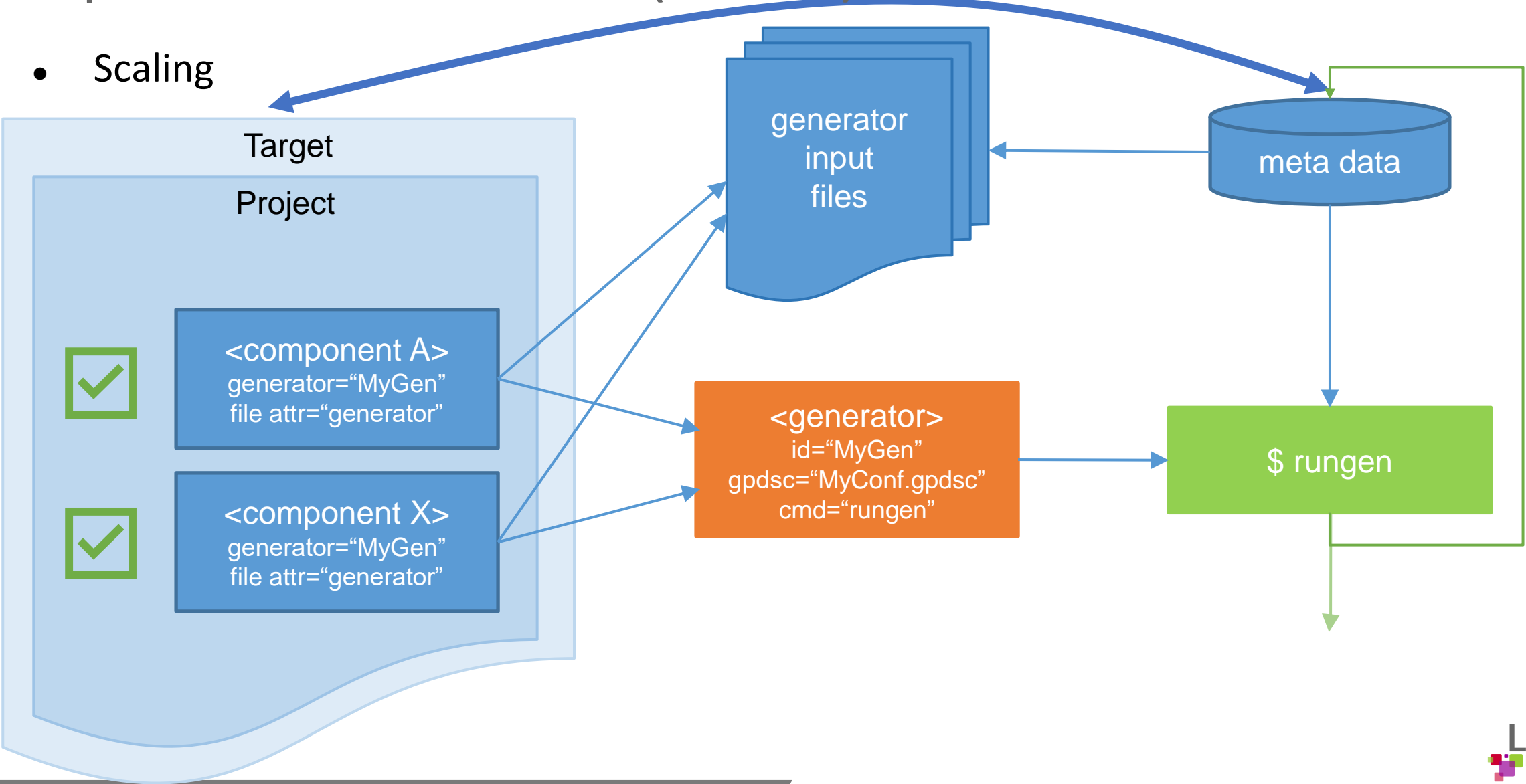
CMSIS-Pack Generator (cont'd)

- Dependency/Processing chain



Dependent Generators (cont'd)

- Scaling



Wrap Up

[Issue Overview](#)

Next week: please make suggestions to the agenda

August:

- [How to cover a "corner case": expressing dependencies on features #5](#)
- Introduction to cpackget utility (Charles, Linaro)
- Introduction to Arm contributed tools & libs (cbuildgen, packgen, rtemodel, etc.)
- Kick-off development for project creation and maintenance MVP [CMSIS-12](#)

September:

- Protecting CMSIS-Pack content from malicious tempering (TBD)

Next Meeting: Tuesday Aug. 24th 2021, 15:00 – 16:00 (UK)

Thank you

