# 2021-6-15 Meeting notes

## Date

15 Jun 2021, 10:00 AM EST (US)

# Participants

@ Vicky Moschou Scott Imlay @ David Gutzwiller @ Simone Crippa @ Tobias Leicht @ Gregory Sjaardema @ David Gutzwiller @ Stephen Guzik @ Simone Crippa @ dmitry.s.kamenetskiy @ Thomas Hauser @ Tony Garratt @ Patrick Baker @ Earl P Duque @ ZJ Wang @ Christopher Rumsey @ Matthias Möller 🌟 @ Pierre-Jacques Legay 🌟 Kamenetskiy, Dmitry S @ Mickael PHILIT

n attendance

# Steering Committee Issues

## Discussion topics

Item	Presenter	Notes
Approve 2021/3 /2 minutes.	@ Scot Breitenfeld	post last meeting's minutes to CGNS webpage.
		Approved

Proposed Data integration Points

CPEX #0047

@ Mickael PHILIT

Please find attached a new CGNS proposal to extend GridLocation possibilities. Current CGNS features do not allow to store Solution data at Integration Points when using Finite Element Methods. This topic is quite important for CSM (Computational Structural Mechanics) and FSI (Fluid-Structure Interaction).

Feel free to join this initiative as the CPEX is still a work in progress.

Any feedback is very welcomed to improve the proposal, especially on the MLL and HDF5 mapping parts.



Feedback from Tobias Leicht (DLR) and Berenger Berthoul (ONERA) taken into account. Very small modification listed at the end of version 2. This last version is ready for voting (without MLL API).



Passed CPEX #0047

high-level editing tools for the documentation page

@ Marc Poinot@ Christopher Rumsey

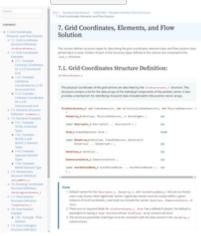
Help needed to divide the remaining tasks:

https://github.com/CGNS/cgns.github.io/projects/1

Raw html is not an ideal format to maintain documentation; the latex version seemed easier. It was mentioned to maybe go back to using latex, but the latex version is now out of date compared to the html version. Some committee members were uncertain whether the latex format was the right way to go when compared to other documentation methods (Markdown, Readthedocs, etc...). Either way, it will involve some effort to move from the HTML versions.

There is a support page with the commands and syntaxes for documentation edition /generation: https://poinot.github.io/cgns-test.github.io/governance/support.html

Suggest looking into using Doxygen, @ Marc Poinot suggest a separate meeting to discuss.



#### Update from @ Marc Poinot : Archive all emails (I can take the action and put them back in new doc site) New doc site, progress have been made (thanks Mickael) to have a syntax highlight on CGNS/SIDS data model syntax, not pushed yet The new doc probably won't progress until next year, I put the effort on the way to write the doc and generate it first Last update: New doc is on a personal web site. You can produce the doc on your own host, the generated html pages are self-contained, open the web browser on local file system. Exception is for example files, papers (pdf and co) and all other files. In that case please contact me or Mickael, the way to do is not explained yet in the support pages. Doc editor support (how to write the doc, how to produce it to have beautiful pages):https://p oinot.github.io/cgns-test.github.io/governance/support.html#support If you need some support for sphinx and its plugins, please contact me. The remaining work to achieve migration includes: · Quick start guide https://poinot.github.io/cgns-test.github.io/general/start. html#quickstartguide (heavy) • Update external links to papers, slides... https://poinot.github.io/cgns-test.github.io/doc. html#docmap (light) Find and merge governance and history pages: (medium) https://poinot.github.io/cgns-test.github.io/governance/committee. html#yemightysteeringcommittee • b. https://poinot.github.io/cgns-test.github.io/general/what.html#whatiscgns • c. https://poinot.github.io/cgns-test.github.io/general/history. html#historyandstatus • d. Others... Update and/or clean: https://poinot.github.io/cgns-test.github.io/current/contributed. html#contributed (light) What to do with: https://poinot.github.io/cgns-test.github.io/doc/userguide. html#docuserguide (light) Update CGNS/Python (Marc will do) Check CGNS/FMM (light) Update CGNS/MLL (heavy) Check CGNS/SIDS \*\*all text there, all figures should be there too\*\* a. Add intro https://poinot.github.io/cgns-test.github.io/standard/SIDS/intro.html (light) • b. Add cross-links, indexes (heavy) • c. Check (light) Extend and glossary https://poinot.github.io/cgns-test.github.io/general/glossary. html#cgnsglossary (light) Add index (heavy) Invitation to help with MLL functions. It concerns the <u>assumption</u> of the different vendor softwares that elements that belong to the **Discussion Topic** @ Vicky Moschou same Zone\_BC must be grouped under one Elements\_t node, and this is why the Zone\_BC node is ignored in many cases. We are dealing with issue over and over again. As you can understand, this really hurts the portability of the file. · Lacks the resources to progress. Status of Future The current focus is on finishing and implementing CPEX 45. @ Koen Hillewaert **CPEX 0044** Tabling CPEX 0044 for now. https://cgnsorg. **NO UPDATES** atlassian.net /browse/CGNS-181 Status of @ Koen Hillewaert @ Koen Hillewaert prototype implementation working and interfaced in in-house code. Accepted CPEX 0045 @ Tobias Leicht is interested in testing it. Will be tested over the next few months via the https://cgnsorg. HiFiTurb project. Introduce an API by the end of the year. atlassian.net /browse/CGNS-WIII work with @ Scot Breitenfeld to merge into develop when it is ready. 182 **NO UPDATES**

Status of Future CPEX 0046 https://cgnsorg. atlassian.net /browse/CGNS- 183	@ Thomas Hauser	@ Thomas Hauser will set-up another meeting in Sept.  NO UPDATES
prioritization, review and attribution of JIRA bugs/issues	@ Tony Garratt @ David Gutzwiller	Next release 4.3.0, Kanban: https://cgnsorg.atlassian.net/secure/RapidBoard.jspa?rapidView=4&selectedIssue=CGNS-235 General Kanban Board: https://cgnsorg.atlassian.net/secure/RapidBoard.jspa? rapidView=3&projectKey=CGNS&selectedIssue=CGNS-190 ISSUE CARRIED OVER: Platform proposals Windows is under-tested. Suggest Test C and Fortran serial and parallel on Windows 10 x64 as a bare minimum Do we test both 32bit (legacy) and 64bit API? It's a minor point, but it would a good idea to add 32bit to at least one Linux and Windows  NEW (June 2021) We need to add Intel OneAPI compilers to the list of supported compilers (note: OneAPI C/C++ compiler is very different to existing legacy one) Bug list: https://cgnsorg.atlassian.net/browse/CGNS-176 A priority of bugs to fix in next release #1 https://cgnsorg.atlassian.net/browse/CGNS-135  Crucial to Ansys. Although most HPC is Linux, project set-up often was done on Windows and import/export/sharing of mesh/solution done on Windows, while most runs performed on Linux clusters #3 https://cgnsorg.atlassian.net/browse/CGNS-116  • important to have parallel working #4 https://cgnsorg.atlassian.net/browse/CGNS-166 #5 https://cgnsorg.atlassian.net/browse/CGNS-166 https://cgnsorg.atlassian.net/browse/CGNS-162 https://cgnsorg.atlassian.net/browse/CGNS-162 https://cgnsorg.atlassian.net/browse/CGNS-162 https://cgnsorg.atlassian.net/browse/CGNS-113

# Action items from last meetings

Description	Due date	Assignee	Task appears on
@ Scot Breitenfeld will enter a Jira issue to make the examples provided by CGNS to be updated to reflect the best practices (in terms of CGNS format description usage).	Scot Breitenfeld		2021-3-2 Meeting notes
© Scot Breitenfeld will enter a Jira issue to add to cgnscheck to not only validated the format, but also give a best practices analysis of the chosen CGNS format description and to suggest an alternative format if needed.		Scot Breitenfeld	2021-3-2 Meeting notes
		Scot Breitenfeld	2021-3-2 Meeting notes

© Scot Breitenfeld will enter a Jira issue to add to cgnsconvert the option to take the best practices suggestion from cgnscheck and convert the CGNS format description to that suggestion.		
@ Mickael PHILIT will create a Jira issue for remaining documentation tasks which need to be completed before switching to the new documentation so we can enlist others and to coordinate the effort.	Mickael PHILIT	2021-3-2 Meeting notes
@ Mickael PHILIT and higher-order developers (@ Tobias Leicht) @ Koen Hillewaert ) will meet to discussion the remaining issue between the CPEX0047 and higher-order methods.	Mickael PHILIT	2021-3-2 Meeting notes
SIDS structure is complete in the documentation prototype but the translation process is quite slow. Help requested.		2021-3-2 Meeting notes
@ Scot Breitenfeld or @ Christopher Rumsey should investigate if the cgns archive can be translated to forum posts or made available on cgns.org, which would make it viewable to web search engines.	Scot Breitenfeld	2021-3-2 Meeting notes
Scot Breitenfeld will update the copyright information on the webpage.	Scot Breitenfeld	2021-3-2 Meeting notes
@ Scot Breitenfeld Update documentation for intel compilers (KH)	Scot Breitenfeld	2021-3-2 Meeting notes
Thomas Hauser will organize a meeting before the next committee meeting; probably even this week.	Thomas Hauser	2021-3-2 Meeting notes
Suggest looking into using Doxygen, @ Marc Poinot suggest a separate meeting to discuss.	Marc Poinot	2021-3-2 Meeting notes
@ Scot Breitenfeld or @ Christopher Rumsey should investigate if the cgns archive can be translated to forum posts or made available on cgns.org, which would make it viewable to web search engines.	Scot Breitenfeld	2020-12-8 Meeting notes
@ Scot Breitenfeld will update the copyright information on the webpage.	Scot Breitenfeld	2020-12-8 Meeting notes
© Scot Breitenfeld will identify reviewers for the CPEX who will report before the next meeting, the CPEX is scheduled to be voted on at the next meeting. This effort should be coordinated with higher-order effort.	Scot Breitenfeld	2020-12-8 Meeting notes
Change test site to: https://poinot.github.io/cgns-test.github.io/		2020-12-8 Meeting notes
Tabling issue, we will look into alternatives if need arises.		2020-12-8 Meeting notes
@ Koen Hillewaert @ Marc Poinot @ ZJ Wang Karman – a decision on CAD classification	Koen Hillewaert	2020-12-8 Meeting notes
© Scot Breitenfeld Update documentation for intel compilers (KH)	Scot Breitenfeld	2020-12-8 Meeting notes
© Scot Breitenfeld contact © Marc Poinot to set-up documentation meeting.	Scot Breitenfeld	2020-12-8 Meeting notes

#### **Decisions**

# Page Title **Decisions** 2019-11-12 Meeting notes BETA-CAE was added to the steering committee The cgio\_read\* will be dropped in the next release of the CGNS library. 2021-6-15 Meeting notes Passed CPEX #0047 2020-12-8 Meeting notes Meeting notes Approved. Passed: move to Github discussions when it's out of beta and retire the use of lists.nasa.gov. The notice should be posted to cgnstalk before the transition to discussions. Passed: Release all cgns.org documentation into the public domain. 2021-3-2 Meeting notes Passed: move to Github discussions when it's out of beta and retire the use of lists.nasa.gov. The notice should be posted to cgnstalk before the transition to discussions. Passed: Release all cgns.org documentation into the public domain.

## **New Business**

Any new CGNS funding proposal opportunities? Nothing identified at the meeting.

# **NO UPDATES**

Schedule next meeting

07 Sep 2021, 10:00 AM EST (US)

Adjourn