2021-3-2 Meeting notes

Date

02 Mar 2021, 10:00 AM EST (US),

Participants

- @ Scot Breitenfeld
- @ Vicky Moschou
- Scott Imlay
- @ David Gutzwiller
- @ Simone Crippa
- @ Tobias Leicht
- @ Gregory Sjaardema
- @ David Gutzwiller
- @ Simone Crippa
- @ dmitry.s.kamenetskiy
- @ Thomas Hauser
- @ Tony Garratt
- @ Patrick Baker
- @ Earl P Duque
- @ ZJ Wang
- Kamenetskiy, Dmitry S
- @ Mickael PHILIT

Steering Committee Issues

☐

Discussion topics

Item	Presenter	Notes
Approve Dec 2020 minutes.	@ Scot Breitenfeld	☑ post last meeting's minutes to CGNS webpage. Approved

cgnstalk: Replacement	@ Scot Breitenfeld	**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.
		☐ @ 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. @ Christopher Rumsey bundled all CGNSTalk archives between 2000-2020 into one file, and posted them to the bottom of CGNS_docs_current/index.html
☐ Release all CGNS documentation at cgns. org into the public domain	@ Scot Breitenfeld	**Passed**: Release all cgns.org documentation into the public domain.
		☐ @ Scot Breitenfeld will update the copyright information on the webpage.

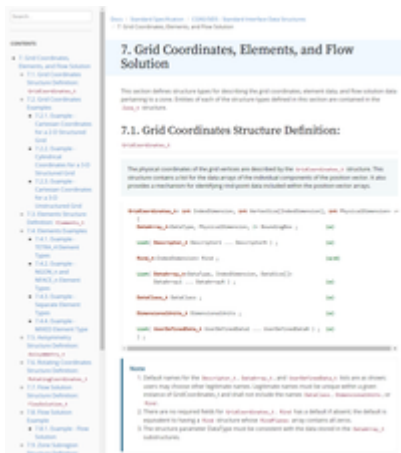|		
Proposed Data integration Points CPEX #0047	@ Mickael PHILIT	Please find attached a new CGNS proposal to extend GridLocation possibilities. Current CGNS features do not allow to store Solution data at Integration Points when using Finite Element Methods. This topic is quite important for CSM (Computational 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. CPEX_CGNS_SIDS_...tDefinition.pdf CPEX_CGNS_SIDS_...Definition.docx ☑ @ 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. 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). ☐ @ Mickael PHILIT and higher-order developers (@ Tobias Leicht @ Koen Hillewaert) will meet to discussion the remaining issue between the CPEX0047 and higher-order methods.

high-level editing tools for the documentation page	@ Marc Poinot @ Christopher Rumsey	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.

- ☑ @ Marc Poinot will look into the latex state of documentation and will look into alternatives to raw HTML.

- @ Marc Poinot has prototype w/ REST (used for the readthedocs web site). It supports equations and images and should, therefore be sufficient. It is implemented / available in dedicated branch (documentation_migration). Needs feedback before continuing
- action for all: check result and the actual rest code. Main concern: simplicity of edition - to be checked by all in the source in a dedicated branch

- ☑ @ Marc Poinot push last edits in prototype on the branch (the branch is https://github.com/CGNS/cgns.github.io/tree/doc-rest-migration/CGNS-ReST-site) and the new directory is CGNS-ReST-site

- ☐ Change the test site to https://poinot.github.io/cgns-test.github.io/

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

- ☐ SIDS structure is complete in the documentation prototype but the translation process is quite slow. Help requested.

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

- ☐ @ 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.

Discussion Topic	@ Vicky Moschou	It concerns the <u>assumption</u> of the different vendor softwares that elements that belong to the 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. ☑ @ Vicky Moschou will make the presentation available. CGNS_steering_c...resentation.pdf ☐ @ 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 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 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.
Status of Future CPEX 0044 https://cgnsorg.atlassian.net/browse/CGNS-181	@ Koen Hillewaert	The current focus is on finishing and implementing CPEX 45. Tabling CPEX 0044 for now. **NO UPDATES**
Status of Accepted CPEX 0045 https://cgnsorg.atlassian.net/browse/CGNS-182	@ Koen Hillewaert	@ Koen Hillewaert prototype implementation working and interfaced in in-house code. ☑ @ Koen Hillewaert make sure branch available for other testers @ Tobias Leicht is interested in testing it. Will be tested over the next few months via the HiFiTurb project. Introduce an API by the end of the year. WIll work with @ Scot Breitenfeld to merge into develop when it is ready. **NO UPDATES**

Status of Future CPEX 0046 https://cgnsorg.atlassian.net/browse/CGNS-183	@ Thomas Hauser	☐ @ Thomas Hauser will organize a meeting before the next committee meeting; probably even this week. @ Thomas Hauser will set-up another meeting in Sept. **NO UPDATES**
prioritization, review and attribution of JIRA bugs/issues	@ Tony Garratt @ David Gutzwiller	We would like to release 4.2 in the next month, we would like to be able to address https://cgnsorg.atlassian.net/browse/CGNS-220 for the release. All the other issues should be moved to the v4.3 release, those bugs that can be addressed in the next month can remain. Updated Kanban Board for release of v4.2 4.2 Kanban Board: https://cgnsorg.atlassian.net/secure/RapidBoard.jspa?rapidView=6&projectKey=CGNS General Kanban Board: https://cgnsorg.atlassian.net/secure/RapidBoard.jspa?rapidView=3&projectKey=CGNS&selectedIssue=CGNS-190 We should consider a bug-fix only (no new features) release of CGNS to address the outstanding bugs and documentation. **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 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 #2 https://cgnsorg.atlassian.net/browse/CGNS-141 #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-55 #6 https://cgnsorg.atlassian.net/browse/CGNS-55 https://cgnsorg.atlassian.net/browse/CGNS-38 https://cgnsorg.atlassian.net/browse/CGNS-162 https://cgnsorg.atlassian.net/browse/CGNS-113 https://cgnsorg.atlassian.net/browse/CGNS-147

Action items from last meetings

- ☑ @ Tony Garratt @ David Gutzwiller @ Scot Breitenfeld continue to review outstanding and prioritization of JIRA items/tasks

- ☐ @ Koen Hillewaert @ Marc Poinot @ ZJ Wang Karman – a decision on CAD classification

- ☐ @ Scot Breitenfeld Update documentation for intel compilers (KH)

- ☑ @ Koen Hillewaert @ ZJ Wang @ Matthias Möller organization of off-line meetings for finalizing https://cgnsorg.atlassian.net/browse/CGNS-181

Decisions

Page Title	Decisions
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.
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.
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.

New Business

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

NO UPDATES

Schedule next meeting

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

Adjourn