

2021-9-7 Meeting notes

Date

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

Participants

- @ Scot Breitenfeld ★
- @ Vicky Moschou ★
- Scott Imlay ★
- @ David Gutzwiller
- @ Simone Crippa
- @ Tobias Leicht
- @ Gregory Sjaardema
- @ David Gutzwiller
- @ Stephen Guzik ★
- @ 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


★ In attendance



Steering Committee Issues



Discussion topics

Item	Presenter	Notes
Approve 2021/6 /15 minutes.	@ Scot Breitenfeld	<input checked="" type="checkbox"/> post last meeting's minutes to CGNS webpage. Approved

<p>Add example of Using C CGNS functions from C++</p>	<p>@ Scot Breitenfeld</p>	<p>See Full discussion at https://github.com/CGNS/CGNS/discussions/278</p> <p>This is just an example of using C functions from C++. The wrapper will convert C++ to C. For instance instead of <code>char * std::string</code> is used. I am not using <code>cgnsccpp</code>. The example is a good starting point for using C++ and CGNS. I use https://conan.io to handle package management and CMake as the build system. I have tested the build on both Windows and Linux. It should work on MacOS. In my opinion <code>cgnsccpp</code> is an overkill.</p> <p>Looking for continued maintenance of project.</p> <p> Approved to include in the CGNS's example code.</p>
<p>CGNS compression update</p>	<p>@ Scot Breitenfeld</p>	<p>Beta implementation of compression with CGNS is in the branch hdf5_compression</p> <p>https://github.com/CGNS/CGNS/tree/hdf5_compression</p> <p>New APIs introduced for chunking and compression. Tests for both serial and parallel (zlib, szip, zfp), Fortran and C.</p> <p>Tools are untested, and documentation not yet added. Older version of CGNS will be able to read a compressed and chunked datasets since this is handled in the HDF5 layer.</p>
<p>high-level editing tools for the documentation page</p>	<p>@ Marc Poinot</p> <p>@ Christopher Rumsey</p>	<p>Help needed to divide the remaining tasks:</p> <p>https://github.com/CGNS/cgns.github.io/projects/1</p> <p>The documentation goes into the source using Doxygen. This work uses the “doxygen” branch. Examples are given for <code>cg_open</code> and <code>cg_version</code>. The aliases used for repeated variable descriptions are in <code>src/doxygen/doxygen.config</code>. Need volunteers to help with translating the remaining APIs to Doxygen.</p>

Discussion Topic	@ Vicky Moschou	<p>It concerns the <u>assumption</u> of the different vendor software 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.</p> <ul style="list-style-type: none"> • Some progress has been made <p><input checked="" type="checkbox"/> @ Vicky Moschou Will send out an updated presentation</p> <div data-bbox="581 386 1081 884" style="border: 1px solid #ccc; padding: 10px; text-align: center;">  CGNS_issues_committee.pdf </div> <div data-bbox="581 894 1081 1392" style="border: 1px solid #ccc; padding: 10px; text-align: center;">  CGNS_proposal_fo...sample_files.zip </div> <p>The presentation and updates will be discussed in the next meeting. Email correspondence about the topic is encouraged for a discussion before the meeting.</p>
Discussion Topic	@ ZJ Wang	<p>Short discussion on past AMR CPEX (0008) and whether AMR should be revisited as a feature supported CGNS. Some groups may be already using CGNS with AMR, but not known for certain. The need for AMR support in CGNS is unknown.</p>
Status update on Accepted CPEX #0045 https://cgnsorg.atlassian.net/browse/CGNS-182	@ Koen Hillewaert	<p>NO UPDATES</p>
Status update on Accepted CPEX #0047 Proposed Data integration Points	@ Mickael PHILIT	<p>Working on the new website before creating a new development branch to prevent duplicating efforts.</p>

<p>Status of Future CPEX 0046</p> <p>https://cgnsorg.atlassian.net/browse/CGNS-183</p>	<p>@ Thomas Hauser</p>	<p>NO UPDATES</p>
<p>Status of Future CPEX 0044</p> <p>https://cgnsorg.atlassian.net/browse/CGNS-181</p>	<p>@ Koen Hillewaert</p>	<p>The current focus is on finishing and implementing CPEX 45.</p> <p>Tabling CPEX 0044 for now.</p> <p>NO UPDATES ON HOLD</p>
<p>prioritization, review and attribution of JIRA bugs/issues</p>	<p>@ Tony Garratt</p> <p>@ David Gutzwiller</p>	<p>Next release 4.3.0, Kanban:</p> <p>https://cgnsorg.atlassian.net/secure/RapidBoard.jspa?rapidView=4&selectedIssue=CGNS-235</p> <p>General Kanban Board:</p> <p>https://cgnsorg.atlassian.net/secure/RapidBoard.jspa?rapidView=3&projectKey=CGNS&selectedIssue=CGNS-190</p> <p>ISSUE CARRIED OVER:</p> <p>Platform proposals</p> <p>Windows is under-tested. Suggest Test C and Fortran serial and parallel on Windows 10 x64 as a bare minimum</p> <p>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</p> <p>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)</p> <p>Bug list: https://cgnsorg.atlassian.net/browse/CGNS-176</p> <p>A priority of bugs to fix in next release</p> <p>#1 https://cgnsorg.atlassian.net/browse/CGNS-135</p> <p>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</p> <p>#3 https://cgnsorg.atlassian.net/browse/CGNS-116</p> <ul style="list-style-type: none"> important to have parallel working <p>#4 https://cgnsorg.atlassian.net/browse/CGNS-166</p> <p>#5 https://cgnsorg.atlassian.net/browse/CGNS-55</p> <p>#6</p> <p>https://cgnsorg.atlassian.net/browse/CGNS-38</p> <p>https://cgnsorg.atlassian.net/browse/CGNS-162</p> <p>https://cgnsorg.atlassian.net/browse/CGNS-113</p>

Action items from last meetings

Description	Due date	Assignee	Task appears on
<p><input type="checkbox"/> @ 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).</p>		<p>Scot Breitenfeld</p>	<p>2021-3-2 Meeting notes</p>

- | | | | |
|--------------------------|---|------------------|----------------------------|
| <input type="checkbox"/> | @ 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 |
| <input type="checkbox"/> | @ 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. | Scot Breitenfeld | 2021-3-2
Meeting notes |
| <input type="checkbox"/> | @ 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 |
| <input type="checkbox"/> | @ 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 |
| <input type="checkbox"/> | SIDS structure is complete in the documentation prototype but the translation process is quite slow. Help requested. | | 2021-3-2
Meeting notes |
| <input type="checkbox"/> | @ 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 |
| <input type="checkbox"/> | @ Scot Breitenfeld will update the copyright information on the webpage. | Scot Breitenfeld | 2021-3-2
Meeting notes |
| <input type="checkbox"/> | @ Scot Breitenfeld Update documentation for intel compilers (KH) | Scot Breitenfeld | 2021-3-2
Meeting notes |
| <input type="checkbox"/> | @ Thomas Hauser will organize a meeting before the next committee meeting; probably even this week. | Thomas Hauser | 2021-3-2
Meeting notes |
| <input type="checkbox"/> | Suggest looking into using Doxygen, @ Marc Pointot suggest a separate meeting to discuss. | Marc Pointot | 2021-3-2
Meeting notes |
| <input type="checkbox"/> | @ 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 |
| <input type="checkbox"/> | @ Scot Breitenfeld will update the copyright information on the webpage. | Scot Breitenfeld | 2020-12-8
Meeting notes |
| <input type="checkbox"/> | @ 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 |
| <input type="checkbox"/> | Change test site to: https://poinot.github.io/cgns-test.github.io/ | | 2020-12-8
Meeting notes |
| <input type="checkbox"/> | Tabling issue, we will look into alternatives if need arises. | | 2020-12-8
Meeting notes |
| <input type="checkbox"/> | @ Koen Hillewaert @ Marc Pointot @ ZJ Wang Karman – a decision on CAD classification | Koen Hillewaert | 2020-12-8
Meeting notes |
| <input type="checkbox"/> | @ 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

@ Christopher Rumsey will look into the current usage of cgnstalk,

Christopher Rumsey 2020-12-8 Meeting notes

Decisions

Page Title	Decisions
2019-11-12 Meeting notes	<ul style="list-style-type: none"> BETA-CAE was added to the steering committee The cgio_read* will be dropped in the next release of the CGNS library.
2020-12-8 Meeting notes	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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.
2021-6-15 Meeting notes	<ul style="list-style-type: none"> Passed CPEX #0047
2021-9-7 Meeting notes	<ul style="list-style-type: none"> Approved to include in the CGNS's example code.

New Business

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

NO UPDATES

Schedule next meeting

14 Dec 2021 , 10:00 AM EST (US)

Adjourn