

2024-11-5 Meeting notes

Date

Nov 5, 2024 , 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 ★
- @Tony Garratt ★
- @Patrick Baker
- @Earl P Duque
- @ZJ Wang
- @Matthias Möller
- @Mickael PHILIT ★
- @Marc Pointot
- @Koen Hillewaert
- Giorgos Strofylas (BETA CAE)
- Stavros Arestis (BETA CAE)
- Mark Lohry
- Julien Coulet
- Alexandre Minot (Convergent Science) ★

★ In attendance

Steering Committee Issues


Drop Colorado State University (CSU) from the Steering Committee

👉 CSU is removed from the Steering Committee, and the website will be updated.

Add Convergent Science to the Steering Committee

👉 Convergent Science was added to the Steering committee, and the website will be updated.

Simone no longer represents Airbus, and they are still looking into finding a replacement but have not gotten back to me. We will decide on their status at the next CGNS meeting.

 Resolve Airbus's status at the next CGNS meeting. [ergoent Science](#) [Convergent Science](#)

Discussion topics

Item	Presenter	Notes
Approve 2024/7/9 minutes.	@Scot Breitenfeld	<input type="checkbox"/> Post the minutes of the last meeting on the CGNS webpage. <input type="checkbox"/> Transferring the minutes to the new web pages. Approved.
cgns.org	@Scot Breitenfeld	Thomas Hauser will add @Scot Breitenfeld as an alternative owner. There are no updates; I've reached out to Thomas.
high-level editing tools for the documentation page	@Mickael PHILIT @Scot Breitenfeld	Doxygen was recently updated for usage with Breathe/Sphinx, oxygen Updates by brtnfld · Pull Request #777 · CGNS/CGNS New PR Doxygen->Breathe->Sphinx MLL docs by brtnfld · Pull Request #6 · CGNS/cgns-modern.github.io A few minor tasks remain before archiving the old web pages. We plan to finish and release 4.5.0 before the end of the year.
Converting CGNSTalk archive to Github Discussion Posts	@Scot Breitenfeld	No update.
Discussion of the need to extend the standard to include identifiers and references	@Scot Breitenfeld	With more widespread sharing of CGNS data, such as ML training, it might be helpful to standardize unique identifiers (global) for the file (maybe data, local?). Some examples: <ul style="list-style-type: none"> • Online Resources: creator URL, publisher URL, contributors • UUIDs, date convention, citations • Descriptive keywords • Lineage: audit trail for mods to original data @Scot Breitenfeld Submitted a DOE pre-proposal to gauge interest in funding the work. No feedback from DOE.

<p>mixed element/face zones discussion</p>	<p>@David Garlisch</p>	<p>ParaView: Mixed definition of unstructured zone by elements and by faces is not valid - CGNS CGNS - Discussion #720</p> <p><input checked="" type="checkbox"/> @David Garlisch will post to cgnstalk files that show the issue, @Gregory Sjaardema will look into it.</p> <p>Unrelated, the files also cause Paraview to crash.</p> <p><input type="checkbox"/> @Scot Breitenfeld will follow-up with @Gregory Sjaardema</p> <p><input type="checkbox"/> @Vicky Moschou and others will draft a document to discuss hardening the specification for faces in the case of mixed meshes.</p> <p>The Paraview issue will be investigated at the next CGNS meeting.</p>	
<p>Multiple CGNS library version support.</p>	<p>@Vicky Moschou</p>	<p>A new workaround allows the API user to support the import/export of TWO different major versions of CGNS (let's say series 4 and series 3) <u>without the need to build and maintain multiple CGNS library instances.</u> Only the latest library instance is enough.</p> <p>@Vicky Moschou will send @Scot Breitenfeld or @Mickael PHILIT proposed addition for a CGNS PR.</p>	
<p>CPEX #0046 - CP EX 0046 - New particle extension proposal - Issue #772 - CGNS/CGNS</p>		<p>We will move to merge to develop and the 4.5.0 release ASAP.</p> <p>The documentation will be included in the new web pages.</p>	
<p>Status update on Accepted CPEX #0045</p> <p>CGNS-182: CPEX 0045: Polynomial Data and Curved Grid Elements IN PROGRESS</p>	<p>No Discussion</p>	<p>No one is currently actively working on this. We will keep the project on the agenda for the meeting, but we don't expect any updates.</p>	
<p>Status update on Accepted CPEX #0047 Proposed Data integration Points</p>	<p>@Mickael PHILIT</p>	<p>Working on the new website before creating a new development branch to prevent duplicating efforts.</p> <p>Started prototyping with Python and C and will push a branch on GitHub in the upcoming weeks. (The "C" branch is a slow work in progress)</p> <ul style="list-style-type: none"> The first draft of the API is in the branch GitHub - CGNS/CGNS at wip_cpex-0047 <ul style="list-style-type: none"> No unit test of the API yet Sample test representative of applications done and will be improved to remove the ".cgns" binary file. Feedback on API is appreciated Target CGNS 5.0 	
<p>prioritization, review and attribution of JIRA bugs/issues</p>	<p>@Tony Garratt @David Gutzwiller</p>	<p>Next release 4.5.0, Kanban: v4.5.0 • CGNS</p> <p>Current status for Ansys:</p> <p>No urgent issues.</p> <ul style="list-style-type: none"> @Scot Breitenfeld is completing the option of using subfiling for CGNS. <ul style="list-style-type: none"> Targeting the 4.6.0 release, currently in the subfiling branch. 	

Discuss adding a level below zones to avoid slowness issues due to creating many zones.	@Stephen Guzik	@Stephen Guzik will develop a CPEX for further discussion <ul style="list-style-type: none">• Might post the topic on cgnstalk to reach a wider audience.	Remove discussion as an alternative solution is being investigated.
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New Business

Are there any new CGNS funding proposal opportunities? Nothing was identified at the meeting.

Schedule next meeting

Jan 21, 2025 , 10:00 AM EST (US)

NOTE: At the meeting, a vote will be made for a chairman of the CGNS committee.

Adjourn