

2024-4-9 Meeting notes

Date

Apr 9, 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 (Has new representative)
- @Earl P Duque
- @ZJ Wang
- @Christopher Rumsey
- @Matthias Möller
- @Pierre-Jacques Legay
- @Mickael PHILIT
- @Marc Pointot
- @Koen Hillewaert
- Giorgos Strofylas (BETA CAE)
- Stavros Arestis (BETA CAE)
- J. Coulet (ONERA) ★
- David Garlisch

★ In attendance

Please note that this meeting was scheduled on short notice.

Steering Committee Issues

Discussion topics

Item	Presenter	Notes
Approve 2024/1/16 minutes.	@Scot Breitenfeld	<input checked="" type="checkbox"/> post the last meeting's minutes to the CGNS webpage. Approved

cgns.org	@Scot Breitenfeld	I meet with Thomas Hauser who is the holder for cgns.org on GoDaddy, he is going to add @Scot Breitenfeld as an alternative owner.
high-level editing tools for the documentation page	@Marc Poinot @Christopher Rumsey @Scot Breitenfeld	The Doxygen branch was merged to develop. Started to explore using Breathe and Sphinx using the <i>develop</i> branch. UPDATE 4/9: Still in progress.
NVidia	@Scot Breitenfeld	I've been meeting with NVidia about their possible use of CGNS in their Universal Scene Description (OpenUSD), Universal Scene Description (USD) at NVIDIA , for fluid modeling. They are looking for examples of unstructured time series. Contact @Scot Breitenfeld if you have simulations they can use.
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, for example, 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.
mixed element/face zones discussion	@David Garlisch	ParaView: Mixed definition of unstructured zone by elements and by faces is not valid · CGNS CGNS · Discussion #720 <input checked="" type="checkbox"/> @David Garlisch will post to cgnstalk files that show the issue, @Gregory Sjaardema will look into it. Unrelated, the files also cause Paraview to crash. <input type="checkbox"/> @Scot Breitenfeld will follow-up with @Gregory Sjaardema <input type="checkbox"/> @Vicky Moschou and others will draft a document to discuss hardening the specification for faces in the case of mixed meshes. UPDATE 4/9: No updates
Status update on Accepted CPEX #0045 CGNS-182: CPEX 0045: Polynomial Data and Curved Grid Elements IN PROGRESS	No Discussion	There is currently no one actively working on this. We will keep the project on the meeting agenda, but we don't expect any updates.
Status update on Accepted CPEX #0047	@Mickael PHILIT	Working on the new website before creating a new development branch to prevent duplicating efforts.

Proposed Data integration Points		<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
prioritization, review and attribution of JIRA bugs/issues	<p>@Tony Garratt @David Gutzwiller</p>	<p>Next release 4.5.0, Kanban: v4.5.0 • CGNS, Targeting June.</p> <p>Current status for Ansys:</p> <p>No urgent issues.</p> <p>Update: 4/9</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 4.5.0 release, currently in the subfiling branch. Needs to resolve updating the Doxygen docs into the main CGNS documentation before releasing.
Discuss adding a level below zones to avoid slowness issues due to creating many zones.	<p>@Stephen Guzik</p>	<p>@Stephen Guzik will develop a CPEX for further discussion</p> <ul style="list-style-type: none"> Might post the topic on cgnstalk to reach a wider audience. <p>Update 4/9: no new updates.</p>

New Business

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

Schedule next meeting

Jul 9, 2024 , 10:00 AM EST (US)

Adjourn