2020-4-28 Meeting notes

Date
28 Apr 2020, 10:00 AM EST (US),

Participants
- @Scot Breitenfeld
- @Matthias Möller
- Stavros Arestis
- @Gregory Sjaardema
- Ken Alabi
- George Strofylas
- @Thomas Hauser
- Tony Garratt
- Chris Rumsey
- @Tobias Leicht
- Vicky Moschou
- @Pierre-Jacques Legay
- Scott Imlay
- ZJ Wang
- @Tobias Leicht
- Stephen Guzik

Steering Committee Issues

@Scot Breitenfeld will follow-up with contacts at P&W about new representative for the committee, vote to drop P&W at next meeting if none found.

Discussion topics

<table>
<thead>
<tr>
<th>Item</th>
<th>Presenter</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Approve 28 Jan 2020 minutes.</td>
<td>@Scot Breitenfeld</td>
<td>post last meeting’s minutes to CGNS webpage.</td>
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<tr>
<td>prioritization, review and attribution of JIRA bugs/issues</td>
<td>@Tony Garratt @David Gutzwiller</td>
<td>@Vicky Moschou will create a separate Jira issue addressing 32/64 bit datatype issue</td>
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<td></td>
<td></td>
<td>@Scot Breitenfeld enter issue about POSIX issue with object storage.</td>
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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

I would like to propose that each meeting we review the list of outstanding bugs and then prioritize those which are a “must-fix” for the next CGNS release.
David and Tony to review prior to the meeting and then discuss the top bugs in each meeting and then increase/downgrade priorities depending on opinions/discussions in the meeting.

From the list below, I have turned the outstanding Ansys suggestions/comments/request into bugs/enhancements. We can therefore from the next meeting onwards dispose with the comments below and only review the bug list board.

I would also like to initiate a discussion where we consider putting out a bug fix only release - i.e. no new features - bug fixes only.

Hope this makes sense to everyone.

Tony

"Additionally, should we make the addition of HDF5 compression as a CPEX to be consider for a future release?"

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
### high-level editing tools for the documentation page

<table>
<thead>
<tr>
<th>@ Marc Poinot</th>
<th>@ Christopher Rumsey</th>
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<tbody>
<tr>
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<td><img src="image2.png" alt="Image" /></td>
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- No new discussion

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 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 branch (branch is https://github.com/CGNS/cgns.github.io/tree/doc-rest-migration/CGNS-ReST-site ) and new directory is CGNS-ReST-site
- @ Marc Poinot provide tarball with resulting html
- @ Marc Poinot try to publish new web site on ReadTheDocs (does require a specific template which would break this hosting site automation) In case of success (not yet: disappointed:) the new doc would appear on https://cgns.readthedocs.io/en/latest/
- Change test site to: https://poinot.github.io/cgns-test.github.io/

### cgnstalk: maintain or to be replaced by an alternative discussion group

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- No new discussion.
  - main issue is that it is a NASA tool and getting older less flexibility
  - currently it’s main advantage is visibility / following
  - if replaced, best within the current tools (jira/confluence) for archival; probably as close as possible to bug tracking

- @ Koen Hillewaert will look into the current usage of cgnstalk

### Status of Future CPEX 0044

https://cgnsorg.atlassian.net/browse/CGNS-181

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- No new discussion

### Status of Accepted CPEX 0045

https://cgnsorg.atlassian.net/browse/CGNS-182

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- No new discussion

- @ Koen Hillewaert prototype implementation working and interfaced in inhouse code.

- @ Koen Hillewaert make sure branch available for other testers

### Status of Future CPEX 0046

https://cgnsorg.atlassian.net/browse/CGNS-183

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- No new discussion

- @ Thomas Hauser will organize a meeting before the next committee meeting; probably even this week.

Sent out a doodle poll for the meeting.
Action items from last meetings

- **Tony Garratt** @ David Gutzwiller @ Scot Breitenfeld: Continue to review outstanding and prioritization of JIRA items/tasks
- **Stephen Guzik** @stephen.guzik@colostate.edu: Documentation of https://cgnsorg.atlassian.net/browse/CGNS-87
- **Scot Breitenfeld**: Add Gutzwiller's large unstructured multi-block regression test suite and reproduce issues
- **Koen Hillewaert** @ Marc Poinot @ ZJ Wang: Karman – a decision on CAD classification
- **Scot Breitenfeld**: Update documentation for Intel compilers (KH)
- **Thomas Hauser**: Organization of off-line meetings for addressing review of https://cgnsorg.atlassian.net/browse/CGNS-183
- **Koen Hillewaert** @ ZJ Wang @ Matthias Möller: Organization of off-line meetings for finalizing https://cgnsorg.atlassian.net/browse/CGNS-181 postponed
- **Scot Breitenfeld**: Will remove the cgio_read_data, cgio_read_all_data, cgio_read_block APIs in the next release, and update the documentation listing the alternative APIs which should be used in their place.

Decisions

Approved the removal of P&W from the steering committee.

New Business

Any new CGNS funding proposal opportunities? **No new discussion.**

- Maybe part of a EuroHPC proposal (Joint undertaking in H2020) on soft- and middleware on exascale currently no calls announced, one passed in January
- Small work package on scalability with in-house code by Cenaero in PRACE 6IP code development project

Schedule next meeting

04 Aug 2020, 10:00 AM EST (US),

Adjourn