

CGNS Telecon Minutes

Tuesday, 2 December 2014, 10:00am Eastern Time

1. The meeting was called to order at 10:0am Eastern Time. Attendees are listed in Appendix A.
2. Oct 2, 2014 minutes were approved as published on the website.
3. Steering committee issues:
 - a. There may be an informal CGNS gathering at AIAA SciTech in Kissimmee in January (probably Wed PM). Rumsey to arrange and email.
4. Discussion
 - a. HDF parallel testing, and merging back to trunk
 - i. There is still an unresolved parallel performance issue from Srinu at Sandia – trying to track it down; other than this, the CGNS parallel improvement task is essentially complete.
 - ii. Flush should at least be removed from docs (even if the subroutine is kept); it bottlenecks the parallel I/O.
 - iii. We still need the committee members to do more testing of the parallel capability.
 - b. Possible CGNS repository move to GitHub
 - i. Committee supports this idea.
 - ii. GitHub allows owners to assign many developers; can also have docs as wiki pages; can easily “fork” the repository.
 - iii. We will wait until merge and new release is complete before attempting a move to GitHub. Rumsey will lead the effort to eventually port everything to GitHub.
 - c. Support of old compilers
 - i. Committee voted to discontinue support for compilers that are not Fortran 2003 compliant (e.g., g77).
 - ii. Rumsey to add a message to the main CGNS website regarding need for up-to-date compilers.
 - iii. Breitenfeld to update release notes and/or install notes in the repository to describe compiler requirements.
 - d. New release
 - i. Committee decided that next release will be 3.3.
 - ii. Breitenfeld to merge his changes back into the trunk around beginning of January 2015.
 - iii. After several months of testing, the 3.3 release will be cut.
 - iv. Note that several new multi-coordinate MLL calls added by Breitenfeld will not work with the current release of HDF-5. When these new MLL calls are documented, they require a warning that HDF 1.8.15 (which probably will be released in the next 6 months or so) or later will be needed.
 - v. Also note that Breitenfeld also made extensive changes regarding how int*8 is handled, apart from the parallel implementation.
 - e. Ideas for future funding of CGNS software development/maintenance
 - i. No definitive ideas yet.
 - ii. Daily testing will be important as we move forward.

5. Review action items
 - a. CPEX 38 (Quartic elements) – has been implemented (in the repository), but still needs testers. Wang and Imlay agreed to collaborate to test quartic elements (CPEX 38).
 - b. GitHub (see notes in 4.b. above).
 - c. CPEX 39 – has been approved, but not yet implemented. Poinot to implement CPEX 39 into MLL and revise the SIDS appropriately.
 - d. CPEX 40 – Guzik to revise write-up of CPEX 40 and submit to Rumsey. Rumsey to send revision for final ballot.

6. New business
 - a. Poinot mentioned that a user is having performance issues with CGNS on Windows when using remote file access (local network?). We are not sure if this is a problem with CGNS, or only a problem with this particular person’s system/configuration/etc. Imlay to work with Poinot to test CGNS performance on his Windows system.

7. Ongoing Action Items
 - a. Wang and Imlay agreed to collaborate to test quartic elements (CPEX 38).
 - b. Rumsey will lead the effort to eventually port everything to GitHub.
 - c. Rumsey to add a message to the main CGNS website regarding need for up-to-date compilers.
 - d. Breitenfeld to update release notes and/or install notes in the repository to describe compiler requirements.
 - e. Breitenfeld to merge his changes back into the trunk around beginning of January 2015.
 - f. Poinot to implement CPEX 39 into MLL and revise the SIDS appropriately.
 - g. Guzik to revise write-up of CPEX 40 and submit to Rumsey. Rumsey to send revision for final ballot.

8. The next meeting was tentatively scheduled for Tuesday 3 March 2015 at 10am Eastern.

9. Adjourn

Appendix A – Attendees

Ken Alabi	TTC
Scot Breitenfeld	HDF Group
Bob Bush	P&W
Simone Crippa	Airbus
Scott Imlay	Tecplot
Mohamed Kaveh	GE
Marc Poinot	ONERA
Chris Rumsey	NASA
ZJ Wang	Kansas U
Ulrike Wolf	ANSYS