CGNS Telecon Minutes

Thursday, 2 October 2014, 11:30am Eastern Time

1. The meeting was called to order at 11:30am Eastern Time. Attendees are listed in Appendix A.

2. Feb 18 and Sep 3 minutes were approved as published on the web-site

3. Simon Pereira introduced Ulrike Wolf who will be replacing him as the ANSYS representative on the Steering Committee. Ulrike gave some of her background – She works for ANSYS in Germany, located near Frankfort, but working for the Hanover office. She has worked with Diane Poirer (a former CGNS software focal point) and with CGNS interfaces for many years.

4. Steering committee issues:
   a. It was noted that the Rumsey-Bush-Wang co-chair arrangement has been approved and is now official

   b. Vote to approve "HDF Group" as new steering committee members –Scot Breitenfeld and Quincey Koziol introduced themselves and are willing for the HDF Group to serve as a new member of the CGNS Steering Committee. Their active participation in extending CGNS capabilities and knowledge of computing standards will enhance the Steering Committee, as well as CGNS capability and acceptance. The Steering Committee voted to approve HDF Group as an official member of the CGNS Steering Committee.

   c. Ulrike Wolf will be the new ANSYS representative to the CGNS Steering Committee. Thanks to Simon Pereira for his service to the committee, and welcome Ulrike.

   d. CPEX Approval Process Revision (Bush) – The Chairpersons have recommended adding a Critical Review to the CPEX approval process. The critical review is intended to be an in-depth review of the CPEX by someone other than the sponsor/author. Once the proposal is finalized, volunteers will be solicited to do a critical review of the proposal and documentation, and make a recommendation to the full committee before the final approval vote.

5. Discussion
   a. HDF Group progress on parallel CGNS (Breitenfeld and Koziol) – HDF Group is entering their last month on a NASA task related to parallel CGNS. They created benchmarks for the C and Fortran libraries. Most of the development has been on Bluejean system at Argonne, and they are starting to work with Pleiades at NASA. The parallel performance has been improved, including simultaneous write of multiple data sets (e.g. x,y,z), FORTRAN wrapper, tuning, register mpi info via CGNS. They are looking for users to test the capabilities on other systems and provide additional feedback. They have a new branch of CGNS that should be available for testing within 2 weeks or so, including a REAME and a PDF document.

   b. CGNS Repository host site (Breitenfeld and Koziol) – The team discussed the advantages of moving the code and documentation from SourceForge to GitHub or another collaborative development site. Stanford has experience with Git and recommends it. GitHub should be free for open source projects (such as CGNS). Chris Rumsey will investigate moving to GitHub and will report back to the committee. HDF is interested in playing a larger role in supporting GitHub and Daily Testing, but would require funding.

c. Daily Testing – the committee discussed the desire to go to some sort of daily testing. This is not supported by SourceForge, Git does have some tools. NSF has a build and test facility that might be available. A reference web-site is: https://www.batlab.org

d. CPEX 39 (add BaseName referencing) (Poinot) –Pointwise (Pat Baker) did the Critical Review and found no issues. This CPEX will be sent to the full committee for final approval.

e. CPEX 40 (hyper-slabs with Rind) (Guzik) –Poinot agreed to do critical review before final approval vote. Poinot concurs with the proposal to add the ability to read sub-domains taking into account Rind data, with the exception of how to handle backward compatibility. There is a discrepancy currently between the SIDS and the MLL implementation. The current MLL implementation does not do what the SIDS indicates. After discussion, the committee would like to keep the SIDS as it is, and work the discrepancy in implementation. It can be addressed by adding an optional argument that turns on the new (SIDS compliant) capability. If the argument is omitted (allowed in both C and Fortran) or set to a specific value, then the MLL will revert to the old mode of operation (and will not have the hyper-slab ability). If the flag is set for the new mode of operation, the new capability, including hyper-slabs with Rind will be available.

f. Committee decided that it is OK if a new MLL call is added that supports only HDF (and not ADF), but need to document the fact.

6. Ongoing Action Items
    a. CPEX 38 – Filemap and MLL implementation (TBD) – still awaiting assignment. Chris Rumsey may have time to work this in the future.
    b. Explore GitHub as potential new host for CGNS software and documentation (Rumsey)
    c. CPEX39 (add BaseName referencing) – (Rumsey) – send for final ballot
    d. CPEX40 (sub-domain read with Rind) – (Guzik) – revise write-up and submit to Rumsey. Rumsey to send revision for final ballot.

7. The next meeting was tentatively scheduled for Tuesday 2 December 2014 at 10am Eastern (to accommodate those calling in from Europe)

8. Adjourn

Appendix A – Attendees

Juan Alonso	Stanford
Scot Breitenfeld	HDF Group
Bob Bush	P&W
Stephen Guzic	Colorado State
Dimitry Kamenetsky	Boeing
Mohamed Kaveh	GE
Quincey Koziol	HDF Group
Simon Pereira	ANSYS
Chris Rumsey	NASA
ZJ Wang	Kansas U
Ulrike Wolf	ANSYS