## CGNS Steering Committee Telecon Minutes 17 December 2013

- 1) The telecon was called to order at 11:00 AM eastern time. There were 9 attendees, listed in Attachment 1.
- 2) The minutes of the 18 September 2013 telecon were approved.
- 3) Membership issues
  - a) Hauser mentioned that Ken Alabi's email has been bouncing. <u>Rumsey to check if</u> <u>Ken is interested in remaining on Committee</u>, and if so to update his email.
- 4) Discussion with Gerd Heber of HDF Group
  - a) Gerd talked about recent and upcoming developments with HDF5. Version 1.10 will come out probably late in 2014, and will have additional features. The discussion centered around (1) concurrency, (2) native HDF5 client/server, (3) performance, and (4) fault tolerance. A set of slides was distributed to the Steering Committee members. Users seem to be moving toward more real-time (or "on-line") analysis. HDF5 is introducing single-writer/multiple-reader (SWMR). There was also discussion of more efficiently accessing HDF5 files on a remote machine as well as journaling to recover from crashes.
  - b) Gerd mentioned that many of these new features are already available as branches and can be tested by users.
  - c) He offered to hold a special telecon (if our members would like to) in the future to go over more specifics for a subset of the committee who are interested in more of the details. Nothing has been set yet.
- 5) There is a meeting time/place set aside for CGNS at the AIAA SciTech meeting in January 2014. Although this is not an official CGNS meeting, attendees can get together to chat about issues if desired.
  - a) Time & location: Monday, January 13, 4pm in Chesapeake L.
- 6) Status of Version 3.2
  - a) Still on hold. Committee is still struggling to determine how to handle software development and maintenance. Rumsey mentioned that there may be limited funding available in 2014. There was some discussion about possible tasks. Rumsey to make a list of possible CGNS tasks for 2014 related to the software and forward to Committee for comment.
  - b) Poinot brought up that we should consider changing the SIDS for time accurate data so that ZoneIterativeData contains link information rather than simply a string array identifier name. This change would require a CPEX to be submitted.
- 7) Status of Old Action Items:
  - a) Hauser and Duque to continue to look into the consortium idea for CGNS, including more active support of HDF-5 consortium. Also look into applying to

NSF software infrastructure for sustained innovation by Feb 2014, possibly related to data management plan.

- i) Carries.
- b) Hauser, Duque, and Iannetti to continue to develop Iannetti's proposal for handling sprays of unconnected points.i) Carries.
- c) Hauser to finalize the CGNS survey based on feedback from committee members, and email out to CGNSTalk.
  - i) Carries.
- d) Guzik will summarize the changes required to the MLL software to have core data always start at location (1,1,1) when including Rind data, as well as backward-compatibility implications, to help the Steering Committee decide on a course of action (index discrepancy).
  - i) Carries.
- e) Hauser will look into the parallel I/O performance issues.
  - i) Carries.
- f) Rumsey, Bush, and Baker to continue off-line communications with Sandia about CPEX 0037 possible structured-to-unstructured connectivity issues.
  - Baker said that a suitable solution has been found for Sandia for the time being, using the existing SIDS definitions. The main negative is that it would be preferable to be able to define structured-to-unstructured connectivity via a range, instead of point-by-point. Based on this information, the Committee felt it appropriate to mark CPEX 0037 as "current version not accepted." This may be revisited again in the future, but the proposal will need to be modified.
- g) All: how to handle bug fixes and CGNS extensions in the future?
  - i) Carries.
- 8) Next Telecon is tentatively set for Tue, Jan 28, 2014, 11 am eastern. A confirmation email will be sent prior to the meeting.
- 9) Summary of <u>action items</u>:
  - a) Hauser and Duque to continue to look into the consortium idea for CGNS, including more active support of HDF-5 consortium. Also look into applying to NSF software infrastructure for sustained innovation by Feb 2014, possibly related to data management plan.
  - b) Hauser, Duque, and Iannetti to continue to develop Iannetti's proposal for handling sprays of unconnected points.
  - c) Hauser to finalize the CGNS survey based on feedback from committee members, and email out to CGNSTalk.
  - d) Guzik will summarize the changes required to the MLL software to have core data always start at location (1,1,1) when including Rind data, as well as backward-compatibility implications, to help the Steering Committee decide on a course of action (index discrepancy).

- e) Hauser will look into the parallel I/O performance issues.
- f) All: how to handle bug fixes and CGNS extensions in the future?
- g) Rumsey to check if Ken is interested in remaining on Committee.
- h) Rumsey to make a list of possible CGNS tasks for 2014 related to the software and forward to Committee for comment.

Attachment 1: Attendees

Pat Baker Bob Bush Stephen Guzik Thomas Hauser Gerd Heber Dmitri Kamenetskiy Marc Poinot Chris Rumsey Brad Whitlock Pointwise Pratt & Whitney Colorado State U University of Colorado HDF Group Boeing ONERA NASA Langley Intelligent Light