CGNS Steering Committee Telecon Minutes
10 December 2012

1) The telecon was called to order at 11:00 AM eastern time. There were 7 attendees, listed in Attachment 1.

2) The minutes of the 23 October 2012 telecon were approved.

3) Dmitri Kamenetskiy will be taking over from Will Stoffers as the Boeing representative on the Steering Committee. Dmitri introduced himself.

4) ZJ Wang described his proposal for high order elements (CPEX 0036, available at http://cgns.sourceforge.net/Proposals.html). These are 3rd-order elements. Eventually we would also like CGNS to be able to handle 4th-order.
   a) Kamenetskiy will look at CPEX 0036 and make sure it does not conflict with an internal methodology being used at Boeing. He and ZJ will work together to finalize the proposal prior to Committee vote.
   b) It was pointed out that the green points in the proposal's plots should be included in the tables, for completeness (also in the existing SIDS).

5) ZJ Wang expressed an interest in joining the Steering Committee. They would like to help with CGNS development, and could be directly involved in the implementation of the high order elements. Rumsey made a motion to add University of Kansas (represented by ZJ Wang) to the Steering Committee and Hauser seconded. Vote was unanimously in favor.

6) Guzik brought up an issue from CGNSTalk related to Rind data indexing. In the SIDS, under GridCoordinates (http://www.grc.nasa.gov/WWW/cgns/CGNS_docs_current/sids/gridflow.html#Grid Coordinates) it specifically states that the core grid begins at indices (1,1,1). But under FlowSolution (http://www.grc.nasa.gov/WWW/cgns/CGNS_docs_current/sids/gridflow.html#Flow Solution) it does not say anything specific. When adding Rind data at the lower end, the MLL and CGNS examples set the Rind data start at location (1,1,1). This does not hurt anything when reading the entire array (the user can account for the offset due to the Rind addition), but it can be a problem – or at least very confusing – when doing a partial data read. It is also inconsistent with other interpretations (including in VisIt). Guzik recommends always having (1,1,1) represent the start of the core data, and changing the MLL. Unfortunately, he notes that this may lose backward compatibility on existing CGNS files with Rind data. 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.

7) Poinot missed the telecom, but reported separately:
   a) In SVN version of v3.2, new multiple families capability is OK (test added, doc ok, sounds good).
   b) Links and weak close mode OK (still some questions, need to test more). He maintains a separate list of objects IDs and closes them at the database close time. But there are still 'unreachable' objects, these actually are link objects but he cannot 'close' them. Anyway the tests are working fine. Now the concern is: do we still have a problem but not the smart test to raise the error? Or should we ignore these unreachable objects (to try to fix with HDF group)? <u>Poinot to commit weak mode fix for HDF5 linking issue to v3.2 SVN repository.</u>

8) Status of previous 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, 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) Wedan to add a flag node to indicate whether a file is using I4 or I8 (along with MLL call to access it).
      i) Carries.
   d) Poinot to track down and correct the latest HDF5 linking issue.
      i) In process. According to the HDF5 people, we need to use WEAK mode rather than STRONG in order to avoid potential HDF5 linking issue, but this means tracking release of all objects (they also may not be correctly released by MLL if switch over to WEAK).
   e) Hauser, Alonso, and Guzik will start to look at and evaluate the new parallel capability in the SVN repository, with a goal to report if it is ready for release.
      i) Carries.
   f) Hauser to finalize the CGNS survey based on feedback from committee members, and email out to CGNSTalk.
      i) Carries. Hauser to send to committee within next few weeks.
   g) Alonso and Hauser will finalize a meeting time at the AIAA ASM.
      i) This is now dubious. <u>Hauser will let committee members know if CGNS meeting at AIAA's ASM in January will take place (currently doubtful).</u>

9) Other discussion:
   a) Hauser ends his 5th year as Steering Committee Chair in January. He tentatively agreed to continue for another year in the position while a new Chair is sought.

10) Next Telecon is tentatively set for Tues, January 15, 2012, 11 am eastern. A confirmation email will be sent prior to the meeting.

11) Summary of **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, 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) Wedan to add a flag node to indicate whether a file is using I4 or I8 (along with MLL call to access it).

    d) Poinot to track down and correct the latest HDF5 linking issue.

    e) Hauser, Alonso, and Guzik will start to look at and evaluate the new parallel capability in the SVN repository, with a goal to report if it is ready for release.

    f) Hauser to finalize the CGNS survey based on feedback from committee members, and email out to CGNSTalk.

    g) Hauser will let committee members know if CGNS meeting at AIAA's ASM in January will take place (currently doubtful).

    h) Kamenetskiy will look at CPEX 0036 and make sure it does not conflict with an internal methodology being used at Boeing. He and ZJ will work together to finalize the proposal prior to Committee vote.

    i) 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.

    j) Poinot to commit weak mode fix for HDF5 linking issue to v3.2 SVN repository.

Attachment 1: Attendees

Bob Bush	Pratt & Whitney
Stephen Guzik	Colorado State U
Thomas Hauser	University of Colorado
Dmitri Kamenetskiy	Boeing
Chris Rumsey	NASA Langley
Will Stoffers	Boeing
ZJ Wang	University of Kansas