CGNS Steering Committee Telecon Minutes 02 September 2009

- 1) The telecon was called to order at 11:00 AM eastern time. There were 8 attendees, listed in Attachment 1.
- 2) The minutes of the 07 July 2009 meeting were approved as posted on the web site.
- 3) Membership issue: Bruce Wedan's company, SimCosm, was voted onto the Steering Committee. The number of steering committee members currently stands at 23.
- 4) Status of CGNS Version 3.0
 - a) Was released in August 2009 (beta version). On SourceForge, can download tar file at bottom of page.
 - b) Static library works, dynamic OK on Linux, but currently does not work on Windows or Mac.
 - c) Memory leak (fixed in V2.5) has also been fixed in 3.0(beta) trunk version.
 - d) There are still some issues with cmake. For example, Absoft compiler not recognized by cmake for Fortran. Wedan added old configure stuff back to trunk distribution of V3.0, so users can have a choice of whether to use cmake or configure.
 - e) There will be an updated beta release of 3.0 soon, which will include abovementioned recent fixes.
 - f) Thomas to update website "Download" page, including making list of what is new in V3.0 compared to V2.5 including new MLL calls/changes, and either send to Rumsey to post on website or post directly himself.
 - g) Wedan to document changes to MLL calls for V3.0 (e.g., is cgns, cg_section_partial_write, cg_element_partial_write), and send to Rumsey and Iannetti for posting to V3.0(beta) docs pages.
 - h) Current documentation for V3.0(beta) can be found at: www.grc.nasa.gov/WWW/cgns/beta/index.html
 - i) Current plan is to schedule "official" V3.0 release for January. Committee members and users should test out V3.0(beta) in the mean time.
- 5) Status of previous action items
 - a) Hauser to look into rescheduling the CGNS tutorial session for the AIAA meeting in Orlando in January 2010.
 - i) Action carries.
 - b) Hauser and his student (Kyle) to post Version 3 BETA to SourceForge and announce its release to CGNSTalk, including its major changes compared to Version 2.5.
 - i) Done.
 - c) Rumsey to create a "how-to" document regarding the website on SourceForge, and email it to Hauser, so that multiple members have it.
 - i) Done. Sent to Hauser, Iannetti, and Wedan.

- d) Hauser to look into creating Track/Wiki capability at Utah State for CGNS.
 - i) Maybe better to use SourceForge. Modified action carries.
- e) Duque and Hauser to continue to look into the consortium idea for CGNS, including more active support of HDF-5 consortium.
 - i) Action carries.
- f) Rumsey to obtain and post Boeing's CGNS translation tools (from Michal) when they are ready.
 - i) Tools not ready yet. Action carries.
- g) Poinot to test the indexing ordering in V3.0.
 - i) In process. Action carries.
- h) Wedan to check if Magnan (CGNSTalk 04 Feb 2009) and Edwards (CGNSTalk 27 March 2009) bugs have been fixed in V2.5 (CVS version).
 - i) Done. Implemented in both V2.5 and V.30(beta).
- i) Poinot to work with Power and others to bring Rigid Motion Improvement proposal to completion, including specific examples.
 - i) Not done yet. New plan identified: <u>Poinot to split Rigid Motion Proposal into 2 parts: part associated to families can be accepted/implemented right away.</u>
- j) Hauser will add HDF-5 parallel code to SourceForge and will let users know when it is available.
 - i) Action carries. (Hope to have it done during Fall 2009.)
- buque and Hauser to continue to develop proposal for handling sprays of unconnected points.
 - i) Action carries.
- 1) Wedan to investigate issue of MLL deleting the entire node even though its new dimensions are the same.
 - i) Generally felt that current behavior is correct, because if there are children and you keep them, this may give erroneous CGNS file. Action item removed; if it proves to be a particular problem to someone in the future, it can be brought up again.
- m) Wedan to complete fixes related to excessive memory usage for partial writes.
 - i) There have been some fixes made in V2.5 and V3.0(beta). Section partial write routines changed to take element range. But if mixed elements, you still must traverse all elements (everything must be loaded into memory). Wedan has a fix for this, but it involves changes to 2 MLL calls. The committee discussed this and decided that for V3.0, the change should be made. This will mean users who currently make use of certain "section_write" routines will need to revise those particular calls for V3.0. The number of users affected is believed not to be large. Wedan to implement partial write fixes for V3.0 applicable to mixed elements, to stop excessive memory usage.
- n) Hauser to proceed with fix for both the "long" vs "int" issue as well as the problem with the 64-bit cg_goto_f.
 - i) Action carries.
- 6) New proposal for handling extensions process (Poinot).
 - a) Mostly involves modification of Proposals webpage, to include assigned number and SIDS-to-ADF mapping. If mapping is given, then people can still use the

accepted proposal even if it has not yet been implemented into the MLL. Idea kind of follows Python methodology for proposing and implementing changes. Rumsey to make modifications to Proposal webpage, to include SIDS-to-ADF mapping status and other ideas from Poinot.

- 7) Next Telecon tentatively set for Wed, October 21, 2009, 11 am eastern.
- 8) Meeting was adjourned at 12:05 PM.

9) Summary of <u>action items</u>:

- a) Thomas to update website "Download" page, including making list of what is new in V3.0 compared to V2.5 including new MLL calls/changes, and either send to Rumsey to post on website or post directly himself.
- b) Hauser to look into scheduling the CGNS tutorial session for the AIAA meeting in Orlando in January 2010 (evening meeting time).
- c) Hauser to look into creating Track/Wiki capability at Utah State or on SourceForge for CGNS.
- d) Duque and Hauser to continue to look into the consortium idea for CGNS, including more active support of HDF-5 consortium.
- e) Rumsey to obtain and post Boeing's CGNS translation tools (from Michal) when they are ready.
- f) Poinot to finish testing the indexing ordering in V3.0.
- g) Poinot to split Rigid Motion Proposal into 2 parts: part associated to families can be accepted/implemented right away.
- h) Hauser will add HDF-5 parallel code to SourceForge and will let users know when it is available.
- i) Duque and Hauser to continue to develop proposal for handling sprays of unconnected points.
- j) Wedan to implement partial write fixes for V3.0 applicable to mixed elements, to stop excessive memory usage.
- k) Wedan to document changes to MLL calls for V3.0 (e.g., is_cgns, cg_section_partial_write, cg_element_partial_write), and send to Rumsey and Iannetti for posting to V3.0(beta) docs pages.
- l) Hauser to proceed with fix for both the "long" vs "int" issue as well as the problem with the 64-bit cg_goto_f.
- m) Rumsey to make modifications to Proposal webpage, to include SIDS-to-ADF mapping status and other ideas from Poinot.

Attachment 1: Attendees

Steve Allmaras

Boeing ANSYS / CFX Richard Hann Thomas Hauser Utah State Mike Jeffries Pointwise Marc Poinot ONERA **USAF**

Greg Power Chris Rumsey Bruce Wedan NASA Langley SimCosm