## CGNS Steering Committee Telecon Minutes 20 May 2009

- 1. The telecon was called to order at 11:05 AM eastern time. There were 10 attendees, listed in Attachment 1.
- 2. The minutes of the 01 April 2009 meeting were approved as posted on the web site.
- 3. Committee membership issues
  - (a) Stanford University (represented by Juan Alonso) was voted onto the steering committee.
  - (b) SimCom Inc (Bruce Wedan) will likely join soon.
- 4. EUCASS meeting in France
  - (a) Poinot, Hauser, and Rumsey will run an all-day special event at the EUCASS meeting in early July 2009 in Versailles, France. The all-day event will consist of a tutorial session, hands-on workstation demos, industrial presentations, and a meeting. Poinot has confirmed two speakers: from Snecma and ONERA (applied department). It is also possible a representative from CD-ADAPCO may be available to speak.
  - (b) Hauser also plans an open CGNS meeting, beginning around 6:10 pm Paris time. <u>Poinot to look into possibility of arranging for Telecon capability at the EUCASS</u> meeting.
- 5. Status of CGNS Version 3.0
  - (a) The 3.0 package has been evaluated by Poinot. Some issues have been discussed and fixed.
  - (b) Biggest discussion focused on new use of cmake (rather than configure scripts). Bottom line: configure needs to be maintained regularly, and is difficult particularly for Windows. Cmake is a more universal tool, although there is some concern that it may cause problems for some users. Decision was made to have cmake the new default for V3, but configure will be kept in bundle for now (unsupported) in case users need it. Once people start using V3, we can see if problems arise regarding cmake.
  - (c) 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.
- 6. Charlie Towne retirement
  - (a) Tony Iannetti at NASA Glenn will be taking over Charlie's job of maintaining documentation.
  - (b) Rumsey is taking over as administrator of CGNSTalk.
  - (c) <u>Towne to email "how-to" document regarding CGNS documentation to Hauser and</u> <u>Rumsey, so that multiple members have it.</u>
  - (d) <u>Rumsey to email Charlie's "how-to" document regarding CGNSTalk administration to</u> <u>Hauser, so that multiple members have it.</u>

- (e) <u>Rumsey to create a "how-to" document regarding the website on SourceForge, and</u> email it to Hauser, so that multiple members have it.
- 7. Other issues
  - (a) Hauser brought up issue of bug tracking. Currently we rely on CGNSTalk and telecon action-items to keep track of these. But with more developers coming on-board, we perhaps need to be more organized about it. SourceForge has method available to assign bug fixes and keep track of them. <u>Hauser and his student (Kyle) to look into</u> SourceForge bug tracking capability.
  - (b) SourceForge also apparently has many testing platforms available. <u>Hauser and his</u> student (Kyle) to look into SourceForge testing platforms.
  - (c) Hauser discussed the issue of software maintenance. This is a necessary evil, and takes a lot of time, particularly testing and documentation. Typically universities are not the most appropriate place to do software maintenance, but rather research. Intelligent Light (Steve Legensky and Earl Duque) had previously communicated with Hauser and Rumsey about the possibility of forming some sort of consortium to help fund this kind of activity. <u>Duque, Rumsey, and Hauser to continue to look into the consortium idea</u> for CGNS.
- 8. Status of previous action items
  - (a) Poinot to organize the industrial presentations for EUCASS.
    - i. In process. Will (necessarily) be done by July 7, the date of the presentations, so action item removed.
  - (b) Rumsey to contact Michael (Boeing) regarding the status of the CGNS-for-DPW effort, as well as to try to obtain tools for posting on the CGNS website.
    - i. The tools are not ready yet. Rumsey to obtain and post Boeing's CGNS translation tools (from Michal) when they are ready.
  - (c) Rumsey to contact Benek to see whether CGNS can play a part of the SBLI-challenge workshop.
    - i. Done. The SBLI workshop is not providing grids, so it is not known yet how CGNS can play a part.
  - (d) Hauser to make a proposal regarding handling index ordering in V3.0 and will hold a special mini-telecon in mid-April to try to finalize how to handle it.
    - i. Done. Poinot to test the indexing ordering in V3.0.
  - (e) Hauser will oversee completion of cgns.org domain transfer. Hauser to announce to CGNSTalk that CGNS.org is back up and running as soon as the domain transfer is successfully concluded.
    - i. Done. www.cgns.org finally up and running again.
  - (f) Hauser to investigate and fix bugs noted by Magnan (CGNSTalk 04 Feb 2009) regarding declaration of cg\_model\_read, and by Edwards (CGNSTalk 27 March 2009) regarding ADF\_Read\_Block\_Data.
    - i. Fixed in V3.0. Wedan to check if Magnan (CGNSTalk 04 Feb 2009) and Edwards (CGNSTalk 27 March 2009) bugs have been fixed in V2.5 (CVS version).

- (g) Hauser & Wedan to complete and release V3.0.
  - i. Hauser to do this, probably later this week.
- (h) Poinot to work with Power and others to bring Rigid Motion Improvement proposal to completion, including specific examples.

i. Not done yet. Action carries.

(i) Hauser will add HDF-5 parallel code to SourceForge and will let users know when it is available.

i. Not done yet. Action carries.

(j) Duque and Hauser to continue to develop proposal for handling sprays of unconnected points.

i. Not done yet. Action carries.

(k) Wedan to investigate issue of MLL deleting the entire node even though its new dimensions are the same.

i. Not done yet. Action carries.

- (l) Wedan to look into issue brought up by Miller (10/19/07) to write info one element at a time to save memory.
  - i. This is related to next action item. See (m).
- (m) Wedan to implement patch sent to him by Bussoletti to fix excessive memory usage by MLL.
  - i. Wedan discussed this at length. The main problem is the MIXED and NGON\_n element type. For these, you must have everything in memory because you do not automatically know the offsets. His plan is to fix everything else (via Bussoletti's fix), and treat mixed as a special case. This work also needs to be coordinated with the parallel work of Hauser. Wedan to complete fixes related to excessive memory usage for partial writes.
- (n) Rumsey will contact Alonso to see if he is interested in rejoining the CGNS steering committee.
  - i. Done. Stanford has been added.
- (o) Power or Michal will provide some high-level routines for reading/writing CGNS that may be useful, for inclusion on the website.
  - i. This action is the same as item (b) above.
- (p) 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. Not done yet. Action carries.
- 9. Meeting was adjourned at 12:15 PM Eastern. Next Telecon may be held during EUCASS. If not, it will probably be set up sometime later in July.
- 10. Summary of action items:
  - (a) Poinot to look into possibility of arranging for Telecon capability at the EUCASS meeting.
  - (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.

- (c) Towne to email "how-to" document regarding CGNS documentation to Hauser and Rumsey, so that multiple members have it.
- (d) Rumsey to email Charlie's "how-to" document regarding CGNSTalk administration to Hauser, so that multiple members have it.
- (e) Rumsey to create a "how-to" document regarding the website on SourceForge, and email it to Hauser, so that multiple members have it.
- (f) Hauser and his student (Kyle) to look into SourceForge bug tracking capability.
- (g) Hauser and his student (Kyle) to look into SourceForge testing platforms.
- (h) Duque, Rumsey, and Hauser to continue to look into the consortium idea for CGNS.
- (i) Rumsey to obtain and post Boeing's CGNS translation tools (from Michal) when they are ready.
- (j) Poinot to test the indexing ordering in V3.0.
- (k) Wedan to check if Magnan (CGNSTalk 04 Feb 2009) and Edwards (CGNSTalk 27 March 2009) bugs have been fixed in V2.5 (CVS version).
- (1) Poinot to work with Power and others to bring Rigid Motion Improvement proposal to completion, including specific examples.
- (m) Hauser will add HDF-5 parallel code to SourceForge and will let users know when it is available.
- (n) Duque and Hauser to continue to develop proposal for handling sprays of unconnected points.
- (o) Wedan to investigate issue of MLL deleting the entire node even though its new dimensions are the same.
- (p) Wedan to complete fixes related to excessive memory usage for partial writes.
- (q) Hauser to proceed with fix for both the "long" vs "int" issue as well as the problem with the 64-bit cg\_goto\_f.

Attachment 1: Attendees

Richard Hann	ANSYS-CFX
Thomas Hauser	Utah State
Tony Iannetti	NASA Glenn
Jim Jiao	Stony Brook University
Prafanch Kambrath	Boeing Bangalor
Simon Pereira	ANSYS / ICEM CFD
Marc Poinot	ONERA
Chris Rumsey	NASA Langley
Charlie Towne	NASA Glenn
Bruce Wedan	SimCosm Inc.
Prafanch Kambrath Simon Pereira Marc Poinot Chris Rumsey Charlie Towne	Boeing Bangalor ANSYS / ICEM CFD ONERA NASA Langley NASA Glenn