

CGNS Steering Committee
Telecon Minutes
7 May 2008

1. The meeting was called to order at 11:05 AM eastern time. There were 11 attendees, listed in [Attachment 1](#).
2. The minutes of the 6 January 2008 meeting were approved as posted on the web site.
3. Region Proposal was discussed
 - (a) Rumsey discussed the status of the Region proposal. It is basically ready, except for the issue of changing `PointRange`, `PointList`, `ElementRange`, and `ElementList` to something else for better ease of use with edge-based. Allmaras would like to use `ConnectivityRange` and `ConnectivityList` instead, not only for Regions but in other places in the SIDS as well. Because V3.0 is almost ready to be officially released, we might want to target that version for the first implementation of Regions.
 - (b) Hann mentioned that the key is making the MLL easy to use. It really does not matter so much what is underneath.
 - (c) Hauser will lead a mini-telecon for those involved with Regions on May 13, to iron it out.
 - (d) Hauser decided the final proposal should still be posted to the website prior to implementation.
 - (e) Allmaras and Wedan said having Regions ready for June or July release in V3.0 was possible.
4. Status of V3.0 — ready for release?
 - (a) Discussion of XML output capability. Consensus decision was to leave XML capability in V3.0, but leave it out of the documentation and configure script. Thus, it will be easy to reinstate if needed, but it will not be a “supported” (or well-known) option for users. This will simplify things. Wedan to remove option regarding XML output from configure script in V3.0.
 - (b) Discussion of whether HDF-5 should be bundled in with CGNS release, so users do not have to go off and get it on their own. Hauser to look into the issue of bundling HDF-5 with the CGNS release of V3.0.
 - (c) Parallel HDF-5 is not a part of the V3.0 release yet. Hauser said it would be at least put up on SourceForge soon. (This is also an earlier action item.)
 - (d) Hann insisted it was very important for his group to have CGNS V3.0 officially released as soon as possible.
 - (e) Pointot said it would be a good idea to ask current vendors to test it and report prior to releasing, but others indicated that CGNS implementation is minimal at best in many vendor codes so it is doubtful they would be inclined to respond quickly. However, Hauser agreed to contact vendors about this. Hauser to contact vendors regarding testing V3.0 prior to release if possible and report back to committee.

- (f) Hauser suggested to improve documentation and build instructions of V3.0. Wedan and Hauser will look into this.
5. Potential funding opportunity from NSF did not work out — call got cancelled due to lack of funding at NSF.
 6. Hauser asked for a volunteer for vice-chair position — none present were interested at this time.
 7. Status of previous action items
 - (a) Hauser will add HDF-5 parallel capability to V3.0 on SourceForge CVS and will let users know when it is available.
 - i. action item carries
 - (b) Rumsey to send Wedan any existing documentation on `NGON_n + NFACE_n` for modification/addition, then post.
 - i. done, but not posted yet. Towne and Rumsey to add `NGON_n + NFACE_n` documentation into V3.0 SIDS. Furthermore, Rumsey to send email to committee members describing `NGON_n + NFACE_n` and ask them to try it out.
 - (c) Allmaras to finalize Regions proposal modification, including proposed additions to `FlowSolution`, `DiscreteData`, `BC`, and `BCDataSet` and send to Rumsey for posting on website.
 - i. still in progress... action item carries
 - (d) Paul, Bussoletti, and Allmaras to look into finding development (particularly for MLL implementation) resources at Boeing.
 - i. action item carries
 - (e) Duque and Hauser to assume lead on new discussion/proposal for handling sprays of unconnected points.
 - i. action item carries
 - (f) Hauser to have further discussions with Poinot on usage of XML and possible need for changes.
 - i. done — decision regarding XML in V3.0 made during this telecon
 - (g) Hauser, Rumsey, and Poinot to continue to explore possible CGNS meeting in Europe.
 - i. ongoing... EUCASS in 2009 is a possibility... action item carries
 - (h) Wedan will add a button to ADFViewer to allow user to compress file after deleting nodes.
 - i. done in V3.0 (`cgnstools3`)
 - (i) Rumsey to check with Towne if documentation is in place for `cg_config_compress`.
 - i. done — it is in MLL under “Configuring CGNS Internals”
 - (j) Poinot to send necessary coding changes for HDF-5 linking to Hauser for implementation into V3.0 alpha version.
 - i. done but unable to retrieve; will do again... action item carries

- (k) Rumsey to look into adding back (optional) registration to website when people download CGNS.
 - i. done — we have had 8 registrants since February 2008
 - (l) Rumsey to respond to some of the CGNSTalk issues that are now closed.
 - i. done
 - (m) Hauser to look into methods on SourceForge for getting Poinot developer access: switch from CVS to SVN? or use SSL?
 - i. not done yet — Poinot will try CVS again; action item carries
 - (n) Rumsey to notify people about V3.0 alpha.
 - i. done
 - (o) Wedan to release 2.5.3.
 - i. done
 - (p) Hauser to speak to Koziol at HDF-5 Group about issues related to developers and funding; and also to ask about when their link-fix release will become official.
 - i. Link fix for HDF5 is now official. HDF5 V1.8.0 has the link fix implemented. Hauser will talk to Koziol about funding and collaboration — new action item
 - (q) Wedan to investigate problem with NFS-mounted soft links when re-write file.
 - i. resolved in V3.0
 - (r) Wedan to investigate issue of MLL deleting the entire node even though its new dimensions are the same.
 - i. not done yet; action item carries
 - (s) Wedan to investigate type casting of int to void pointer then dereferencing (cg_configure).
 - i. changed some data types so compiler does not complain as much — done
 - (t) Rumsey and Hauser to work out issues on domain name with ANSYS-ICEM.
 - i. Hauser has contacted them for an invoice. Hauser will take control of domain name and will consider possibility of moving website to Utah State site.
8. Open Items (purpose of these is to not lose track of long-term issues that come up)
- (a) Keep track of/resolve HDF-5 “to-do” list ([Attachment 2](#)).
 - i. 3 of the items are essentially “done” for V3.0 and can probably be removed from the “to-do” list
 - (b) Keep track of progress with ISO/STEP.
 - i. Hunten indicated early summer completion for next step. Hauser to contact Hunten about ISO/STEP and ask the best way for us to comment.
 - (c) Need for official certification process (test for compliance)
 - (d) Need to make Karman’s changes to PYRA elements: change PYRA_14 to PYRA_13, without the centroid, and add PYRA_14 with the base mid-face defined (in software and in SIDS). Need to wait until V3.0 for this due to compatibility issues.
 - i. Done in V3.0
 - (e) Need to upgrade / update User’s Guide as appropriate (such as additional specific examples).

- i. Done by Rumsey and Towne
 - (f) Need to resolve slow behavior and larger file sizes that can occur in CGNS files when there are many (thousands) of nodes.
 - i. This is no longer as major issue and can be removed.
 - (g) Develop method to write info one element at a time to save memory via something like `cg_section_partialwrite` (Miller 10/19/07 CGNSTalk)
 - (h) Address issue of possible need for “long” instead of “int” to avoid signed 2 Gig limit (Miller 10/19/07 CGNSTalk).
9. There will be no official CGNS meeting in Seattle
 10. CGNS was recently entered into Wikipedia by Rumsey
 11. Meeting was adjourned at 12:45 PM. Next Telecon will be tentatively set for July 2.
 12. Summary of **action items**:
 - (a) Hauser will lead a mini-telecon for those involved with Regions on May 13.
 - (b) Wedan to remove instructions regarding XML output from configure script in V3.0.
 - (c) Hauser to look into the issue of bundling HDF-5 with the CGNS release of V3.0.
 - (d) Hauser to contact vendors regarding testing V3.0 prior to release if possible and report back to committee.
 - (e) Hauser will add HDF-5 parallel code to SourceForge and will let users know when it is available.
 - (f) Towne and Rumsey to add `NGON_n` + `NFACE_n` documentation into V3.0 SIDS.
 - (g) Rumsey to send email to committee members describing `NGON_n` + `NFACE_n` and ask them to try it out.
 - (h) Allmaras to finalize Regions proposal modification, including proposed additions to `FlowSolution`, `DiscreteData`, `BC`, and `BCDataSet` and send to Rumsey for posting on website.
 - (i) Paul, Bussoletti, and Allmaras to look into finding development (particularly for MLL implementation) resources at Boeing.
 - (j) Duque and Hauser to assume lead on new discussion/proposal for handling sprays of unconnected points.
 - (k) Hauser, Rumsey, and Poinot to continue to explore possible CGNS meeting in Europe.
 - (l) Poinot to send necessary coding changes for HDF-5 linking to Hauser for implementation into V3.0 alpha version.
 - (m) Hauser to look into methods on SourceForge for getting Poinot developer access: switch from CVS to SVN? or use SSL?
 - (n) Hauser to speak to Koziol at HDF-5 Group about issues related to developers and funding;
 - (o) Wedan to investigate issue of MLL deleting the entire node even though its new dimensions are the same.
 - (p) Hauser will take control of domain name and will consider possibility of moving website to Utah State site.
 - (q) Hauser to contact Hunten about ISO/STEP and ask the best way for us to comment.

Attachment 1: Attendees

Steve Allmaras	Boeing Commercial
Mark Anderson	Concepts NREC
Earl Duque	Intelligent Light
Richard Hann	ANSYS-CFX
Thomas Hauser	Utah State
Mike Jeffries	Pointwise
Simon Pereira	ANSYS / ICEM CFD
Marc Poinot	ONERA
Chris Rumsey	NASA Langley
Charlie Towne	NASA Glenn
Bruce Wedan	no affiliation

Attachment 2: Tentative to-do list in association with HDF-5 switchover

- Complete and test parallel implementation
 - under development
- Complete and test API capability to automatically detect and switch between ADF and HDF-5 (transparent to user?)
 - done in V3.0
- Assess/minimize impact on software vendors using CGNS
 - under development (success with automatic detection transparent to user will minimize impact)
- Make changes recommended by HDF-5 to improve usability with HDF-5 (e.g., character strings as opposed to character arrays)
- Assess compression capability of HDF-5
- CGNS configure scripts will need to be modified to check for availability of appropriate HDF-5 libraries.
 - done in V3.0
- Possibly add flag-based options when opening CGNS files. For example: “follow links” vs. “don’t follow links”; “use ADF” vs. “use HDF-5”; “translate file automatically” vs. “leave the file as-is”; “compress” vs. “don’t compress”.
- Look into eliminating need for ID’s from MLL
- Resolve "link-of-links" problem: will require HDF-5 fix by NCSA under development (1.8.0 beta)
 - done in V3.0 in combination with HDF-5 V1.8