CGNS Telecon Minutes

Tuesday, 06 November 2018, 10:00am Eastern Time

1. The meeting was called to order by ZJ Wang. Attendees are listed in Appendix A.

2. 18 September 2018 minutes were approved as published on the website.

3. Steering Committee Issues

    a. ZJ Wang introduced Matthias Moller (TU Delft), who is interested in joining the CGNS steering committee. His interests include high order methods, compressible flows, finite elements, and standardization. The committee voted TU delft as our 20th steering committee member.

4. Steering committee attendance:
    a. Committee members (telecon last date attended):

Airbus	09/2018
ANSYS	09/2018
Boeing	11/2018
Cenaero	11/2018
Colo State	06/2018
DLR	11/2018
HDF	11/2018
IL	06/2018
NASA LRC	11/2018
Numeca	11/2018
ONERA	06/2018
P&W	09/2018
Pointwise	11/2018
SAFRAN	11/2018
Sandia	11/2018
Tecplot	10/2017
TTC	11/2018
TU Delft	11/2018
U Colo	11/2018
U Kansas	11/2018

5. Discussion
    a. Software status: ready for next release, except waiting for CPEX 0040 to be completed. Breitenfeld mentioned that using HDF's "compact storage data" for the metadata speeds I/O dramatically for parallel (cgp_open). It does not hurt serial reads. Need to declare the metadata as compact storage. Sjaardema confirmed how much it helps for parallel. Breitenfeld and Sjaardema to keep committee apprised of the status of the use of "compact data storage" with CGNS.
    b. Hillewaert discussed the status of the high order solution storage CPEX. There was a new consensus reached among Hillewaert's smaller group that the proposal SHOULD include nonparametric interpolation. This is now in the draft document, and will be a part of the existing CPEX that already includes parametric interpolation. He is currently working how to define the interface in the MLL. Hillewaert to have the high order CPEX available by the next telecon.
    c. Poinot introduced two new CPEXes: 0042 (Storing the Bounding Box of a Grid) and 0043 (Family Hierarchy as a Tree). Rumsey has posted these proposals to www.cgns.org. The steering committee should look them over and start to comment.

6. Review action items
    a. Continue to review outstanding JIRA items/tasks.
        i. Item carries.
    b. Breitenfeld to do a new CGNS release, including the software for CPEX 0040 and 0041.
        i. Item carries (waiting on CPEX 0040 to be completed).
    c. Hillewaert to finalize his CPEXs, so they can be numbered and formally reviewed.
        i. Item carries.
    d. Hillewaert, Poinot, Wang, and Karman to decide about CAD classification. May need new writeup on how best to use current functions to define/describe surface info.
        i. Item carries.
    e. Breitenfeld to update documentation for Intel compilers (serial and parallel) for Windows.
        i. Item carries.
    f. Baker and Karman to specify how the CGNS standard for P4 high-order mesh definitions needs to be changed in the CGNS docs to be consistent with existing textbook standard. Once they define it, Rumsey to help make the docs change.
        i. Definitions sent to Rumsey. Docs change still needed.
    g. Leicht, Legay, and Hillewaert (and others?) to get together outside of the CGNS committee meetings to initiate a new CPEX for including nonparametric interpolation.
        i. Done. Decision made to include nonparametric interpolation in the current CPEX being worked.

7. Ongoing action items
    a. Continue to review outstanding JIRA items/tasks.
    b. Breitenfeld to do a new CGNS release, including the software for CPEX 0040 and 0041.
    c. Hillewaert to finalize his CPEXs, so they can be numbered and formally reviewed.
    d. Hillewaert, Poinot, Wang, and Karman to decide about CAD classification. May need new writeup on how best to use current functions to define/describe surface info.
    e. Breitenfeld to update documentation for Intel compilers (serial and parallel) for Windows.
    f. Rumsey to make docs change for P4 high-order CGNS standard as summarized by Baker and Karman.
    g. Breitenfeld and Sjaardema to keep committee apprised of the status of the use of "compact data storage" with CGNS.

8. The next meeting is tentatively scheduled for Tuesday, 22 January 2019 at 10am Eastern.

9. Adjourn

Appendix A – Attendees

Ken Alabi	TTC
Pat Baker	Pointwise
Scot Breitenfeld	HDF Group
David Gutzwiller	NUMECA
Thomas Hauser	U Colorado
Koen Hillewaert	Cenaero
Dimitri Kamenetskiy	Boeing
Tobias Leicht	DLR
Matthias Moller	TU Delft
Marc Poinot	Safran
Chris Rumsey	NASA Langley
Greg Sjaardema	Sandia
ZJ Wang	U Kansas