

## CGNS Telecon Minutes

Tuesday, 24 October 2017, 10:00am Eastern Time

1. The meeting was called to order by ZJ Wang. Attendees are listed in Appendix A.
2. 12 September 2017 minutes were approved as published on the website.
3. Steering Committee Issues
  - a. Numeca was voted onto the Steering Committee (represented by David Gutzwiller). David works in the U.S. wing of Numeca (in San Francisco). He has been using CGNS for a long time; they have parallel CGNS in their unstructured solver (working well), now implementing it in their structured solver.
4. Steering committee attendance:
  - a. Committee members (telecon last date attended):

Airbus	09/2017
ANSYS	09/2017
Boeing	09/2017
Cenaero	09/2017
Colo State	09/2017
HDF	10/2017
IL	10/2017
NASA LRC	10/2017
Numeca	10/2017
ONERA	10/2017
P&W	10/2017
Pointwise	10/2017
SAFRAN	10/2017
Sandia	10/2017
Tecplot	10/2017
TTC	11/2016
U Colo	01/2017
U Kansas	10/2017
5. Discussion
  - a. Talked about recent NSF proposal, which was not funded. Learned that NSF had too many “highly responsive” proposals, and could not fund them all. It appears that I/O related proposals were not high priority at this time. Duque mentioned a new DoE SBIR topic; CGNS could possibly fit (parallel, high order, etc.). Duque to work with Breitenfeld and Wang to determine if CGNS can be part of a new DoE SBIR call.
  - b. Status of high order extensions: Hillewaert plans to split the CPEX he is working on into two separate CPEXes: (1) set of functions, and (2) high order.
6. Review action items
  - a. Continue to review outstanding JIRA items/tasks.
    - i. Item carries. There is a triage of bugs to be fixed for the next release (3.3.2), including “too many communicators” parallel issue. Committee members are encouraged to get on Jira and see if they feel if any other need to be elevated. See: <https://cgnsorg.atlassian.net>.
  - b. Hillewaert and sub-committee of experts to continue with proposal for storage of high-order

- grids and data Hillewaert.
      - i. Item carries.
  - c. Breitenfeld to add Windows documentation as appropriate.
    - i. Item carries.
  - d. Garratt to work with Breitenfeld to update documentation for cmake and compression.
    - i. Item carries.
  - e. Legay to incorporate Hann's latest review of CPEX 0041, and send out for final vote.
    - i. Done. CPEX 0041 passed. It is now approved, but has yet to be implemented.
      - Legay and Poinot to implement CPEX 0041.
  - f. Guzik to finalize implementation of CPEX 0040.
    - i. Item carries.
  - g. Wang/Rumsey to add statement to the docs about the fact that nodes are uniformly spaced on all edges of high-order elements.
    - i. Done.
- 7. New business
  - a. Poinot to present a paper at AIAA SciTech: "Seven Keys for Practical Understanding and Use of CGNS." It is in the session titled MVC-06 on Wednesday Jan 10, 8:30-9:00pm, in Daytona 1. Rumsey to arrange for an informal CGNS get-together immediately after the MVC-06 session at SciTech 2018.
  - b. Wang brought up that the high-order experts are debating the current methodology for storing P4 elements. They would like to unify CGNS, gmsh, and Pointwise. Wang, Hillewaert, and others to decide if/how to unify P4 elements for CGNS, gmsh, and Pointwise.
- 8. Ongoing action items
  - a. Continue to review outstanding JIRA items/tasks.
  - b. Hillewaert and sub-committee of experts to continue with CPEX proposal(s) for storage of high-order grids and data.
  - c. Breitenfeld to add Windows documentation as appropriate.
  - d. Garratt to work with Breitenfeld to update documentation for cmake and compression.
  - e. Guzik to finalize implementation of CPEX 0040.
  - f. Legay and Poinot to implement CPEX 0041.
  - g. Duque to work with Breitenfeld and Wang to determine if CGNS can be part of a new DoE SBIR call.
  - h. Rumsey to arrange for an informal CGNS get-together immediately after the MVC-06 session at SciTech 2018.
  - i. Wang, Hillewaert, and others to decide if/how to unify P4 elements for CGNS, gmsh, and Pointwise
- 9. The next meeting is tentatively scheduled for Tuesday, 16 January 2018 at 10am Eastern.
- 10. Adjourn

## **Appendix A – Attendees**

Pat Baker	Pointwise
Scot Breitenfeld	HDF Group
Bob Bush	Pratt & Whitney
Scott Imlay	Tecplot
David Gutzwiller	Numeca
Pierre Jacques-Legay	Onera
Marc Poinot	Safran
Chris Rumsey	NASA Langley
Greg Sjaardema	Sandia
ZJ Wang	U Kansas
Earl Duque	Intelligent Light