CGNS Telecon Minutes

Tuesday, 05 July 2016, 10:00am Eastern Time

1. The meeting was called to order by Bob Bush at 10:05am eastern time. Attendees are listed in Appendix A.

2. April 5, 2016 minutes were approved as published on the website.

3. Steering committee issues:
    a. Committee members (telecon last date attended):
        a. Airbus   12/15
        b. ANSYS   12/15
        c. Boeing   7/16
        d. Colo State   4/16
        e. GE   10/15
        f. HDF   7/16
        g. IL   5/15
        h. NASA LRC 7/16
        i. ONERA   7/16
        j. Pointwise   7/16
        k. P&W   7/16
        l. Tecplot   12/14
        m. TTC   12/14
        n. U Colo   4/16
        o. U Kansas   7/16
    b. Kaveh Mohammed's email still bounces; if no contact by 10/16 then GE will be removed from the committee.
    c. IL, Tecplot, and TTC have not called in to a steering committee telecon in over 1 year.
    d. Re: NSF and DOE proposal status. Bush contacted Hauser (after this telecon), and learned that the NSF proposal did not make it. Hauser included some CGNS tasks as part of a DOE Exa-scale proposal, but its status is not yet known.

4. Discussion
    a. Software status
        i. There are still issues when opening CGNS files in parallel when using on the order of 1-10K cores (or more). HDF Version 1.8.17 and 1.10.0 are both slow in this situation (1.10.0 is slower than 1.8.17). It is hoped that upcoming HDF 1.10.1 will improve this slowness issue, but don't know if it will yet or not.
        ii. There appear to be some issues with parallel HDF usage on Lustre file systems (e.g., NASA Pleiades).
        iii. It was noted that testing of parallel CGNS can be done independent of having parmetis installed.
        iv. Breitenfeld could use help addressing some of the JIRA items (on cgnsorg.atlassian.net). Currently most are assigned to him.
        v. It was felt to be better to have a new CGNS release after fixing the few major roadblock issues, rather than waiting to fix the many minor ones.
        vi. Independent testing of parallel CGNS is still seems to be going rather slow. Many people already have workarounds in place (so no driving need for parallel I/O), and have only limited resources to invest.

5. Review action items
    a. Review outstanding JIRA items.
        i. Ongoing.
        ii. There are currently two "roadblock" issues: CGNS-85 and 86.
    b. Breitenfeld to write a recommendation regarding what packages are best to use with CGNS, and Rumsey to post in on the Download page.
        i. Ongoing.
    c. Hauser to take lead in putting NSF proposal together, with help from Wang. Letters of support will be needed from other committee members. All this to be done off-line in coming weeks.
        i. Proposal was not accepted.
    d. Hauser to continue to pursue DOE proposal.
        i. Done; status not yet known.

6. New business
    a. ZJ Wang mentioned need for storing solutions high-order (more complex than simply storing information at additional nodes). E.g., how to write a standard to describe a high-order basis? Has anyone already defined a way to store high-order solutions in CGNS?

7. Ongoing Action Items
    a. Continue to review outstanding JIRA items/tasks.
    b. Breitenfeld to write a recommendation regarding what packages are best to use with CGNS, and Rumsey to post in on the Download page.
    c. Hauser to continue to pursue DOE proposal.

8. The next meeting is tentatively scheduled for Tuesday, 13 September 2016 at 10am Eastern.

9. Adjourn

Appendix A – Attendees
Pat Baker   Pointwise
Scot Breitenfeld   HDF Group
Bob Bush   Pratt & Whitney
Dimitri Kamenetskiy   Boeing
Marc Poinot   ONERA
Chris Rumsey   NASA LaRC
ZJ Wang   U Kansas