

Minutes from Sept. 29, 2021 meeting of the ns-3 Consortium Advisory Board

Minutes taken by Tom Henderson

Attending: Tom Henderson, Manuel Ricardo, Sandra Lagen, Doug Blough, Mohit Tahiliani

Agenda:

- 1) Review budget
- 2) Review proposal for gifts and thank yous for WNS3 chairs
- 3) Review WiFi/WiGig software work by Sebastien Deronne, and discuss proposal to continue work
- 4) WNS3 2022 planning (meeting format)
- 5) WNS3 TPC co-chair search
- 6) Member updates and consortium initiatives

Tom shared that the available balance in the Consortium accounts was approximately \$23,000 at the start of the new year, and is roughly \$16,000 now, with the major expenses being WNS3 proceedings publication, Wi-Fi software maintenance work, and a new macOS computer purchase. HUST and CableLabs submitted renewals for the consortium in July.

Tom suggested sending a small gift to our WNS3 chairs (Eric, Stefano, and Michele) as thanks for their efforts, and all agreed.

The group discussed the software work undertaken by Sebastien Deronne to perform a deep refactoring of the WiGig module code to align with the ns-3 Wi-Fi module architecture. Sebastien has completed the current phase of work and estimates that the remaining three phases to complete would cost about \$6,000 further. There was strong agreement that this work should continue to be funded and would be valuable to the community.

The meeting next discussed plans for the 2022 edition of Workshop on ns-3. With the pandemic, it is difficult to plan but was noted that most scientific meetings plan to resume in person meetings in 2022. There was support for trying to schedule an in-person workshop again, with possibility of converting it to virtual if conditions do not look favorable by March. The pros and cons of a hybrid event were discussed, with the pros mainly being that hybrid increased participation particularly from communities that cannot afford the meeting expense, and the cons being that a hybrid meeting detracts from the in-person meeting experience, and may reduce the in-person attendance. We discussed the possibility of parts of the workshop such as training being virtual/hybrid, but paper presentations not being hybrid. Since 2020 WNS3 was planned for NIST in Washington DC but later suspended, Tom volunteered to check in with NIST again about the possibility of hosting.

Tom mentioned that nominations for technical program committee co-chair were being accepted, for the position being vacated by Stefano Avallone. Decisions should be taken in the next month or so.

Finally, the remainder of the meeting was an update from various members regarding current or near-term ns-3 activities, particularly as they relate to consortium initiatives of research, education, and training.

- Tom plans to continue upgrading Direct Code Execution after the ns-3.35 release, and would like to spend more time on usability, training, and educational support.
- Doug continues work on millimeter wave Wi-Fi and parallelization, and plans to teach a network simulation course in the spring.
- Manuel has been using ns-3 in a course, including Wi-Fi and LTE scheduler concepts, and his group still is pursuing trace-based models. Manuel and Mohit have recently started a collaboration on this with six NITK students, aiming to create several apps related to machine learning for the ns-3 app store.
- Mohit also mentioned work on using NEST and flent to perform validation of three queue discs against the Linux implementations; this work is being conducted with some members of the Bufferbloat community.
- Sandra said that they have continued industrial funding for 5G and MIMO/mmWave, and would like to align the NR-U module with the updated WiGig module, and also continue to work on the V2X branch.