

Data & Network Management Task Team (DNMTT) Minutes

Co-leads, Dan Brancaccio (dbrancaccio@quanta-technology.com) and (co-lead position is available)

Synchrophasor Archive and Network Strategy Task Force (SANSTF) Lead: Laurel Dunn (laurel@pingthings.io)

Teresa Carlon, NASPI web site and listserv contact (teresa.carlon@pnnl.gov)

Email list address: naspi-taskteam-data@lyris.pnnl.gov

November 4, 2021

1.) Roll call and introductions. Attendees listed below.

2.) Review Action Items

- a. Clock issue survey. Terry Jones will help Dan with this effort. If you would like to contribute to this effort, please get in touch with Dan.
- b. Naming convention paper. NDR volunteered to help Dan with this paper. Anyone is welcome to help and if you have notes or ideas on topics that should be included please email to Dan, his email is at the top of this page.
- c. Dan will reach out to Laurel to discuss the path forward with SANSTF.

3.) Old business

- a. SANSTF needs to be revisited with Laurel and determine whether this activity can move forward. Dan will contact Laurel.
- b. Dan experiencing issues with clocks in the field, for example, servers running up to two minutes slow. Synchrophasors thinking this data is coming from the future and tossed it out. Equipment in the field is reporting the wrong date in entirely. Some date stamps coming from future dates. The downside to all of this, none of the clocks are reporting any errors. No flags are being set. Dan is manually having to fix this issue. Dan wants to know if anyone else is running into these issues. Terry Jones would like to help Dan pull together a paper on this topic and a survey. Clocks are sensitive to things like weather conditions and fall foliage.
- c. Naming conventions paper. Having the proper naming convention has always been important and has been increasingly more important as multiple entities continue to look at data. Documentation: where do utilities keep their naming convention? Who is the custodian of this information? Is the naming convention unique?
- d. STTP update by Ritchie. SEL has a good deployment. STTP has better throughput and better metadata. The data values "live" on their own. The size of the data frame is much more reliable. One bit error in the older protocols can the loss of the whole data frame.
- e. IEEE PE/PSCC P2664 Standard for Streaming Telemetry Transport Protocol (update from the PRSVTT Call/Ken Martin) progress is being made, had a problem with terminology with channel vs. connection went through a process to revise those terms. TCP UDP will be used to write the standard if that becomes a viable option. All the sections are pretty much finished, on track to make the December 2022 deadline. NDR asked Dan/Ritchie what are the advantages of STTP? STTP has better throughput and better metadata. The data values "live" on their own. The size of the data frame is much more reliable. One bit error in the older protocols can the loss of the whole data frame.

4.) New project discussion

a. None at this time.

Link to the DNMTT folder on Google Docs. This folder contains the most recent version of the **SABGANS** paper and the **NASPI 2019 Survey of Industry Best Practices for Archiving Synchronized Measurements paper**: https://drive.google.com/drive/folders/1dAqf7GrkdluoQF1tUTn-dVUDbfpm4tt5?usp=sharing Anyone with this link can edit the content in this folder, Google sign-in required.

*Naming convention resources:

NASPI Synchrophasor Start Kit (Section 12) – DRAFT October 9, 2015: https://www.naspi.org/node/355 NASPI PDC Configuration Workshop Minutes: https://www.naspi.org/node/389. PDC Configuration Workshop, March 10, 2014 (PDF).

NASPI Synchrophasor Technical Report, Use of IEC 61850-90-5 to Transmit Synchrophasor Information According to IEEE 37.118, From NASPI tutorial October 16, 2012; August 2014 Update: https://www.naspi.org/node/386
D. Brancaccio. 2012. WECC WISP Technical Notes, PMU Identification Numbers: WISP PMU Identification and Signal Naming.pdf (wecc.org)

NASPI Technical Workshop – Communication and Networking Issues – San Diego, CA, April 2019: https://www.naspi.org/node/759 (naming conventions, D. Brancaccio's slides.)

Attendees

Mahendra Patel Sarma NDR Nuthalapati J. Ritchie Carroll Dan Brancaccio Teresa Carlon Terry Jones Yi Hu