BAS Summit

Report of Contributions

Contribution ID: **1** Type: **not specified**

Arriving and Badging

Wednesday, 14 September 2022 07:30 (30 minutes)

Contribution ID: **2** Type: **not specified**

Meet and Greet (coffee/refreshments)

Wednesday, 14 September 2022 08:00 (45 minutes)

Contribution ID: **3** Type: **not specified**

Welcome Statements

Wednesday, 14 September 2022 08:45 (30 minutes)

Contribution ID: 4 Type: **not specified**

NREL's Zero Energy Analytics and Dashboard

Wednesday, 14 September 2022 09:15 (45 minutes)

Contribution ID: **5** Type: **not specified**

Unhosted Drinks & Dinner at the historic Two Brothers Round House in Aurora

Wednesday, 14 September 2022 17:00 (4 hours)

Note: Significant others are welcome to join us this evening at Two Brothers!
205 N Broadway, Aurora, IL

Contribution ID: **6**   Type: **not specified**

Introduction to ASHRAE Guideline 36

ASHRAE Guideline 36 "High Performance Sequences of Operation for HVAC Systems" was published in 2018 and updated in 2021. It provides standardized sequences of operation for common HVAC equipment found in commercial buildings, including central plant, air handling units, and terminal units. It aims to deliver direct benefits that include reduced design effort, reduced programming and testing effort, improved air quality, and improved energy performance. It also makes possible additional downstream benefits such as interoperable programming environments, interoperability between programming and energy models and design models, and similar advantages of standardization among common equipment applications.

This presentation reviews the contents of the Guideline, explains how the Guideline is intended to be implemented, reviews the extent of current industry adoption of the Guideline, and shares some "watch-its" related to implementing the Guideline. Attendees should leave the presentation with better understanding of what the Guideline can do, what it cannot do, and what is required from stakeholders if a project decides to adopt Guideline 36 sequences.

Primary author: KNIGHT, Robert (Arup)

Presenter: KNIGHT, Robert (Arup)

Session Classification: Arriving, Badging

Contribution ID: **7** Type: **not specified**

enOcean Wireless Integration

Confronted by aging buildings with continually evolving primary functions, a solution to overcome common retrofit issues such as solid ceilings, asbestos concerns, GPR requirements, and operational interruptions, is needed. The option of integrating wireless sensors into a BAS network provides useful benefits compared to traditional I/O in some key scenarios at Los Alamos National Laboratory. This presentation will demonstrate the pros and cons of several pilot projects at LANL as well as address some key challenges with regards to BAS integration, design considerations, network security concerns, and future servicing.

Primary author: PAIGE, Jeffrey (Los Alamos National Laboratory)

Presenter: PAIGE, Jeffrey (Los Alamos National Laboratory)

Session Classification: Arriving, Badging

Contribution ID: **8** Type: **not specified**

BAS Upgrades – Trials and Tribulations

This presentation will look at the existing Building Automation System at Sandia National Laboratories and where it is headed. Existing BAS limitations must be understood in order to update the system in a way that supports both regulatory requirements and future mission needs. Implementation challenges will also be explored.

Primary authors: MAYFIELD, Jason (Sandia National Labs - Albuquerque, NM); MASER, Travis (Sandia National Labs - New Mexico)

Presenters: MAYFIELD, Jason (Sandia National Labs - Albuquerque, NM); MASER, Travis (Sandia National Labs - New Mexico)

Session Classification: Arriving, Badging

Contribution ID: **9**   Type: **not specified**

BACnet SC – Secure Connect

In our presentation we will discuss basics of BACnet, some of the types of BACnet and how these were used to create BACnet/SC, a secure type of BACnet. We will discuss BACnet/SC, its features, network requirements and security requirements. We will also discuss public key encryption which is how BACnet/SC provides its security.

BACnet SC – Secure Connect

Primary author: CONTROLS, Bennet Levine

Presenter: CONTROLS, Bennet Levine

Contribution ID: **10**   Type: **not specified**

NREL's Zero Energy Analytics and Dashboard

The National Renewable Energy Laboratory's (NREL's) Research Support Facility (RSF), constructed in 2011, was designed as a zero energy building and achieved LEED Zero Energy certification in 2020. Recently, NREL developed a new dashboard for monitoring the RSF's ability to maintain zero energy operation through major building changes related to COVID and remodeling. The dashboard engages operators and occupants to clearly communicate the building's zero energy performance. This presentation describes the dashboard requirements, design features, and technical implementation.

BACnet SC – Secure Connect

Primary author: FRANK, Stephen (National Renewable Energy Laboratory)

Presenter: FRANK, Stephen (National Renewable Energy Laboratory)

Contribution ID: **11** Type: **not specified**

IP Controllers & Flat Architectures

Wednesday, 14 September 2022 10:00 (45 minutes)

Contribution ID: **12** Type: **not specified**

Break: Coffee/Refreshments/Networking

Wednesday, 14 September 2022 10:45 (15 minutes)

Contribution ID: **13**   Type: **not specified**

BACnet SC - Secure Connect

Wednesday, 14 September 2022 11:00 (45 minutes)

Contribution ID: **14** Type: **not specified**

LUNCH

Wednesday, 14 September 2022 11:45 (1h 15m)

Contribution ID: **15** Type: **not specified**

OCx (Ongoing Commissioning)

Wednesday, 14 September 2022 13:00 (45 minutes)

Contribution ID: **16** Type: **not specified**

BAS Alarm Management

Wednesday, 14 September 2022 13:45 (45 minutes)

Contribution ID: **17** Type: **not specified**

Break: Coffee/Refreshments/Networking

Wednesday, 14 September 2022 14:30 (15 minutes)

Contribution ID: **18** Type: **not specified**

DDC vs PLC for Critical Systems

Wednesday, 14 September 2022 14:45 (45 minutes)

Contribution ID: **19**   Type: **not specified**

enOcean Wireless Integration

Wednesday, 14 September 2022 15:30 (45 minutes)

Contribution ID: **20** Type: **not specified**

Meet/Greet - Coffee and Refreshments

Thursday, 15 September 2022 07:30 (30 minutes)

Contribution ID: **21** Type: **not specified**

BAS Upgrades - Trials & Tribulations

Thursday, 15 September 2022 08:00 (45 minutes)

Contribution ID: **22** Type: **not specified**

Controls & Carbon Footprint

Thursday, 15 September 2022 08:45 (45 minutes)

Contribution ID: **23** Type: **not specified**

Break: Coffee/Refreshments/Networking

Thursday, 15 September 2022 09:30 (15 minutes)

Contribution ID: **24** Type: **not specified**

Fermilab Bus Tour

Thursday, 15 September 2022 09:45 (1h 30m)

Contribution ID: **25** Type: **not specified**

Lunch

Thursday, 15 September 2022 11:15 (1h 15m)

Contribution ID: **26** Type: **not specified**

SkySpark Data Analytics: Tagging Practices; and Identifying Energy Opportunities

Thursday, 15 September 2022 12:30 (45 minutes)

Contribution ID: **27** Type: **not specified**

BAS Network Security

Thursday, 15 September 2022 13:15 (45 minutes)

Contribution ID: **28** Type: **not specified**

Completing the Transition to IPv6 – OMB M-21-07

Thursday, 15 September 2022 14:00 (45 minutes)

Contribution ID: **29** Type: **not specified**

Break: Coffee/Refreshments/Networking

Thursday, 15 September 2022 14:45 (15 minutes)

Contribution ID: **30**   Type: **not specified**

Introduction to ASHRAE Guideline 36

Thursday, 15 September 2022 15:00 (45 minutes)

Contribution ID: **31** Type: **not specified**

Closing/Future Summit Planning/Etc.

Thursday, 15 September 2022 15:45 (45 minutes)