Title: Cybersecurity in Buildings

Subject Areas:

Administration	✔	Design	✔	
Operations	✔	Compliance	✔	
Maintenance	✔	Finance	✔	
Construction	✔	Energy Reduction		
Planning	✔	Risk Mitigation	✔	

Time Required: 60 minutes

Session Overview:

Cyber-attacks are actions that target computers and network systems designed to disrupt the normal operations of the system. These actions can be initiated locally or remotely. While normally intentional, issues can still result unintentionally via poor security threat prevention. Cybersecurity is protection of assets against these attacks, and its objective is to provide increased levels of protection for information and physical assets from theft, corruption, misuse, or accidents while maintaining access for intended users.

There is not one single product that can defend a network, rather a defense-in-depth approach that ensures the best coverage for a secured, highly available operation. In this session we will discuss the trends that are driving developments in cybersecurity, how these will impact BAS products and services, and how all building industry stakeholders can better protect themselves from this evolving threat.

Presenter:

Name:	Tyler Haak
Title:	Consultant Solution Architect, Northeast
Mobile Phone:	(412) 855-6107
Email address:	tyler.haak@se.com

Presenter Bio:
In his current role, Tyler is a Consultant Solutions Architect who works primarily in the northeast US by interfacing with the building design community and sharing the importance of smart building services via Internet of Things (IoT) platforms. Tyler helps the community design integrated, intelligent building systems using Schneider Electric's EcoStruxure BAS platform. Originally from Pittsburgh, PA, Tyler is closing in on a decade of experience in building automation sales and business development. He holds degrees in Structural Engineering (BS) from Virginia Tech, and Energy & Atmosphere Engineering from Stanford (MS). He currently lives in New York City, NY.

Event Information:

Name:	Lunch & Learn Presentation by ABC Partners
Location:	Customer Company & Sons
Date:	Month Day, Year

Event Type:

Tradeshow
Workshop
Webinar
Presentation ✓

Additional documentation attached:

White Paper	Presentation
Case Study	Other

Title: Cybersecurity in Buildings

Presentation Outline

I. **An Introduction to Cyberattacks**
   a. Definition and description of what cyberattacks are
   b. Visual representation of cyberattacks globally and in real-time
   c. Business implications of cyberattacks and what incentivizes bad actors

II. **Recent Pertinent Examples of Cyberattacks**
   a. Industrial PLC example
   b. Noteworthy breaches that have affected all of us
   c. Famous hack as a result of a breach in HVAC BAS network

III. **Defining What Makes Cybersecurity So Difficult to Address**
   a. Evolution of risk due to changing treats, vulnerabilities, and harm
   b. Inverse priorities in IT/OT availability and confidentiality

IV. **Defense in Depth Approach to Securing Building Networks**
   a. Security Plan
   b. Network Separation
   c. Perimeter Protection
   d. Network Segmentation
   e. Device Hardening
   f. Monitoring & Updating

V. **Best Practices in BAS Cybersecurity**
   a. Enhanced cybersecurity features and best-in-class technology enhancements
   b. Designing cybersecure BAS specifications
   c. Best practices for implementing cybersecure projects
   d. Published resources