Agenda

• Welcome and Introductions

• Energy Sector Asset Management (ESAM) Project Update

• GridSecCon 2018

• Questions, Open Discussion
OT Asset Management Attributes

Asset Discovery:
• establishment of a full baseline of physical and logical locations of assets

Asset Identification:
• capture of asset attributes, such as manufacturer, model, operating system (OS), Internet Protocol (IP) addresses, Media Access Control (MAC) addresses, protocols, patch-level information, and firmware versions

Asset Visibility:
• continuous identification of newly connected or disconnected devices, and IP (routable and non-routable) and serial connections to other devices

Asset Disposition:
• the level of criticality (high, medium, or low) of a particular asset, its relation to other assets within the OT network, and its communication (to include serial) with other devices

Alerting Capabilities:
• detection of a deviation from the expected operation of assets
### ESAM Project Milestones

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Milestone</th>
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<tbody>
<tr>
<td>June 2018</td>
<td>Build Team Kickoff</td>
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<tr>
<td>July – October 2018</td>
<td>Build Architecture</td>
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<tr>
<td>October 2018 – January 2019</td>
<td>Implementation</td>
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<tr>
<td>February/March 2019</td>
<td>Draft ESAM Practice Guide (PG)</td>
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<td>April 2019</td>
<td>Draft ESAM Public Release</td>
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<td>Name</td>
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<tr>
<td>Jim McCarthy</td>
<td>NIST/NCCoE</td>
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<td>Michael Powell</td>
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<td>Titilayo Ogunyale</td>
<td>MITRE/NCCoE</td>
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<td>John Wiltberger</td>
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<td>Devin Wynne</td>
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<td>Lauren Acierto</td>
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<td>Nikolas Urlab</td>
<td>MITRE/NCCoE</td>
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ESAM Build Team
ESAM Build Architecture to Date
ESAM Project Execution Timeline

**Describe**
- Publish the NCCoE building block description

**Form Team**
- Form the team and complete the FRN, LOI, and CRADA

**Design**
- Design and engineer the architecture and usage scenarios taking into consideration resources

**Build Plan**
- Develop the execution plan for building the demonstration based on the design

**Build**
- Compose, build the demonstration, and perform security functional tests

**Document**
- Develop the practice guide to publish as a public draft and final document

**Outreach**
- Present at public events and interact with community of interest

**Timeline**
- Q2 2018
- Q3 2018
- Q3 / Q4 2018
- Q3 / Q4 2018
- Q4 2018 / Q1 2019
- Q1 / Q2 2019
- Q3 2019

**Notes**
- Q3 2018
- Q3 / Q4 2018
- Q4 2018 / Q1 2019
- Q1 / Q2 2019
- Q3 2019
Energy Sector Upcoming Events

- **GridSecCon 2018 – Training Session (4 Hours)**
  - October 16, 2018, Las Vegas, NV
  - *Presenting NCCoE Energy Sector projects (such as ESAM) to session attendees*

- **National Cybersecurity Awareness Month – IIoT Webinar**
  - October 23, 2018, 3:00-4:00pm (ET)
  - *Energy Sector and IIoT challenges discussion in collaboration with BlackRidge Technologies*
NCCoE Energy Sector Upcoming Activities

**Theme:** Enhancing Asset Management Capabilities for the Energy Sector

**8-8:10 – Welcome, overview of NCCoE**

**8:10-10:30: Part 1- Panel Presentations (10 Mins Q&A after each presentation)**

8:10-8:40  Jim McCarthy & Michael Powell (NCCoE/NIST)
8:50-9:20  Don Hill (University of Maryland) & Bill Johnson (Tdi Technologies)
9:30-9:50  Mark Rice (PNNL)
10:00-10:30: Break

**10:30- 12:00: Part II- Open Dialogue and Discussion – IIoT Cybersecurity Challenges in the Energy Space**

**Part II Summary:** NIST’s National Cybersecurity Center of Excellence (NCCoE) is considering developing a project around securing IIoT and wants to hear your thoughts on challenges and potential solutions. Our goal is to better understand which topics and technologies are relevant when addressing these issues.

10:30-10:45: Introduction of Panelist and Moderation of Panel- Harry Perper (MITRE)
10:45-11:45  Questions and Discussion with Panelists
  - Jim McCarthy (NIST)
  - Mark Rice (PNNL)
  - Jon Stanford (Cisco)
  - Bill Johnson (Tdi)
  - Patrick Miller (Archer International)
11:45-12:00: Summary of Morning, Way Ahead, & Closing
Contact Us

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