

National Cybersecurity Center of Excellence

Energy Provider Community (EPC) Update

10/09/2018

> 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

June 2018	Build Team Kickoff
July – October 2018	Build Architecture
October 2018 – January 2019	Implementation
February/March 2019	Draft ESAM Practice Guide (PG)
April 2019	Draft ESAM Public Release

> NCCoE ESAM Team: Contacts / Roles

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> ESAM Build Team

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SOLUTIONS

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splunk>

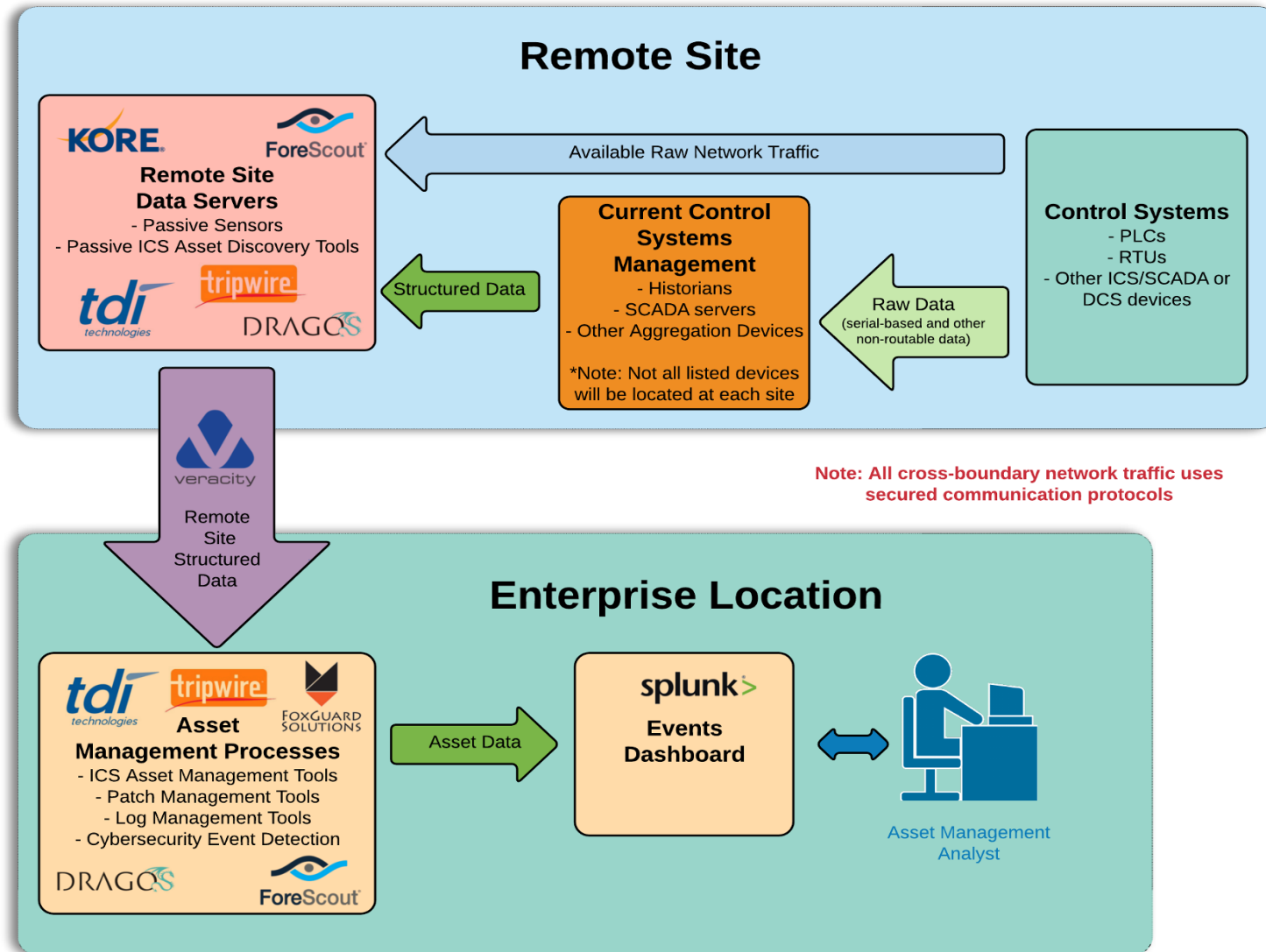
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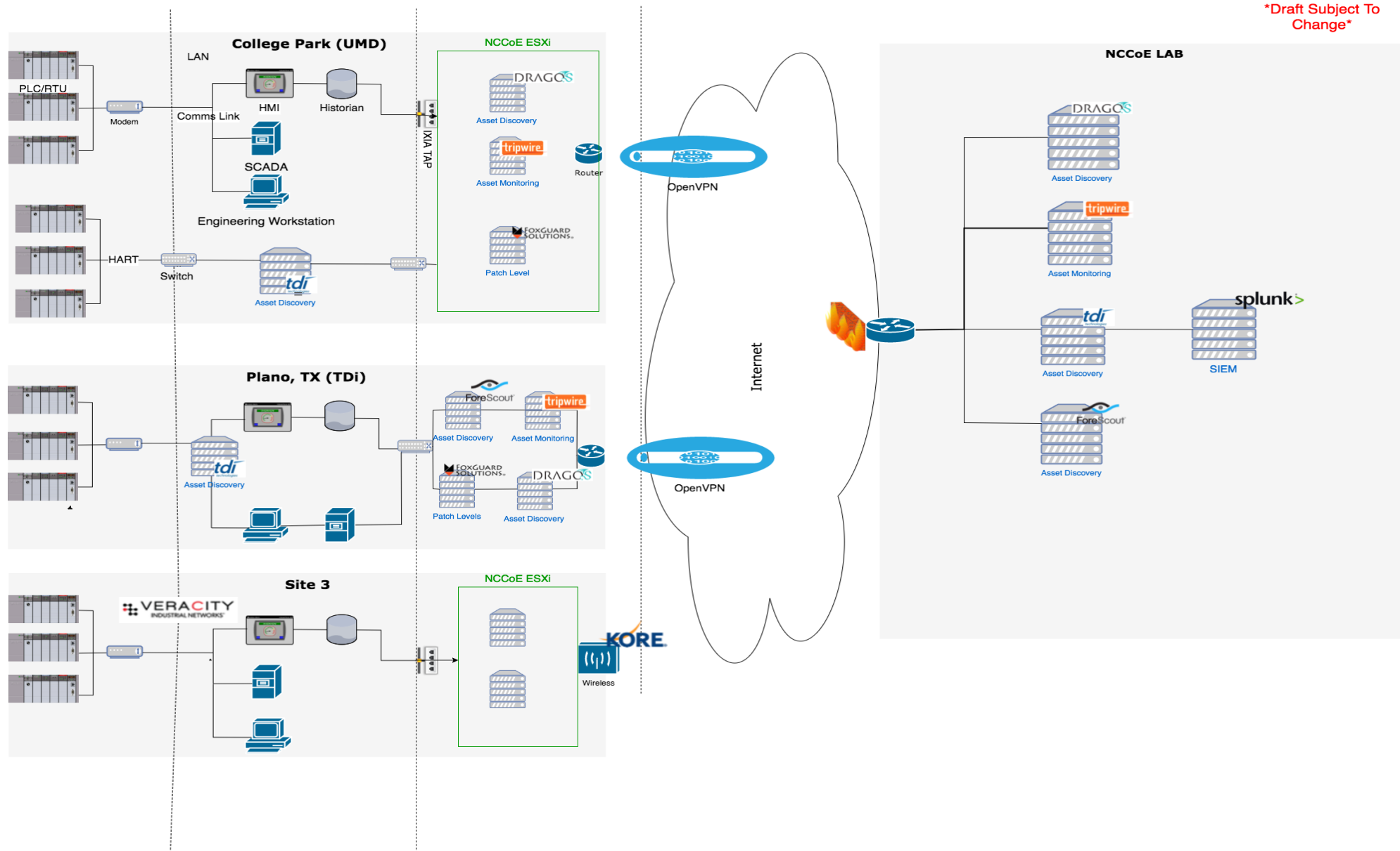
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INDUSTRIAL NETWORKS

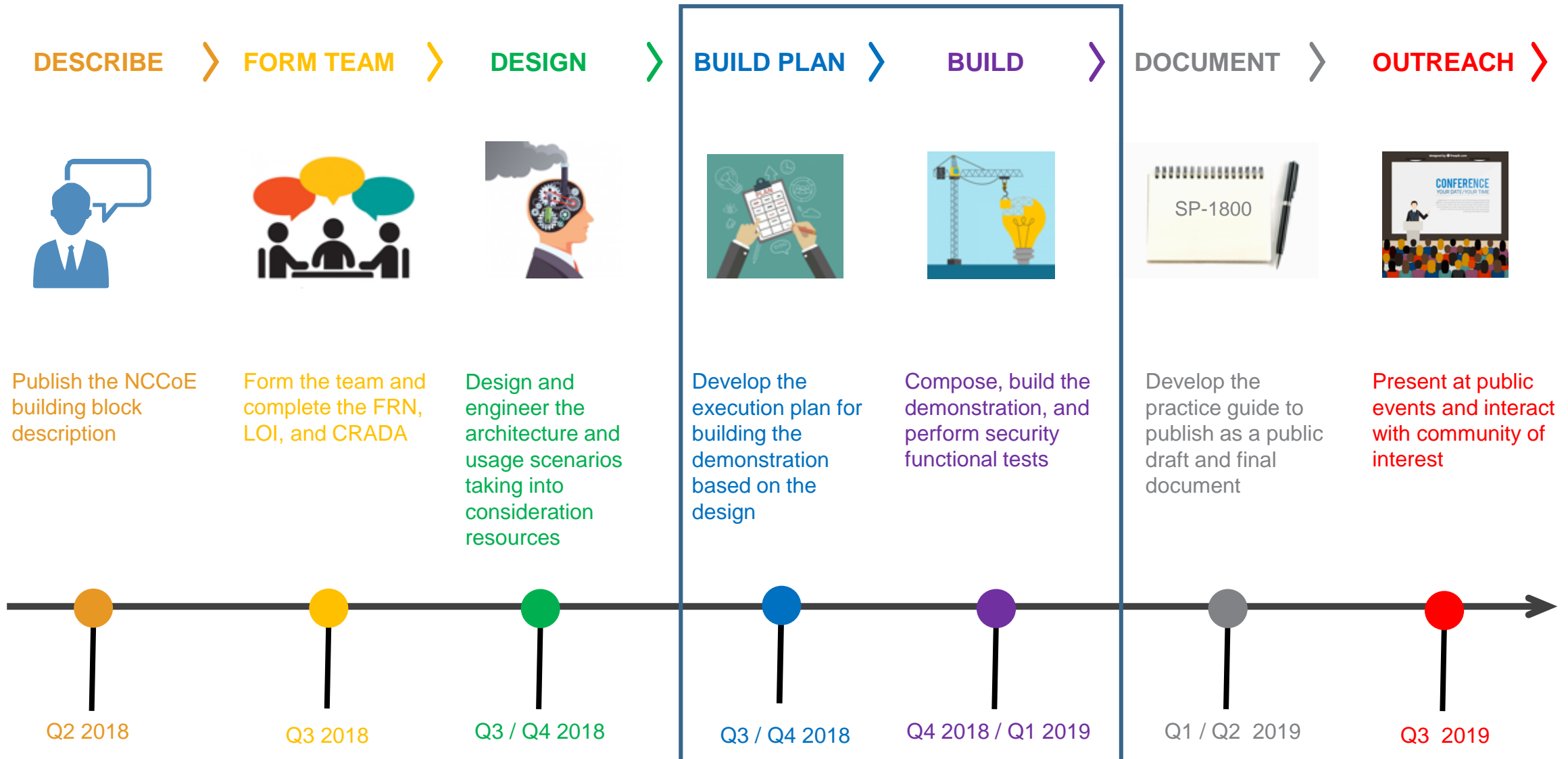
> ESAM Flow Diagram



ESAM Build Architecture to Date



> ESAM Project Execution Timeline



> 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

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