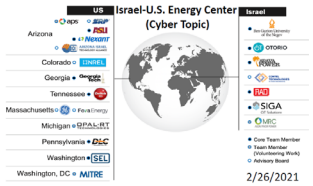


SIGA OT Solutions

Task 9

False Data Injection

Task 9 - Objectives

SIGA OT Solutions

Objective of Task

1. Adjust framework and algorithmic models to real-time high sampling rate data collected from multiple sites to gain insights into cyberattacks at the power distribution grid. **(SIGA)**
2. Generate Insights from Sensor Data & Process Data received from different assets in the power distribution. **(SIGA)**
3. Design enhanced event detectors that use offline learning algorithms to identify real from fake events. Further, to develop an OT+IT software to enhance existing EMS visualization methods to provide transparency into why detectors perceive an event as a probable cyberattack through false data injection. **(ASU)**

Task 9 - Concept

SIGA OT Solutions

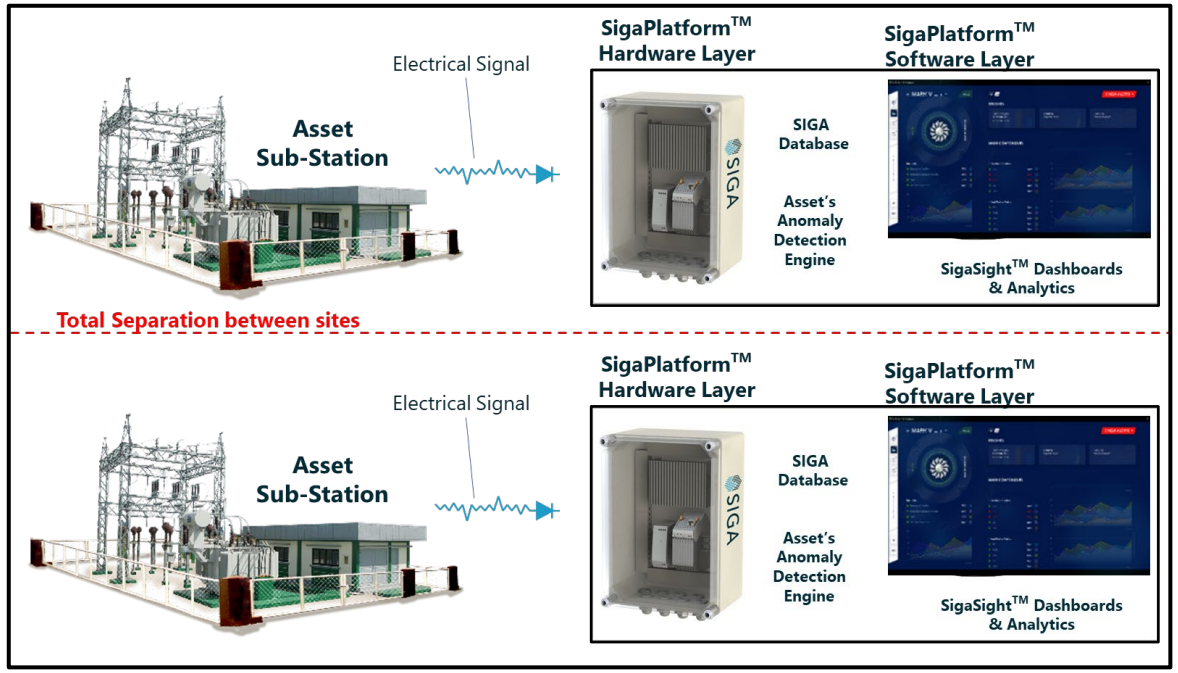
Current

- Monitor and analyze each specific site with unsupervised anomaly detection for each site
- Independent visualization and dashboard for each site
- Adjusted to standard industry data sources types

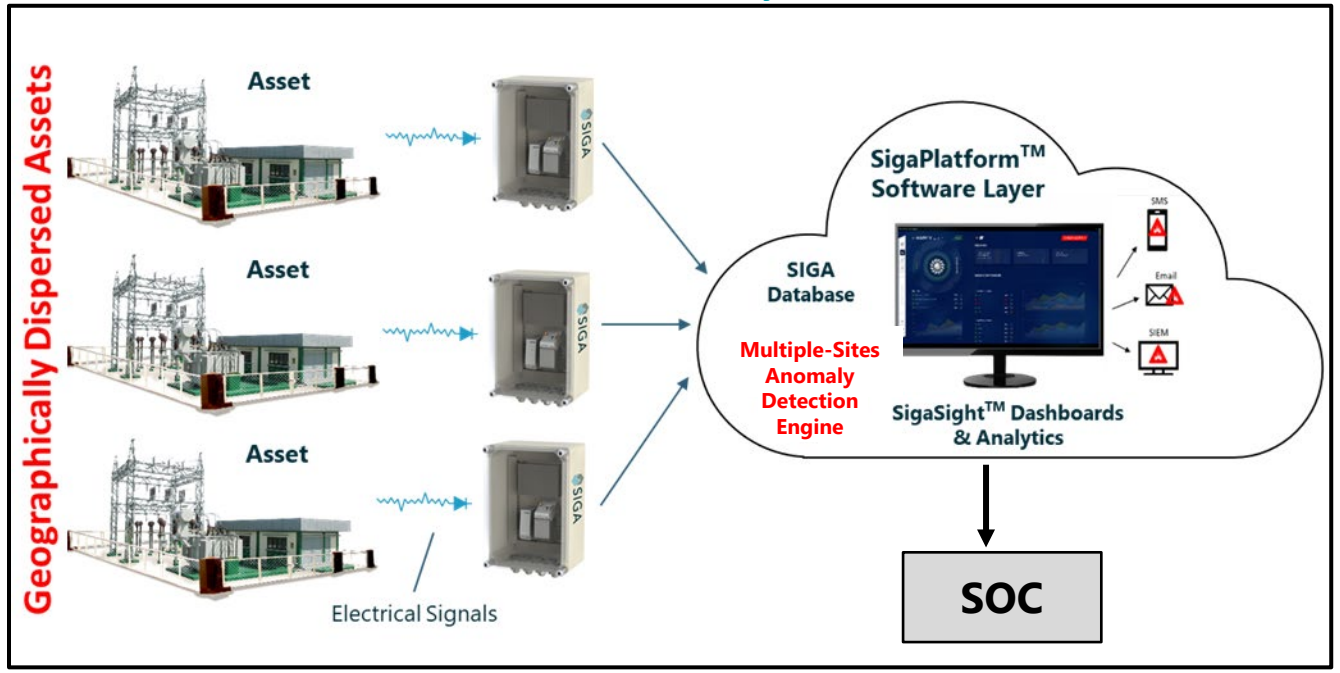
Planned Development

- Monitor and analyze multiple geographically dispersed energy distribution sites as a one comprehensive grid
- Centralized visualization and dashboard for holistic view of the grid
- Adjusted to power grid assets data sources

Current: SIGA 1-to-1 Architecture



Planned: SIGA 1-to-Many Architecture



Task 9 - Progress

- The task officially begins at May 2022
- SIGA and ASU have been discussing the details of the task plan, management and responsibilities.
- SIGA will use various sources of data for the development and will test it results in pilot sites, relying on the task partners.

Data Providers for Development

MITRE

ASU

Nexant

DLC DUQUESNE LIGHT CO.

SEL

Delek US

Alon Tavor

Planned Development: SIGA 1-to-Many Architecture

SIGA

ASU

Use Cases Pilots

ASU

DLC DUQUESNE LIGHT CO.

Delek US

aps

Task 9 - Commercialization

SIGA OT Solutions

The resulted development of the task can be commercialized:

- By SIGA in the US and in Israel as a SIGA solution for the energy sector
- By SIGA and other partners as a collaboration between SIGA's product and the partners product
- SIGA is open to any opportunity that will come from this project and the collaboration with the other partners – technological and commercial