

# Welcome to the Second Annual Intelligence & National Security Forum



# Today's Agenda



0800 – 0900 Registration and Light Breakfast

0900 – 0910 Opening Remarks

Mr. Paul J. Geraci, Senior Director – Intelligence and National Security, OSIsoft

0910 – 0930 OSIsoft, The PI System, and National Security – an Introduction

Mr. Paul J. Geraci, Senior Director – Intelligence and National Security, OSIsoft

0930 – 0945 The PI System - A Short Primer

Mr. Mark McCoy, Federal Solutions Architect, OSIsoft

0945 – 1015 Keynote: Do Sensors Write Fake News?

Mr. Graham Plaster, Policy Advisor, OASD, CEO, [theintelligencecommunity.com](http://theintelligencecommunity.com)

Editor-in-Chief, Foreign Area Officer Association Journal of Internal Affairs

1015 – 1045 IIoT and Azure – PI in the Sky

Mr. Niten Malik, Director Cloud Strategy, Microsoft National Security Group

1045 – 1100 Coffee and Networking Break

1100 – 1130 DoD: GSA / DoD Control Systems Cyber Policy and Strategy

Mr. Daryl Haegley, Program Manager, Office of the Assistant Secretary of Defense for Energy,

Installations, and Environment, DoD: GSA/DoD Control Systems Cyber Policy and Strategy

# Today's Agenda



- 1130 – 1200 Time and Space: Convergent Monitoring of the Cyber Supply –  
a Geospatial Approach  
Mr. Brian Biesecker, Technical Director, Intelligence Community, Esri
- 1200 – 1300 Hosted Networking Lunch
- 1300 – 1330 Panel Discussion: Holistic Situational Awareness - the Need and the Challenges
- Mr. Jonathan Goodwin, DoD Liaison, National Capital Region for Communications Assessment, Former Chief, Requirements Integration, Army Cyber Proponency
  - Mr. Brian Bostwick, Principal Cybersecurity Advisor, Market Principal, OSIsoft
  - Mr. John Levy, Director, C4ISR Solutions, Spectrum
  - Mr. James McCarthy, Director, National Cyber Center of Excellence (NCCoE), National Institute of Science and Technology (NIST)
- 1330 – 1400 DHS Efforts  
Mr. Brian Done, Deputy Chief Technology Officer, Office of Cybersecurity & Communications  
Department of Homeland Security
- 1400 – 1430 Energy Sector Cybersecurity  
Mr. James McCarthy, Director, National Cybersecurity Center of Excellence, NIST
- 1430 – 1445 Afternoon Networking Break

# Today's Agenda



- 1445 – 1515 Addressing Challenges in Federal Facilities from Cyber Risk to Operational Performance  
Mr. Ryan Colker, Director, Consultative Council/Presidential Advisor,  
National Institute of Building Sciences
- 1515 – 1545 Operational Intelligence - Bringing It All Together  
Mr. Dan Lopez, Systems Engineer, OSIsoft
- 1545 – 1600 Closing Remarks  
Mr. Paul J. Geraci, Senior Director - Intelligence and National Security, OSIsoft
- 1600 – 1800 Hosted Networking Reception



# OSIsoft and the PI System:

The nexus of IT and OT  
in an IoT, sensor-proliferated,  
Intelligence and National Security Sector

Presented by **Paul J. Geraci**  
Senior Director, Intelligence and National Security  
OSIsoft, LLC

- About OSIsoft
- Introduction to the PI System
- IoT and Sensor Pervasiveness in the Intelligence and National Security Sector
- Threats, Risks, and Vulnerabilities
- The PI System for SA / CoP
- Questions



# OSIsoft

Founded in 1980, OSIsoft's purpose has remained constant: to empower our customers' Operational transformation by delivering greater value into the enterprise.

We deliver *the PI System*<sup>™</sup> - an open enterprise infrastructure to connect sensor-based data, systems and stakeholders.

The result: real-time, actionable insights that empower enterprises to optimize and transform their operations.



# OSIsoft by the Numbers...

**35+** years as a leader in Operational Intelligence

**19,000+** sites deployed

**125+** countries

**65%** of the Fortune 500

**94%** CIKR

**100%** RTO / ISO

**1.5B+** licensed sensor-based data streams



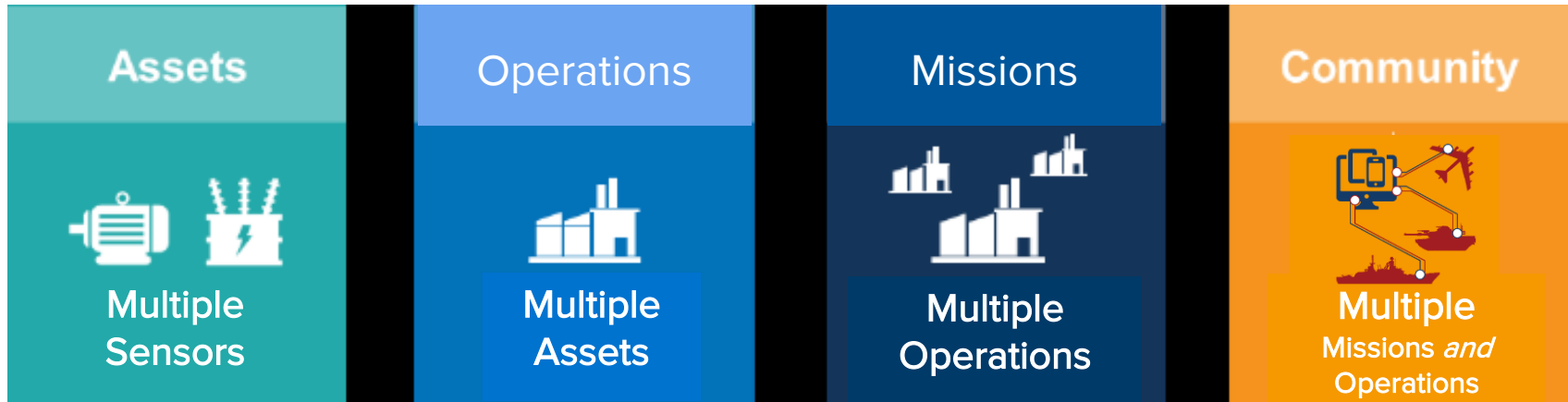
# OSIsoft by the Numbers...

**1.5B+**

sensor-based data streams

# Our Federal Mission at OSIssoft<sup>®</sup>

Empower stakeholders, agencies, and communities to transform their operational data into real-time operational intelligence.



# FEDERAL FOCUS AREAS

CRITICAL  
FACILITY/CAMPUS  
SITUATIONAL AWARENESS



HOLISTIC CYBER SECURITY  
& INFORMATION  
ASSURANCE



ENERGY  
MANAGEMENT



C5ISR



HIGH-PERFORMANCE  
COMPUTING CENTERS



CONDITION BASED  
MONITORING



## CONTRACT VEHICLES

### General Services Administration Schedules

*Information Technology Professional Services (IT 70) Management, Organization, and Business Improvement Services (MOBIS)*

### SEWP V

NASA SEWP V GWAC (Government-Wide Acquisition Contract) provides the latest in Information Technology (IT) products and product-based services for all Federal Agencies.

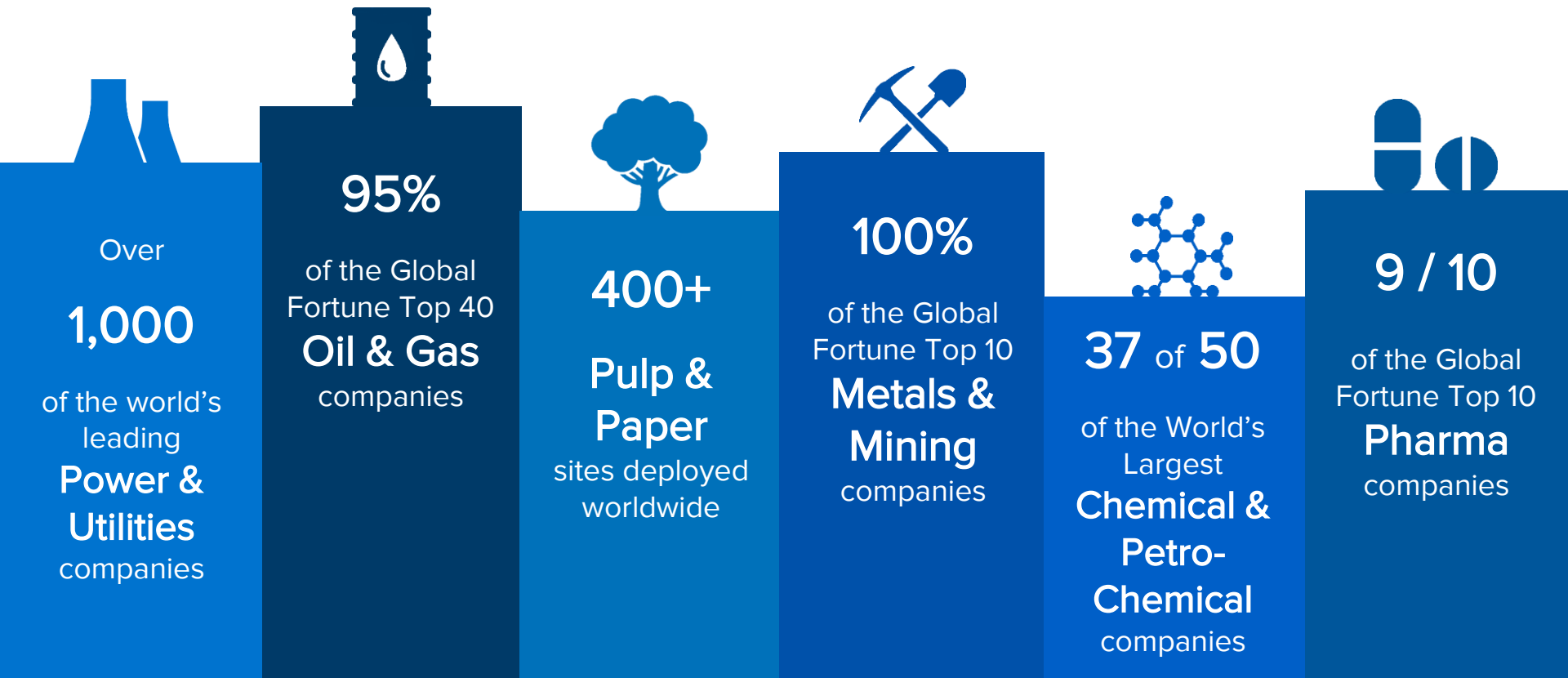
# What is the PI System?

The PI System is a COTS software architecture that connects sensor-based data, operations and the stakeholders who rely upon data to manage sensor-based assets, process efficiency, asset health, real-time situational awareness, quality, and resource management.

The PI System works through server-based technology and makes historical, real-time, and future data instantly accessible to operators and decision-makers wherever they may be.



# OSIsoft is trusted by the world's leading companies



# Information Technology (IT)

The application of computers to store, study, retrieve, transmit, and manipulate data, or *information*.





# PI System – Framing the Puzzle...

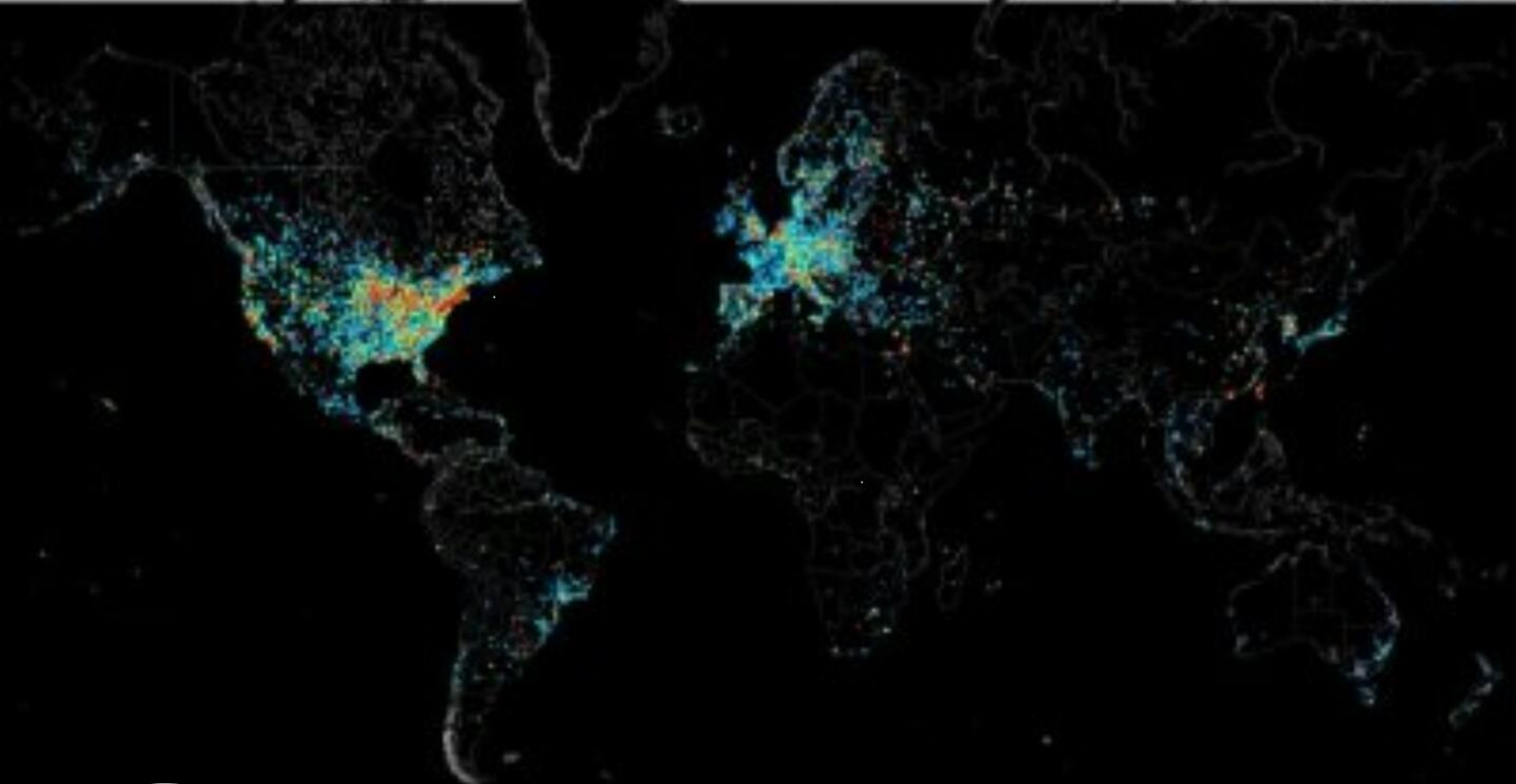


Connecting and “framing” data for a *complete*, reliable, valid, timely, accurate and analytically predictive picture.



# Cyber threats have become a risk to our Nation's Physical World





# Threats to Intelligence and National Security Missions

## Insider Threats



*Malicious/Non-Malicious*

## Hacktavists



## Natural Disasters



## Terrorism



*Organizational /  
State Sponsored*

Many critical facilities are not well-positioned to meet the security demands of an evolving OT environment - assuming unnecessary risk for critical enterprise systems and facilities and OT components; oftentimes they attempt to apply traditional IT security practices to OT systems – this often causes the underlying systems to malfunction.



RSS • [About Us](#)  
LinkedIn • [Advertise](#)  
Facebook • [Contact Us](#)  
Google • [Subscribe](#)  
Twitter • [Editorial Tech Brief](#)

• POLICY  
• MANAGEMENT  
• EXEC TECH  
• WHO & WHERE  
• THE HILL  
• AGENCIES  
• OPINION  
• RESOURCES  
• EVENTS

## Watchdog: IT glitch at NASA led to fire

• *By Mark Rockwell*

• *Feb 09, 2017*

A security patch that shut down monitoring equipment in a large NASA engineering oven resulted in a fire that destroyed spacecraft hardware inside it. Since the computer reboot to accommodate the software upgrade also crippled fire alarm activation, the fire in the oven wasn't discovered for three and a half hours.



Security patch caused equipment shutdown and fire at NASA





# Real-time Operations Data is being created everywhere

- Creating islands of systems
- Demanding we connect data, to systems, to stakeholders - providing historic data, real-time situational awareness and forecasted analysis
- Accessibility, availability, and understanding of this data in real-time is critical for the safety and security of IC and National Security Mission Infrastructure

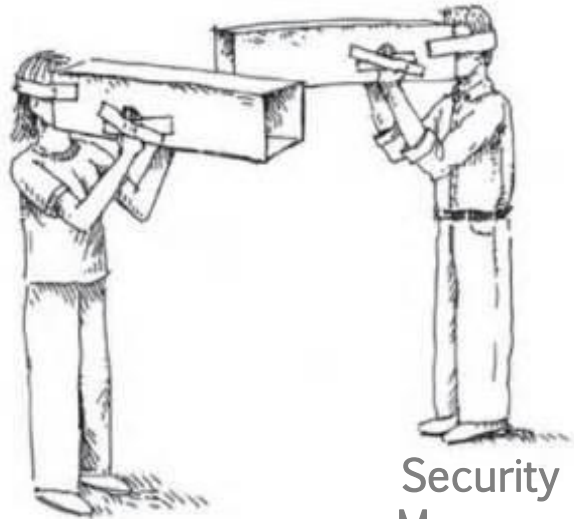


# Situational Awareness

Situational awareness (SA) is the perception of environmental elements with respect to time or space, the comprehension of their meaning, and the projection of their status after some variable has changed, such as time, or some other variable, such as a predetermined event. It is also a field of study concerned with understanding of the environment critical to decision-makers in complex, dynamic mission-sets

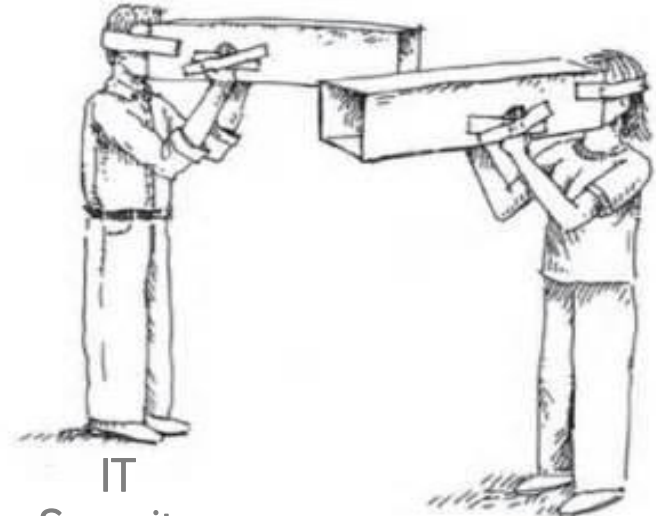


# How common is a Common Operating Picture ???



Facility  
Manager

Security  
Manager



IT  
Security  
Engineer

OT  
Engineer



# The Common Operating Picture



# The Common Operating Picture

**12  
13  
14**

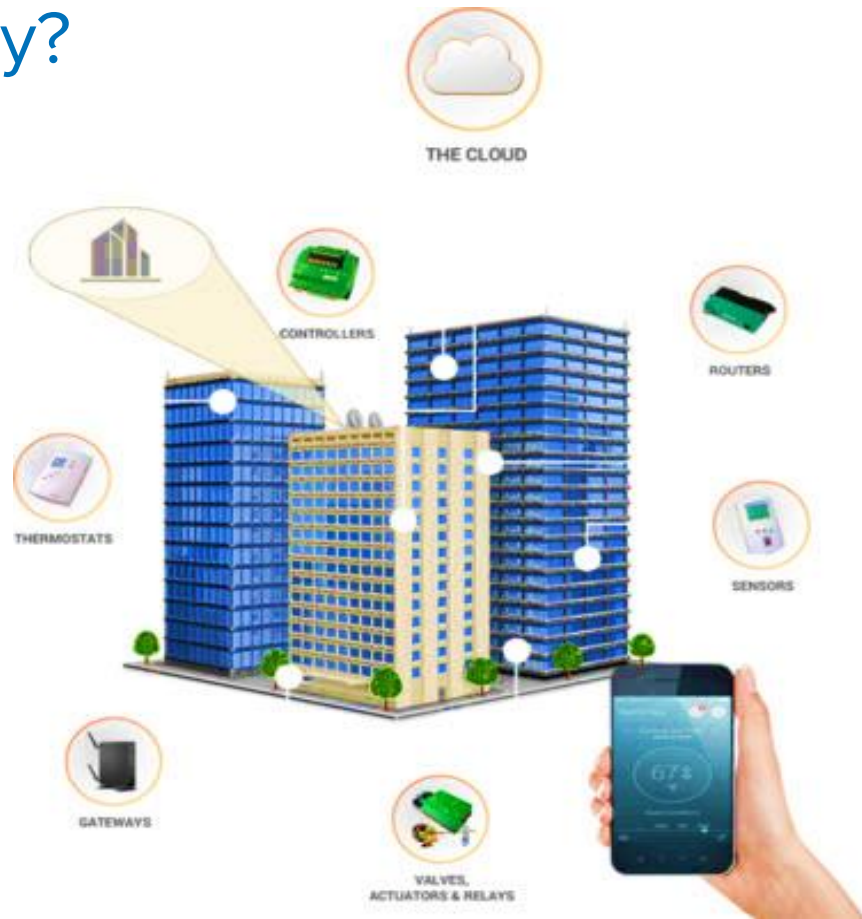
# The Common Operating Picture

**AIBC**

# The Common Operating Picture



# Which do you find more scary?





# Key Takeaways...

- ✓ OSIssoft is the leader for Operational Intelligence
- ✓ The PI System is the “Swiss Army Knife” that provides an architecture for real-time, historic, and predictive data
- ✓ The PI System connects to more interfaces and more formats than any other operational data collection system
- ✓ Real-Time Situational Awareness and a “True” Common Operating Picture (CoP) is key to the security, safety, and resilience of your Operational Mission
- ✓ The threats are real, the risks are real – are your vulnerabilities?

# Contact Information

Paul J. Geraci  
Senior Director,  
Intelligence and National Security  
OSIsoft, LLC  
[pgeraci@osisoft.com](mailto:pgeraci@osisoft.com)  
202.809.1522





# Questions

Please wait for the **microphone** before asking your questions



State your **name & organization**

# Please don't forget to...

Complete the Survey for this session



The Power of Data

DECISION READY IN REAL-TIME

## Evaluation Form (Seminar Location - Date)

Name: \_\_\_\_\_ Company: \_\_\_\_\_

Email: \_\_\_\_\_

| Quality and content of the presentations  | Poor                  | Good                  | Excellent             | N/A                   |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| Welcome   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The Journey To Real-Time Operational Intelligence   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The Power of Connection   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Tank Level Management System  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Using the FI System to Aid in Troubleshooting Operational Aspects of Oil and Gas Well Drilling and Completion | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Unleash your Infrastructure   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Information on the Spot   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Wrap-up/Seminar Conclusion  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <b>Quality and organization of the seminar</b>  |                       |                       |                       |                       |
| Choice of date  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Time allowed for lunch/breaks   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Choice of presentations   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Break time allowed for the presentation   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |