OT Cybersecurity Overview

Trends

– As data collection and analysis become more important

– IT and OT converge to enable "big data" initiatives

Directions

– it has become necessary to reassess cybersecurity best practices

– for protecting OT

OT security

What is Operational Technology (OT) Cybersecurity?

Operational technology (OT) cybersecurity references

– software, hardware, practices, personnel, and services
– deployed to protect operational technology infrastructure, people, and data.

IT and OT converge to enable "big data"

Third Industrial Revolution

– We are in it, going to Fourth

Programmable logic controller (PLC)

Control Systems

SCADA

Supervisory Control and Data Acquisition (SCADA) Systems

Human-Machine Interface (HMI)

Distributed Control Systems (DCS)

ICS and OT

"

Hardware and software that detects or causes a change through the direct monitoring and/or control of physical devices, processes and events in asset-centric enterprises, particularly in production and operations."

IoT and IIoT

Like OT, IoT utilizes devices such as actuators and sensors

IoT architectures are fairly streamlined compared with OT

When applied to industrial applications

– **Industrial Internet of Things (IIoT)**
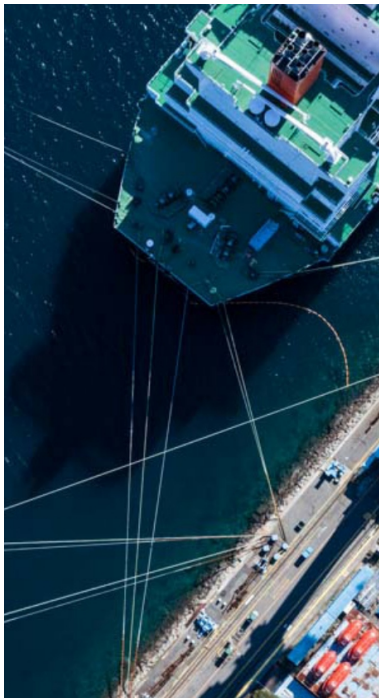
Examples of IoT devices

Electricity/Gas/Water Smart Meters

Smart Home

Building Automation

Vehicle Head Unit

Security & Fire Alarms

Inventory Management

CCTV

Healthcare Monitoring

Assisted Living Monitoring