



**ISA GLOBAL
CYBERSECURITY
ALLIANCE**

2024 YEAR IN REVIEW

www.isagca.org

ISAGCA Drives Education and Advocacy for ISA/IEC 62443 Standards

ISAGCA works with a broad spectrum of stakeholders to encourage education and information about the value of ISA/IEC 62443 standards and share best practices across industry sectors. 2024 was a year of strong efforts across all aspects of adoption and advocacy work.

Key Focus Areas

- **Accelerate** ISA/IEC 62443 Adoption in the EU/USA
- **Expand** the ICS4ICS Program with a Sector-Specific Focus
- **Enhance** Awareness of ISA/IEC 62443

Accelerating Adoption

Promoting ISA/IEC 62443 Series of Standards Through Education and Collaboration

North American Government Agencies, Organizations and Academia

- National Institute of Standards and Technology Cybersecurity Framework, NIST CSF ([Online Informative Reference, OLIR](#)) was updated with ISA/IEC 62443-3-3 status.
- [MITRE unveils the full release of the EMB3D Threat Model](#)
 - The EMB3D Threat Model enables vendors, asset owners/operators, and security researchers to identify relevant threats to embedded devices and incorporate the necessary mitigations for robust protection—essentially adopting a “secure by design” philosophy.
 - Alignment with ISA/IEC 62443-4-2: Mitigations are mapped to the security controls specified in the ISA/IEC 62443-4-2 standard for Industrial Automation and Control Systems, aiding organizations in identifying which EMB3D mitigations are necessary to meet the standard’s requirements.



- Joint research effort with Idaho National Laboratory, the US Department of Energy Office of Cybersecurity, Energy Security, and Emergency Response (DOE CESER), Idaho State University, and the International Society of Automation Global Cybersecurity Alliance (ISAGCA) under the supervision of Dr. Sean McBride. Created [Curricular Guidance to Develop a New Generation of Industrial Cybersecurity Professionals | Webinar](#)
- Sandia National Lab led a [comparative study](#) of existing standards and their suitability for the cybersecurity certification of Electric Vehicle Supply Equipment (EVSE; vehicle chargers). ISA/IEC 62443 is found to be significantly in line with EVSE security needs and will be used in future testing to certify EVSE and help guide the project to demonstrate where gaps exist.
- The [IIoT System Implementation and Certification Based on ISA/IEC 62443 Standards: Webinar](#) provides Use cases and cross-reference of Cloud Security Alliance's Cloud Control Matrix and ISA/IEC 62443; helping End User needs for measurable security levels for IIOT Solutions.
- [North American Electric Reliability Corporation Critical Infrastructure Protection \(NERC CIP\) and ISA/IEC 62443 Comparative Analysis](#). Requirement-level mappings from NERC CIP-002-CIP-014 to the ISA/IEC 62443 standards align with supplier process requirements, as well as product security capabilities necessary to meet asset owner requirements under NERC CIP.
- ISAGCA and supplier members support Department of Energy's Secure by Design efforts for a cross reference to ISA/IEC 62443 series of standards. DOE promoting Secure by Design efforts with other G7 nations.
- North America Transmission Forum (NATF) is learning how ISA/IEC 62443 product certification to improve supply chain security.

Global References

- Malaysian Standard (MS) officially recognized IEC 62443 3-2, IEC 62443 4-1 and IEC 62443 4-2 allowing companies to comply with it at a national level.
- Open Process Automation Forum (OPAF) [The Open Group](#) chose conformance schemes based on ISA/IEC 62443 for Cybersecurity Requirements in the O-PAS™ Standard. [ISASECURE is the exclusive conformance scheme provider.](#)
- Taiwan's Ministry of Economic Affairs introduced a Personal Cybersecurity certificate for industrial controls systems for university graduates and bringing awareness to ISA/IEC 62443 series of standards.
- Shared multiple updates on EU Regulation and policies:
 - [European Union Legislative Landscape: CRA, RED and their relation to ISA/IEC 62443 Webinar](#)
- [ISAGCA Whitepaper Zero Trust Outcomes Using ISA/IEC 62443 Standards](#) and insightful discussion with the authors [webinar.](#)



Expanding ICS4ICS Programming

2024 Accomplishments

- Finalized and facilitated Version 3 ICS4ICS exercise at ISA 2024 OT Cybersecurity Summit, DHS Critical Manufacturing, CS4CA in Houston, and a chemical company in Houston.
- Completed the ICS4ICS-INL Work Force Development (WFD) project, identifying job tasks and skills for 25 roles that are critical in supporting normal OT operations. A webinar was conducted to share project results, self-assessment tools and resources.
- Continued promotion of ICS4ICS Credentials for job roles resulted in 12 people completing credentials.



ICS4ICS
Incident Command System
for Industrial Control Systems

ICS4ICS Focuses on Industry Sectors

- Critical Manufacturing Sector Exercise delivered with DHS on 26 June 2024
- Joint ICS4ICS exercise with Dragos on Cyber Incident Response delivered on 25 July 2024
- Marine Ship Exercise executed August 2024
- Mini-Computer Incident Response Plan to address EPA requirements for water utilities delivered August 2024
- Join Chemical Sector Exercise with DHS, based on 2023 and 2024 chemical company exercises, completed
- Rail exercise delivered September 2024

Enhancing Awareness

ISAGCA continued its efforts to boost global awareness of ISA/IEC 62443 - the world's leading consensus standards for operational technology (OT) cybersecurity. By securing media placements, editorial coverage, technical resources and speaker engagement at global conferences and events, ISAGCA further promoted ISA/IEC 62443 on the world stage.

Bringing Global Audiences Together Through Webinars

ISAGCA hosted 5 webinars in 2024 covering a range of technical topics and reaching over 1,600 professionals globally. Below is a summary of topics covered in 2024.

- [Curricular Guidance: To Develop Next Generations of Industrial Cyber Professionals](#)
- [Campari Group Case Study : Applying 62443 to Operating Site](#)
- [European Union Legislation: CRA, RED and Relationship with ISA/IEC62443](#)
- [Zero Trust Outcomes Using ISA/IEC62443](#)
- Securing Operations and Building Resilience in Critical Infrastructure





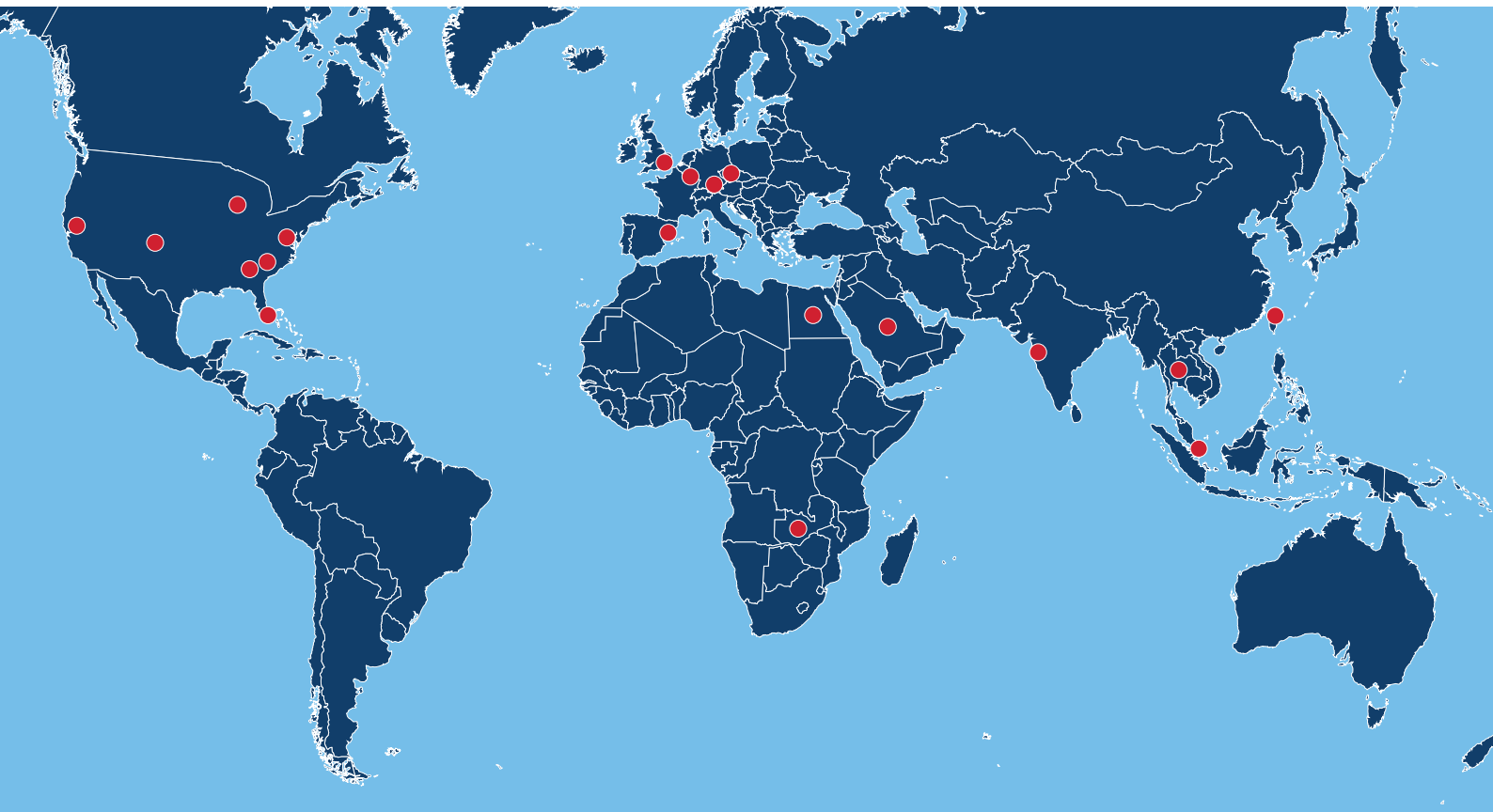
Educating Industry Professionals with Technical Resources

In 2024, ISAGCA focused on educating and informing various industry sectors about ISA/IEC 62443 applications through the creation of expert-written white papers and technical resources.

- White Paper: [IIoT System Implementation and Certification Based on ISA/IEC 62443 Standards](#)
- White Paper: [Zero Trust Outcomes Using ISA/IEC 62443 Standards](#)
- White Paper: [North American Electric Reliability Corporation Critical Infrastructure Protection \(NERC CIP\) and ISA/IEC 62443 Comparative Analysis](#)
- Curricular Guidance: [Industrial Cybersecurity Knowledge](#)

Leveraging Global Industry Forums to Raise Awareness

In 2024, ISAGCA seized opportunities to amplify awareness, surpassing goals for media mentions and editorial placements. Their efforts brought ISA/IEC 62443 into the global spotlight. Additionally, speaker engagements exceeded expectations, with experts from the ISAGCA communities captivating audiences all over the world:



Maximizing Visibility with Comprehensive Content

ISAGCA continued bringing exposure to cybersecurity topics and ISA/IEC 62443 in 2024 through insightful, knowledge-driven blog articles and website content. Exceeding its goal, ISAGCA brought in over 156k website views and more than 101k blog views. Popular blog topics covered a range of technical topics to include:

- [SPAN Ports and OT Continuous Monitoring: Securing Otherwise Insecure Network Traffic](#)
- [5 Benefits of Implementing Biometric Authentication in Cybersecurity](#)
- [Should ISA/IEC 62443 Security Level 2 Be the Minimum for COTS Components?](#)
- [Do You Have a Cybersecurity Contingency Plan?](#)
- [Why Collaboration Is Essential for Cybersecurity Teams](#)

2024 Media Placements

ISA achieved a record 54 media placements in 2024 across a wide variety of publications:



OT Cyber Summit Sees Significant Growth

The ISA OT Cybersecurity Summit saw a remarkable 117% year-over-year growth, marking a major milestone in ISA's event strategy and thought leadership. This event reinforces ISA's position as a leader in the OT cybersecurity field, solidifying our role at the forefront of industry discussions and innovation.



260 
ATTENDEES

44 
SPEAKERS

 **34**
SESSIONS

 **14**
SPONSORS



**IC32 TRAINING
SOLD OUT**



**ICS4ICS WORKSHOP
SOLD OUT**



The event also featured a highly immersive, OT Cyber Escape Room custom created for ISA so attendees could simulate how to react to a breach in real time.

2024 Members

Founding Members



Supporting Members



International Society of Automation
Setting the Standard for Automation™

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