

Industrial Internet Consortium New Member Orientation

Diane Ehramjian, Director of Member Engagement

July 2019







Industrial Internet Consortium

The world's leading organization transforming business and society by accelerating the Industrial Internet of Things.

The IIC is an open, neutral "sandbox" where industry, academia and government meet to collaborate, innovate and enable.

200+ GI	obal member organzations	30+	Countries
24+ Ac	tive testbeds	35+	Working groups
7 110	T guidance documents	40+	Liaisons
24+ w	orking deliverables		

Lead your Industry



€ ECHELON.

VIMANA

FOGHORN

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care Innovations

Azomsystem

WATERFALL

WISCkey

FREEWAVE

Advansys ESC

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A Global, Open Membership Consortium spanning 30+ countries





IIC Small Industry Members

AVIAGE SYSTEMS

Rubicon

Pollux

QUALI<mark>CAL</mark>

GlobalSign.

WIBU

MIDTium

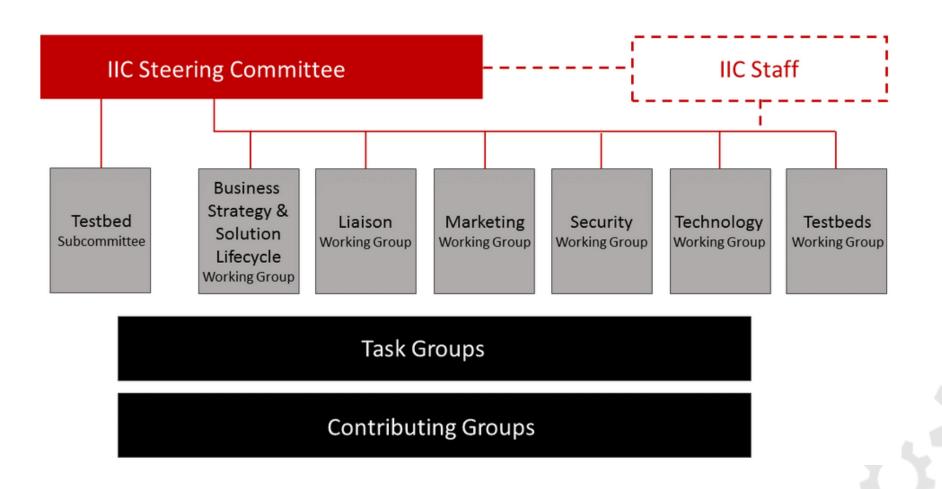
CORLINA

451 Research

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Organizational Structure of the Industrial Internet Consortium







Current Steering Committee

International team comprised of leaders from Germany, France, US and China



Mr. Dirk Slama
IIC SC Chair, VP of
Business Development
Bosch Software
Innovations



Dr. Stan Schneider *IIC SC-Vice-Chair*, CEO Real-Time Innovations, Inc.



Mr. Mung Chiang
Dean of the College of
Engineering and the
Roscoe H. George Professor
of Electrical and Computer
Engineering
Purdue University



Mr. Robert Martin Senior Principal Engineer MITRE



Mr. Karthik Suri Chief Operating Officer, Predix General Electric



Mr. Ron Zahavi
Chief Strategist for IoT
Standards,
Microsoft Azure IoT



Dr. Jacques DurandDirector of Standards
and Engineering **Fujitsu**



Dr. Richard Soley
Executive Director
Industrial Internet
Consortium



Dr. Said Tabet
Chief Architect for IoT
Solutions
Dell EMC



Mr. Wang Xuemin
Director,
Standardization and
Industry Department
Huawei



Mr. K. Eric Harper Senior Principal Scientist ABB



Mr. Wael Diab
IIC SC Secretary, Vice
President - AI, IoT Standardization
and Strategy
Huawei

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Meet the IIC Staff



Dr. Richard Soley Executive Director



Bill Hoffman President



Stephen Mellor CTO



Howard Kradjel Vice President, Industry Programs



Kathy WalshVice President,
Marketing



Diane EhramjianDirector of Member
Engagement



Cheryl RocheleauDirector, Marketing
Programs



Karen Quatromoni Senior PR Manager



Matt Sexton
Senior Marketing
Specialist



Andrew Hazerjian Marketing Specialist



Harriet CostaProject Manager



Skyler LewProject Manager



Terrence MilliganProject Manager

July 23, 2019





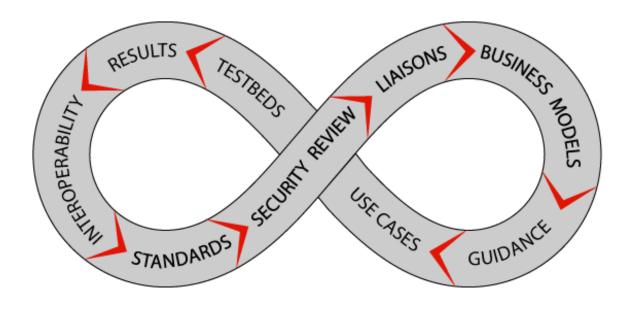
Access Industry Leaders



Collaborate in **Working & Task Groups**



Deliver Results via *Testbeds*



The Industrial Internet Consortium ecosystem is a continuous flow of inter-related activities



Take advantage of the vibrant industrial internet ecosystem and the ability to access industry leaders.



Meet Productively

Find new business development opportunities. Form collaborative relationships with key industry players, thought leaders and up-and-comers.



Work Conveniently

Convene regularly at face-to-face meetings, via teleconference, our workspace, at industry events and other venues to continue efforts and deliver work products.



Collaborate Frequently

Unlimited opportunities to produce jointly-developed technical deliverables and to promote via IIC marketing channels.



Convene Globally

Gather 4x/year in the US, Europe, and Asia/Pacific. Hundreds of members come together for face-to-face working meetings, educational sessions, networking and special events.



The IIoT Ecosystem: Criticality of Liaisons

40+ relationships with government entities, standards bodies, alliances and open source organizations

INTERNATIONAL DATA SPACES ASSOCIATION

GLOBALPLATFORM







































































hub.iiconsortium.org

A portal for industrial internet implementations (Public Beta Site)

For Project Managers and System Architects who are analyzing, planning or considering IoT projects, the Resource Hub provides an interface to essential tools and industry resources developed collaboratively by IIC members. A web-based tool guides users through the analysis and planning of IIoT projects. Users receive actionable intelligence and access to IIC members via the Ecosystem Directory and the Body of Knowledge.

Body of Knowledge



Library of collaboratively developed and published insights, frameworks, architectures and technical docs.

Project Explorer



Web-based tool for creating an IoT project assessment and implementation plan.

Ecosystem Directory



A mapping of the IIoT ecosystem that categorizes IIoT products, services, researchers and end users, making experts searchable by their expertise.

INDUSTRIAL INTERNET CONSORTIUM

www.iiconsortium.org

hub.iiconsortium.org

New IIC Resource Hub™ Explorer - IIoT Maturity Assessment (June 2019)

- Web-based tool included in the IIC Resource Hub™ that enables users to better understand their enterprise IIoT maturity. The <u>IIoT Maturity Assessment</u> helps organizations become best-practice adopters of IIoT by guiding business managers through a range of questions about the adoption, usage and governance of IIoT within their organizations.
- The <u>IIoT Maturity Assessment</u> is available in three levels of analysis: Quick, Standard (both open to everyone) and Detailed (IIC members only).



Collaborate in IIC Working Groups

Play a major role in the future of the industrial internet by collaborating in Working Groups

Technology Working Group: define and develop reference architectures, frameworks for connectivity, business strategies, industrial analytics, edge computing and more.

★ Liaison Working Group: develop coalitions for collaboration in the Industrial internet ecosystem. Operates as the gateway for formal liaisons with standards development organizations, open-source organizations, certification and testing bodies, government entities.

Marketing Working Group: work with members and industry at large to establish the Industrial Internet Consortium as a community that champions innovation in connected intelligent machines and processes.

Security Working Group: determine and develop security and privacy frameworks, evaluate testbed security concerns, deliver trustworthiness best practices, guidance and maturity models.

★ Testbed Working Group: accelerate the creation and implementation of innovations for the industrial internet. Foster partnerships to build real innovations, provide processes and an infrastructure for effective operations.

★ Business Strategy and Solution Lifecycle Working Group: offer resources to monetize innovation Offer actionable guidance and best practices for all aspects of developing and operating an Industrial Internet of Things (IIoT) Solution



IIC Working Groups and Task Groups

Technology Working Group

Architecture

Connectivity

Digital Transformation (former IT & OT)

Digital Twin Interoperability

Distributed Data
Interoperability &
Management

Edge Computing

Fog Computing

IIoT System Management

Industrial Artificial Intelligence

Industrial Distributed Ledger

Innovation

Networking

Vocabulary

Security Working Group

Automotive Security

Security Applicability

Trustworthiness

Testbed Security

Liaison Working Group

40+ agreements currently

Standards

Open Source

PI4.0

Marketing Working Group

Academic

Automotive

Communications

Energy

Global Event Series

Healthcare

Marketing Security

Mining

Resource Hub

Retail Operations

Smart Factory

Thought Leadership

Testbeds Working Group

24 testbeds currently

Testbed Strategy

Business Strategy & Solution Lifecycle Working Group

Business Strategy

Ecosystem

Use Cases

Regional Teams

German Indian China

Korea

More coming!





IIC Working Group Deliverables – Foundational Technical Papers

Industrial Internet Reference Architecture -

 Blueprint for Industrial Internet systems. It outlines a standards-based open architecture, describing each component needed in a typical system.

Key System Concerns -

• Identifies and addresses seven key IIoT system concerns

Industrial Internet Security Framework -

• Defines and provides guidance on IIoT security.

Industrial Internet Connectivity Framework -

 Provides a comprehensive treatment of connectivity as a means of building interoperable IIoT systems.

https://www.iiconsortium.org/white-papers.htm



IIC Working Group Deliverables – Foundational Technical Papers

Business Strategy and Innovation Framework -

• Provides a high-level identification and analysis of issues that an enterprise will need to address to capitalize on the opportunities emerging within the IIoT.

Industrial IoT Analytics Framework -

• The first document to offer the broadest scope of requirements and concerns for analytics for IIoT systems.

Industrial Internet Vocabulary Technical Report -

• Specifies a common set of definitions for effective communication within the Industrial Internet ecosystem.



IIC Working & Task Group Deliverables – Sample White Papers



http://www.iiconsortium.org/white-papers.htm



Our testbeds are where the innovation and opportunities of the Industrial Internet are initiated, thought through

and rigorously tested

New Technologies

- New Applications
- New Products
- New Services
- New Processes

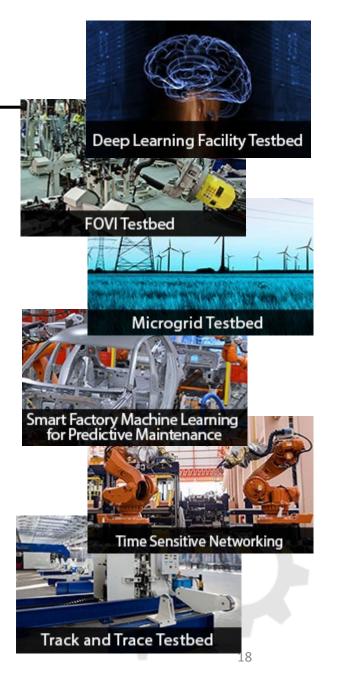








- □Innovate and Initiate untested technologies or existing technologies working together
- ☐ Build end to end solutions with Industry Partners
- ☐ Influence standards and drive multi-vendor interoperability
- ☐ Test solutions to ascertain usefulness and viability before going to market
- □Convergence of Operational Technologies (OT) and Information Technologies (IT) to identify changes in **business models** and **best practices**





Approved Testbed Portfolio - www.iiconsortium.org/test-beds.htm



























Approved Testbed Portfolio- www.iiconsortium.org/test-beds.htm



























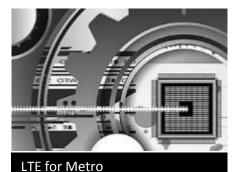
Approved Testbed Portfolio- www.iiconsortium.org/test-beds.htm











Approved Testbed Portfolio

Testbed Deliverables and Insights

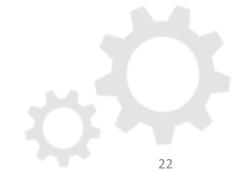
Testbed Processes/Templates/How To Engage (Join TBWG)





Test Drives - New Program Concept Seeking Examples

- Test Drives are short-term rapid engagement pilots for industry End Users to evaluate and adopt IoT technologies. The goal of IIC Test Drives is help stimulate adoption of IIoT technologies through accelerated implementation and learning.
- Right now, our goal is to gauge interest in this concept and collect examples from members. An overview is found in this Testbed WG Wiki page (join the Testbed WG to access).



Announcing IoT Challenges

We are excited to launch a series of <u>IoT Challenges</u> aimed at solving real problems and advancing the validation of industrial internet applications and solutions. We are currently designing the two challenges, co-organized with the Trusted IoT Alliance.

If you are interested in becoming a Principal or Emerging Technology Partner, please click on the links below and complete the forms.

- <u>Smart Logistics Challenge</u> opened May 15, 2019
- Smart Building Challenge opened May 15, 2019



Other Working Group and Task Group Deliverables

Working Group and Task Group Deliverables can be found on IIC Member site: https://engage.iiconsortium.org/wg/Allmembers/home/working-deliverables

Latest Working and Task Group Activities and Priorities can be found on IIC Member site:

https://engage.iiconsortium.org/wg/Allmembers/htmlPage/13



Build your IIoT business and brand by participating in the IIC ecosystem platforms...

IIC Speakers Bureau

IIC Speakers
Bureau Speaking
opportunities at
industry events

Ecosystem Directory

Add company information to Resource Hub / Ecosystem Directory

IIC Public Forums

Participate in
IIC Public
Forums, IoT
Quarterly
Global Event
Series

IIC Pavilion

Participate in
IIC Pavilion at
Industry Events
(Hannover
Messe, IOT
SWC)

Leadership Role

Assume
leadership role
on Steering
Committee,
Working/Task
Group

Author Articles

Author articles in theme based "Journal of Innovation"

Author Technical Documents

Author technical reports and white papers in Working/Task Groups



Build your IIoT business and brand by participating in the IIC ecosystem platforms

Publish Public Website

Your **Use** Cases/White Papers published on public website Webinars, Videos, **Blog Posts**

Participate in webinars, "Voices of the IIC" videos, media interviews. Blog posts

Host or **Sponsor**

Host or sponsor IIC meetings or events, demo your solutions

Testbed Promotion

Participate in promotion of Testbeds industry events, quarterly meetings Regional **Teams**

Join **Regional Teams** – Germany, India, China, Korea - more coming!

Quarterly Member Meetings

Attend Quarterly member meetingsinnovation, thought leadership collaboration

IIC Connect

Participate in "IIC Connect" at quarterly F2F meetings to collaborate and build partnerships with other attendees



Q4 Member Meeting and Global Event Series

Q3 Member Meeting, Anaheim, CA, USA, September 9 ~ 12, 2019

- Registration site open on member site
- Disney's Grand Californian Hotel & Spa
- Use code **IICMCA19** for pass discount code
- Discounted meeting fee deadline Aug 9th
- Discounted hotel reservations deadline Aug19
- Highlights OTA Track, Industry Day (Smart Manufacturing and ITS, Security Maturity Model Workshop, WG/TG sessions, and more



Q3 Global Event Series – *Industry IIoT in Action* - September 12, 2019

- Disney's Grand Californian Hotel & Spa, Anaheim, CA, USA
- Register now!



Q4 Member Meeting and Global Event Series

Q4 Member Meeting, Sydney, Australia, November 18 ~21, 2019

- Registration site open on member site
- University of Technology Sydney
- Use code IICMAU19 for pass discount code
- Discounted meeting fee deadline Oct 18th
- Discounted hotel reservations deadline Oct 14th
 Four Points by Sheraton Sydney, Central Park

Q4 Global Event Series – November 21, 2019

Details coming soon!





Open Edge Symposium™ (formerly Fog World Congress™)

Open Edge Symposium, Long Beach, CA, USA - December 11 ~ 12, 2019

Exploring Intelligent Edge-Fog Solutions for the IIoT

IIC member discount – Save \$200 when you register before October 11

Three Conference Tracks:

- Research/academia/standards
- Technical
- Business Outcomes

Call for Papers: Deadline September 15th

Speaking Opportunities, Limited sponsorships

Registration and details here: https://openedgesymposium.org/



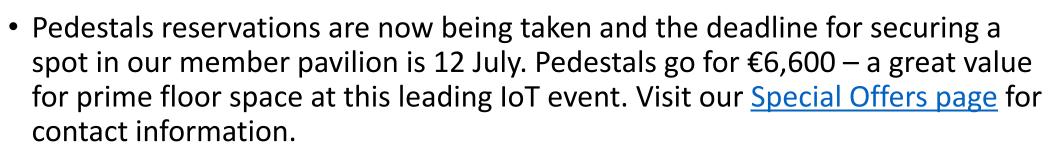


IoT Solutions World Congress

IoT Solutions World Congress

October 29 – 31, 2019, Barcelona, Spain

IIC Member Pavilion



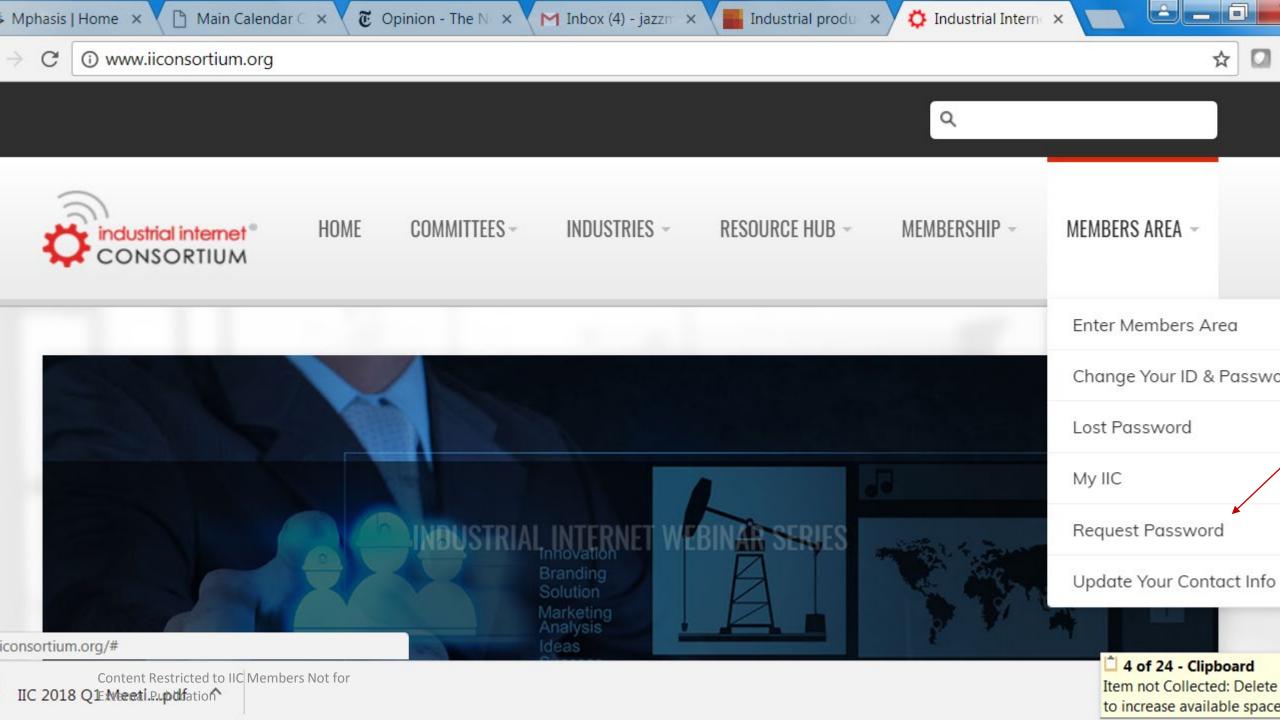
Opportunities to exhibit and sponsor are described in the related links





IIC Public Site iiconsortium.org

IIC Member Only Site engage.iiconsortium.org

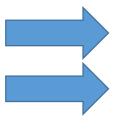


IIC Member Website Login - engage.iiconsortium.org

Industrial Internet Consortium

Username in your Welcome email when you joined

Password link in your Welcome email when you joined



C
Enter your Username and Password Username:
Password:
□Remember Me
LOGIN
Porgot your password?
For security reasons, please log out and exit your web browser when you are done accessing services that require authentication!





We welcome our members to our workspace.

Login is restricted to Industrial Internet Consortium Members.

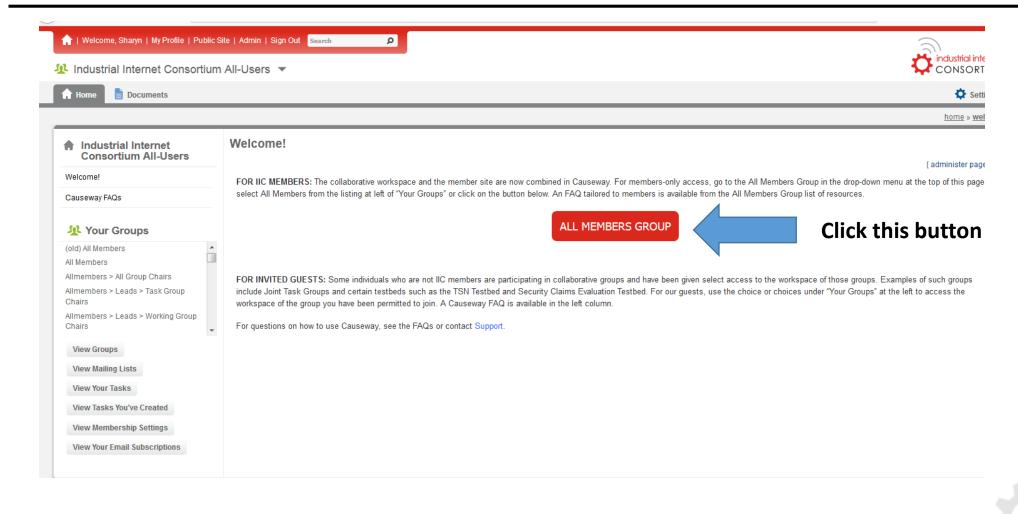
If your company is an Industrial Internet ConsortiumTM member but you forgot your password or don't have one, click here to find out what it is or get a new one. If you don't know whether your company is a member or not, click here to find out.

If your company is a member and you would like a username and password, please submit this form. For information about joining IIC and the membership levels available to your company click here.

The Industrial Internet Consortium welcomes any company or organization to join our consortium, access members-only documents, join discussions, attend face-to-face meetings and more.

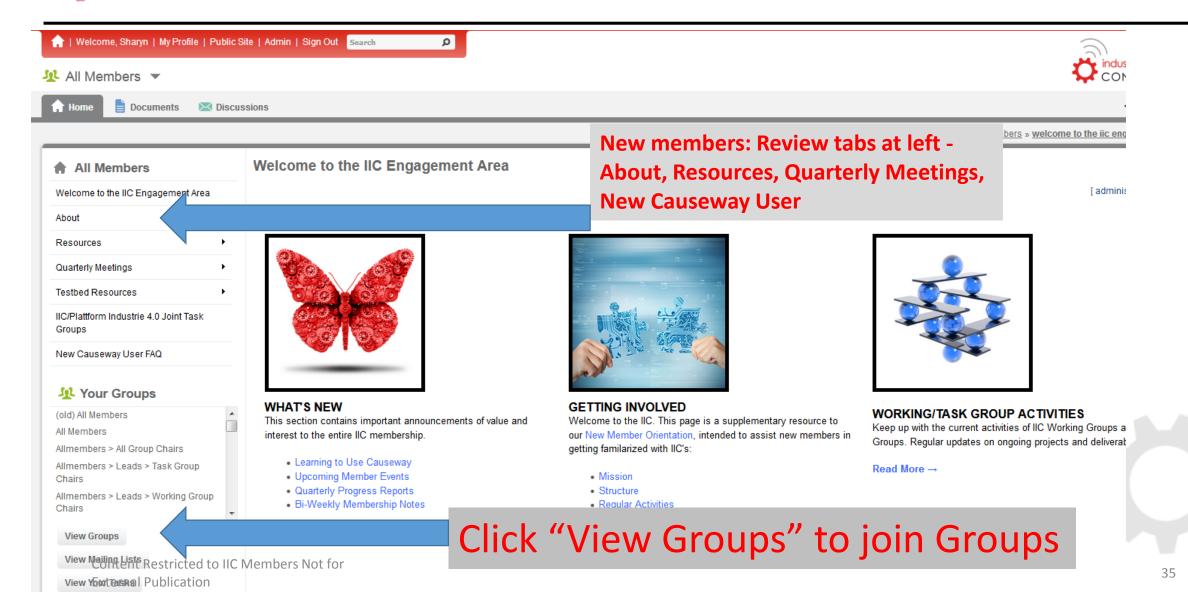
For more information please send email to info@iiconsortium.org







All Members Group - Site Homepage

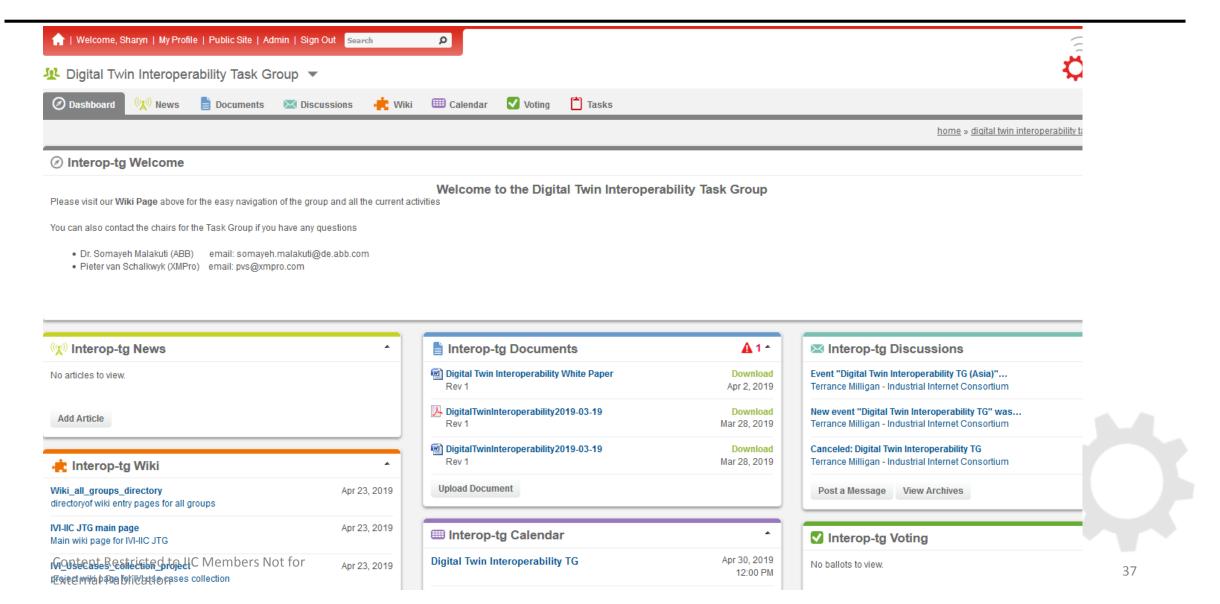


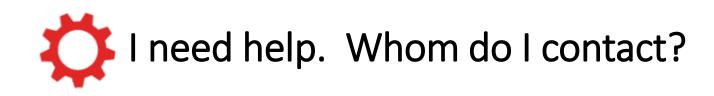


Ā	> Business Strategy Task Group The group's purpose is to identify and analyze at a high level all of the key is: enterprise will need to address to fully exploit Industrial IoT concepts for con other) gain.	n Group	You can join this workgroup. Join
W	> Ecosystem Task Group The group helps IIC members leverage the IIC and its ecosystem for business benefit and seeks to understand the value chains in the emerging Industrial IoT. It will clarify market opportunities and technology use cases.	Stan Schneider Real-Time Innovations Bassam Zarkout IGnPower	You are a member of this group. Leave Edit Settings
Ñ	 System Lifecycle and Interoperability Challenges A forum to identify and discuss solutions for challenges • About Interoperability (diversity of technologies / devices / protocols / interfaces), • About lifecycle management (upgrade, evolve and scale-up. 		You can join this workgroup. Join
W	> Use Cases Task Group The Task Group will collect, evaluate, and where applicable, accept use cases for IIoT solutions across all verticals represented in the IIC.	Jim Morrish Company for Individuals	You can join this workgroup. Join
W	> Verticals Taxonomy The group created deliverable defining a list of "industrial verticals" for use as a common reference by the IIC membership.	Jacques Durand Fujitsu Fumi likura Fujitsu Robert Martin MITRE	You can join this workgroup. Join



Example WG/TG Dashboard – Digital Twin Task Group





- Technology or security-related questions: Stephen Mellor, Chief Technology Officer (mellor@iiconsortium.org)
- Testbed inquiries: Howard Kradjel, Vice President, Industry Programs (kradjel@iiconsortium.org)
- Marketing inquiries: Kathy Walsh, Vice President, Marketing (walsh@iiconsortium.org)
- Membership Services: Diane Ehramjian, Director of Member Engagement (diane@omg.org)
- Help with Causeway navigation: Harriet Costa (costa@iconsortium.org)

info@iiconsortium.org