

Back to Berlin

The Industrial Internet Consortium held its quarterly meeting June 12 ~ 15 in Berlin, Germany. Another great turnout at the event with a keynote from Christof Jugel, from the German Energy Agency (dena) on Insights from the German Energiewende: Status Quo and Challenges Ahead, progress on our Industrial Internet Interoperability Coalition (I3C) portal, and a goodly number of technical meetings to make progress on our contributions to the IIoT ecosystem. A special thanks to those that participated to the success of this event!

We hosted a Smart Cities public forum on Wednesday afternoon, June 14th, with speakers and panelists from members InterDigital, Cisco, RTI, Belden, GE, Wipro, Asavie and Dell EMC.

We ran two IIC Connect sessions. IIC Connect is like "match.com" for member companies. The concept is simple: you enter your profile and a quick description of what might interest you. Then everyone looks at the profiles and requests meetings. You accept the ones you like; software does some automated scheduling, then you have 20-minute networking sessions. It's fast, easy, efficient and fun! There were 44 such meetings over two sessions. Your correspondent attended his first, with a new member, and there were multiple opportunities for collaboration with others. It was very informative, and it was clear the new member got a lot of value from the other members he met.

PUBLICATIONS

<u>The Industrial Internet Vocabulary Version 2.0</u> completed its review in early June and should be published shortly. The Industrial Internet Vocabulary Technical Report version 2.0 is poised to publish in late July. At the time of this report, it was in the final stages. Check the <u>Vocabulary Technical Report landing page</u> to see the updated version as soon as it is published.

JOURNAL OF INNOVATION

The Industrial Internet Consortium publishes the *Journal of Innovation* each quarter highlighting innovative ideas, approaches, products and services emerging within the industrial internet. The theme of the June 2017 edition is "Smart Cities," a theme selected by the Industrial Internet Consortium's Thought Leadership Task Group and supported by contributors throughout the membership. Download individual articles directly from the table of contents below or download the complete June 2017 edition of the <u>Journal of Innovation</u>.

- <u>Intelligent Transport Solutions for Smart Cities and Regions: Lessons Learned from an</u> 18-month Trial
- How IoT Can Significantly Improve Healthcare in the Context of Smart City
- Spotlight on the Business Strategy & Solution Lifecycle Working Group

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- Neuromarketing The Art and Science of Marketing and Neurosciences Enabled by IoT Technologies
- Outcomes, Insights and Best Practices from IIC Testbeds: Track and Trace Testbed

TESTBEDS

<u>Testbeds</u> provide an environment for companies and multi-disciplinary stakeholders to team up and prove out complex systems and gain real-world experience. With 24 approved testbeds (and more in the pipeline), participants are generating best practices, recommendations and priorities for standards organizations. Of course, it takes time to go from idea to approval to deployment and then get some useful results. To encourage getting useful results, we ran a "Testbed Showcase" at our March meeting. Eight testbeds participated and the <u>winner</u> was the Time-Sensitive Networking Testbed. Since then, we have produced a short video, which you can <u>view here</u>. There is now a second instance of the testbed up and running at BoschRexroth in Erbach, Germany.

Security is an important aspect of testbeds. The Steering Committee requires, and has from the beginning, that "security be considered in every testbed". The Testbed Security Contributing Group now has a next-generation testbed security review process, currently being applied in beta with select testbeds for assessment and refinement prior to rollout. An online testbed security evaluation questionnaire has been implemented in alpha for Testbed Security Evaluation Group to evaluate and evolve.

IIC EVENT ACTIVITY

We exhibited at Hannover Messe (April 24th ~ 28th) and repeated our partner role in the *Industrie 4.0 Meets the Industrial Internet Forum*. The IIC Pavilion was full, with twelve members at the pedestal, the Time-Sensitive Network (TSN) Testbed, and Security Claims Evaluation Testbed demonstrations.

The security liaison between Industrie 4.0 and IIC ran a joint demo showing how the IIC's Industrial Internet Security Framework (IISF) and the concepts of secure cooperation in cross-company environments can be applied to solve the challenge of multiple companies needing to work together to ensure security both within a single manufacturer's plants and across every participant in the value chain. The group completed a joint security demonstration at Hannover Messe that included 26 distinct participating companies located in the IIC booth, the I4.0 booth, elsewhere at HMI, or even from international destinations (Smart Factory in Japan). The demonstration highlighted an interoperable security monitoring solution that included a number of security analytics solutions that gathered security events from all participants. Participating companies from Industrie 4.0 and IIC include aicas, Belden, GarrettCom, Hirschmann, Tripwire, Cisco, Dell Technologies, RSA, Electric Imp, Fujitsu, GlobalSign, Infineon Technologies, Intel, Kaspersky Lab, Microsoft, Plethora IIoT, Robert Bosch, Real-Time Innovations, SAP SE, Schneider

Electric, SICK AG, Siemens, Smart Connect Technologies, SoCe, UL (Underwriters Laboratories), Waterfall Security, Wibu-Systems and Xilinx.

The demonstration is believed to have been the largest live integration of independent demonstrations. The demonstrations were integrated at the HMI event, and all integrations were completed by the end of the first day, highlighting the effectiveness of the design. Additional updates were implemented as opportunities arose, for example, the Wibu demonstration with an embroidery machine was featured in a video where the embroidery data was altered to cause the machine to embroider a different pattern. This was reported by the security analytics before the "counterfeit" material was off of the machine, highlighting the dynamic nature of the security detections.

Overall, the event garnered a lot of attention and demonstrated that independent consortia such as IIC and I4.0 can effectively collaborate to ensure the greater good for the industry. The JTG5 team plans to further enhance the demonstration testbed and present the new version at IOT Solutions World Congress in Barcelona in Q3.

We hosted a webinar highlighting this joint demo at Hannover Messe. The joint demo will be exhibited in the IIC Member Pavilion at <u>IOT Solutions World Congress</u> in Barcelona, October 3-5.

A <u>webpage</u> on the IIC site highlights member activities at HMI, a <u>webinar</u> highlights the Interoperable IIoT Event Monitoring Demo. These and all past webinars are available for viewing on demand from our <u>website</u>.

We co-hosted the <u>Deterministic Ethernet Forum</u> in Vienna, Austria (April 27-28) where we showcased the IIC TSN Testbed.

In April, at Hannover Messe, the IIC signed a memorandum of understanding with the <u>Industrial Value Chain Initiative</u> (IVI). IVI is forum, based in Japan, to design a new society by combining manufacturing and information technologies, and for all enterprises to take an initiative collaboratively. The photo shows Dr. Richard Soley, Executive Director of IIC on the left and Nishiokasan from IVI on the right

We followed this up with a joint workshop in Tokyo in June. The workshop had over 400 attendees with guests



from all over the world, including other consortia. Three IIC testbeds presented June 8 at Tokyo Big Sight--Factory Operations Visibility & Intelligence (Fujitsu), Factory Automation Platform as a Service (Mitsubishi Electric, Hitachi, Intel), and Deep Learning Facility (Toshiba, Dell EMC).



OTHER ARTICLES

In addition to these events, the Marketing team has been working on <u>press releases</u>. Here are a few:

- The Industrial Internet Consortium Hosts Smart Cities Forum in Berlin
- The Industrial Internet Consortium and Plattform Industrie 4.0 Host IIoT World Tour Event on June 19, 2017 in Turin, Italy
- <u>The Industrial Internet Consortium and the Industrial Value Chain Initiative Expand</u>
 <u>Collaboration with Joint Workshop</u>
- The Industrial Internet Consortium and the Industrial Value Chain Initiative Sign MoU
- Industrial Internet Consortium Members Announce Support for IIoT Security Demo with Plattform Industrie 4.0 at Hannover Messe 2017

You can always find the latest record of IIC members featured in the news here.

TECHNICAL INNOVATION AWARD

The Steering Committee instituted an award program to recognize some of the great work you can see being carried out in the IIC. The award category for Q2 was <u>Individual Contribution</u>. The award was given to one Sven Schrecker (<u>Intel</u>). Congratulations, Sven!

Sven's citation was for his leadership of Joint Task Group 5 (Security), a part of our partnership with Plattform Industrie 4.0, which created a demo for Hannover Messe (see above). He graciously accepted on that team's behalf.



Nominations are now open for the third quarter, the <u>Testbed</u> <u>Contributor Award</u>. The group Leads vote in mid-August. The award will be presented at our third-quarter meeting in Singapore in September.

NEW MEMBERS

We are pleased to announce the following new members.

- Saison Information Systems Co., Ltd. (Japan)
- Nozomi Networks Inc. (USA)
- Micron Technology (USA)
- SAS Institute (USA)
- SWIM.IT (USA)
- Vadict, Inc.
- Lantronix (USA)
- Millipore Sigma Corporation (Germany)
- ClearBlade (USA)
- Thales e-Security (USA)
- OTSL inc (Japan)
- CMMI Institute (USA)
- SENAI/SC: National Service of Industrial Apprenticeship of Santa Catarina State (Brazil)
- iVeia (USA)
- Rockwell Automation (USA)
- Quoin Inc (USA)
- Kalycito Infotech Private Limited (India)
- digiBlitz Inc (USA)
- Contextere (Canada)

Come and join us!

The Industrial Internet Consortium is the world's leading organization transforming business and society by accelerating the Industrial Internet of Things. Our mission is to deliver a trustworthy Industrial Internet of Things in which the world's systems and devices are securely connected and controlled to deliver transformational outcomes. Founded by AT&T, Cisco, General Electric, IBM and Intel in March 2014, the Industrial Internet Consortium catalyzes and coordinates the priorities and enabling technologies of the Industrial Internet. The Industrial Internet Consortium is managed by the Object Management Group® (OMG®). Visit www.iiconsortium.org.

IIC members gain experience they could never have as a non-member. They experience member meetings unlike any local meet-up groups. Here are some key benefits of membership:

- Networking

 Make the connections; find the needed expertise.
- Information & News—A fast pass to newsworthy industry developments.
- Competitive edge—Stay
 ahead of the competition, or
 take advantage of changes
 and developments that might
 otherwise have passed you
- Create a market—Join a collective voice supporting a single mission; create the disruption in the market and develop the business opportunities.
- Success—Members are building businesses and dedicating their professional lives to IIoT. They want to be successful, and they want others to succeed.
- Professional development—
 Grow your career, meet
 mentors and mentees, career
 prospects.
- Solve important problems and help your partners and customers.
- Events Capitalize on opportunities for continuous exposure to industry developments.