

July 23, 2015

Field Communication Insider is an e-newsletter featuring the latest news and developments in the application of HART, FOUNDATION Fieldbus and FDI technology around the world.

#### People for process automation

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#### NEWS

#### FieldComm Group officially debuts at ACHEMA 2015 Fair

The new organization is dedicated to advancing intelligent integration in process control and instrumentation, and it was officially introduced to the global process industry at the 2015 ACHEMA Fair in Frankfurt, Germany, June 15-19. **Read more.** 

#### FieldComm Group describes role in the future of process automation

FieldComm Group was established to develop, manage and promote global standards for integrating digital devices into automation system architectures while protecting existing investments in the HART and FOUNDATION Fieldbus communication technologies. **Read more.** 

### FDI specifications, tools and host components delivered to automation market

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### IDX Academy becomes first accredited training facility under FieldComm Group

This program establishes uniform standards for fieldbus end-user educational curriculum around the globe and defines acceptable levels of learning for students of the technology. **Read more.** 

#### Yamatake changed its name to Azbil Corporation

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#### PRODUCTS

New product news you might be interested in:

- Free trial of ABB's new FDI-based device management software
- Emerson streamlines HART device configuration and wireless network management
- Endress+Hauser Field Xpert: Device documentation at the touch of a button
- FCI ST100 series/air gas flowmeter web demo
- Lee College announces 2015 Fieldbus certified end user training schedule
- Phoenix Contact Ethernet-based HART multiplexer
- Microcyber's WirelessHART solution is all you need
- Get data on the go with ProComSol HART-based products
- Softing offers new FOUNDATION Fieldbus configuration tool for FFusb
- <u>Moore Industries' TFZ programmable FOUNDATION</u> Fieldbus temperature transmitter
- Phoenix Contact field diagnostics module

#### CALENDAR

#### **Americas**

Free End User Fieldbus Seminar Calgary, AB, Canada September 22, 2015 More Information

Free End User Fieldbus Seminar Long Beach, CA, USA November 5, 2015 More Information Free End User Fieldbus Seminar Edmonton, AB, Canada September 24, 2015

More Information

Europe, Middle East, Africa (EMEA)
CONTROL Roadshow
Port Elizabeth, South Africa

**CONTROL Roadshow** Secunda, South Africa

August 27, 2015 More Information

**Distributed Control System (DCS) 20** Congress

Miskolc-Lillafüred, Hungary October 20-22, 2015 More Information

**CONTROL Roadshow** 

Vanderbijlpark, South Africa November 3, 2015 **More Information** 

Measurement and Control (JEMIMA)

Participation in mcT Petrolchimico

exhibition and conference

Tokyo, Japan December 2-4 2015 **More Information** 

September 17, 2015

More Information

Milan, Italy

November 2015

More Information

Asia-Pacific MICONEX 2015

Chongging, China September 22-25, 2015 **More Information** 

FieldComm Group General Assembly and **End User Seminar** 

Tokyo, Japan December 2, 2015 More Information

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When you team with Emerson for real-time control and asset management, you get the assurance of working with a leader in FOUNDATION Fieldbus, the EMERSON. flexibility of our unmatched range of fieldbus-enabled devices and systems, and the confidence that comes with expert engineering, installation, and support services. And thanks to the Human Centered Design behind our Device Dashboards, putting fieldbus to work is now easier than ever. Learn more.

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## FieldComm Group officially debuts at ACHEMA 2015 Fair



FieldComm Group was founded in January 2015 with the combining of two leading automation industry consortiums — the Fieldbus Foundation and HART Communication Foundation. The new organization is dedicated to advancing intelligent integration in process control and instrumentation, and it was officially introduced to the global process industry at the 2015 ACHEMA Fair in Frankfurt, Germany, June 15-19.

With 170,000 attendees from more than 100 countries and 3,800 exhibitors, ACHEMA is the most comprehensive event for process manufacturing. By creating a larger-than-life "Technology Wall" in Hall 11.0, Booth E43, FieldComm Group showed attendees how it is "connecting the world of process automation'" through solutions to integrate valuable digital data available from intelligent field devices.

FieldComm Group staged an interoperable technology demonstration featuring nearly 40 leading suppliers and over 70 devices integrated into both new and legacy systems. The display included leading automation solutions such as FOUNDATION Fieldbus, HART, HART-IP<sup>TM</sup> and WirelessHART, as well as the Field Device Integration (FDI) standard.



According to FieldComm Group President and CEO Ted Masters, the ACHEMA 2015 exhibition marked a significant milestone for stakeholders involved in developing, managing and promoting global standards for digital device integration. "As one of the world's leading process industry fairs, ACHEMA was the prime venue to debut FieldComm Group and present our vision to end users, suppliers, system integrators and others. We appreciated the opportunity to participate in this major event."

ACHEMA attendees were able to learn about recent advancements in intelligent instrumentation and digital communication protocols. A live demonstration of FDI technology explained how industrial operations benefit from the latest device integration solutions. The FDI specification, developer tools and host components were released in March 2015, and FieldComm Group is now the primary source for assistance with developing FDI-based devices and host systems for FOUNDATION Fieldbus, HART and PROFIBUS.

FieldComm Group's booth also included individual company kiosks hosted by major automation vendors supporting open and interoperable standard technologies. The suppliers showcased their compliant products and integration tools, and experts were on hand to answer questions and demonstrate how connecting and integrating device information delivers value to the enterprise.

For more information, please visit www.fieldcommgroup.org.

## FieldComm Group describes role in the future of process automation



FieldComm Group, conducting a press briefing at the 2015 ACHEMA Fair in Frankfurt, Germany, on Wednesday, June 15, described its role as a "hub of collaboration" in the new era of digital communication and integration technology for the global process automation market.

According to FieldComm Group's mission statement, the new organization was established to develop, manage and promote global standards for integrating digital devices into automation system architectures while protecting existing investments in the HART and FOUNDATION Fieldbus communication technologies.

President and CEO Ted Masters outlined FieldComm Group's objectives to trade publication editors and industry analysts attending the ACHEMA event. "The HART Communication Foundation and Fieldbus Foundation have operated similarly in their roles, and their technologies complement each other around the common goal of helping users automate to leverage real-time digital data from field devices in their plants," Masters said. "FieldComm Group was formed by combining these former foundations to create a new entity, which provides a home for their technologies. Although 'Group' replaces 'Foundation' in the new organization, the HART and FOUNDATION Fieldbus core technologies and branding remain and will be enhanced. All existing registration marks and identifications will also be retained."



He added, "Going forward, we will become the home of Field Device Integration (FDI) technology and lead its adoption as the integration standard for process automation."

Masters indicated there are many strategic advantages to automation end users, suppliers and other industry stakeholders working together based on a unified message. Additional benefits will result from leveraging combined resources to enable improvements in quality, consistency and efficiency across technologies, while replacing the duality of administrative duties.

Masters emphasized the goal of FieldComm Group is to create an open environment by partnering with industry peers around the world. "In addition to serving as the home for HART, FOUNDATION Fieldbus and FDI solutions, the Group provides a venue for all companies and associations serving the process automation market to share thought leadership. Culturally, we are receptive to collaborating with leading technologies outside of our organization to find common ground for the betterment of the industry. FDI is a giant step in this effort with international standards organizations such as Profibus International, OPC and FDT Group, and ISA100 already working together. Participation through FieldComm Group Working Groups will also help to standardize the user experience with intelligent device management."

The FieldComm Group structure combines executive strategy and direction at the board level with efficient execution and coordination around the globe. The board consists of the combined leadership of the legacy foundations and adds a Strategic Technology Committee to provide guidance from a diverse group of technical experts in leading companies.

Maintaining headquarters in Austin, Texas, USA, the organization will also coordinate marketing functions in different areas of the world to promote the message of automation integration and digital information, as well as drive industry adoption of FDI technology.

Masters explained FieldComm Group's vision for the future: "In the era of 'Internet of Things,' there is no analog—only digital data exists. The value of digital data accessed through various hosts and systems is exciting, and is transforming our everyday lives. Nearly all devices are becoming connected and accessed for various types of new use cases. But as the 'Industrial Internet of Things,' or IIoT, becomes more complicated, users will have many more requirements to keep their plants safe and mission-critical processes reliable. The protocols of FieldComm Group understand the critical needs of process automation users and build robust standards around these special requirements."

Masters stressed that the new, emerging integration standard across all process automation protocols will be FDI, which will simplify the lives of end users and Group members alike. End users will benefit from the fact that all host systems follow the same standard, with vendors providing only a single device package per instrument type regardless of the host. Overall, the FDI solution will simplify workflows, minimize integration effort, reduce frustration, and protect asset investments.

Concluding the briefing, Masters predicted improved solutions for digital integration would enable process industry organizations to use actionable intelligence to enhance decision-making, and thus realize greater operational and business value. "We believe the task of capturing automation technology benefits starts with connecting to data, integrating it into systems and hosts, and, ultimately, delivering the intelligence to applications where users can make better decisions to optimize their operations," he said.

# FDI specifications, tools and host components delivered to automation market

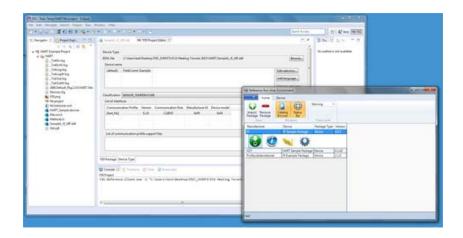


FieldComm Group is supporting the implementation of Field Device Integration (FDI) technology by distributing compliant specifications, tools and host components for the FOUNDATION Fieldbus, HART, PROFIBUS and PROFINET protocols. This effort will assist automation manufacturers in the development of FDI Device Packages and compatible host systems.

Major automation industry foundations and controls & instrumentation suppliers established FDI Cooperation, LLC to standardize the integration of field devices into host systems. This effort combined the advantages of Field Device Tool (FDT) technology and Electronic Device Description Language (EDDL) in a single solution.

With the dissolution of FDI Cooperation, LLC in July, FieldComm Group will become the home for FDI technology. According to President and CEO Ted Masters, the organization is committed to delivering FDI tools across the leading automation protocols, as well as driving enhancement and adoption of the technology as the integration standard for the marketplace.

"FieldComm Group will provide comprehensive support for FDI development, which includes technical assistance and conformance testing around the world," Master said. "Our goal is to ensure a high-quality standard that maintains interoperability between protocols and vendors, and enables backwards compatibility between generations of field devices and host systems."



Approval of the FDI specification as part of the emerging International Electrotechnical Commission (IEC) 62769 standard is expected by mid-2015. At the core of the specification is the FDI Device Package, which includes everything a host system needs to integrate an intelligent device. A single FDI Device Package can scale according to the complexities and requirements of instruments, making it easier for automation suppliers to develop and integrate device information and configurations across a wide range of host systems and protocols.

FDI technology is future-proof and fits seamlessly into the Reference Architecture Model for Industry 4.0 (RAMI) described in the Implementation Strategy for Industry 4.0 by German industry associations BITKOM, VDMA and ZVEI. The Reference Architecture Model names FDI technology for the Integration Layer and the Functional Layer. The FDI client/server architecture with its Device Information Model (according IEC 62541-100) provides everything to model real devices as virtual objects and bring them to the Industrial Internet of Things (IIoT).

Developers can implement and test FDI Device Packages using the FDI Integrated Development Environment (IDE), which helps instrumentation manufacturers create solutions for FOUNDATION Fieldbus, HART and PROFIBUS/PROFINET devices. Electronic Device Descriptions (EDDs) are created with the help of an editor and converted to the encoded file format by means of "tokenizing" (the binary coding of an EDD). The encoded EDD, the UIP developed using Visual Studio, and the attachments are then combined to form an FDI Device Package. A runtime environment (reference host) runs the FDI Packages for tests and debugging. Finally, a test engine is used to automatically run FDI Package conformance tests.

Host system manufacturers may utilize FDI Common Host Components for host systems such as device management tools, asset management tools, and process automation systems. They allow for rapid development and ensure FDI Device Packages behave consistently across different systems. FDI Common Host Components fully support the new unified EDD file format for FOUNDATION Fieldbus, HART and PROFIBUS/PROFINET devices, as well as existing FOUNDATION Fieldbus and HART EDDs to protect end-user investments. The EDD Engine supports the entire language scope of EDD in a multiprotocol manner, in accordance with IEC 61804-3, and is backward compatible with existing EDD formats.

For more information about FDI developer resources, please visit www.fieldcommgroup.org.

# IDX Academy becomes first accredited training facility under FieldComm Group



FieldComm Group has announced that IDX Academy, the South African industrial communications training center based in Johannesburg, has been successful in the rigorous certification process required to become a site that offers fieldbus training courses certified under the FOUNDATION Fieldbus Certified Training Program (FCTP). This program establishes uniform standards for fieldbus end user educational curriculum around the globe, and defines acceptable levels of learning for students of the technology.

IDX Academy is the first certified FOUNDATION Fieldbus training site on the African continent. Eight engineers from Angola LNG passed the inaugural five-day FOUNDATION Fieldbus Certified Technical Specialist course. The successful students are now proficient in the installation, maintenance, repair, and trouble-shooting of FOUNDATION Fieldbus networks and systems. Certified students may be included in the Student Registry on the FieldComm Group website.

The certification of IDX Academy is the first FCTP accreditation since the joining of the Fieldbus Foundation and HART Communication Foundation was completed, with the new FieldComm Group becoming operational on January 1, 2015. The opportunity to incorporate certified HART technology training is being planned alongside the current certified training centers.

Chuck Carter, certified FOUNDATION Fieldbus instructor, was instrumental in developing the certified curriculum at IDX. He teaches the FOUNDATION Fieldbus courses and will instruct additional trainers to ensure ongoing, sustainable certified training expertise. Carter has been an instructor in instrumentation and process technology since 1976 and was center director for over 16 years at the FCTP-accredited Lee College Fieldbus Training Center in Baytown, Texas, USA, before relocating to South Africa.

David Bean, who heads up IDX, commented, "Certification is important for the IDX Academy because we are now formally recognized by FieldComm Group as the high-quality training center that we are. Our customers expect the best and this gives them a guarantee that the content of our FOUNDATION Fieldbus courses and the course materials are up-to-date and delivered by an expert."

He added, "We are looking forward to adding world class Foundation Fieldbus training opportunities to the solid base of the other industrial communications products, services and

training we already offer across the sub-Saharan region and, of course, we'd be keen to extend our capabilities further with the addition of HART technology training."

The provision of a certified training center in the African continent has been a primary objective of FieldComm Group Southern African Marketing Committee for some time. Marc Van Pelt, FieldComm Group Vice President EMEA Operations, is delighted that IDX Academy has gained its accreditation. "I am proud that we have reached our goal of providing certified technical training and support to FOUNDATION Fieldbus users and potential users across the region, and my thanks go to everyone involved throughout the comprehensive process. It was an honor to present the certificate of accreditation to David Bean and his team."



The dedicated Foundation Fieldbus training rigs at IDX Academy utilize host systems, devices and components from several FieldComm Group members, including Emerson Process Management, Endress+Hauser, Eaton/MTL, Honeywell, National Instruments, Pepperl+Fuchs, Smar, Softing, StoneL, Turck and Wika.

FieldComm Group's Director Technical Services, Sean Vincent, welcomed the addition of another certified establishment. He commented, "Effective and standardized training of plant personnel is the key to successful design and overall project implementation of an advanced technology such as FOUNDATION Fieldbus."

Vincent continued, "This certification program ensures a very comprehensive, vendor-neutral approach to training. Process end users want to maximize the benefits of their fieldbus instrumentation and control system investments—and experience has shown that training of operators, engineers and technicians is essential to getting the most out of the technology."

For more information about certified training and FOUNDATION Fieldbus training sites, please visit the Education/End User Certified Training section of FieldComm Group's website.