

# Meet FIWARE at Hannover Messe '19



**1 - 5 April**  
**Hanover**  
**Hall 8, Stand C25**

DATA-DRIVEN  
DIGITAL  
MANUFACTURING  
EXCELLENCE

## ABOUT FIWARE

FIWARE is an open source initiative defining a universal set of standards for context data management which facilitate the development of **Smart Solutions** for different domains such as Smart Industry, Smart Energy, Smart Cities and Smart Agrifood.

We provide free Application Programming Interfaces (APIs) and components, enabling the connection to the **Internet of Things** with **Context Information Management** and **Big Data** services on the **Cloud**. They can be assembled together and with other third-party platform components to accelerate the development of Smart Solutions. The specifications of the FIWARE APIs are public and royalty-free. The FIWARE technologies allow fast, cost-effective, hassle-free and sustainable creation of innovative digital services and products that can be built by any type of actor in the industry.

# Applications of the FIWARE Technologies in Industrie 4.0

## Digital Feedback and Forward Loops for Manufacturing Excellence



This use case demonstrates how factories can overcome information silos implementing IDS and FIWARE open source technologies. Maintenance of milling and coordinate-measuring machines (CMMs) can be improved through the exchange of their data. The FIWARE - IDS Connectors ensure sovereignty on data and guarantee the security of processing of this information.

The demo is further extended by the operation analysis of the parts that were manufactured on the milling machine. Once adding sensors to these parts and using Digital Twins, the factory is able to inspect the performance of produced parts. Linking this analysis with the CMM programme leads to the creation of an excellence process loop across the entire product life-cycle. That way, factories can achieve continuous improvement in manufacturing.

### Benefits:

- Enhanced and more robust design based on product performance.
- Manufacturing excellence across the product lifecycle.
- Smart defect forecasting and predictive maintenance tasks planning.



## Fleet Management for the Future

Fueloyal offers cutting edge customized fuel management solutions that help companies improve their work and minimize costs.

[www.fueloyal.com](http://www.fueloyal.com)



## The EU Initiative to Digitalise the Manufacturing Industry

ICT Innovation for Manufacturing SMEs (I4MS) is a program promoted by the European Commission to expand the digital innovation of manufacturing SMEs in Europe.

[www.i4ms.eu](http://www.i4ms.eu)



## Smart Logistics 4.0 Powered by FIWARE

The H2020 Factories of the Future MIDIH Innovation Action (Manufacturing Industry Digital Innovation Hubs) project aims at implementing a disruptive digital transformation program for manufacturing SMEs in the domain of industrial CPS and IOT.

[www.midih.eu](http://www.midih.eu)





prostep ivip is an international association headquartered in Germany that commits itself to developing innovative approaches to solving problems and modern standards for product data management and virtual product creation.

[www.prostep.org](http://www.prostep.org)



#### **Total Track & Trace for Industry 4.0**

WiTraC is a young company based in Valencia (Spain) focused on wireless and positioning technologies. It provides B2C products to improve User Experience of final customers and B2B advanced solutions. Among them is an innovative wireless real-time location and tracking system (RTLS).

[www.witrac.es/en](http://www.witrac.es/en)

## **Follow FIWARE at the Hannover Messe 2019**

### **• 2 April 2:30 pm**

Hall 8, stand C25

FIWARE & IDSA Booth Opening

### **• 4 April 10:30-11 am**

**Forum Industrie 4.0** (hall 8, stand D17)

Presentation **FIWARE and IDSA: Data Sovereignty for Industrie 4.0** (in German)

Ulrich Ahle

*FIWARE Foundation CEO*

Lars Nagel

*International Data Spaces Association Managing Director*

### **• 4 April 11 am**

Hall 8, stand C25

FIWARE & IDSA Networking Event

## **FIWARE Foundation Membership Benefits:**

- Have a voice in driving technology change
- Create sustainable business models whilst implementing FIWARE-based solutions
- Help to promote adoption of the FIWARE open standards

Not a member of the FIWARE Foundation yet?

[www.fiware.org/join](http://www.fiware.org/join)

**For more info about FIWARE visit [www.fiware.org](http://www.fiware.org) [www.marketplace.fiware.org](http://www.marketplace.fiware.org)**