

Open APIs
for Open
Minds



IoT Week Bilbao, 7th June 2018

Jorge Rodriguez (Head of ATOS R&I Manufacturing & Retail Sector)

@jredroso

jorge.rodriguez@atos.net



What is FIWARE?

FIWARE is the **open source platform** of choice for building **Smart Solutions**



OPEN SOURCE PLATFORM

A market-ready **open source software**, combining components that enable the connection to IoT with Context Information Management and Big Data services in the Cloud



SMART USAGE OF DATA

Standard APIs for data management and exchange, as well as harmonised data models.



SMART SOLUTIONS & SERVICES

Automation of processes across the entire value chain. Easy plug&play integration with other solutions and services. Part of a marketplace of portable and interoperable solutions.

What is FIWARE?



FIWARE FOUNDATION

Actively promotes the FIWARE Adoption, supports the community providing shared resources and validates the FIWARE technologies.



FIWARE SUMMITS

A meeting place for developers, entrepreneurs, political decision makers, thought leaders, business executives and investors.



FIWARE ECOSYSTEM

More than 100 cities, 11 iHubs, various accelerator programmes, and strategic partnerships with GSMA, TM Forum, CEF, and ETSI, amongst others.

The FIWARE Ecosystem



FIWARE Mundus

A worldwide expansion of FIWARE into Latin America, North America, Africa, and Asia.



FIWARE iHubs

European network of business hubs working together for an easy implementation of FIWARE technologies in businesses.



FIWARE Accelerators

80 M funding for the most talented teams and business proposals building upon FIWARE technology. Discover our 16 accelerators.

The FIWARE iHubs

A screenshot of the FIWARE Maps application. The interface has a blue header with the FIWARE logo, the word 'Maps', and tabs for 'Actors', 'Cities', 'Tweets', and 'Events'. A 'Sign In' button is in the top right. Below the header is a sidebar with a search bar and a list of iHubs. The main area is a world map with several blue location pins. A semi-transparent text box is overlaid on the map, containing a list of services provided by the iHubs.

FIWARE Maps Actors Cities Tweets Events Sign In

iHUBS 11

- Aplis Hub, Prague
- CIEMSA Montevideo, Montevideo
- FIWAREMAC (FIMAC) iHub, Sant...
- FIWARE Rioja, Logroño
- FIWARE Zone, Sevilla
- Future City I Hub, Amersfoort
- iHUB Umbria, Perugia
- IoT Booster, Saint-Quentin
- Laboratorio Nacional de Internet ...
- UberHub FIWARE iHub, Uberlândia
- UDG-FIWARE-iHub-Western-Swit...

- Technology and consulting support, training, research and testing by using FIWARE technology
- Individual coaching of startup and SMEs
- Support on certification process for Powered by Fiware applications and FIWARE IoT Ready applications
- Market information and organization of events to spread FIWARE technologies

FIWARE for INDUSTRY inside the FIWARE CATALOGUE



FIWARE GENERIC ENABLERS

Generic Enablers (GE) offer a number of general-purpose functions, offered through well-defined APIs, easing development of smart applications in multiple sectors. They will set the foundations of the architecture associated to your application.

Specifications of FIWARE GE APIs are public and royalty-free. You can search for the open source reference implementation, as well as alternative implementations, of each FIWARE GE in the FIWARE Reference Architecture.



Data/Context Management
Enabling access, gathering, processing, publication and analysis of context information at large scale.

Internet of Things (IoT) Services Enablement
Make connected things available, accessible, and usable.

Advanced Web-based User Interface
3D & AR capabilities for web-based UI.



Security
Make delivery and usage of services trustworthy by meeting security and privacy requirements.

Interface to Networks and Devices (I2ND)
Build communication-efficient distributed applications, exploit advanced network capabilities and easily manage robotic devices.

Architecture of Applications / Services Ecosystem and Delivery Framework
Coordinate, publish, cross-cut and consume applications/services, addressing all business aspects.

DOMAIN SPECIFIC ENABLERS (DSEs)

The FIWARE Catalogue includes links to other catalogues bringing information about domain-specific enablers (DSEs) to be combined with those serving general purposes (Generic Enablers - GE). They may be helpful for those who plan to develop applications in the domains of energy, creative media, smart manufacturing, health and wellbeing and the agrifood sector.

The perfect solution to make your app focus on a specific vertical.



Please note that Domain Specific Enablers (DSEs) are different from FIWARE Generic Enablers (GEs). Some of them have been developed as part of the Future Internet PPP large scale trials as domain specific extensions which are now available to you. Their development may not have followed the FIWARE Developers' guidelines, and subsequently no quality assurance and support can be given. There may also be different regimes regarding availability of source code under well-known open source licenses, level of support and sustainability in the long term.

Some DSEs may demonstrate they are not only applicable to the specific domain for which they were originally designed but to many other application domains. Those DSEs may eventually become a FIWARE GE by going through the incubation process defined within the FIWARE Open Source Community.

Note that support of DSE catalogues as well as DSEs is outside the control of FIWARE.

Smart Platform

- GE1** • IoT.Backend.IoTBroker
• Reference Impl. by NEC
- GE2** • IoT.Backend.ConfMan
• Orion Context Broker by Telefonica I+D
- GE3** • IoT.Backend.DeviceManagement
• IDAS by Telefonica I+D
- GE4** • IoT.Gateway.ProtocolAdapter
• ZPA by Telecom Italia
- GE5** • IoT.Gateway.DataHandling
• EsperaFastData by Orange
- SE1** • Shopfloor Data Collection
• SDG by Uninova & ATOS
- SE2** • Secure Event Management
• SEM by TXT
- SE3** • Dynamic CEP
• DyCEP by FI & NISSATECH
- SE4** • Dynamic Visualization & Interaction
• DyVisual by DFKI

Virtual Platform

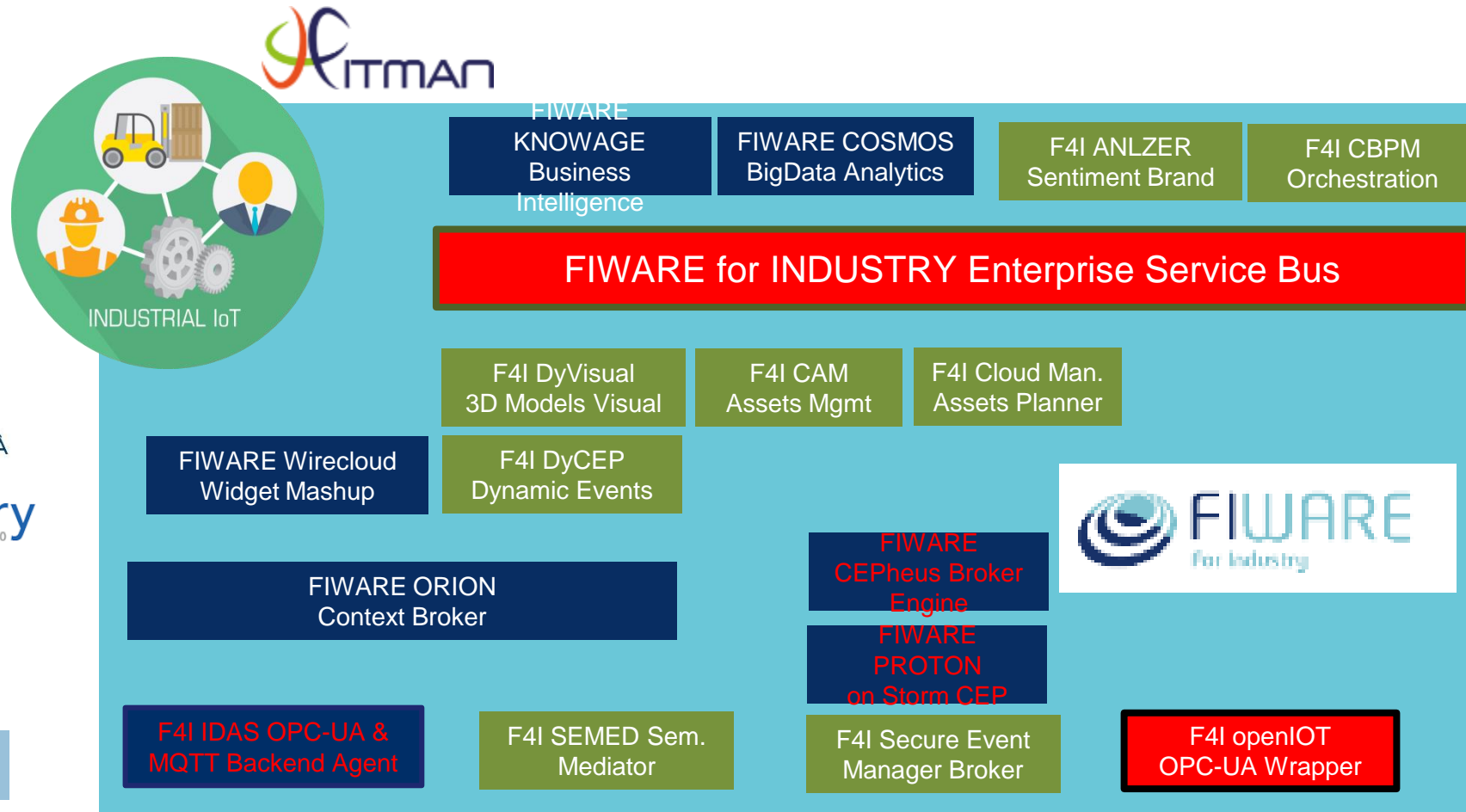
- GE1** • Apps.Marketplace
• Reference Impl. by SAP
- GE2** • Apps.Repository
• Reference Impl. by SAP
- GE3** • Apps.Mediator
• Reference Impl. by Telecom Italia / Thales
- GE4** • Apps.Registry
• Reference Impl. by SAP
- GE5** • Apps.LightSemanticComposition
• COMPEI by ATOS
- GE6** • Data.SemanticSupport
• Semantic Application Support by ATOS
- SE1** • Collaborative Asset Management
• CAM by ENG
- SE2** • Collaborative Business Process Management
• BPM by ENG
- SE3** • Supply Chain & Business Ecosystem Apps
• SCApp by TXT
- SE4** • Data Interoperability Platform Services
• DIPS by TXT
- SE5** • Metadata and Ontologies Semantic Matching
• SeMo by NTUA
- SE6** • Management of Virtualized Assets
• MoVA by DITF
- SE7** • Generation and Transformation of Virtualized Assets
• GeToVA by UIBK

Digital Platform

- GE1** • Data.PubSub
• Context Awareness Platform by Telecom Italia
- GE2** • Apps.ApplicationMashup
• Wirecloud by UPM
- GE3** • Data.UnstructuredDataAnalysis
• UDA by ATOS
- SE1** • Unstructured & Social Data Analytics
• Anizer by NTUA
- SE2** back-end
• SEMed by BIBA
- SE3** • 3D Scanning Storage and Visualisation
• 3DScan by DATAPIXEL
- SE4** • Collaborative 3D Web Viewer
• c3DWW by DFKI



FIWARE for INDUSTRY in H2020: 17 ENABLERS 8 SE+, 3GE+, 2NE, 4GE

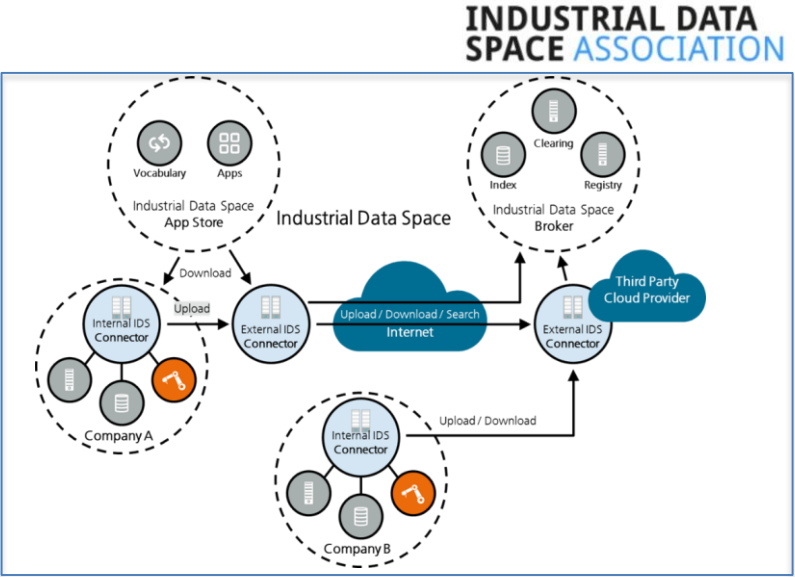


Evolution of FITMAN Specific Enablers in H2020 Program

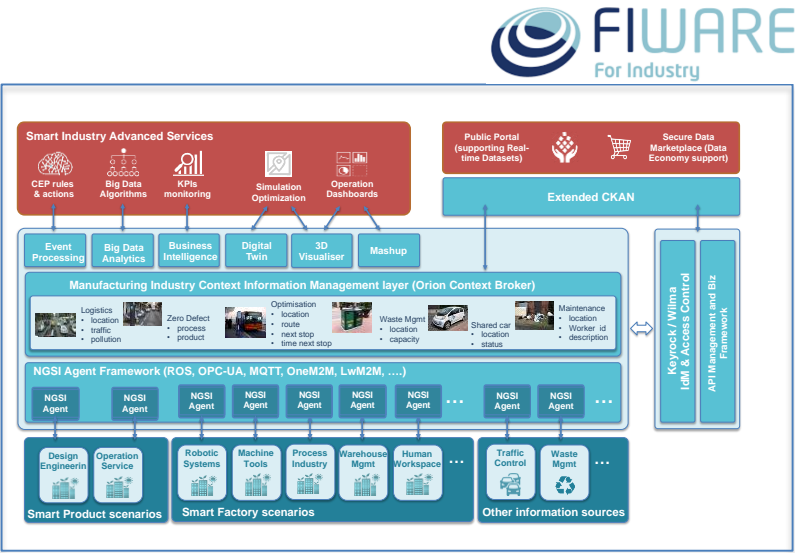
www.fiwareforindustry.eu

The next Task: Positioning of the four main Drivers of Industrial IoT

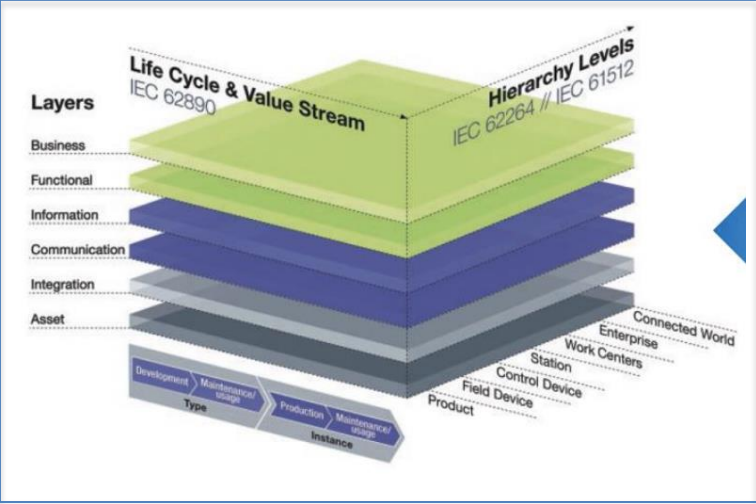
Industrial Data Space
Reference Architecture



FIWARE
Reference Architecture

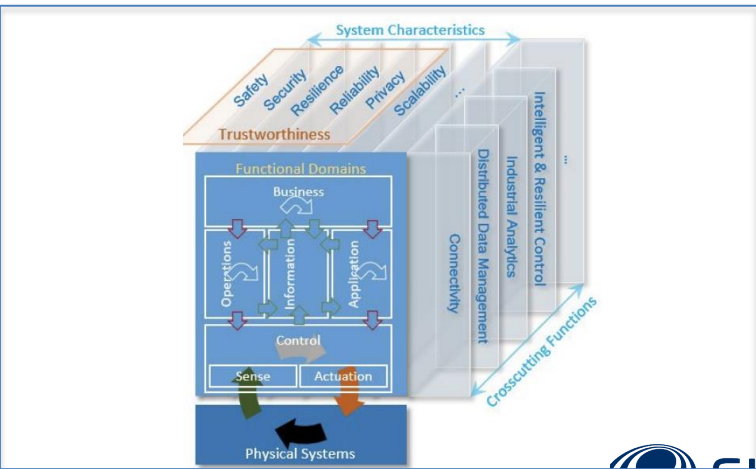


PLATTFORM INDUSTRIE 4.0



Reference Architecture
Model Industrie 4.0

industrial internet CONSORTIUM



Industrial Internet
Reference Architecture

Thank you!

Jorge Rodriguez (Head of ATOS R&I Manufacturing & Retail Sector)

@jredroso

jorge.rodriguez@atos.net

www.fiware.org

Follow @FIWARE on Twitter

