

# FIWARE Introduction – May 2015

Thierry Nagellen  
Orange Programme Manager  
thierry.nagellen@orange.com



<http://www.fiware.org>

<http://lab.fiware.org>

Follow @FIWARE on Twitter



# Summary

1. FI-PPP – the stakes and the programme strategy
2. FIWARE – Planning
3. FIWARE main focuses
4. FIWARE Phase 3 for adoption by SMEs and Web entrepreneurs
5. FIWARE Acceleration programme
6. FIWARE Chapters
7. FIWARE Lab and the 4 steps to create an account
8. FIWARE catalogu, WIKI, Q&A platforme
9. HOSTABEE

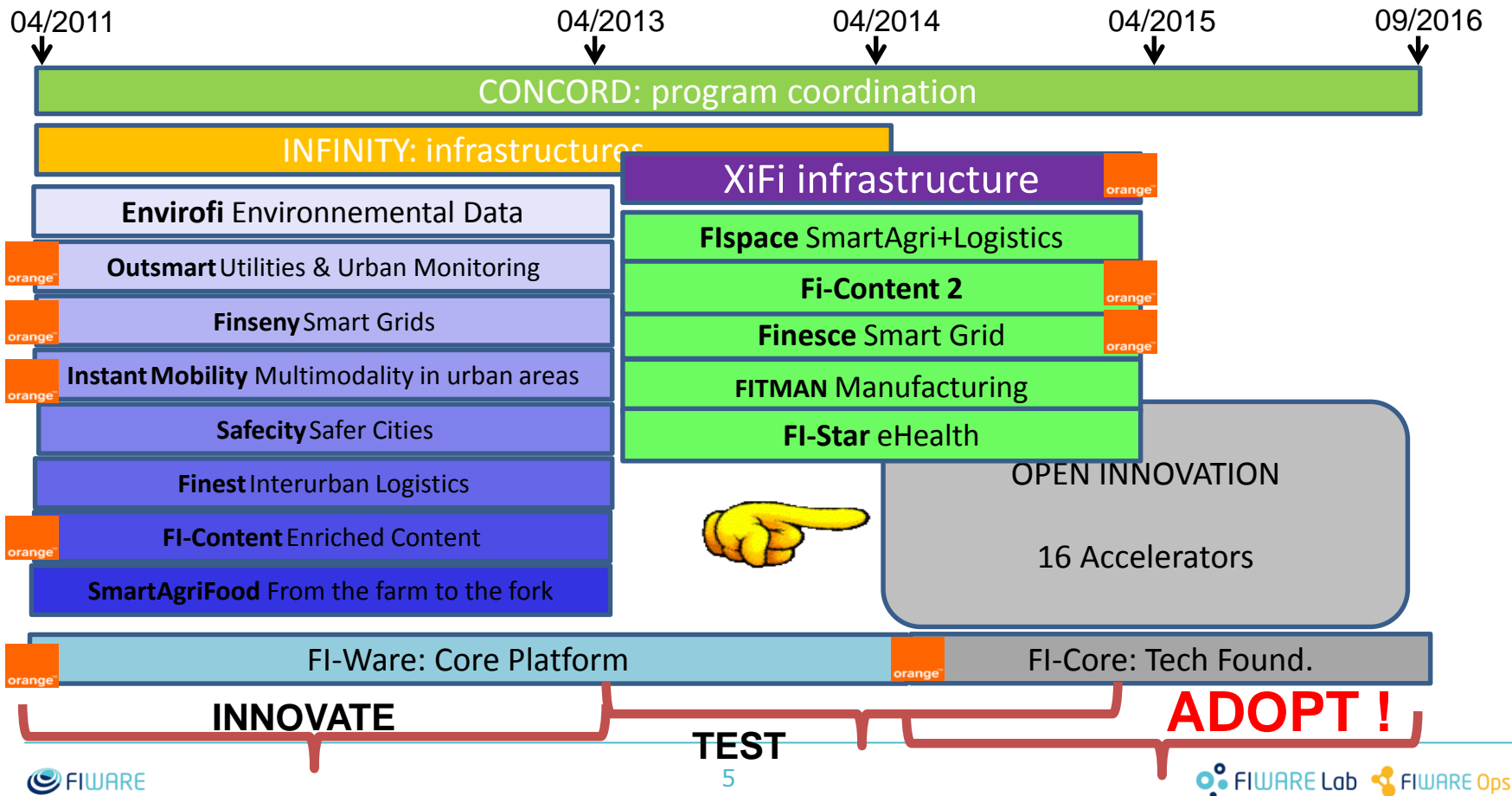
# Future internet Public Private Partnership - Stakes

- Increases the **competitive position of European industry** in sectors such as telecommunication, mobile devices, software and services, and content provision
- Increases the **effectiveness of business processes and infrastructures** supporting applications in vertical sectors such as **transport, health, environment, energy, media, agrifood and smartcities**
- Provides new **innovative business models** that strengthen the newly created technologies

# Future internet Public Private Partnership - Programme

- **“How you can best use the Net to do business !**
- Structure all projects under the same “umbrella”
- Invent the market place to push research result in real application contexts and involved users early in the lifecycle
- **Natively Industry driven** : The platforms will be used by SMEs and Public administrations,
  - to validate the technologies in the context of smart applications and their ability to support «user driven» innovation schemes.
- **And large scale ...**
  - 500 M€ total budget
  - 300 M€ EC contribution
  - 100M€ dedicated to SMEs
  - +200 partners involved – Research centers, universities, Telcos, SMEs, ...

# FI- PPP Programme



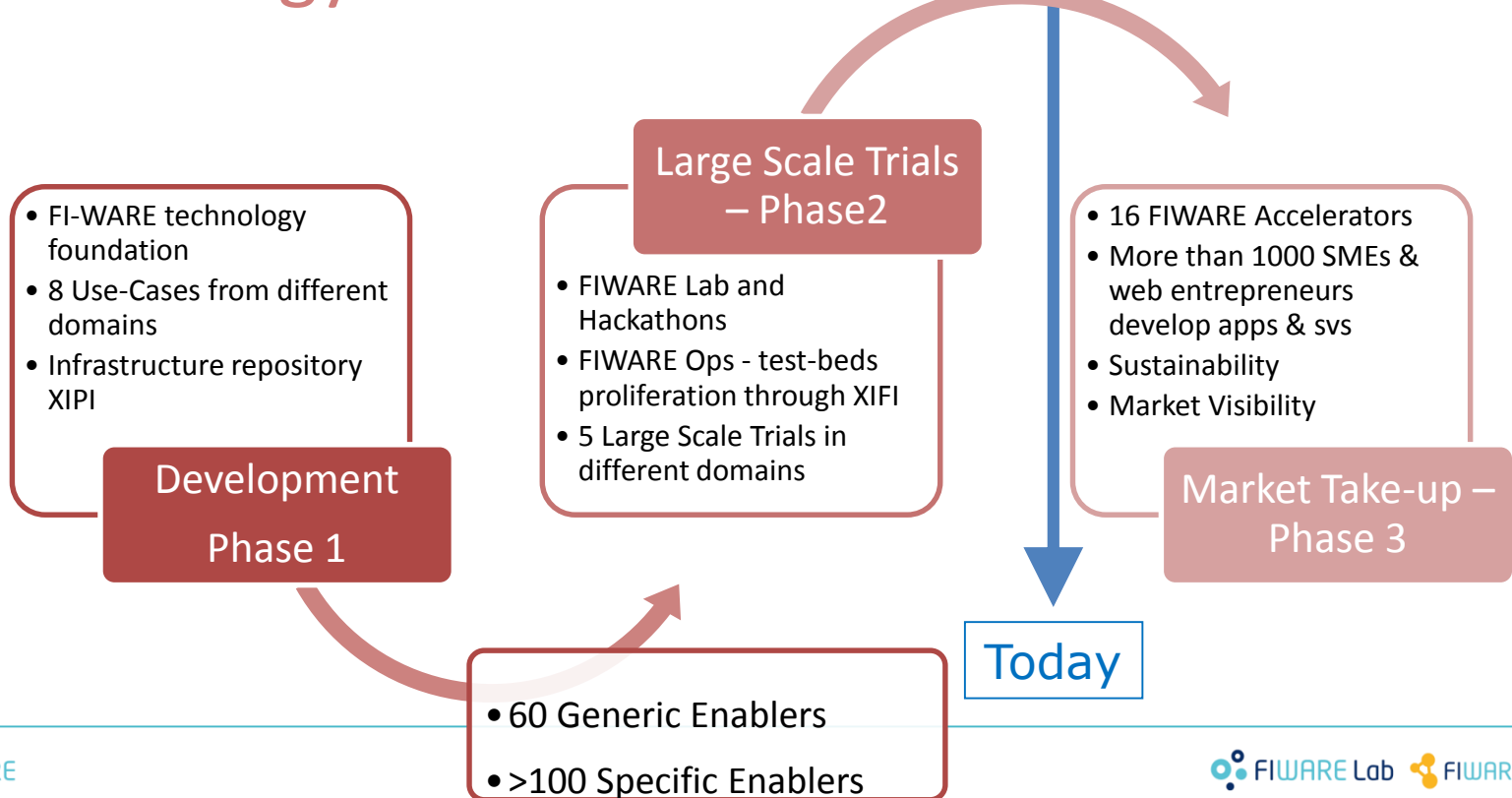
# FIWARE Planning

- Phase 1: 2011 – 2012
  - Derive the architecture and identify the common enablers of the core platform; start developing components.
- Phase 2: 2013 – 2014
  - Developing the core platform and the use case specific functionalities
- Phase 3: 2014 – 2016
  - Expansion of use cases by developing applications and services
  - Extending the technology foundation

# FIWARE Focuses over time

## Technology Focus

## Innovation Focus



# Fiware Adoption Phase 3

- The third phase of the Future Internet PPP builds on technological developments and trials taking place in earlier phases.

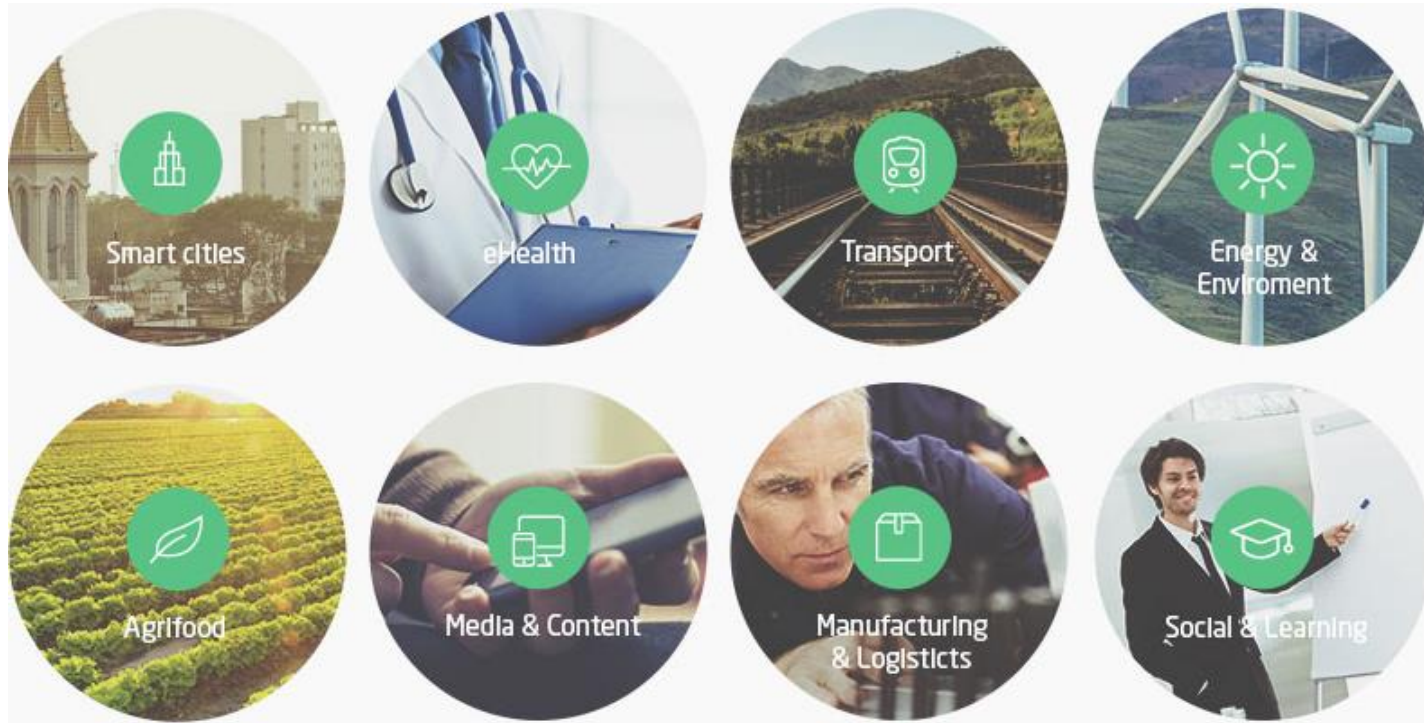
## Fiware Adoption phase 3

- €80 million EU funding
- 16 accelerators fostering digital business within Europe
- EuropeanPioneers
  - €4.5 million for 25 digital enterprises (start-ups and SMEs)
- <http://fiware.org/>

# Fiware acceleration programme

- Open calls to develop highly innovative services and applications.
- Since September 2014 **16 selected "FIWARE accelerator projects"** will publish open calls for the distribution of grants to SMEs and Web entrepreneurs
- **SMEs and Web entrepreneurs** may submit proposals to these Open Calls, in accordance with the requirements defined by the projects launching the Open Calls.
- **You have innovative ideas** to enter the market and to create a sustainable business.
- **You can submit proposals** (up to 3 accelerators)

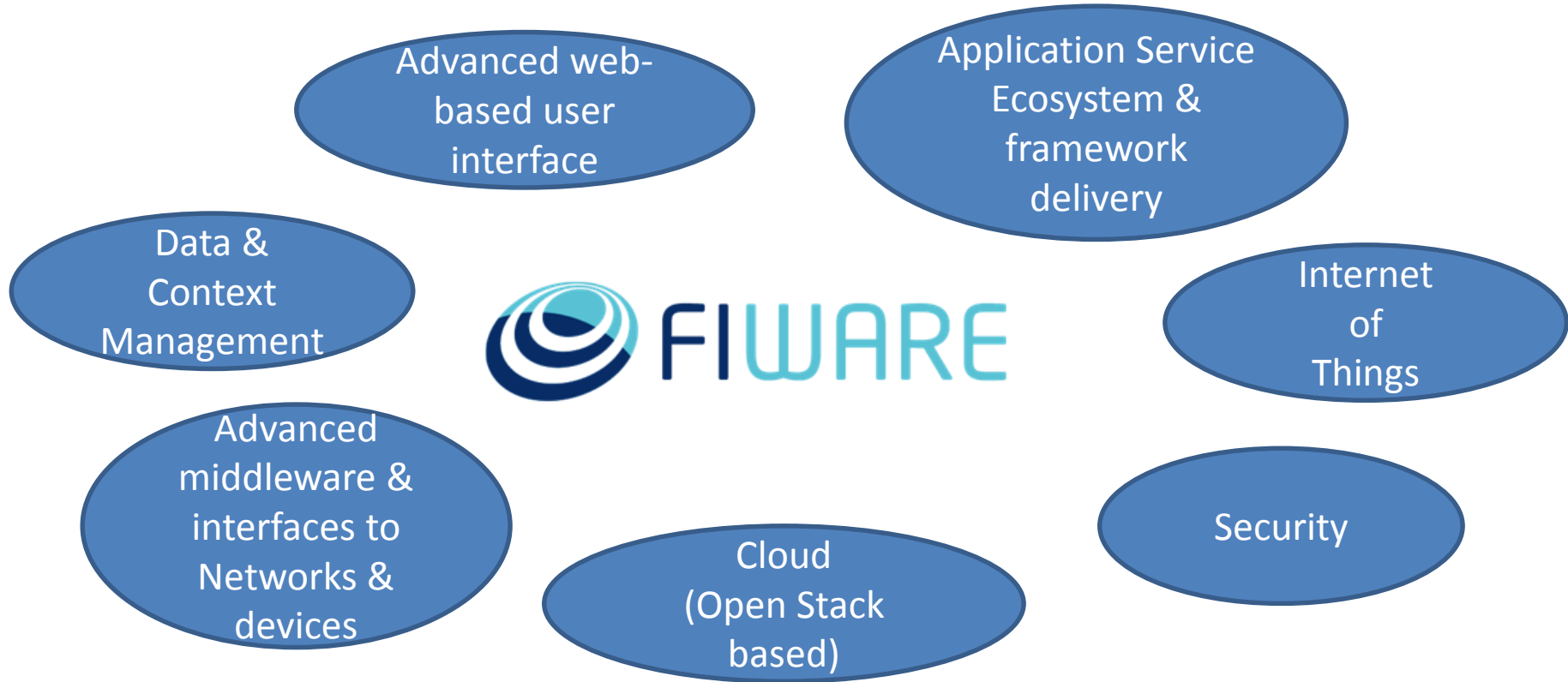
# 16 accelerators among 8 industrial sectors



## Fiware is a brand and an ecosystem

- FIWARE provides enhanced **OpenStack-based cloud hosting capabilities** plus a rich library of added-value functions offered “as a Service”: The **GEs**
- **GEs : FREE, Open, modular and reusable (sustainable)**
  - **no more « walled gardens » !**
  - Fiware GEs addresses 6 chapters
  - Some Specific enablers are also available. They are free up to the end of phase 3 (Sept 16)

# FIWARE platform: 7 chapters / 36 Generic Enablers



# Fiware provides Fiware Lab (since 2013)

- Fiware Lab welcomes you :
  - **hosting your application on the FIWARE Cloud and providing the “sand box”**
- Over 4000 proposals received during the 1st wave open call
- Over 9000 operational user account ...
- **the infrastructures facilities that you need to operate** within the Fiware environment (provisioning and lifecycle)

# FIWARE LAB

- Relies on 18 nodes in Europe
  - Spain, Trento, Paris, Waterford, Berlin, Mexico, Zurich, Budapest, C4I, Karlskrona, Gent, Prague, two locations in the Athens area, Volos, Stockholm, Poznan, Crete, ...
- Provides
  - A non commercial Sand box
  - Account types : Basic, Trial= up to 2VM and **Community** (5VM but requires European Pioneer and coach approval)

# FIWARE LAB

- A Sand box

- where you can have access to the Fiware Catalogue to **GE** via Make « hands on » technologies
- Ability to **test with real data**
- Ability to **run trials with real users**
- Visibility, promotion
- **Hosting of permanent showcases**
- Connection to potential customers
- Acceleration of product development
- **Exploiting open data published** by cities and other organizations **(+2000 datasets are available)**

[lab.fiware.org](http://lab.fiware.org)

[Datasets](#) [Organizations](#) [Groups](#) [Data Requests](#) [About](#)


## Search Your Data

[Popular Tags](#) [medio ambiente](#) [energía](#) [fotovoltaica](#)

### Welcome to FIWARE Lab Data

Welcome to the FIWARE Lab Data Portal, a data hub for Smart Cities and organizations to offer Data to be used by developers and entrepreneurs for experimentation.

"SMART CITIES ARE OF STRATEGIC INTEREST FOR ALL OF US"  
FIWARE for Smart Cities



### FIWARE Lab Data Portal statistics

2.6k	19	19	1
datasets	organizations	groups	related item

### Organizations

Trentino (866)

Malaga (270)

Rotterdam (179)

Valencia (75)

Alcobendas (14)

Lleida (12)

Vigo (5)

Sevilla (4)

Santander (1)

Logroño (1)

Show More Organizations

Search datasets...



**1,441 datasets found**

Order by: Relevance



### EsAccesible App / It's Accessible

EsAccesible App / It's Accessible, mobile application with which to define and share the physical accessibility of places (bars, restaurants, ...) and to share with users the...

CSV

### Valencia: Sociedad y Bienestar: Descripción de los códigos de la capa de equi...

Tabla relación descripción de los códigos de la capa equipamientos municipales. Datos alfanuméricos: Clase: Descripción del identificador de la clase. id:...

CSV geojson

## THE FIWARE CATALOGUE

The FIWARE Catalogue contains a rich library of components (Generic Enablers) with reference implementations that allow developers to put into effect functionalities such as the connection to the Internet of Things or Big Data analysis, making programming much easier. All of them are public, royalty-free and open source!

By combining them, you can start developing your application right away. Just take a look at our guide and learn which enabler does what or get to know how they can be added to your already working application to add new functionalities. Our library will make your application smarter!

If you are not an experienced FIWARE developer, we suggest that prior navigating the FIWARE Catalogue using the links below you visit the Quick FIWARE guide for developers.

### TAKE THE TOUR

#### QUICK FIWARE GUIDE FOR DEVELOPERS

## 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

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



INTERNET OF THINGS

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



ADVANCED UI

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



SECURITY

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



I2ND

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



APPS

**Architecture of Applications / Services Ecosystem and Delivery Framework**  
Co-create, publish, cross-sell and consume applications/services, addressing all business aspects.

## DOMAIN SPECIFIC ENABLERS

The FIWARE Catalogue will be extended to include domain-oriented enablers to be combined with those serving general purposes (Generic Enablers - GE). They will cover functionalities that are specific and will help accelerating development of applications, in certain domains.

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



Manufacturing



Media



eHealth



Energy



AgriFood

## BUNDLES

### BUSINESS FRAMEWORK CONSUMPTION

The Business Framework Consumption Bundle includes a set of GEIs that support different monetization and revenue sharing features.

### WIRECLOUD MONETIZATION

The Wirecloud (App Mashup) Monetization Bundle represents one of the uses cases of the business Framework and intends to show the potential of the BF features provided by FIWARE in a concrete use case. This use case is based on the use of the business framework.

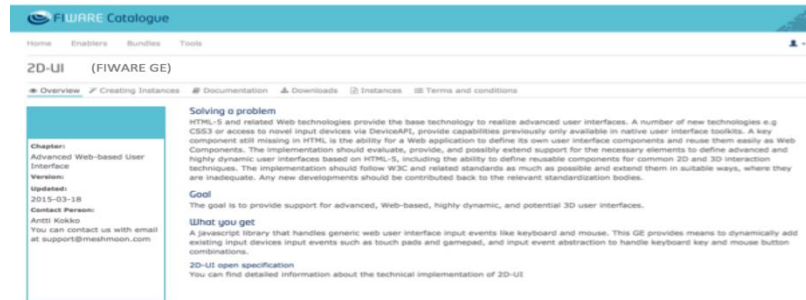
### DATA CONTEXT STREAMS

Context Streams generation storage and analysis.



# The FIWARE Catalogue

## [catalogue.fiware.org](http://catalogue.fiware.org)




# Q&A platform

StackExchange

sign up log in tour help stack overflow careers

fiware

stackoverflow

Questions Tags Users Badges Unanswered Ask Question

Search

fiware

search

376 results

relevance newest votes active

0 votes

1 answer

**Q: Fiware-Cosmos MapReduce**  
I have a Question regarding the MapReduce example explained here:  
[http://forge.fiware.org/plugins/mediawiki/wiki/fiware/index.php/BigData\\_Analysis\\_-\\_Quick\\_Start\\_for\\_Programmers](http://forge.fiware.org/plugins/mediawiki/wiki/fiware/index.php/BigData_Analysis_-_Quick_Start_for_Programmers) It is indeed ...  
hadoop mapreduce fiware fiware-cygnus  
asked Mar 3 by Lope Lh

2 votes

2 answers

**Q: Fiware Instance Status Error**  
Hi I've been trying to try out the **Fiware** service. I've setup an POI Instance in the Waterford Region. I've followed the instructions and assigned a floating IP. On the Instance page I have no IP ...  
instance status fiware  
asked Feb 2 by user1512783

1 vote

1 answer

**Q: Cosmos Fiware and Webhdfs API**  
I signed up in **Fiware** and created an account for Cosmos. I was able to ssh on the head node, but I couldn't use the API for webhdfs or cosmos. I used curl on my ubuntu shell like this: curl -i ...  
fiware  
asked Sep 15 '14 by Cassildo

1 vote

2 answers

**Q: Fiware Orion - pepProxy**  
I'm part of a team that is developing an application that uses the **Fiware** GE's has part of the Smart-AgriFood accelerator. We are using the Orion Context Broker for gathering the data provided ... by the sensor network, and we intend to use the Pep-Proxy to authenticate the sensor node for access the Orion instance. We have tried the following pepProxy's: <https://github.com/telefonicaid/fiware-orion> ...  
fiware-orion  
asked Apr 10 by Andres

Advanced Search Tips

results found containing  
**fiware**



## Looking for a job?

**Lead WordPress Developer**  
Razeware  
McGaheysville, VA / remote  
wordpress css3

**Android Engineer**  
Self  
Treviso, Italy  
android java



[About](#) [Blog](#) [Events/Coaching](#) [Competitions](#) [Press](#) [FIWARE Accelerate](#) [Help/Contact](#)

**CEED TECH  
APPLICATIONS OPEN!**



**APPLY NOW**

**SMES & ENTREPRENEURS**  
FIWARE ACCELERATOR PROGRAMME

**80  
million  
FUNDING**



**FIWARE  
DEVELOPERS**



**FIWARE  
PROVIDERS**



**DOMAIN  
STAKEHOLDERS**  
PUBLIC ADMINISTRATION  
AND COMPANIES



## FI-WARE Architecture

Following is a description of the Reference Architecture linked to it. Enablers (GEs) being supported in each chapter is provided, including Enabler (GE) exposes to application developers or it uses to connect.

- Cloud Hosting
- Data/Context Management
- Internet of Things (IoT) Services Enablement
- Applications/Services Ecosystem and Delivery Framework
- Security
- Interface to Networks and Devices (I2ND)

### Security Chapter

- Security-Monitoring: Mulval Attack Path Engine Open API Specification
- Security-Monitoring: Mulval Attack Path Engine Web Application Open API Specification
- Security-Monitoring: Scored Attack Paths Open API Specification
- Security-Monitoring: Remediation Open API Specification
- Security-Monitoring: Service Level SIEM Open API Specification
- Security-Monitoring: IoT Fuzzer Open API Specification
- Security-Monitoring: Android Vulnerability Assessment Open API Specification
- Identity Management Open API Specification
- Privacy Open RESTful API Specification
- Data Handling Open RESTful API Specification
- Access Control Authorization Open RESTful API Specification
- Context-based Security & Compliance Open RESTful API Specification
- DBAnonymizer Open RESTful API Specification
- Secure Storage Service Open API Specification
- Content Based Security Open RESTful API Specification
- Malware Detection Service Open API Specification
- Android Flow Monitoring Open Specification

API

### Cloud Hosting Chapter

- FIWARE.OpenSpecification.Cloud.DCRM
- FIWARE.OpenSpecification.Cloud.SM
- FIWARE.OpenSpecification.Cloud.SelfServiceInterfaces
- FIWARE.OpenSpecification.Cloud.CloudEdge
- FIWARE.OpenSpecification.Cloud.ObjectStorage
- FIWARE.OpenSpecification.Cloud.SDC
- FIWARE.OpenSpecification.Cloud.PaaS
- FIWARE.OpenSpecification.Cloud.Monitoring
- FIWARE.OpenSpecification.Cloud.JobScheduler
- FIWARE.OpenSpecification.Cloud.Edgelets

Open  
Specs

### Data/Context Management Chapter

- FIWARE.OpenSpecification.Data.BigData
- FIWARE.OpenSpecification.Data.PubSub
- FIWARE.OpenSpecification.Data.CEP
- FIWARE.OpenSpecification.Data.Location
- FIWARE.OpenSpecification.Data.MetadataPreprocessing
- FIWARE.OpenSpecification.Data.CompressedDomainVideoAnalysis
- FIWARE.OpenSpecification.Data.QueryBroker
- FIWARE.OpenSpecification.Data.SemanticAnnotation
- FIWARE.OpenSpecification.Data.SemanticSupport
- FIWARE.OpenSpecification.Data.Middleware

## Materializing the FI-WARE Vision


- Materializing Cloud Hosting in FI-WARE
- Materializing Data/Context Management in FI-WARE
- Materializing Internet of Things (IoT) Services Enablement in FI-WARE
- Materializing Applications/Services Ecosystem and Delivery Framework in FI-WARE
- Materializing Security in FI-WARE
- Materializing the Interface to Networks and Devices (I2ND) in FI-WARE
- Materializing Advanced User Interfaces in FI-WARE
- Materializing Common base technologies in FI-WARE
- Materializing FI-WARE Cross-Chapter functions

From description  
to  
concrete softwares

# FIWARE websites

- Everything is on [www.fiware.org](http://www.fiware.org)
- But you can go to the essential content directly:
  - [catalogue.fiware.org](http://catalogue.fiware.org) a kind of executive summary per Generic Enabler
  - [edu.fiware.org](http://edu.fiware.org) the e-Learning platform to discover Generic Enablers Features
  - [wiki.fiware.org](http://wiki.fiware.org) the place to find many more details
- And then create your account on FIWARE Lab to play and test Generic Enablers
  - [lab.fiware.org](http://lab.fiware.org)

# 1- Go to <http://lab.fiware.org>

 [Cloud](#) [Store](#) [Mashup](#) [Data](#) [Account](#) [Help&info](#)


## FIWARE Lab


FIWARE Lab is a working instance of FIWARE available for experimentation.


You will be able to setup the basic virtual infrastructure needed to run applications that make use of the APIs provided by FIWARE Generic Enablers deployed as a Service either globally or by you (as private instance).


[Request Community Account upgrade](#)

[Sign up](#)

 [Need Help?](#) [Ask a question.](#)

 [Our GEs](#) [See our Catalogue.](#)

 [FIWARE Lab nodes](#) [Learn about FIWARE Ops.](#)

 [eLearning](#) [Train yourself.](#)

## Log In

☐ remember me

[Sign In](#)

[Sign up](#) | [Forgot password](#) | [Didn't receive confirmation instructions?](#)

## 2- Registration on FIWARE Lab

### Registration

---

Username

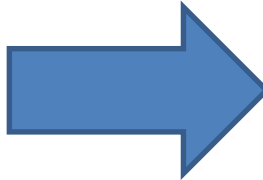
E-mail

Password

Password (again)

Captcha

*ocum*



### Registration

---

Username

E-mail

Password

Password (again)

Captcha

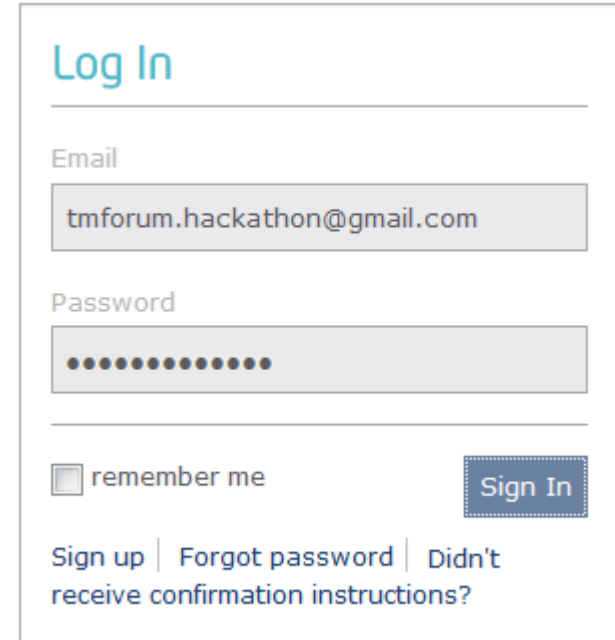
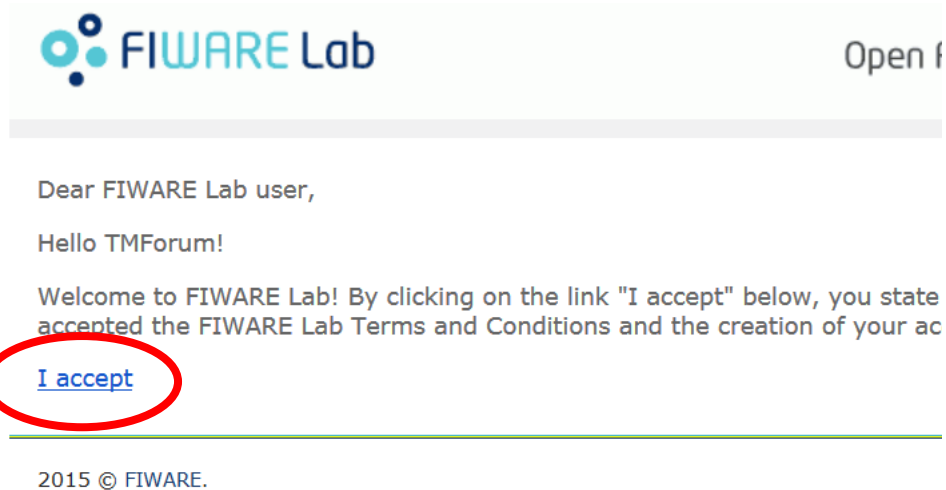
*ediah*

☐ I want to be a trial user (Not available)

☒ I accept FIWARE Lab [Terms and Conditions.](#)

[Forgot password](#) | [Didn't receive confirmation instructions?](#)

### 3- Check your emails and sign in!



The image shows a "Log In" form. It has a title "Log In" followed by a horizontal line. Below the title are two input fields: "Email" with the value "tmforum.hackathon@gmail.com" and "Password" with a masked password represented by dots. Below the password field is a checkbox labeled "remember me" and a "Sign In" button. At the bottom, there are links: "Sign up | Forgot password | Didn't receive confirmation instructions?".

## 4- You are done ! your FIWARE Lab account is created

The screenshot displays the FIWARE Lab user interface. At the top, a navigation bar includes the FIWARE Lab logo and links for Cloud, Store, Mashup, Data, Account, and Help&Info. A user profile icon labeled 'TMForum' is in the top right corner.

The main content area is divided into two sections:

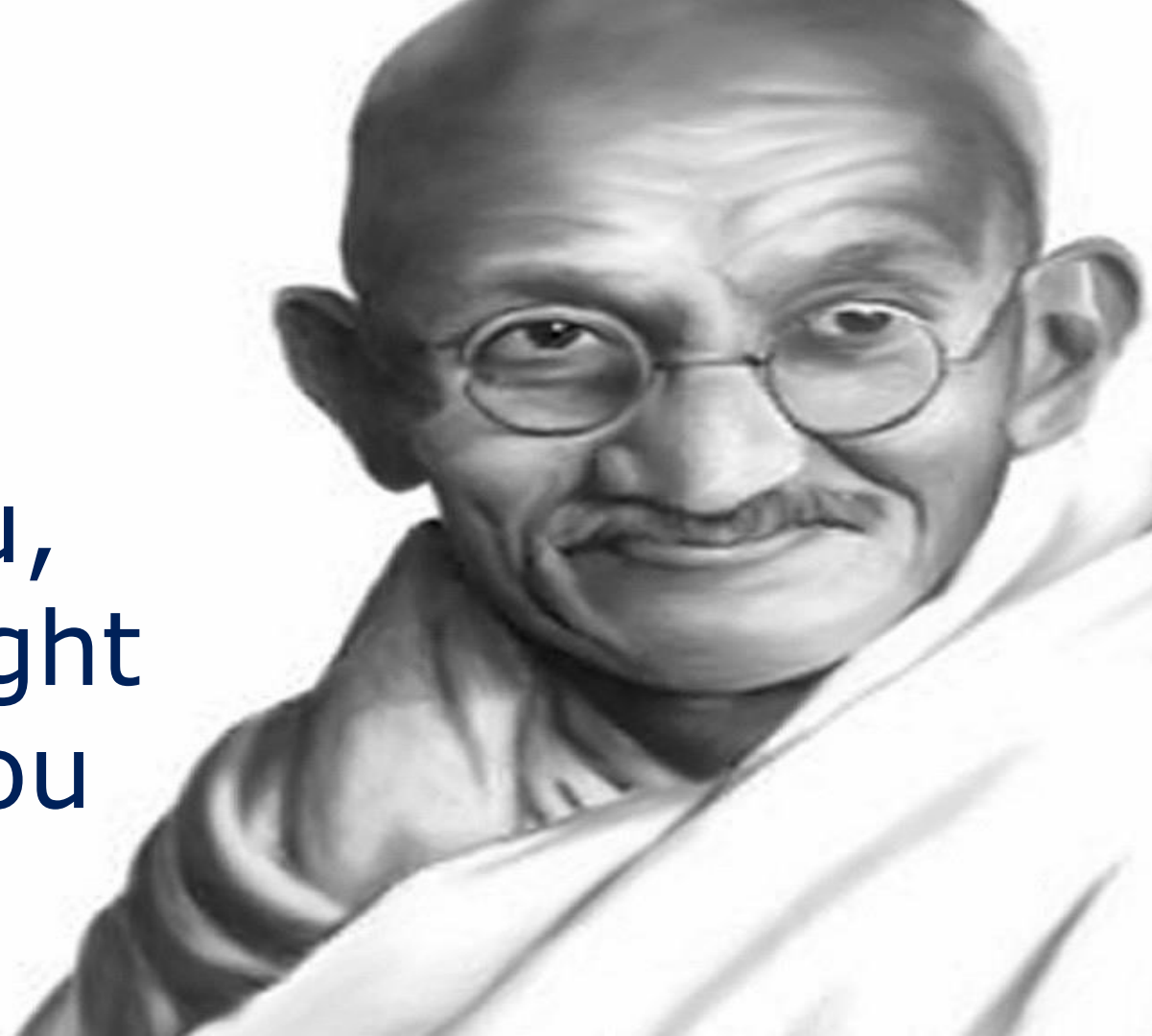
- Identity Manager**: Located on the left, it contains a sidebar with links to Home, Organizations, and My Applications.
- Home**: The main content area on the right, featuring two panels:
  - Applications**: A panel with a 'Register' button at the top right and a 'View All' button at the bottom right. The main area is currently empty.
  - Organizations**: A panel with a 'Create' button at the top right. It displays a single organization entry: 'TMForum cloud' with a group icon and the text 'This organization is intended ...'. A 'View All' button is at the bottom right.

# HOSTABEE : a French «Fiware inside» success story

- [Hostabee](#)

First they  
ignore you,  
then they  
laugh at you,  
then they fight  
you, then you  
win.

---



# Thanks!



OPEN APIs FOR OPEN MINDS

[www.fiware.org](http://www.fiware.org)  
@Fiware 

