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## FIWARE Technology




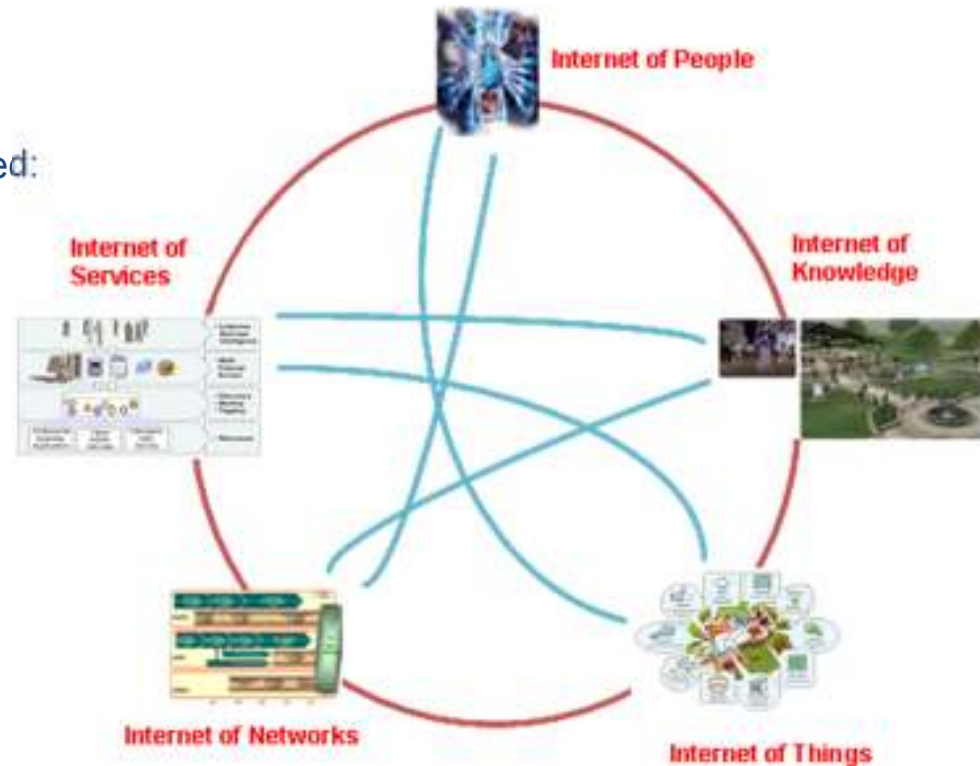
OPEN APIs FOR OPEN MINDS

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



# Why to use FIWARE

- The nature of ICT applications is changing
- Many people (users, developers, SME, WE) need:
  - to platform for your applications
  - to host in the cloud
  - to connect to IoT
  - to able to analyze data into large-scale
-  **FIWARE** can help them



# FIWARE Platform

■ Advanced OpenStack-based Cloud + rich library of services named Generic Enablers (GEs)

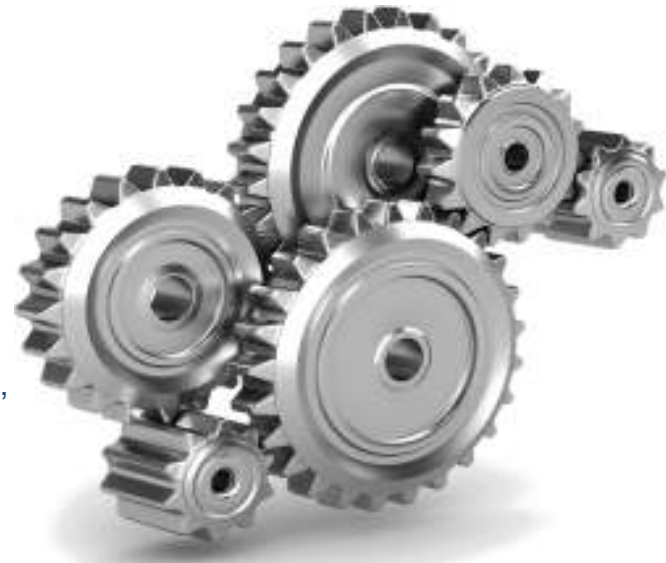
■ These services cover common functionalities in many application fields like:

- security
- storage
- cloud
- data
- IoT

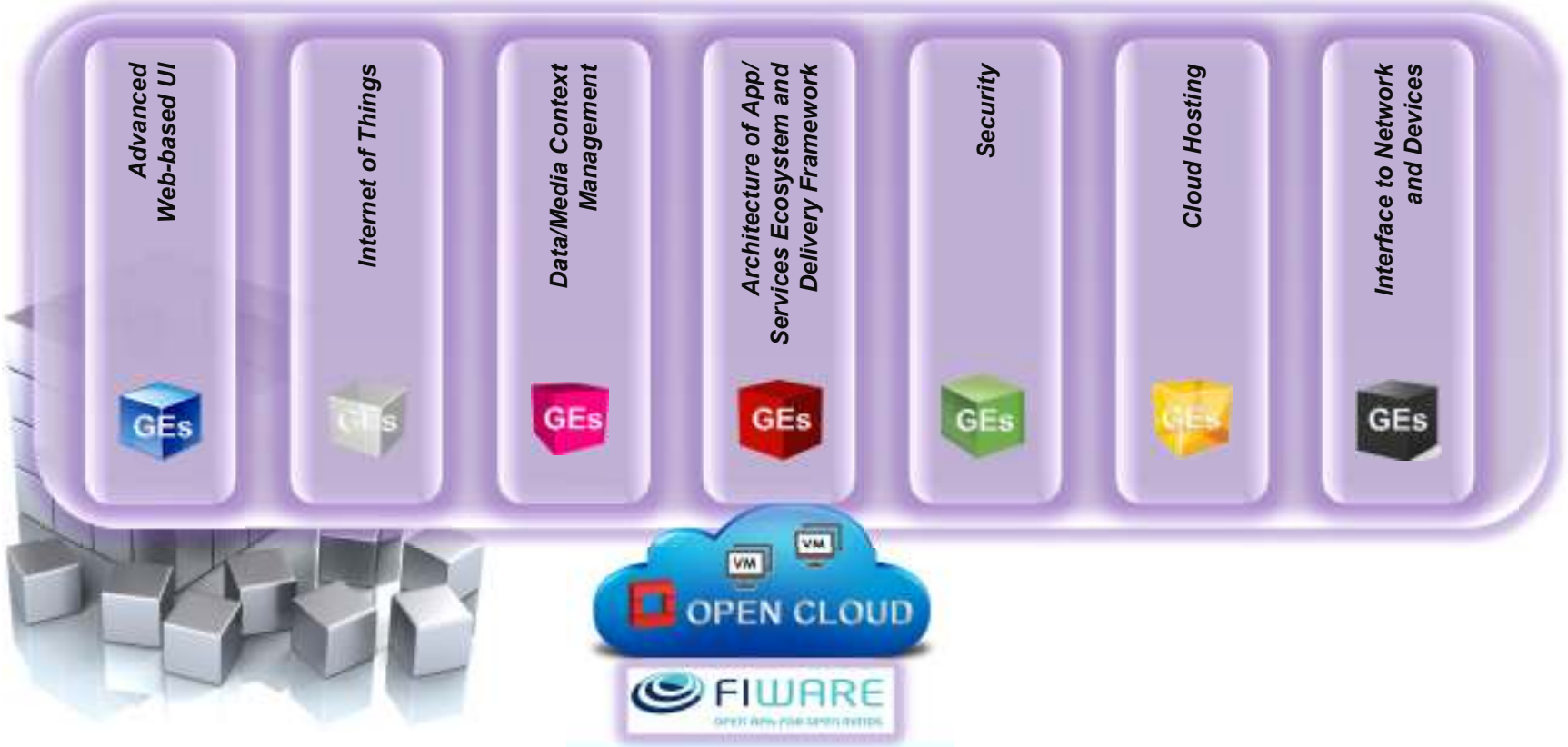


## What are the Generic Enablers?

- FIWARE GEs are a set of general-purpose functions available through standard well-defined APIs
- GEs are useful to make easier to:
  - connect to the Internet of Things, perform Big Data analysis,
  - handle Data/Media in real time at large scale,
  - create augmented reality applications and 3D user interfaces,
  - and manage the security aspects.
- GEs are published in the FIWARE Catalogue and divided into 7 technical chapters



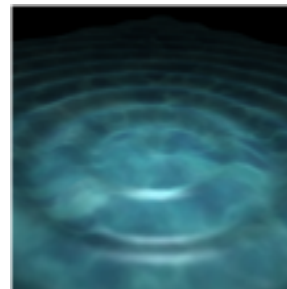
# GEs Technical Chapters



# FIWARE GEs for Advanced Web-based UI

- Rich web-based User Experience:

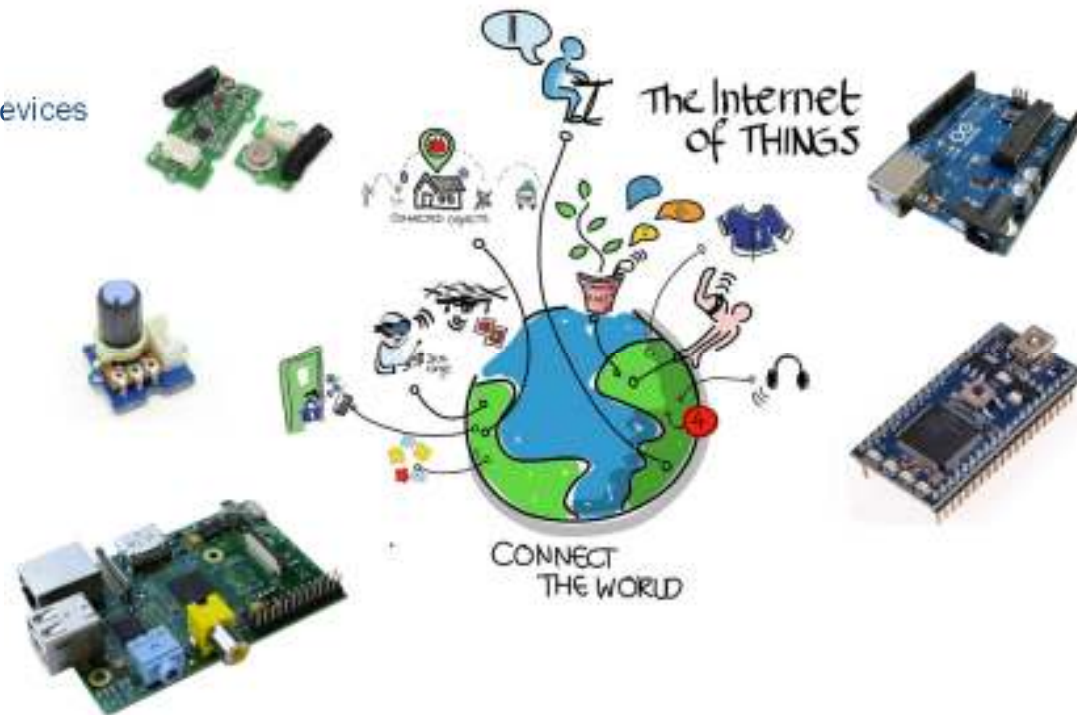
- 3D graphics for the web (HTML 5) without any experiences
- Real-time collaborative 3D applications
- Design of 3D environments
- Virtual Characters on the web
- Infrastructure for interaction with real world objects
- GIS 3D presentations



# FIWARE GEs for Internet of Things

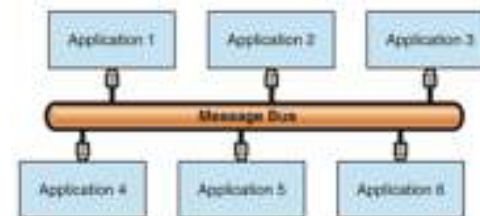
■ Connect apps to the physical world:

- Interface & Discovery of Sensors/Devices
- Configuration Manager
- Gateway Data Handling



# FIWARE GEs for Data/Context Management

- Manage data at large scale and transform it into knowledge:
  - Big Data Analysis
  - Management of communication among different entities
  - Massive message events handling and processing
  - Media Streaming and Processing





# FIWARE GEs for Apps/Services Ecosystem and Delivery Framework

- Reach target users, to monetize apps and services:
  - Combine existing widgets for web application front-ends
  - Business management of applications and services:
    - Marketplace
    - Repository
    - Revenue Sharing System (RSS)
    - Store



# FIWARE GEs for Security

- Ensuring Privacy, Security and Trust:
  - Identity Management
  - Access Control
  - Security Monitoring and Analysis



## FIWARE GEs for Cloud Hosting

- Take the most of infrastructures while keeping costs lower and under control:
  - IaaS/PaaS Management
  - Monitoring
  - Policy Management Portal and tools for cloud services



## FIWARE GEs for Interface to Network and Devices

- Access from everywhere by using network interfaces, adapt to devices:
  - Controller for software defined networking



# How to make available FIWARE technologies

■ You need a “meeting point” where users (developers, SME, WE) can:

- test and showcase the applications with real data and users
- catch attention of potential customers and investors
- meet each other to create innovation

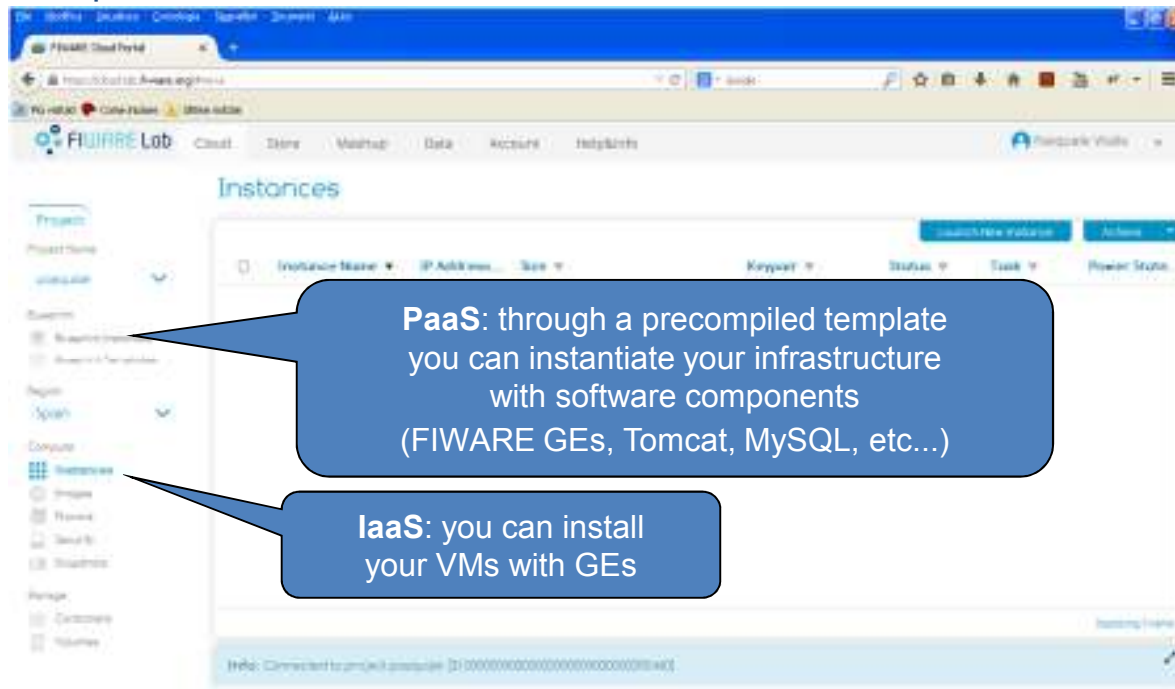
■ FIWARE Lab is:

- accessible from a dedicate website
- a free cloud hosting to create, build and test apps



# FIWARE Lab (<https://cloud.lab.fi-ware.org>)

- FIWARE Lab is a portal accessible via web browser



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## FIWARE Lab Node (Regions)

- The FIWARE Lab cloud platform is based on a federation of interconnected nodes across Europe  
New nodes are in Zurigo, Pozna, Crete, Gent, Stockholm ...



# Where to find GEs

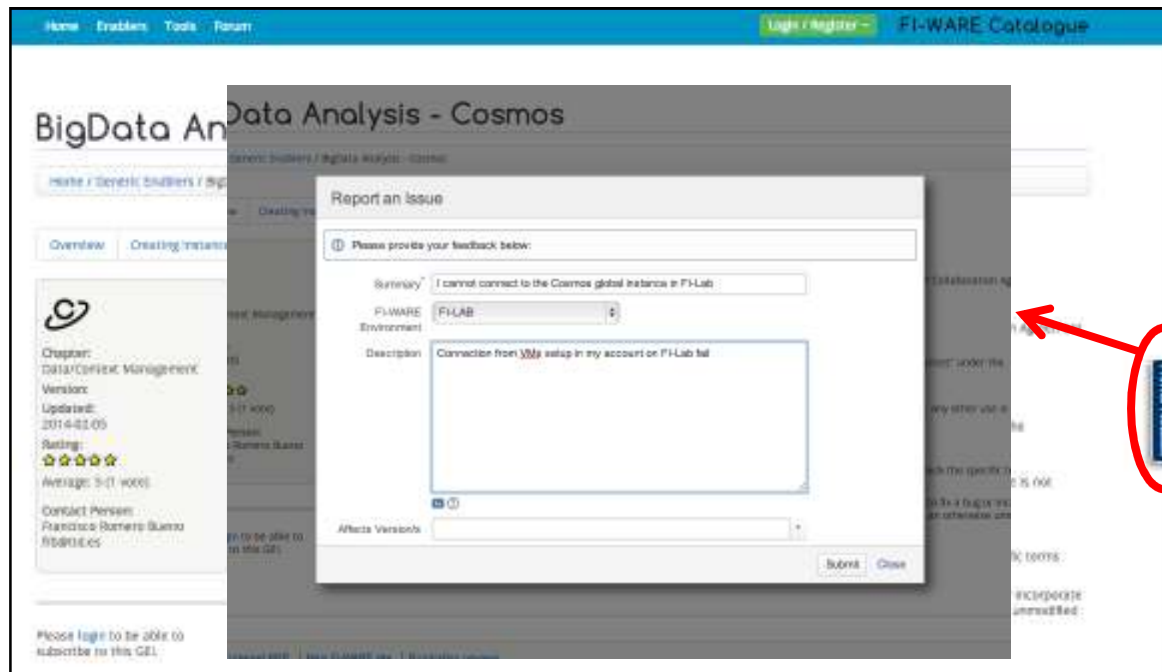
- GEs are described in the Catalogue (<http://catalogue.fi-ware.org/>)

The image shows two screenshots of the FI-WARE Catalogue website. The left screenshot displays the 'Generic Enablers' section, which includes a search bar, a list of enablers such as 'BigData Analysis - Cosmos', 'Complex Event Processing (CEP) - IBM Proactive Technology Online', and 'Compressed Domain Video Analysis - Codon', and a 'Location - LOCI' section. The right screenshot shows the detailed page for 'BigData Analysis - Cosmos', including its description, version, update date, rating, and contact information.



# FIWARE Catalogue

- You can provide a feedback



# FIWARE Catalogue

## Download sources

The image shows two overlapping screenshots. The left screenshot is from the FIWARE Catalogue, displaying the page for 'Application Mashup - Wirecloud'. The 'Downloads' tab is highlighted with a red circle. Below it, a table lists download links for various versions. One of the links, 'GitHub: https://github.com/wirecloud/wirecloud', is circled in red, with a red arrow pointing to the right. The right screenshot shows the GitHub repository for 'Wirecloud / wirecloud'. The repository name is circled in red, and a red arrow points from the GitHub link in the catalogue to this repository. The GitHub page shows the repository description, commit history, and a 'Download ZIP' button.

File	Description
	Please check the <a href="#">Wirecloud Terms and Conditions</a> to learn the terms and conditions of the software. Download and use at your own risk. Not downloadable here.
	GitHub: <a href="https://github.com/wirecloud/wirecloud">https://github.com/wirecloud/wirecloud</a>
wirecloud-1.0.0-FIWARE-1.7.0-SNAPSHOT.tar.gz	You can always look for updated versions on <a href="https://forge.fiware.org/#/project/fiware/apps/wirecloud">https://forge.fiware.org/#/project/fiware/apps/wirecloud</a>
APPS-Application-Mashup-Wirecloud-2.1.1.tar.gz	You can always look for updated versions on <a href="https://forge.fiware.org/#/project/fiware/apps/wirecloud">https://forge.fiware.org/#/project/fiware/apps/wirecloud</a>
APPS-Application-Mashup-Wirecloud-2.3.0.tar.gz	You can always look for updated versions on <a href="https://forge.fiware.org/#/project/fiware/apps/wirecloud">https://forge.fiware.org/#/project/fiware/apps/wirecloud</a>
APPS-Application-Mashup-Wirecloud-3.1.1.tar.gz	You can always look for updated versions on <a href="https://forge.fiware.org/#/project/fiware/apps/wirecloud">https://forge.fiware.org/#/project/fiware/apps/wirecloud</a>

## Where to find tutorials and guides

- In Mediawiki of FIWARE forge ([http://forge.fi-ware.org/plugins/mediawiki/wiki/fiware/index.php/Main\\_Page](http://forge.fi-ware.org/plugins/mediawiki/wiki/fiware/index.php/Main_Page))



The image shows a screenshot of the FIWARE Forge website. The top navigation bar includes links for Home, My Page, Projects, FIWARE, and Mediawiki. The Mediawiki link is highlighted with a red circle. Below the navigation bar, there is a search bar and a login link. The main content area displays the FIWARE project summary, including a description of the project's goal to advance the global competitiveness of the EU economy by introducing an innovative and delivery of services, providing high QoS and security guarantees. It also includes tags for FIWARE and a section for project statistics.

# FIWARE Academy (http://edu.fi-ware.org)

■ FIWARE Academy is an e-Learning Platform where you can find:

- webinars
- courses
- videos



The navigation is divided in Chapters

## Conclusion

- FIWARE allows you to easily build and manage in newer apps and services by making complex process simple, cost-effective, high-quality and secure.



Thanks!



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@Fiware 

