FIWARE Workshop

FIWARE is a technological platform of Future Internet, based on Cloud Computing, using OpenStack (open cloud computing) where software development and hardware integrate components such as accelerators or enablers that serve to implement applications in different areas, particularly FIWARE Mexico Is promoting the use of this technology for developments in smart cities, video surveillance and security, health and energy. The components, technologies and applications developed around FIWARE can be opened or marketed in a closed way.

The course is aimed at developers, integrators and hardware and software vendors interested in generating innovative solutions using FIWARE, a public and open technology platform that provides a sustainable ecosystem for the development of cloud-based applications, Big Data and Internet. things.

Upon completion of the training, participants will be able to understand the potential of the FIWARE platform and gain theoretical / practical skills to develop cloud computing and Internet applications of the Objects using the Orion Context Broker component of the FIWARE platform and the FIWARE cloud "FIWARE Lab ".

To participate you must cover the following profile:

● Experience in Object Oriented Programming

● Micro service knowledge: Basic HTTP, RESTful

● Basic knowledge of Linux system administration (Centos 7)

● Basic knowledge of virtualization: Dockers, vagrant.

● Git background knowledge

And meet the following requirements:

• Bring your own computer with the following features:

OS

Preferably Ubuntu or Windows 7 onwards 64-bit

RAM

8 GB or 12 GB if Windows (for virtualization)

Disk

16 GB (for virtual machines)

The computer must have the following sw installed:

● The latest version of VirtualBox

● Vagrant 1.9.0

● The latest version of Git

● Insomnia REST client

The agenda includes:

1. Introduction to the FIWARE ecosystem

○ FIWARE as an open innovation platform

○ Five pillars of FIWARE

○ The FIWARE cloud

○ The FIWARE platform

■ FIWARE Architecture

■ Principal components

○ Successful apps developed with FIWARE

■ Europe examples

■ Smart cities applications

2. Management of contect information with Orion Context Broker

○ What is context information?

○ NGSI Model

○ Orion Context Broker Model

○ Basic functions

3. Examples with the Orion Context Broker

○ Creation of entities

○ Updating entities

○ Consulting entities

○ Suscriptions

○ Queries with geolocalization

○ Example sindig data for air quality within a mobile app.

4. The FIWARE Cloud

○ How to create an account

○ Access to the FIWARE Lab

○ Deployment of virtual machines

○ Storage services