

FIWARE Lab Cloud



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Programme of the European Union



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FIWARE Lab Cloud

Panorama General

FIWARE Lab es un ambiente libre de experimentación (no comercial), donde los usuarios pueden **desarrollar aplicaciones y servicios** innovadores empleando los GEs de FIWARE.



FIWARE Lab no solamente permite experimentar con las tecnologías FIWARE, también permite **mostrar y testear** las aplicaciones con datos y **usuarios reales**, aprovechando los datos abiertos publicados por las ciudades y otras organizaciones. Esto permite **captar** la atención de los inversionistas y clientes potenciales.

Muchas ciudades **ya están conectadas** (Trento, Santander, Ciudad de México) y están exportando sus **datos abiertos** a la nube de FIWARE Lab.

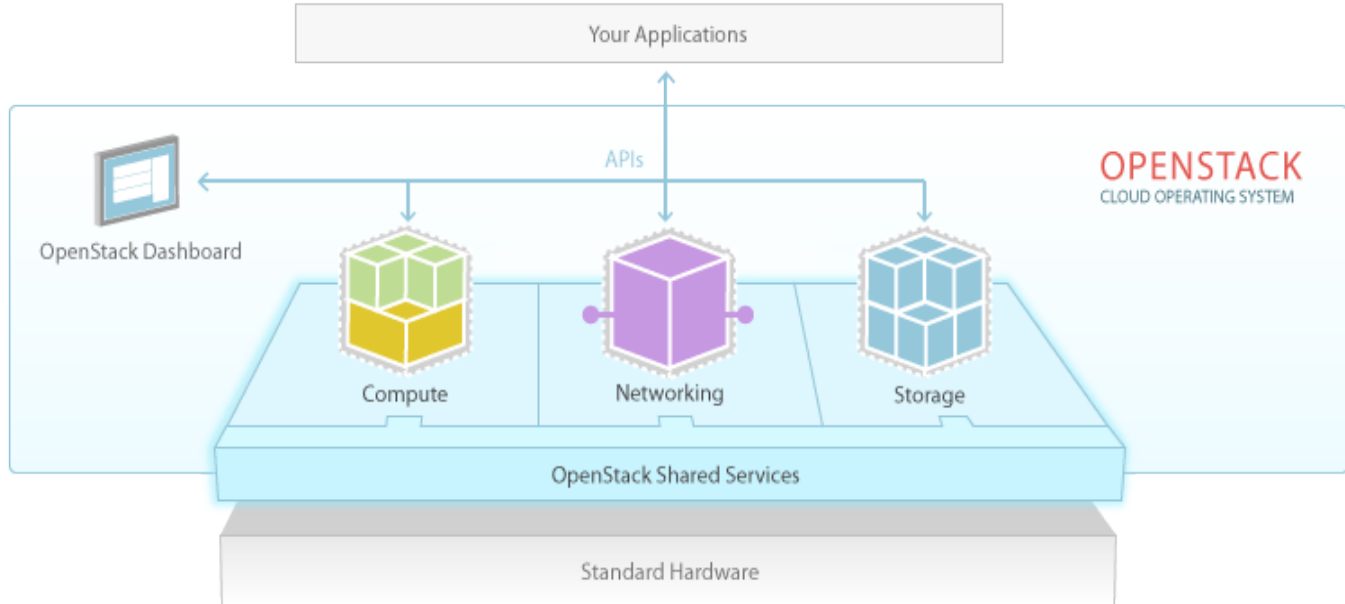


FIWARE Lab Cloud

Arquitectura

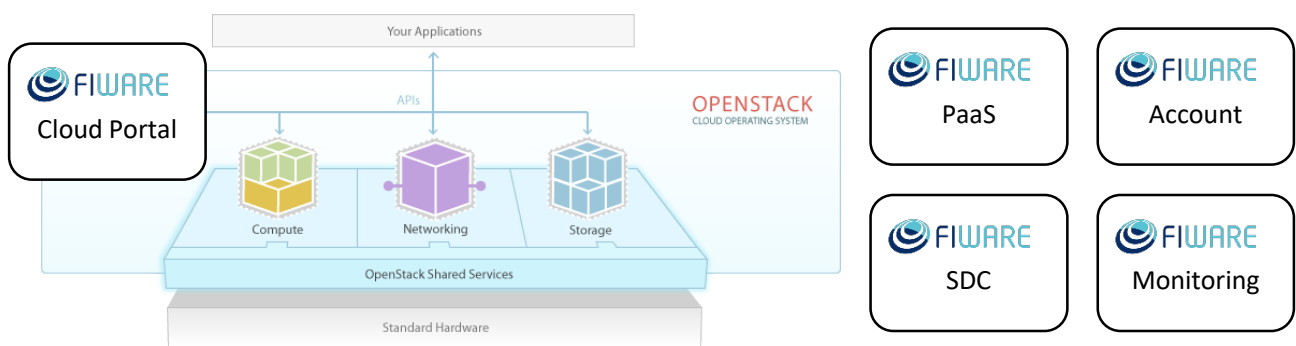
- FIWARE Lab emplea la tecnología de **OpenStack** para el despliegue de la nube virtual, la cual es una solución *cloud computing*.
- OpenStack es un sistema operativo abierto y escalable para la **creación** de nubes públicas y privadas.

Misión de OpenStack: creación de nubes **simples de implementar y masivamente escalables**.



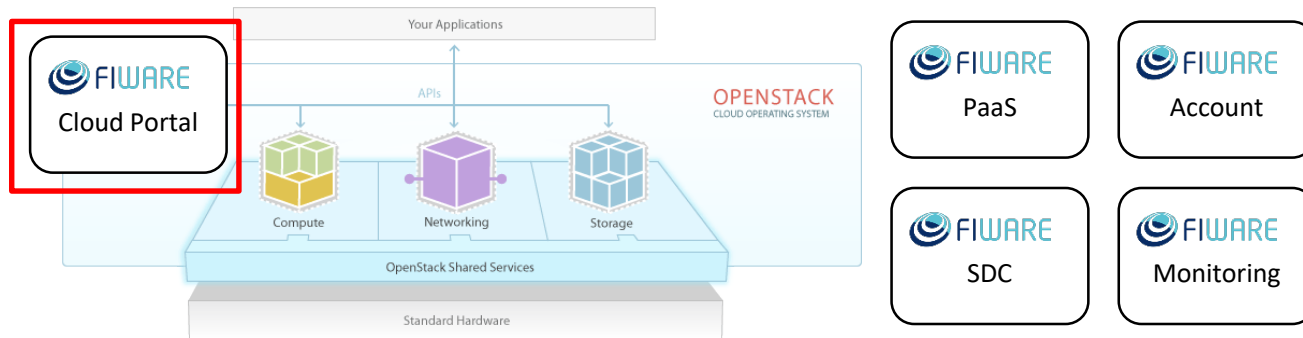
FIWARE Lab Cloud

Arquitectura



FIWARE Lab Cloud

Arquitectura

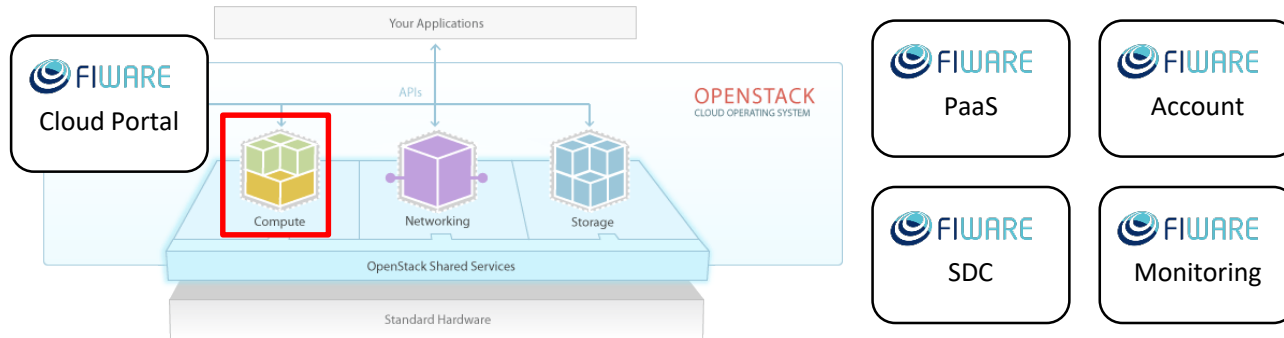


FIWARE Cloud portal: provee una **interfaz** a los usuarios finales y al administrador.



FIWARE Lab Cloud

Arquitectura

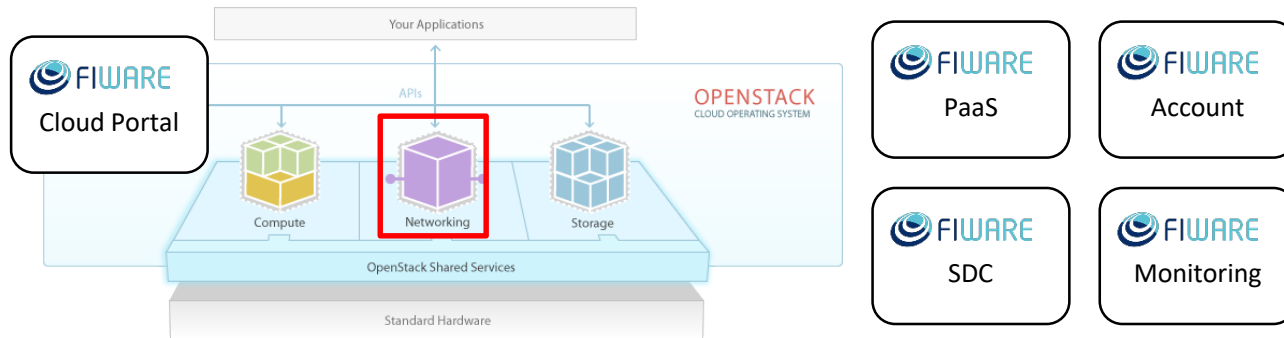


Compute: Administra el ciclo de vida de las instancias de cómputo. Es responsable de la creación, programación y desmantelamiento de las VMs (OpenStack Nova).



FIWARE Lab Cloud

Arquitectura

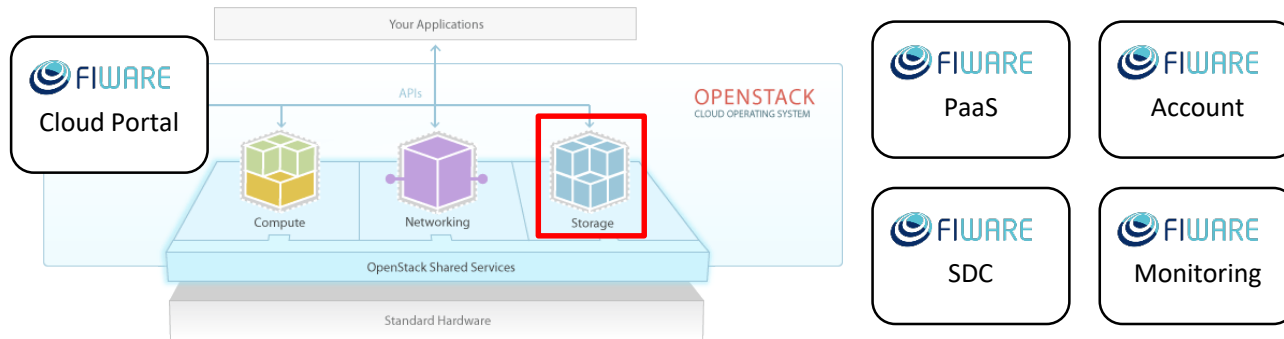


Networking: provee **redes** virtuales como servicio entre dispositivos administrados por otros servicios de OpenStack, como puede ser una máquina virtual de Nova (OpenStack Neutron).



FIWARE Lab Cloud

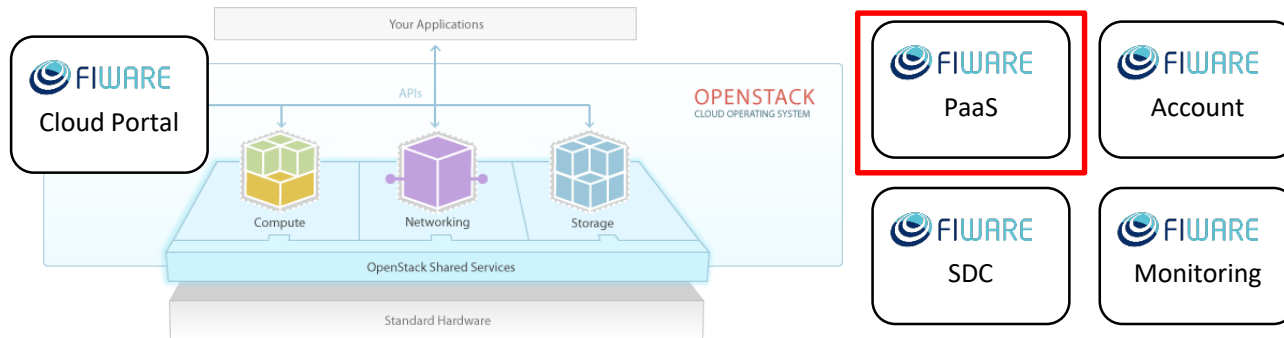
Arquitectura



Storage: provee almacenamiento persistente a las VMs alojadas en la nube. (OpenStack Cinder / OpenStack Swift).

FIWARE Lab Cloud

Arquitectura

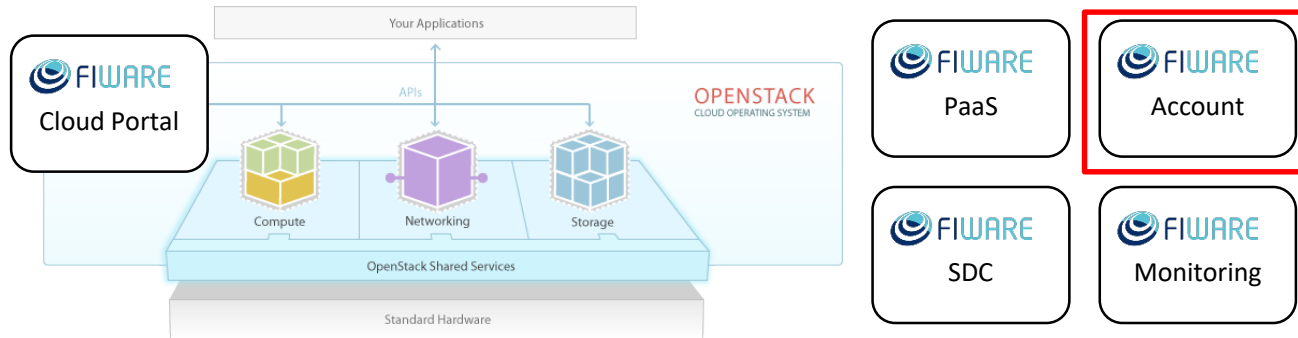


FIWARE PaaS: proporciona una plataforma y un entorno que permiten a los desarrolladores **crear aplicaciones y servicios** que funcionen a través de internet. Además permite el trabajo con regiones, así como creación de niveles y despliegue de Blueprints.



FIWARE Lab Cloud

Arquitectura

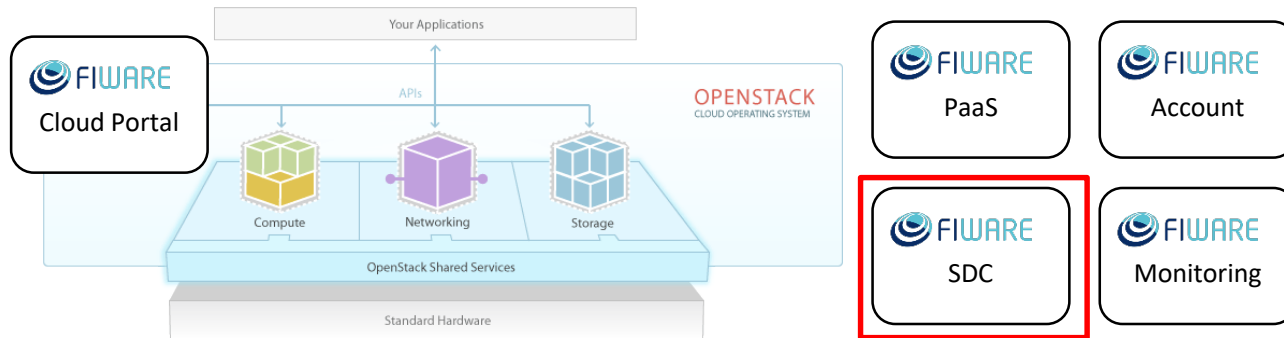


FIWARE Account: Administra la **identidad** y a las organizaciones, provee los servicios de autenticación y autorización (OpenStack Keystone).



FIWARE Lab Cloud

Arquitectura

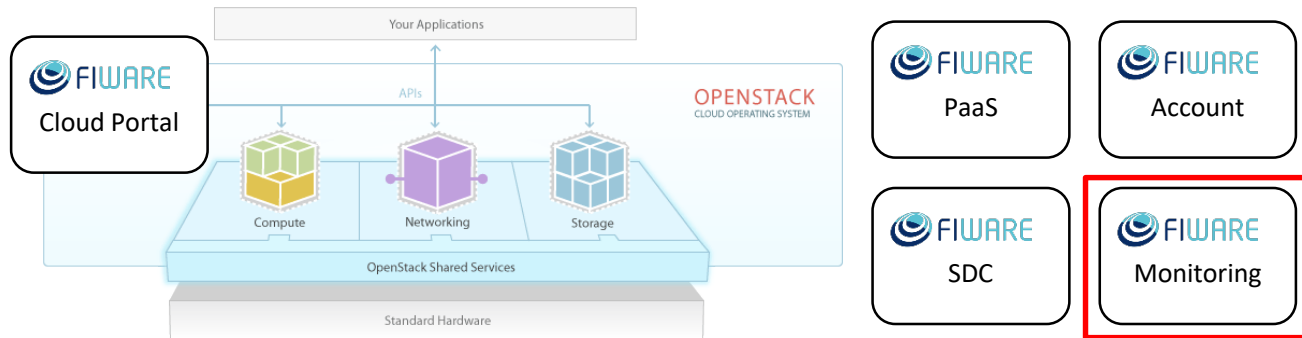


SDC (Software Development and Configuration): Es el habilitador clave utilizado para soportar la implementación automatizada (instalación y configuración) de software (GEs) en la ejecución de máquinas virtuales.



FIWARE Lab Cloud

Arquitectura



Monitoring: es el encargo del monitorear la información sobre las máquinas virtuales (OpenStack Ceilometer).

FIWARE Lab Cloud

Arquitectura



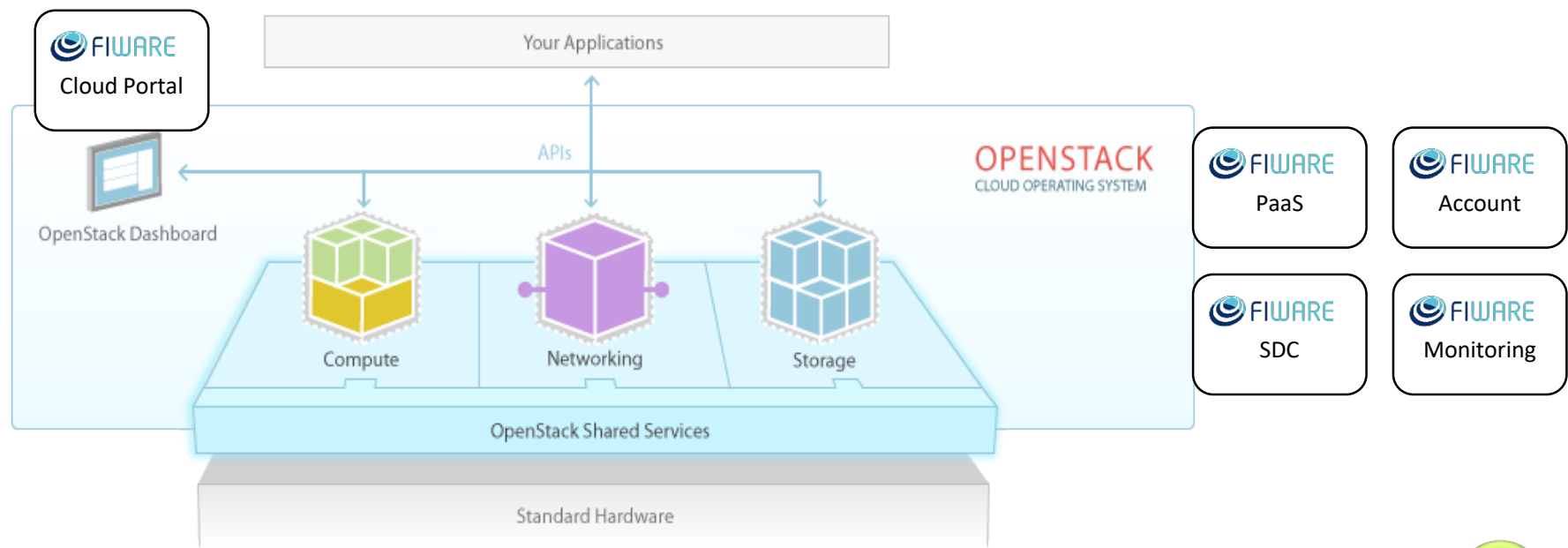
[Sign In](#)
[Home](#)

SANITY CHECK STATUS		
Brittany	last updated: 2017/02/15 11:49 UTC	took: 0h, 11m, 11s
Budapest2	last updated: 2017/02/15 11:58 UTC	took: 0h, 8m, 55s
Budapest3	last updated: 2017/02/15 11:51 UTC	took: 0h, 4m, 26s
Crete	last updated: 2017/02/15 12:00 UTC	took: 0h, 8m, 30s
Genoa	last updated: 2017/02/15 12:07 UTC	took: 0h, 18m, 19s
Hannover	last updated: 2017/02/15 11:49 UTC	took: 0h, 11m, 22s
Lannion3	last updated: 2017/02/15 11:45 UTC	took: 0h, 7m, 12s
Lannion4	last updated: 2017/02/15 11:57 UTC	took: 0h, 7m, 30s
Mexico	last updated: 2017/02/15 11:45 UTC	took: 0h, 7m, 35s
PiraeusU	last updated: 2017/02/15 11:54 UTC	took: 0h, 16m, 20s
Poznan	last updated: 2017/02/15 12:14 UTC	took: 0h, 23m, 12s
Prague	last updated: 2017/02/15 12:26 UTC	took: 0h, 39m, 44s
SaoPaulo	last updated: 2017/02/15 11:46 UTC	took: 0h, 8m, 7s
SophiaAntipolis2	last updated: 2017/02/15 11:47 UTC	took: 0h, 9m, 6s
Spain2	last updated: 2017/02/15 11:53 UTC	took: 0h, 7m, 46s



FIWARE Lab Cloud

Arquitectura



2

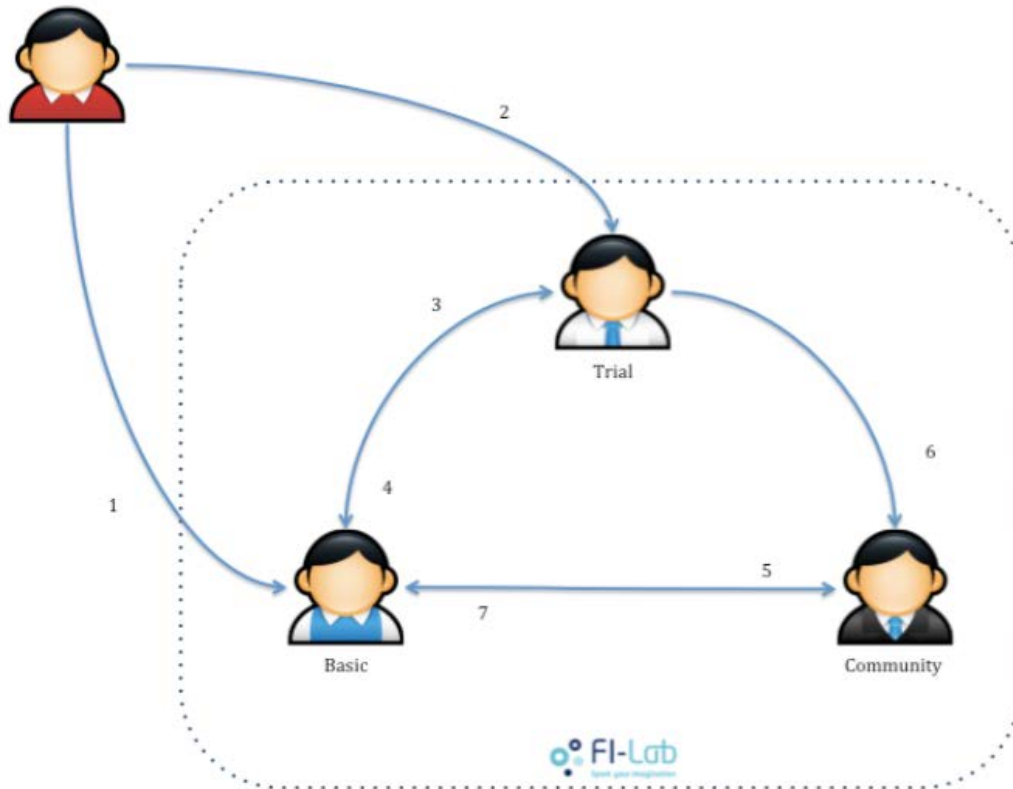
FIWARE Lab: funcionalidades básicas

- Servicios de identificación
- Servicios de cómputo



FIWARE Lab:funcionalidades básicas

Tipos de cuenta



- **Basic:** es solo un usuario registrado en FIWARE, sin embargo no tiene acceso a la nube de FIWARE.
- **Trial:** usuario que tiene acceso a la nube durante 14 días.
- **Community:** usuario con acceso completo a la nube.



FIWARE Lab:funcionalidades básicas

Creación de cuenta

<https://account.lab.fiware.org/>

FIWARE Lab
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.
FIWARE Academy Train yourself.

Log In
Email
Password
 remember me **Sign In**
Sign up | Forgot password | Didn't receive confirmation instructions?



FIWARE Lab:funcionalidades básicas

Creación de cuenta



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



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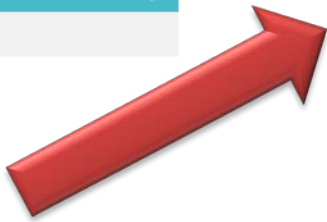
Log In

Email

Password 

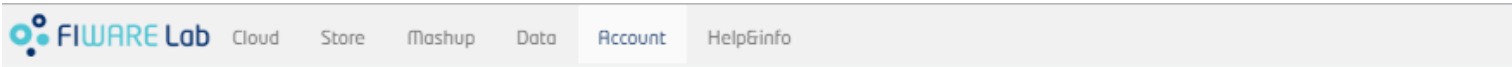
remember me [Sign In](#)

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



FIWARE Lab:funcionalidades básicas

Creación de cuenta



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FIWARE Lab nodes Learn about FIWARE Ops.	FIWARE Academy Train yourself.

Registration


Username

E-mail

I have Gravatar and want to use it for my avatar.

Password

Password (again)

Captcha
 I'm not a robot 

I want to be a trial user
 I accept FIWARE Lab [Terms and Conditions](#)

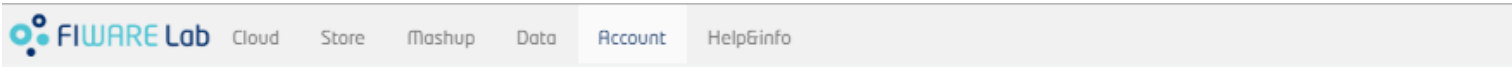
[Sign Up](#)

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



FIWARE Lab:funcionalidades básicas

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- [Need Help?](#) Ask a question.
- [Our GEs](#) See our Catalogue.
- [FIWARE Lab nodes](#) Learn about FIWARE Ops.
- [FIWARE Academy](#) Train yourself.

Trial →
→
Aceptar los términos y condiciones

Registration

Username

E-mail

I have Gravatar and want to use it for my avatar.

Password

Password (again)

Captcha
 I'm not a robot

I want to be a trial user
 I accept FIWARE Lab [Terms and Conditions](#)

[Sign Up](#)

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



FIWARE Lab:funcionalidades básicas

Solicitar una cuenta Community

The screenshot shows the FIWARE Lab website interface. At the top, there is a navigation bar with links for Cloud, Store, Mashup, Data, Account, and Help&info. The main content area is divided into two sections. On the left, the 'FIWARE Lab' section provides information about the service and includes a button labeled 'Request Community Account upgrade' which is highlighted with a red box. A large red arrow points from this button towards the right. Below this section are four teal-colored buttons: 'Need Help?' (with a question mark icon), 'Our GEs' (with a play icon), 'FIWARE Lab nodes' (with a globe icon), and 'FIWARE Academy' (with an information icon). On the right side of the page, there is a 'Log In' section with input fields for 'Email' and 'Password', a 'remember me' checkbox, and a 'Sign In' button. Below the login fields are links for 'Sign up', 'Forgot password', and 'Didn't receive confirmation instructions?'.

Para solicitar una cuenta Community, preferentemente se debe contar con un proyecto de investigación en desarrollo o contar con financiamiento para iniciar o desarrollar una aplicación para Ciudades Inteligentes.



FIWARE Lab:funcionalidades básicas

Solicitar una cuenta Community

Community Account Request

i Fill in the data to request a Community Account, you will receive a confirmation email at each step of the process from communityaccount@fiware.org email address. If not please check your SPAM inbox or contact the helpdesk: fiware-lab-help@lists.fiware.org. In the project description, motivate why you apply for a FIWARE Lab account, describing how you plan to use FIWARE. Check <https://developer.fiware.org> for ideas!

User Full Name*
Your full name as by your ID

User Account Email*
Insert the email associated to the main representative in your project

Are you already registered in FIWARE Lab?
 Yes
 No
Confirm that you created a main account for you project in [FIWARE Lab](#). You should be able to register a "basic" account without any issue. In case of problems, the Help Desk will support you in the creation of the account.

Company*

Department



FIWARE Lab:funcionalidades básicas

Solicitar una cuenta Community

<http://lanif.infotec.mx>



Solicitar cuenta Community FIWARE



LaNIF
Laboratorio Nacional
del Internet del Futuro

**Instrucción de trabajo para
solicitar cuenta FIWARE**

Versión: 02

Instrucción de trabajo para la creación de una cuenta en FIWARE Lab.

Esta instrucción de trabajo describe los pasos para la creación de una cuenta en la plataforma de FIWARE Lab. Esta plataforma es una instancia de trabajo de FIWARE disponible para experimentación. FIWARE cuenta con componentes de software genéricos (*Generic Enablers GEs*), reutilizables y adaptables, que sirven como bloques de construcción para crear, en forma rápida, aplicaciones y servicios específicos basados en Internet. Los *GEs* ofrecen funciones para múltiples áreas de uso que son comunes a varios sectores.

Para tener acceso a FIWARE Lab, es necesario contar con una cuenta *basic* o *trial* para tener acceso a un espacio que permite el despliegue de una infraestructura virtual necesaria para experimentar con las tecnologías de internet de las cosas, cómputo en la nube y *Big Data*, a través de los *GEs* disponibles en FIWARE. A continuación se describen los pasos para la creación de la cuenta en FIWARE Lab.

FIWARE Lab:funcionalidades básicas

Solicitar una cuenta Community

La evaluación se realizará de acuerdo a los siguientes criterios:

- Objetivo
- Áreas de aplicación (turismo, salud, seguridad, etc.)
- Descripción de la aplicación que desea desarrollar y sus beneficios
- Tiempo estimado de desarrollo
- Recursos de FIWARE que impactan a su proyecto

Cuota estándar:

- Número de instancias: 2
- Número de cores: 2
- Cantidad de memoria RAM: 4 Gb
- Capacidad de disco: 40 Gb
- IPs: 1

Cuota máxima:

- Número de instancias: 5
- Número de cores: 10
- Cantidad de memoria RAM: 10 Gb
- Capacidad de disco: 100 Gb
- IPs: 5



2

FIWARE Lab: funcionalidades básicas

- Servicios de identificación
- Servicios de cómputo



FIWARE Lab: funcionalidades básicas

Acceso a FIWARE Lab

<https://account.lab.fiware.org/>

The screenshot shows the FIWARE Lab account page. At the top is a navigation bar with links for Cloud, Store, Mashup, Data, Account, and Help&info. The main content area is divided into two columns. The left column contains a description of FIWARE Lab, a 'Request Community Account upgrade' button, and a 'Sign up' button. Below this are four teal buttons with icons and text: 'Need Help?' (Ask a question), 'Our GEs' (See our Catalogue), 'FIWARE Lab nodes' (Learn about FIWARE Ops), and 'FIWARE Academy' (Train yourself). The right column contains a 'Log In' form with fields for Email and Password, a 'remember me' checkbox, and a 'Sign In' button highlighted with a red box. Two red arrows point from the 'Sign up' button in the left column to the 'Log In' form in the right column.



FIWARE Lab: funcionalidades básicas

Acceso a FIWARE Lab Cloud

Identity Manager

- Home
- Organizations
- My Applications

Cloud Store Mashup Data Account Help&info Blanca Vázquez

Home

Applications Register

- Cloud
<http://cloud.lab.fiware.org/>

[View All](#)

Organizations Create

- Blanca Vázquez cloud
This organization is intended to...

[View All](#)



FIWARE Lab: funcionalidades básicas

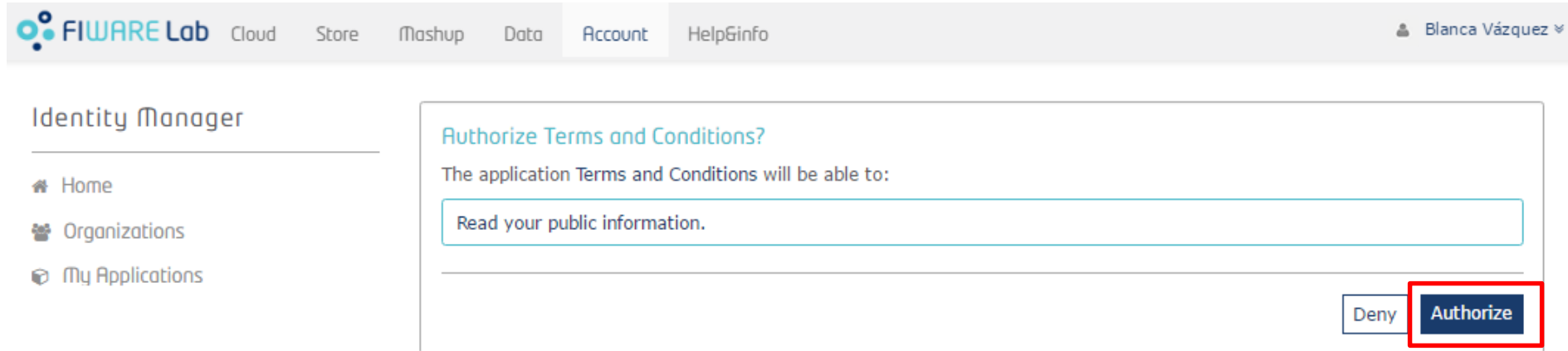
Acceso a FIWARE Lab Cloud

The screenshot displays the FIWARE Lab Cloud user interface. At the top, the navigation bar includes 'FIWARE Lab', 'Cloud', 'Store', 'Mashup', 'Data', 'Account', and 'Help&info'. The user's email 'blancavazquez2013@gmail.com' is visible in the top right. The main content area is titled 'Instances' and features a 'Launch New Instance' button and an 'Actions' dropdown menu. A modal dialog box titled 'Important info' is centered on the screen, containing the following text: 'Dear User, By clicking the "I accept" link below, you declare to accept the new defined policies. Otherwise, you can still work with your account but note that it will be removed by the defined deadline and the FIWARE Lab providers will not be responsible for creating a copy of the data you stored on the FIWARE Lab.' The 'I Accept' link is highlighted with a red rectangular box. Below the text is a 'Continue' button. The background interface shows a sidebar with navigation options like 'Menu', 'Project', 'Blueprint', 'Region', 'Compute', 'Storage', and 'Network', and a table of instances with columns for 'Status', 'Task', and 'Power State'.



FIWARE Lab: funcionalidades básicas

Acceso a FIWARE Lab Cloud



The screenshot shows the FIWARE Lab Cloud interface. The top navigation bar includes the FIWARE Lab logo and links for Cloud, Store, Mashup, Data, Account, and Help&info. The user's name, Blanca Vázquez, is displayed in the top right corner. On the left, the Identity Manager section is visible, with links for Home, Organizations, and My Applications. The main content area displays an authorization dialog titled "Authorize Terms and Conditions?". The dialog text states: "The application Terms and Conditions will be able to:" followed by a list of permissions in a box: "Read your public information." At the bottom right of the dialog, there are two buttons: "Deny" and "Authorize". The "Authorize" button is highlighted with a red rectangular border.



FIWARE Lab: funcionalidades básicas

Acceso a FIWARE Lab Cloud

Do you Accept the New Term and Conditions?

The main new policies are summarized as follow:

1. Users will be categorized in "Trial" and "Community". Trial users will include the users accessing the Lab for testing the FIWARE technologies during a limited period of time. Community users will include users who have formally requested a longer term environment for working on the development of applications based on FIWARE technologies.
2. Trial users will be provided with a limited set of resources and for a limited period of time (14 days) within a single node part of FIWARE Lab. To keep resources, Trial users who wish to have a longer term environment will need to apply (and obtain) and Community account (see point 3). After the expiration of their trial period, the account assigned to a Trial user is disabled and the associated resources released - any backup is up to the user. FIWARE Lab is not responsible for the loss of any data. Reminders are sent one week before the expiration and the day before. The total resources made available to Trial Users are documented at this link. However, the amount of resources assigned to Trial Users may vary depending on availability of new nodes and change of internal policies.
3. Community users will be selected through an application process. The application process, which may result with a negative answer, will be handled with the eventual support of FIWARE Accelerator projects (see [1], [2]) that will identify users that are part of their acceleration programme. Users beyond the FIWARE Accelerator programme are also admitted. Users willing to become Community users will need to describe the application they are developing and the planned usage of FIWARE resources. Community users will be assigned a default FIWARE Lab node and will have access to it for a 9 month period unless the application process is renewed. This node is selected according to their preference and/or ascription to a given FIWARE accelerator project, each of which is linked to a default node. By issuing a request for additional resources, Community users may be able to access additional nodes if well motivated.
4. If the total quota assigned to Trial users gets exhausted, requests to create a Trial user account that require management of cloud resources will be queued and notified once resources are available on a "first arrived, first served" basis.
5. Users requesting a Public IP need to provide a verifiable identity information that will be handled by FIWARE infrastructure providers to ensure the possibly to track liable actions within the FIWARE Lab.
6. Users will not be able to create new "Organizations" anymore beyond the organization linked to their account. FIWARE Lab allows to share access to the cloud environment set up by a given user by adding users to the organization linked to that user. As a consequence, existing organizations will be blocked from accessing cloud resources.

[1] <http://www.fiware.org/accelerators/>

[2] <http://www.fiware.org/fiware-accelerator-programme/>

Should you not accept the new defined policies by 24/02/2015, your account will be removed and your resources released. FIWARE Lab providers will not be responsible for creating a copy of the data you stored in FIWARE Lab.

Additionally, we have added a few statements to adapt to the latest changes in FIWARE Lab:

- The initiative formerly known as "FI-WARE" is now referred to as "FIWARE"
- The environment formerly known as "FI-Lab" or "FI-Lab" is now referred to as "FIWARE Lab"
- The communication with the support channels or other channels can be published .
- Clarification on the number of users that an individual may have

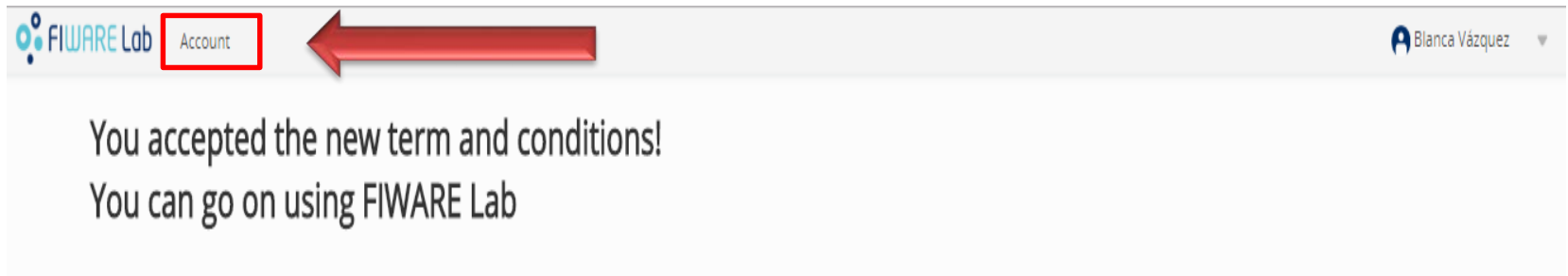
The complete text of term and conditions is available here.

Accept



FIWARE Lab: funcionalidades básicas

Acceso a FIWARE Lab Cloud



The screenshot shows the top navigation bar of the FIWARE Lab interface. On the left, the FIWARE Lab logo is followed by a button labeled 'Account', which is highlighted with a red rectangular border. A large red arrow points from the 'Account' button towards the center of the page. On the right side of the navigation bar, the user's name 'Blanca Vázquez' is displayed next to a small downward-pointing triangle. Below the navigation bar, a light gray message box contains the text: 'You accepted the new term and conditions!' followed by 'You can go on using FIWARE Lab'.



FIWARE Lab: funcionalidades básicas

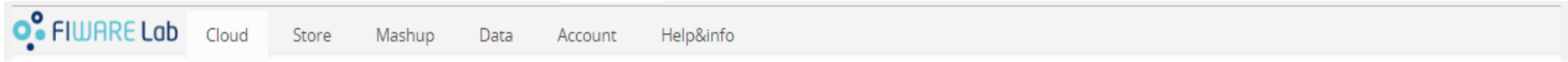
Acceso a FIWARE Lab Cloud

The screenshot displays the FIWARE Lab Cloud user interface. At the top, a navigation bar includes the FIWARE Lab logo, a 'Cloud' menu item (highlighted with a red box), and other options: Store, Mashup, Data, Account, and Help&Info. On the right side of the navigation bar, the user's name 'Blanca Vázquez' is displayed with a dropdown arrow. Below the navigation bar, the 'Identity Manager' section is visible, with a red arrow pointing to it. The main content area is titled 'Home' and is divided into two columns. The left column is titled 'Applications' and features a 'Register' button. It contains a single application entry: 'Cloud' with the URL 'http://cloud.lab.fiware.org/'. The right column is titled 'Organizations' and features a 'Create' button. It contains a single organization entry: 'Blanca Vázquez cloud' with the description 'This organization is intended to...'. Both columns have a 'View All' link at the bottom.



FIWARE Lab: funcionalidades básicas

Acceso a FIWARE Lab Cloud



Loading FIWARE Cloud Portal...



FIWARE Lab: funcionalidades básicas

FIWARE Lab Cloud



Cloud Store Mashup Data Account Help&info

blancavazquez2013@gmail.com

Instances

- Menu
- Project
 - Blanca Vázquez cloud**
 - Info
- Blueprint
 - Blueprint Instances
 - Blueprint Templates
- Region
 - Spain2
- Compute
 - Instances**
 - Images
 - Flavors
 - Security
 - Snapshots
- Storage
 - Containers
 - Volumes
- Network
 - Networks
 - Routers

Launch New Instance Actions

<input type="checkbox"/>	Instance Name	IP Address	Size	Keypair	Status	Task	Power State
<input type="checkbox"/>	instancecapacitacion	192.168.241.255 130.206.125.221	2048 MB RAM 1 VCPU 20GB Disk	keycap	ACTIVE	None	RUNNING

Displaying 1 item

Info: Connected to project Blanca Vázquez cloud (ID 93715909ea814bff83479323733a6a1f)

FIWARE Lab: funcionalidades básicas

FIWARE Lab Cloud



Cloud Store Mashup Data Account Help&info

blancavazquez2013@gmail.com

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FIWARE Lab: funcionalidades básicas

Información de la cuenta

FIWARE Lab Cloud Store Mashup Data Account Help&info blancavazquez2013@gmail.com

Instances

Launch New Instance Actions

<input type="checkbox"/>	Instance Name ▾	IP Address ▾	Size ▾	Keypair ▾	Status ▾	Task ▾	Power State ▾
<input type="checkbox"/>	instancecapacitacion	192.168.241.255 130.206.125.221	2048 MB RAM 1 VCPU 20GB Disk	keycap	ACTIVE	None	RUNNING

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FIWARE Lab: funcionalidades básicas

Información de la cuenta

FIWARE Lab Cloud Store Mashup Data Account Help&info blancavazquez2013@gmail.com

Instances

Launch New Instance Actions

Instance Name	IP Address	Size	Keypair	Status	Task	Power State
instancecapacitacion	192.168.241.255 130.206.125.221	2048 MB RAM 1 VCPU 20GB Disk	keycap	ACTIVE	None	RUNNING

Info: Connected to project Blanca Vázquez cloud (ID 93715909ea814bff83479323733a6a1f)

FIWARE Lab: funcionalidades básicas

Información de la cuenta

The screenshot shows the FIWARE Lab web interface. At the top, there is a navigation bar with the FIWARE Lab logo and several menu items: Cloud, Store, Mashup, Data, Account, and Help&info. On the right side of the navigation bar, there is a user profile icon and the email address 'blancavazquez2013@gmail.com'. Below the navigation bar, the main content area is titled 'Instances'. On the left side, there is a sidebar menu with various categories: Project (Blanca Vázquez cloud), Info, Blueprint (Blueprint Instances, Blueprint Templates), Region (Spain2), Compute (Instances, Images, Flavors, Security, Snapshots), Storage (Containers, Volumes), and Network (Networks, Routers). The 'Instances' table is the central focus, displaying a single instance with the following details:

Instance Name	IP Address	Size	Keypair	Status	Task	Power State
instancecapacitacion	192.168.241.255 130.206.125.221	2048 MB RAM 1 VCPU 20GB Disk	keycap	ACTIVE	None	RUNNING

At the bottom of the page, there is a status bar that reads 'Info: Connected to project Blanca Vázquez cloud (ID 93715909ea814bff83479323733a6a1f)'. The footer of the page contains the text 'ARE Lab services is subject to the acceptance of the Terms and Conditions, Privacy Policy and Cookies Policy'.

FIWARE Lab: funcionalidades básicas

Información de la cuenta



Cloud Store Mashup Data Account Help&info

blancavazquez2013@gmail.com

Instances

- Menu
- Project
 - Blanca Vázquez cloud
 - Info**

		Launch New Instance		Actions			
<input type="checkbox"/>	Instance Name	IP Address	Size	Keypair	Status	Task	Power State
<input type="checkbox"/>	instancecapacitacion	192.168.241.255 130.206.125.221	2048 MB RAM 1 VCPU 20GB Disk	keycap	ACTIVE	None	RUNNING

- Blueprint
 - Blueprint Instances
 - Blueprint Templates
- Region
 - Spain2
- Compute
 - Instances**
 - Images
 - Flavors
 - Security
 - Snapshots
- Storage
 - Containers
 - Volumes
- Network
 - Networks
 - Routers

Info: Connected to project Blanca Vázquez cloud (ID 93715909ea814bff83479323733a6a1f)

FIWARE Lab: funcionalidades básicas

Información de la cuenta

Project Info

Credentials	Description
User name: <code>blancavazquez2013@gmail.com</code> Tenant name: Blanca Vázquez cloud Tenant id: <code>93715909ea814bff83479323733a6a1f</code> Region: <code>Spain2</code> Authentication URL: <code>http://130.206.84.8:4730/v3/</code>	The information shown here, refers to the main variables of authentication required to access Openstack services from the console. How to: <ol style="list-style-type: none">1. Download your openrc file.2. Edit the file configuring your OS_PASSWORD variable.3. Source openrc file in your console.4. Start working!.

Cancel [Download openrc file](#)



FIWARE Lab: funcionalidades básicas

Despliegue de una instancia

Para llevar a cabo el despliegue de una instancia, es necesario seguir los siguientes pasos:

- Creación de una llave privada (keypair).
- Creación de un grupo de seguridad (se definen los puertos para la instancias, ejemplo el puerto 22 para ssh).
- Desplegar tu instancia:
 - ✓ Seleccionar del repositorio una imagen predefinida (Centos, Ubuntu, etc.)
 - ✓ Seleccionar el tamaño de la instancia (vCPU, memoria, usuario, disco).
 - ✓ Seleccionar un grupo de seguridad.
 - ✓ Seleccionar la llave privada para acceso.
- Asociar una IP pública a la instancia.



FIWARE Lab: funcionalidades básicas

Creación de una llave privada

Cloud Store Mashup Data Account Help&info blancavazquez2013@gmail.com

Instances

Launch New Instance Actions

Instance Name	IP Address	Size	Keypair	Status	Task	Power State
instancecapacitacion	192.168.241.255 130.206.125.221	2048 MB RAM 1 VCPU 20GB Disk	keycap	ACTIVE	None	RUNNING

Menu

Project

Blanca Vázquez cloud

Info

Blueprint

Blueprint Instances

Blueprint Templates

Region

Spain2

Compute

Instances

Images

Flavors

Security

Snapshots

Storage

Containers

Volumes

Network

Networks

Routers

Info: Connected to project Blanca Vázquez cloud (ID 93715909ea814bff83479323733a6a1f)

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Se debe crear una llave privada (keypair) para acceder a las instancias



FIWARE Lab: funcionalidades básicas

Creación de una llave privada

The screenshot shows the FIWARE Lab interface. At the top, there is a navigation bar with 'Cloud', 'Store', 'Mashup', 'Data', 'Account', and 'Help&info'. The user is logged in as 'blancavazquez2013@gmail.com'. On the left, there is a 'Menu' sidebar with categories like 'Project', 'Blueprint', 'Region', 'Compute', 'Storage', and 'Network'. The main content area is titled 'Security' and has three tabs: 'Floating IPs', 'Security Groups', and 'Keypairs'. The 'Keypairs' tab is selected and highlighted with a red box, and a red arrow points to it from the right. Below the tabs is a table with one row of data:

<input type="checkbox"/>	IP Address ▾	Instance ▾	Fixed Address ▾	Floating IP Pool ▾
<input type="checkbox"/>	130.206.125.221	instancecapacitacion	192.168.241.255	public-ext-net-01

At the bottom of the interface, there is an 'Info' bar that reads: 'Info: Connected to project Blanca Vázquez cloud (ID 93715909ea814bff83479323733a6a1f)'. Below the info bar, there is a footer text: 'ARE Lab services is subject to the acceptance of the Terms and Conditions, Privacy Policy and Cookies Policy'.



FIWARE Lab: funcionalidades básicas

Creación de una llave privada

The screenshot displays the FIWARE Lab web interface. At the top, the navigation bar includes 'Cloud', 'Store', 'Mashup', 'Data', 'Account', and 'Help&info'. The user's email 'blancavazquez2013@gmail.com' is visible in the top right. The main content area is titled 'Security' and contains three tabs: 'Floating IPs', 'Security Groups', and 'Keypairs'. The 'Keypairs' tab is active, showing a table with columns for 'Name' and 'Fingerprint'. A red arrow points to the 'Create Keypair' button, which is highlighted with a red rectangular box. Other buttons for 'Import Keypair' and 'Actions' are also visible. The left sidebar contains a 'Menu' with categories like Project, Blueprint, Region, Compute, Storage, and Network. The bottom status bar shows 'Info: Connected to project Blanca Vázquez cloud (ID 93715909ea814bff83479323733a6a1f)' and a footer note: 'ARE Lab services is subject to the acceptance of the Terms and Conditions, Privacy Policy and Cookies Policy'.



FIWARE Lab: funcionalidades básicas

Creación de una llave privada


Create Keypair ✕

Keypair Name *

Description
Keypairs are ssh credentials which are injected into images when they are launched. Creating a new key pair registers the public key and downloads the private key (a .pem file).
Protect and use the key as you would any normal ssh private key.

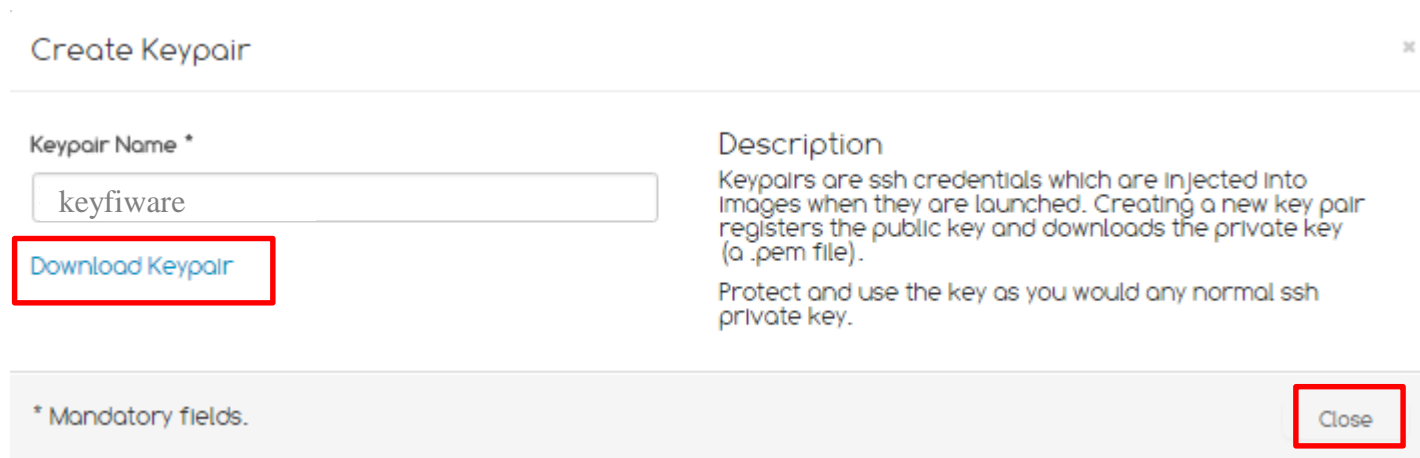
* Mandatory fields.

Cancel



FIWARE Lab: funcionalidades básicas

Creación de una llave privada



Create Keypair

Keypair Name *

keyfiware

Download Keypair

Description

Keypairs are ssh credentials which are injected into images when they are launched. Creating a new key pair registers the public key and downloads the private key (a .pem file).

Protect and use the key as you would any normal ssh private key.

* Mandatory fields.

Close

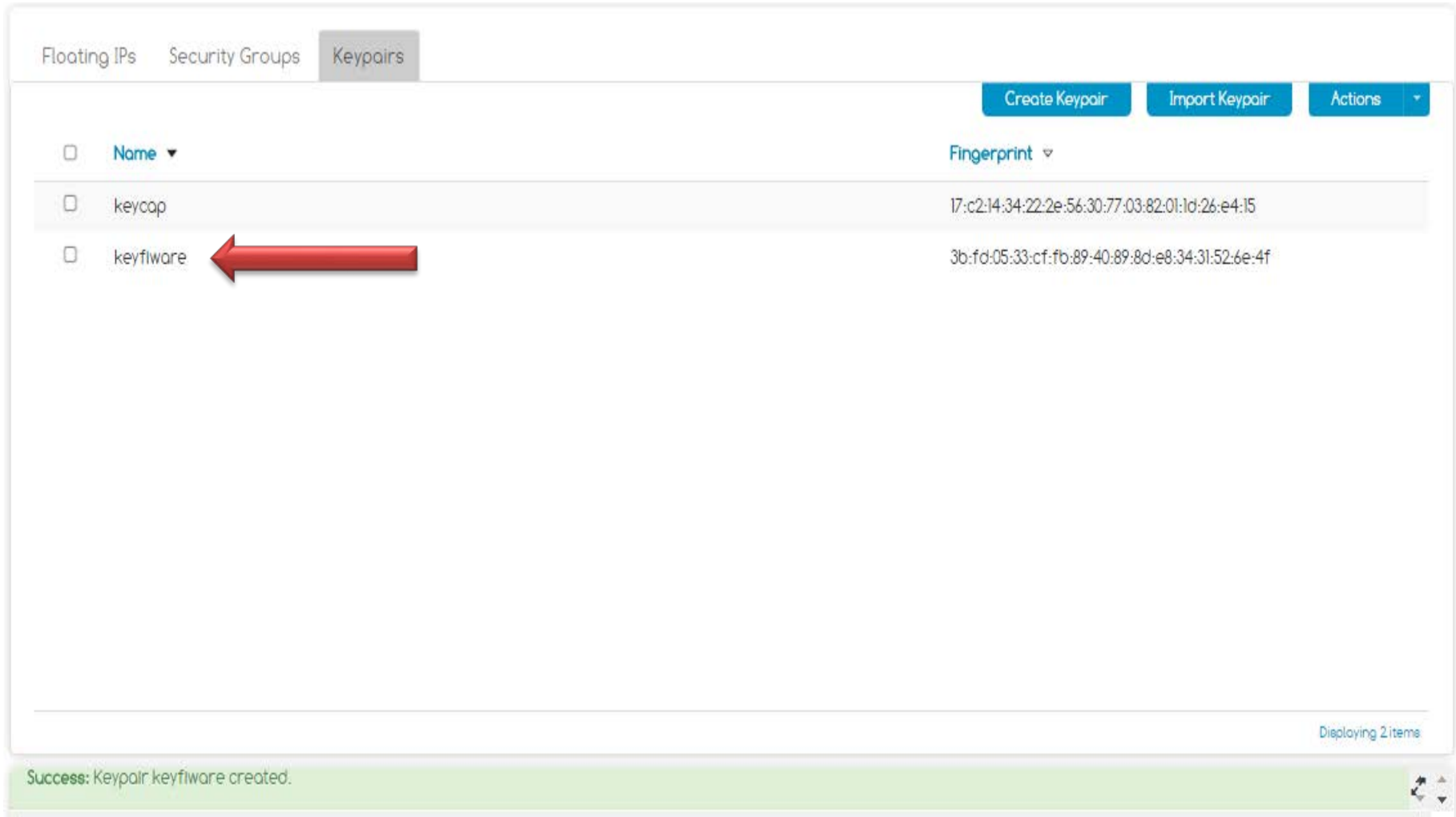
Descargar la keypair (archivo.pem)

Este es el único momento para DESCARGAR la llave.
Al momento de la descarga, **NO CAMBIAR** el nombre del archivo



FIWARE Lab: funcionalidades básicas

Creación de una llave privada



The screenshot shows the OpenStack dashboard interface for managing Keypairs. The 'Keypairs' tab is active, displaying a table of existing keypairs. A red arrow points to the 'keyfiware' entry, which is the newly created keypair. The table lists the name of the keypair and its corresponding fingerprint. Below the table, a green success message confirms the creation of the 'keyfiware' keypair.

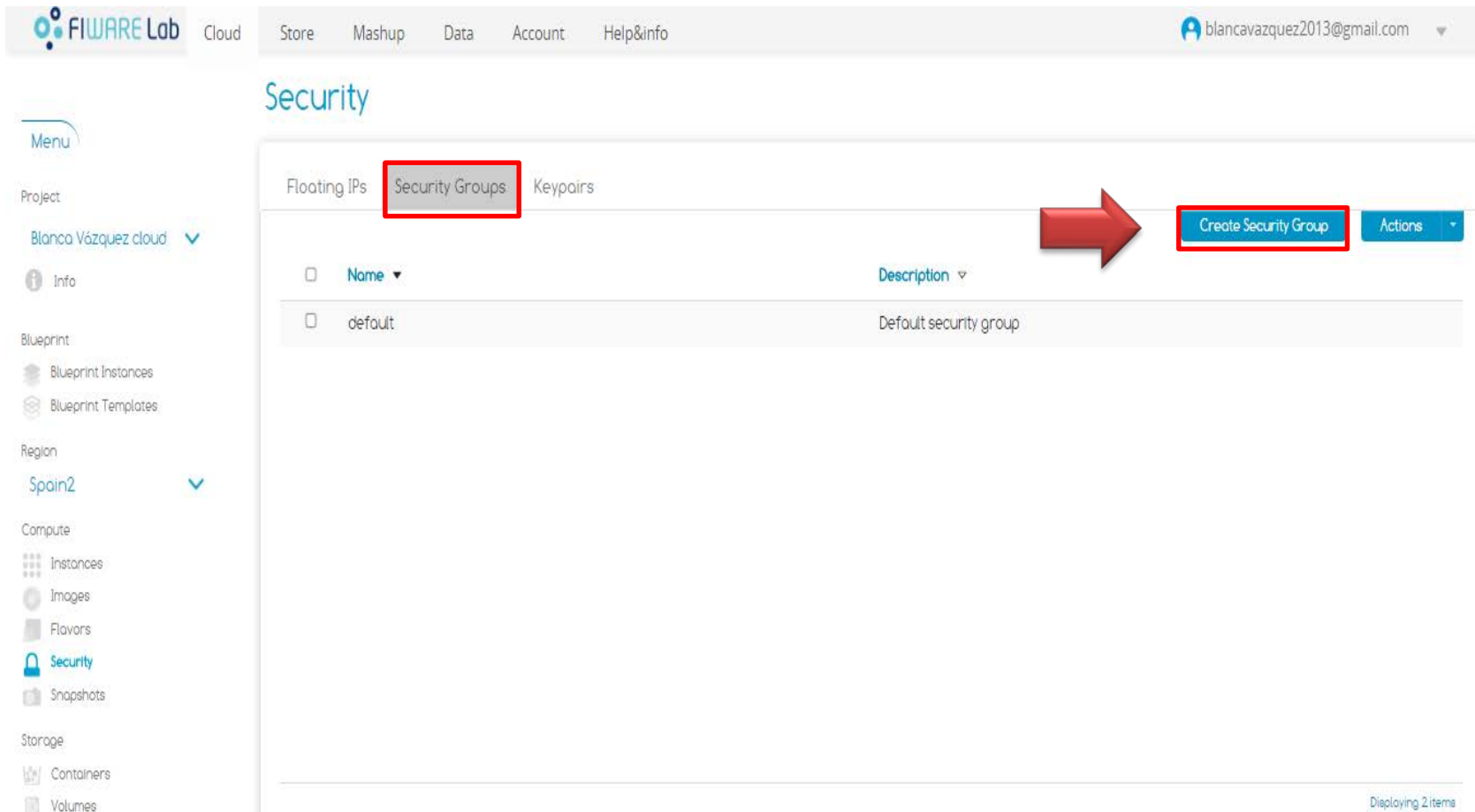
<input type="checkbox"/>	Name ▾	Fingerprint ▾
<input type="checkbox"/>	keycap	17:c2:14:34:22:2e:56:30:77:03:82:01:1d:26:e4:15
<input type="checkbox"/>	keyfiware	3b:fd:05:33:cf:fb:89:40:89:8d:e8:34:31:52:6e:4f

Success: Keypair keyfiware created.



FIWARE Lab: funcionalidades básicas

Creación de un grupo de seguridad



The screenshot shows the FIWARE Lab interface. The top navigation bar includes 'Cloud', 'Store', 'Mashup', 'Data', 'Account', and 'Help&info'. The user's email 'blancavazquez2013@gmail.com' is visible in the top right. The left sidebar contains a 'Menu' and various categories: Project (Blanca Vázquez cloud), Info, Blueprint (Instances, Templates), Region (Spain2), Compute (Instances, Images, Flavors, Security, Snapshots), and Storage (Containers, Volumes). The main content area is titled 'Security' and has three tabs: 'Floating IPs', 'Security Groups', and 'Keypairs'. The 'Security Groups' tab is selected and highlighted with a red box. A red arrow points from this tab to a 'Create Security Group' button, which is also highlighted with a red box. Below the tabs is a table with columns 'Name' and 'Description'. The table contains one entry: 'default' with the description 'Default security group'. The bottom right corner of the table area says 'Displaying 2 items'.



FIWARE Lab: funcionalidades básicas

Creación de un grupo de seguridad

Create Security Group ✕

Name *

Description
From here you can create a new security group

Description *

* Mandatory fields.

Cancel

Se recomienda describir adecuadamente los nombres de los grupos de seguridad y las instancias



FIWARE Lab: funcionalidades básicas

Creación de un grupo de seguridad

Floating IPs Security Groups Keypairs

Create Security Group Actions

<input type="checkbox"/> Name ▾	Description ▾
<input type="checkbox"/> default	Default security group
<input type="checkbox"/> sgcapacitacion	Grupo de seguridad para la capacitación de FIWARE
<input type="checkbox"/> sgfiware	Grupo de seguridad para mostrar la creación de una instancia

Displaying 3 items



FIWARE Lab: funcionalidades básicas

Definición de reglas

Floating IPs Security Groups Keypairs

Create Security Group Actions

<input type="checkbox"/> Name ▾	Description ▾
<input type="checkbox"/> default	Default security group
<input type="checkbox"/> sgcapacitacion	Grupo de seguridad para la capacitación de FIWARE
<input checked="" type="checkbox"/> sgfiware	Grupo de seguridad para mostrar la creación de una instancia

Edit Rules
Delete Rules

Displaying 3 items



FIWARE Lab: funcionalidades básicas

Definición de reglas

Edit Security Group Rules ✕

Security Group Rules

IP Protocol ▾	From Port ▾	To Port ▾	Source ▾	Action ▾
TCP	1	22	0.0.0.0/0 (CIDR)	Delete Rule
TCP	1	80	0.0.0.0/0 (CIDR)	Delete Rule

Displaying 2 items

Add Rule

IP Protocol: ▾

From Port *:


To Port *:

Source Group: ▾

CIDR:

Success: Security group rule created.

* Mandatory fields.



FIWARE Lab: funcionalidades básicas

Despliegue de una instancia

The screenshot shows the FIWARE Lab interface. The 'Instances' menu item is highlighted with a red box. The 'Launch New Instance' button is also highlighted with a red box. A red arrow points to the 'Launch New Instance' button. The table below shows one instance named 'instancecapacitacion' with status 'ACTIVE' and power state 'RUNNING'.

Instance Name	IP Address	Size	Keypair	Status	Task	Power State
instancecapacitacion	192.168.241.255 130.206.125.221	2048 MB RAM 1 VCPU 20GB Disk	keycap	ACTIVE	None	RUNNING

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FIWARE Lab: funcionalidades básicas

Despliegue de una instancia

Cloud Store Mashup Data Account Help&info blancavazquez2013@gmail.com

Images

Repositorio de imágenes de FIWARE Lab

Name	Type	Status	Visibility	Container Format	Disk Format	Actions
base_ubuntu_14.04	baseimages	active	public	BARE	QCOW2	Launch
base_centos_6	baseimages	active	public	BARE	QCOW2	Launch
base_centos_7	baseimages	active	public	BARE	QCOW2	Launch
base_debian_7	baseimages	active	public	BARE	QCOW2	Launch
base_ubuntu_12.04	baseimages	active	public	BARE	QCOW2	Launch
base_debian_8	baseimages	active	public	BARE	QCOW2	Launch
repository-image-R3.2	fiware:apps	active	public	AMI	AMI	Launch
wstore-img	fiware:apps	active	public	OVF	QCOW2	Launch
SpagaBI	fiware:apps	active	public	BARE	QCOW2	Launch
marketplace	fiware:apps	active	public	BARE	QCOW2	Launch
wirecloud-image-R5.4	fiware:apps	active	public	BARE	QCOW2	Launch

Info: Connected to project Blanca Vázquez cloud (ID 93715909ea814bfff83479323733a6a1f)

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FIWARE Lab: funcionalidades básicas

Despliegue de una instancia

Launch Instances



1. Details

2. Access & Security

3. Networking

4. Post-Creation

5. Summary

Instance Name *

instanciafiware

Flavor

m1.small

Instance Count *

1

Description

Specify the details for launching an instance. The chart below shows the resources used by this project in relation to the project's quotas.

Flavor Details

Name	m1.small
VCPUs	1
Root Disk	20 GB
Ephemeral Disk	0 GB
Total Disk	20 GB
RAM	2048 MB

Project Quotas

Instance Count (1)	2 Available
VCPUs (1)	11 Available
Memory (2048 MB)	10952 MB Available

* Mandatory fields.

Cancel

Next



FIWARE Lab: funcionalidades básicas

Despliegue de una instancia

Launch Instances

1. Details

2. Access & Security

3. Networking

4. Post-Creation

5. Summary

Instance Name *

instanciafiware

Flavor

m1.small
m1.small
m1.medium
m1.large
m1.large.ephemeral
esp.cantera1

Description

Specify the details for launching an instance. The chart below shows the resources used by this project in relation to the project's quotas.

Flavor Details

Name	m1.small
VCPUs	1
Root Disk	20 GB
Ephemeral Disk	0 GB
Total Disk	20 GB
RAM	2048 MB

Project Quotas

Instance Count (1)	2 Available
VCPUs (1)	11 Available
Memory (2048 MB)	10952 MB Available

* Mandatory fields.

Cancel

Next



FIWARE Lab: funcionalidades básicas

Despliegue de una instancia

Launch Instances x

1. Details 2. Access & Security 3. Networking 4. Post-Creation 5. Summary

Instance Name *

Flavor

Instance Count *

Description
Specify the details for launching an instance. The chart below shows the resources used by this project in relation to the project's quotas.


Flavor Details

Name	m1.small
VCPUs	1
Root Disk	20 GB
Ephemeral Disk	0 GB
Total Disk	20 GB
RAM	2048 MB

Project Quotas

Instance Count (1)	2 Available
VCPUs (1)	11 Available
Memory (2048 MB)	10952 MB Available

* Mandatory fields.



FIWARE Lab: funcionalidades básicas

Despliegue de una instancia

Launch Instances x

1. Details 2. Access & Security 3. Networking 4. Post-Creation 5. Summary

Instance Name *

Flavor

Instance Count *

Description
Specify the details for launching an instance. The chart below shows the resources used by this project in relation to the project's quotas.


Flavor Details

Name	m1.small
VCPUs	1
Root Disk	20 GB
Ephemeral Disk	0 GB
Total Disk	20 GB
RAM	2048 MB

Project Quotas

Instance Count (1)	2 Available
VCPUs (1)	11 Available
Memory (2048 MB)	10952 MB Available

* Mandatory fields.



FIWARE Lab: funcionalidades básicas

Despliegue de una instancia

Launch Instances ×

1. Details

2. Access & Security

3. Networking

4. Post-Creation

5. Summary

Keypair

Select a keypair

Create new Keypair

Description

Control access to your instance via keypairs, security groups, and other mechanisms.

Security Groups

- default
- sgcapacitacion
- sgfiware

Add new Security Group

* Mandatory fields.

Back

Next



FIWARE Lab: funcionalidades básicas

Despliegue de una instancia

Launch Instances

1. Details

2. Access & Security

3. Networking

4. Post-Creation

5. Summary



Keypair

Select a keypair

Select a keypair

keycap

keyfiware

Security Groups

- default
- sgcapacitacion
- sgfiware

Add new Security Group

Description

Control access to your instance via keypairs, security groups, and other mechanisms.

* Mandatory fields.

Back

Next



FIWARE Lab: funcionalidades básicas

Despliegue de una instancia

Launch Instances x

- 1. Details
- 2. Access & Security
- 3. Networking
- 4. Post-Creation
- 5. Summary

Keypair

keyfiware

Create new Keypair

Description

Control access to your instance via keypairs, security groups, and other mechanisms.

Security Groups

- default
- sgcapacitacion
- sgfiware

Add new Security Group



* Mandatory fields.

Back

Next



FIWARE Lab: funcionalidades básicas

Despliegue de una instancia

Launch Instances x

1. Details — 2. Access & Security — 3. Networking — 4. Post-Creation — 5. Summary

Selected Networks

Available Networks

node-int-net-01

node-int-net-01-dual

node-int-noinet-net-02

Description
Control access to your instance via keypairs, security groups, and other mechanisms.
Drag and drop the networks to which you want to connect the instance from "Available" to "Selected".

* Mandatory fields.

[Back](#) [Next](#)



FIWARE Lab: funcionalidades básicas

Despliegue de una instancia

Launch Instances x

- 1. Details
- 2. Access & Security
- 3. Networking
- 4. Post-Creation
- 5. Summary

Selected Networks

nic:1 node-Int-net-01



Available Networks

node-Int-net-01-dual

node-Int-noInet-net-02

Description

Control access to your instance via keypairs, security groups, and other mechanisms.
Drag and drop the networks to which you want to connect the instance from "Available" to "Selected".

* Mandatory fields.

Back

Next



FIWARE Lab: funcionalidades básicas

Despliegue de una instancia

Launch Instances ✕


1. Details — 2. Access & Security — 3. Networking — 4. Post-Creation — 5. Summary

Customization Script

```
#cloud-config
#
# This script automatically permorm some needed actions for
# You can modify it, but be careful not to change network con
write_files:
- encoding: b64
  content: |
    YXV0byBsbyAKaWZhY2UgbG8gaW5ldCBsb29wYmFjan
  path: /etc/network/interfaces
```

Description

You can customize your instance after it's launched using the options available here. The "Customization Script" field is analogous to "User Data" in other systems.

 No cambiar nada

* Mandatory fields.

Back **Next**



FIWARE Lab: funcionalidades básicas

Despliegue de una instancia

Launch Instances ✕

1. Details — 2. Access & Security — 3. Networking — 4. Post-Creation — 5. Summary

Instance Name: `Instanciafiware`
Image: `base_ubuntu_14.04`
Flavor: `m1.small`
Instance Count: `1`
Keypair: `keyfiware`
Security Group: `sgfiware`

To access the instance:

- You need to include a security group with port 22 opened to access via SSH.
- You need to assign a floating IP to access from a external network.

* Mandatory fields.

[Back](#) [Launch instance](#)



FIWARE Lab: funcionalidades básicas

Despliegue de una instancia

Instances

Menu

Project

Blanca Vázquez cloud

Info

Blueprint

Blueprint Instances

Blueprint Templates

Region

Spain2

Compute

Instances

Images

Flavors

Security

Snapshots

Storage

Containers

Volumes

Network

Networks

Routers

Launch New Instance

Actions

<input type="checkbox"/>	Instance Name	IP Address	Size	Keypair	Status	Task	Power State
<input type="checkbox"/>	instancecapacitacion	192.168.241.255 130.206.125.221	2048 MB RAM 1 VCPU 20GB Disk	keycap	ACTIVE	None	RUNNING
<input type="checkbox"/>	instanciafiware		2048 MB RAM 1 VCPU 20GB Disk	keyfiware	BUILD	spawning	NO STATE

↑

↑

Success: Instance instanciafiware launched.

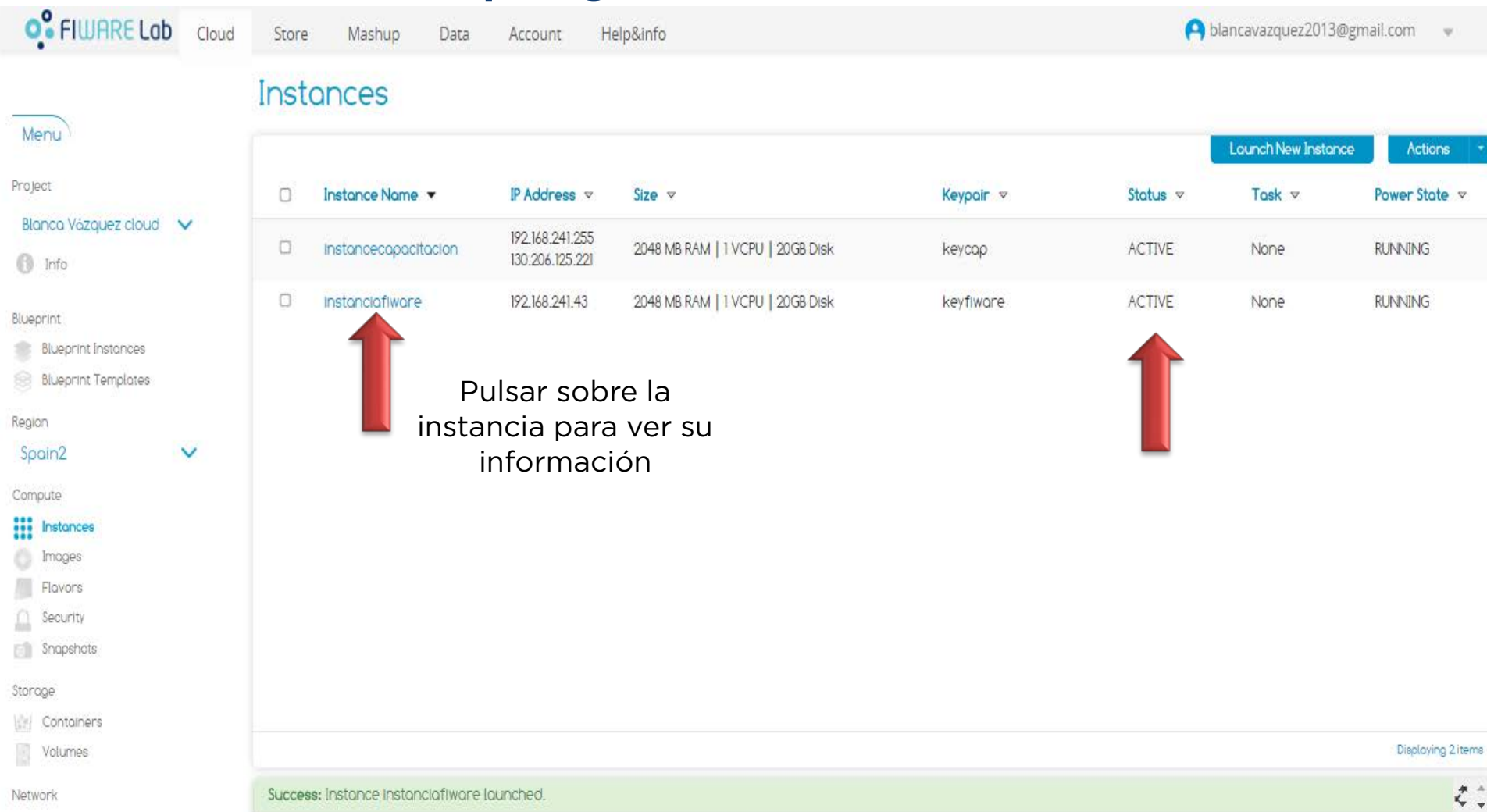
Displaying 2 items

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FIWARE Lab: funcionalidades básicas

Despliegue de una instancia



Cloud Store Mashup Data Account Help&info blancavazquez2013@gmail.com

Instances

Launch New Instance Actions

Instance Name	IP Address	Size	Keypair	Status	Task	Power State
instancecapacitacion	192.168.241.255 130.206.125.221	2048 MB RAM 1 VCPU 20GB Disk	keycop	ACTIVE	None	RUNNING
Instanciafiware	192.168.241.43	2048 MB RAM 1 VCPU 20GB Disk	keyfiware	ACTIVE	None	RUNNING

Success: Instance Instanciafiware launched.



FIWARE Lab: funcionalidades básicas

Resumen de la instancia

The screenshot shows the FIWARE Lab interface. At the top, there is a navigation bar with 'FIWARE Lab' on the left and 'blancavazquez2013@gmail.com' on the right. Below the navigation bar, the 'Instances' page is displayed. The page has a left sidebar with a 'Menu' and various categories like 'Project', 'Blueprint', 'Region', 'Compute', 'Storage', etc. The main content area is titled 'Instances' and has tabs for 'Overview', 'Log', 'Connection', and 'Monitoring'. The 'Overview' tab is selected, showing details for an instance named 'Instanciافيware'. The details are organized into several sections: 'Info', 'Specs', 'IP Addresses', 'Security Groups', 'Meta', 'Volumes', and 'Installed Software'. The 'Info' section shows the instance name, ID, and status. The 'Specs' section shows RAM, VCPUs, and Disk. The 'IP Addresses' section shows the IP address. The 'Security Groups' section shows the group name. The 'Meta' section shows the key name, image name, and region. The 'Installed Software' section has an 'Edit' button.

Cloud Store Mashup Data Account Help&info blancavazquez2013@gmail.com

Instances

Overview Log Connection Monitoring

Info	Specs	IP Addresses
Name: Instanciافيware ID: 472c190f-70cf-4c75-a770-f7d70a0244e2 Status: ACTIVE	RAM: 2048MB VCPUs: 1 VCPU Disk: 20GB	<i>node-int-net-01:</i> 192.168.241.43

Security Groups	Meta	Volumes
sgfiware	Key name: keyfiware Image Name: base_ubuntu_14.04 region: Spain2	

Installed Software [Edit](#)



FIWARE Lab: funcionalidades básicas

Asignar una IP

The screenshot shows the FIWARE Lab interface. The top navigation bar includes 'Cloud', 'Store', 'Mashup', 'Data', 'Account', and 'Help&info'. The user's email 'blancavazquez2013@gmail.com' is visible in the top right. The left sidebar contains a 'Menu' and a 'Project' dropdown set to 'Blanca Vázquez cloud'. Under 'Region', 'Spain2' is selected. The 'Security' section is highlighted in the sidebar. The main content area is titled 'Security' and has tabs for 'Floating IPs', 'Security Groups', and 'Keypairs'. The 'Floating IPs' tab is active, showing a table with columns: 'IP Address', 'Instance', 'Fixed Address', and 'Floating IP Pool'. A red arrow points to the 'Allocate IP to Project' button in the top right of the table area. The 'Actions' button is also visible. The bottom right of the table area shows 'Displaying 0 items'.



FIWARE Lab: funcionalidades básicas

Asignar una IP

Allocate Floating IP

Pool

public-ext-net-01
federation-ext-net-01
public-ext-net-01



Description

Allocate a floating IP from a given floating ip pool.

Project Quotas

Floating IP (0) 1 Available



Cancel

Allocate IP



FIWARE Lab: funcionalidades básicas

Asignar una IP

The screenshot shows the FIWARE Lab Security console. The 'Floating IPs' tab is active, displaying a table with one entry: IP Address 130.206.125.68, Instance -, Fixed Address -, and public-ext-net-01. A red arrow points to the 'Associate IP' button in the 'Actions' dropdown menu. Another red arrow points to the checkbox for the IP address. A text box with an upward-pointing red arrow says 'Seleccionar la IP asignada'. A green success message at the bottom reads 'Success: Successfully allocated floating IP'.

<input type="checkbox"/>	IP Address	Instance	Fixed Address		Allocate IP to Project	Actions
<input checked="" type="checkbox"/>	130.206.125.68	-	-	public-ext-net-01		Associate IP Disassociate Floating IP Release Floating IPs

Success: Successfully allocated floating IP



FIWARE Lab: funcionalidades básicas

Asignar una IP

Associate Floating IP ✕

Associate Floating IP:

130.206.125.68

Description

Associate a floating ip with an Instance.

to instance:

Select an instance

Select an instance

instanciafiware

Select IP to associate with



Cancel

Associate IP



FIWARE Lab: funcionalidades básicas

Asignar una IP

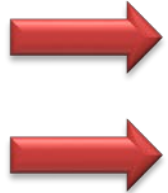
Associate Floating IP ✕

Associate Floating IP:

Description
Associate a floating ip with an instance.

to instance:

and to IP Address:



FIWARE Lab: funcionalidades básicas

Asignar una IP

The screenshot shows the FIWARE Lab interface. The top navigation bar includes 'Store', 'Mashup', 'Data', 'Account', and 'Help&info'. The user is logged in as 'blancavazquez2013@gmail.com'. The left sidebar shows a 'Menu' with categories like Project, Info, Blueprint, Region, Compute, Storage, and Network. The main content area is titled 'Security' and has tabs for 'Floating IPs', 'Security Groups', and 'Keypairs'. The 'Floating IPs' tab is active, showing a table with the following data:

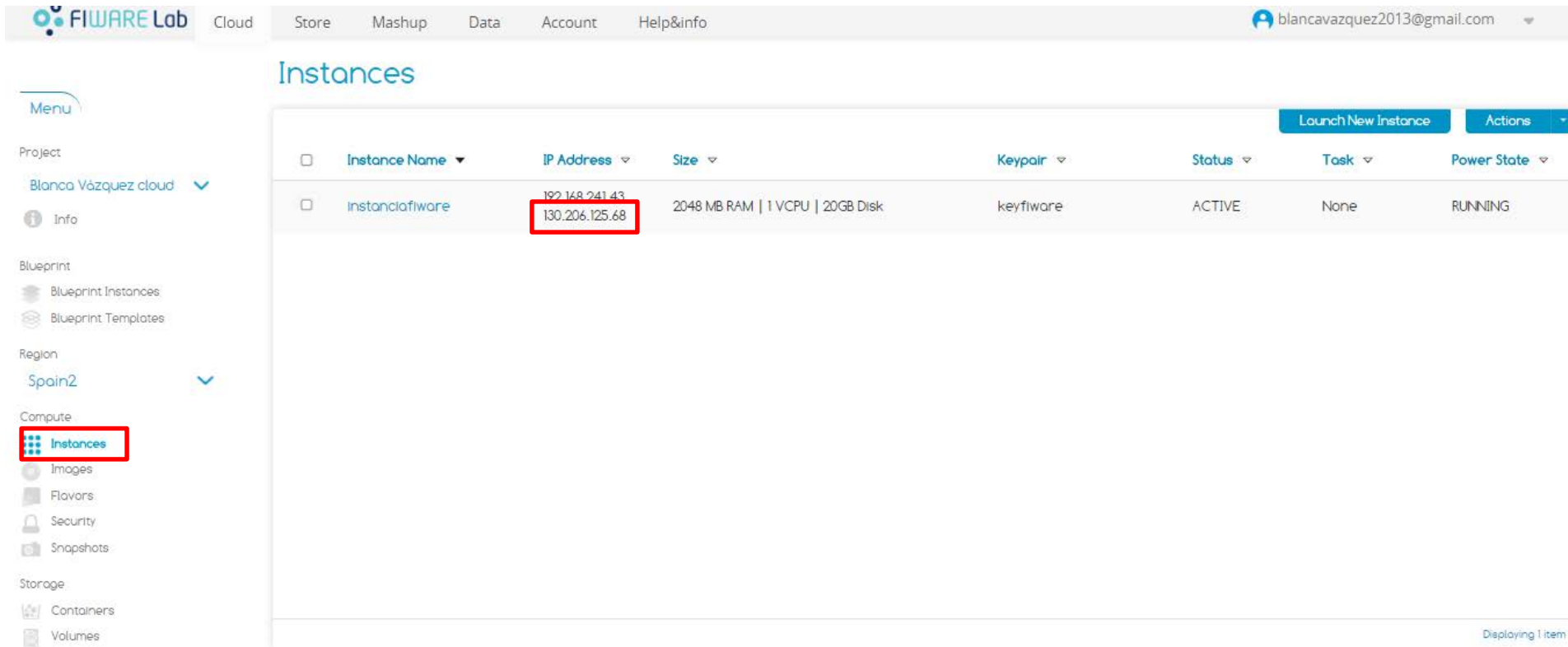
<input type="checkbox"/>	IP Address ▾	Instance ▾	Fixed Address ▾	Floating IP Pool ▾
<input checked="" type="checkbox"/>	130.206.125.68	instanciafiware	192.168.241.43	public-ext-net-01

Two red arrows point to the 'Instance' and 'Fixed Address' columns. At the bottom, a green success message reads: 'Success: Successfully associated Floating IP 130.206.125.68 with Instance: instanciafiware'. The interface also shows 'Allocate IP to Project' and 'Actions' buttons, and a 'Displaying 1 item' indicator.



FIWARE Lab: funcionalidades básicas

Acceder a la instancia



The screenshot shows the FIWARE Lab Cloud console interface. The left sidebar contains a menu with the following items: Menu, Project (Blanca Vázquez cloud), Info, Blueprint (Blueprint Instances, Blueprint Templates), Region (Spain2), Compute (Instances, Images, Flavors, Security, Snapshots), Storage (Containers, Volumes). The 'Instances' menu item is highlighted with a red box. The main content area displays a table of instances with the following columns: Instance Name, IP Address, Size, Keypair, Status, Task, and Power State. The table contains one instance named 'instanciafiware' with an IP address of 130.206.125.68 (highlighted with a red box), a size of 2048 MB RAM | 1 VCPU | 20GB Disk, a keypair named 'keyfiware', a status of 'ACTIVE', a task of 'None', and a power state of 'RUNNING'. The top navigation bar includes links for Store, Mashup, Data, Account, and Help&info, along with the user's email address: blancavazquez2013@gmail.com.

Instance Name	IP Address	Size	Keypair	Status	Task	Power State
instanciafiware	130.206.125.68	2048 MB RAM 1 VCPU 20GB Disk	keyfiware	ACTIVE	None	RUNNING

Puntos a considerar (en caso de Linux):

- Identificar la IP externa de la instancia



FIWARE Lab: funcionalidades básicas

Acceder a la instancia en Ubuntu



- 1) Desde una terminal localizar el archivo.pem
- 2) Instrucción de acceso: `sudo ssh -i archivo.pem ubuntu@ipExterna`

```
blanca@blanca-VirtualBox:~/Capacitación$ ls
keyfiware.pem
blanca@blanca-VirtualBox:~/Capacitación$ sudo ssh -i keyfiware.pem ubuntu@130.206.125.68
[sudo] password for blanca:
The authenticity of host '130.206.125.68 (130.206.125.68)' can't be established.
ECDSA key fingerprint is 41:e4:5e:2f:26:ff:fe:05:5a:9e:1d:50:59:fa:6f:89.
Are you sure you want to continue connecting (yes/no)? █
```



FIWARE Lab: funcionalidades básicas

Acceder a la instancia

```
Welcome to Ubuntu 14.04.4 LTS (GNU/Linux 3.13.0-86-generic x86_64)

* Documentation:  https://help.ubuntu.com/

System information as of Sun Feb 12 04:30:06 UTC 2017

System load: 0.0                Memory usage: 2%   Processes:      53
Usage of /:  4.0% of 19.65GB    Swap usage:  0%   Users logged in: 0

Graph this data and manage this system at:
https://landscape.canonical.com/

Get cloud support with Ubuntu Advantage Cloud Guest:
http://www.ubuntu.com/business/services/cloud

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

ubuntu@instanciafiware:~$ █
```



FIWARE Lab: funcionalidades básicas

Conexión por SSH en Windows utilizando PuTTY

1. Descargar PuTTYgen y PuTTY del siguiente link:

<http://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>

Alternative binary files

The installer packages above will provide all of these (except PuTTYtel), but you can download them one by one if you prefer.

putty.exe (the SSH and Telnet client itself)

32-bit: [putty.exe](#) [\(or by FTP\)](#) [\(signature\)](#)

pscp.exe (an SCP client, i.e. command-line secure file copy)

32-bit: [pscp.exe](#) [\(or by FTP\)](#) [\(signature\)](#)

psftp.exe (an SFTP client, i.e. general file transfer sessions much like FTP)

32-bit: [psftp.exe](#) [\(or by FTP\)](#) [\(signature\)](#)

puttytel.exe (a Telnet-only client)

32-bit: [puttytel.exe](#) [\(or by FTP\)](#) [\(signature\)](#)

plink.exe (a command-line interface to the PuTTY back ends)

32-bit: [plink.exe](#) [\(or by FTP\)](#) [\(signature\)](#)

pageant.exe (an SSH authentication agent for PuTTY, PSCP, PSFTP, and Plink)

32-bit: [pageant.exe](#) [\(or by FTP\)](#) [\(signature\)](#)

puttygen.exe (a RSA and DSA key generation utility)

32-bit: [puttygen.exe](#) [\(or by FTP\)](#) [\(signature\)](#)

putty.zip (a .ZIP archive of all the above)

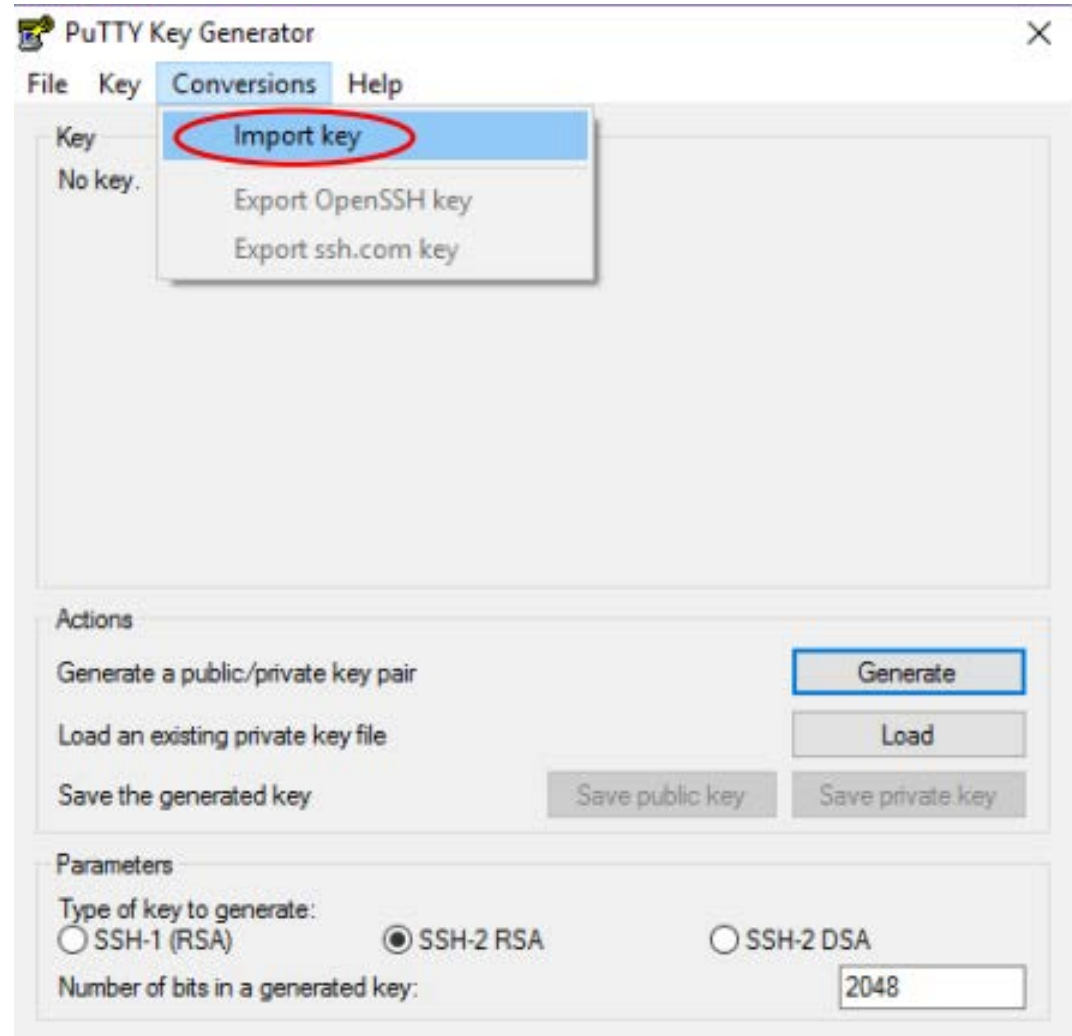
32-bit: [putty.zip](#) [\(or by FTP\)](#) [\(signature\)](#)



FIWARE Lab: funcionalidades básicas

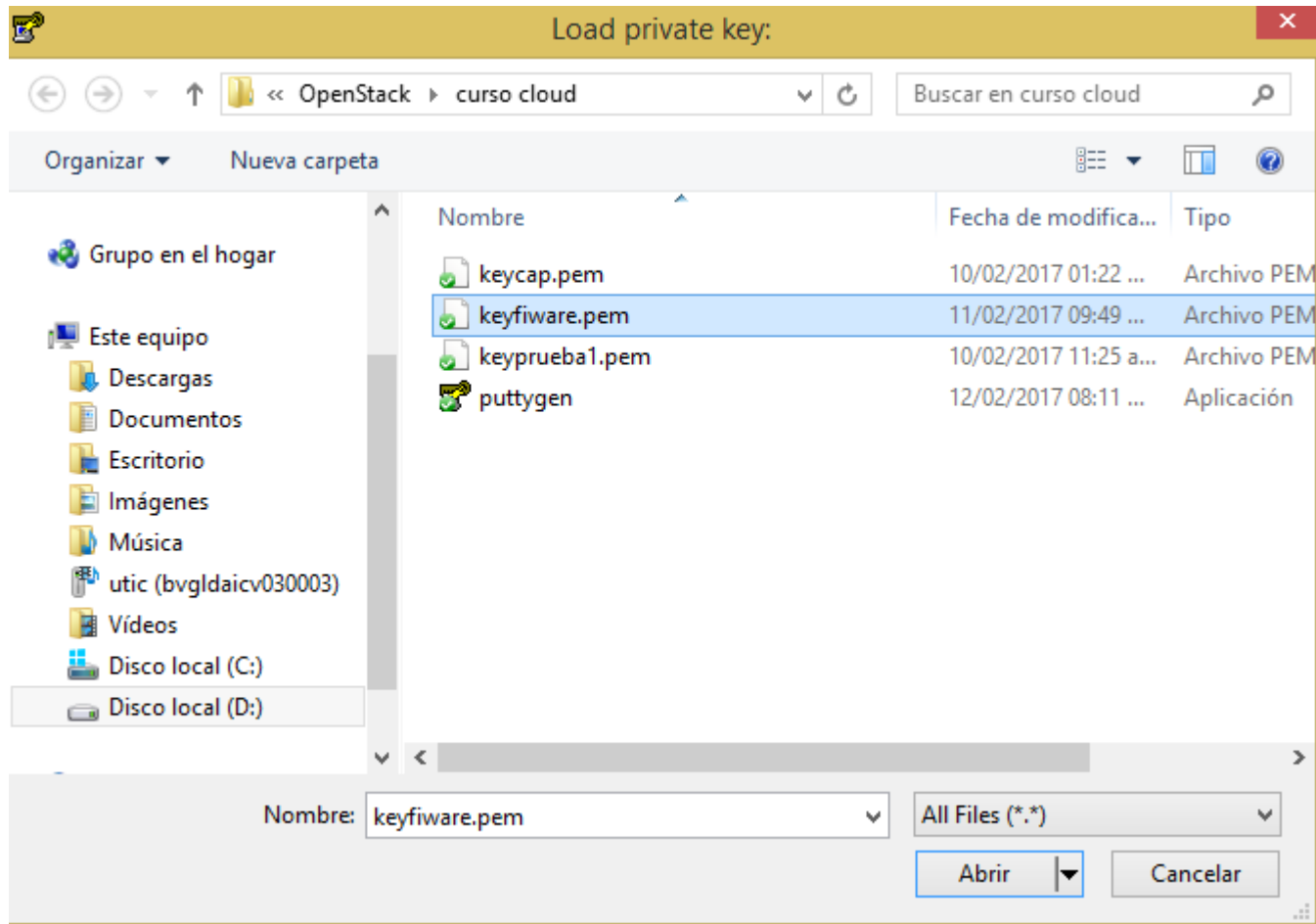
Generación de la clave para el acceso con PuTTY

1. Contar con la llave privada (archivo.pem)
2. Procedemos a convertir el archivo.pem a archivo.ppk



FIWARE Lab: funcionalidades básicas

Generación de la clave para el acceso con PuTTY



FIWARE Lab: funcionalidades básicas

Generación de la clave para el acceso con PuTTY

PuTTY Key Generator

File Key Conversions Help

Key

Public key for pasting into OpenSSH authorized_keys file:

```
ssh-rsa  
AAAAB3NzaC1yc2EAAAADAQABAAQDgvuvk3Y3JUNduuxA78B2voFcNA48UIG  
c8Cl2aov6Ke0XMBmyuJhVM2yNKAQFI4vwwdiaufrz6CPBMzMkkH8i0IYZU9EONCD7  
Q/MtGfOA6Rknva3JSAhFHteHi2tpjcNUcV467EtD5NU4cBX17RRy6rGJv3dUXZGs/d  
xgFLyV/P0pnjG6lq3VL8mgDkaO240sDMIMdaTyfu2Q3FeGf5623Vaj10abMP6HWBSN
```

Key fingerprint: ssh-rsa 2048 3b.fd:05:33:cf:fb:89:40:89:8d:e8:34:31:52:6e:4f

Key comment: imported-openssh-key

Key passphrase:

Confirm passphrase:

Actions

Generate a public/private key pair

Load an existing private key file

Save the generated key

Parameters

Type of key to generate:

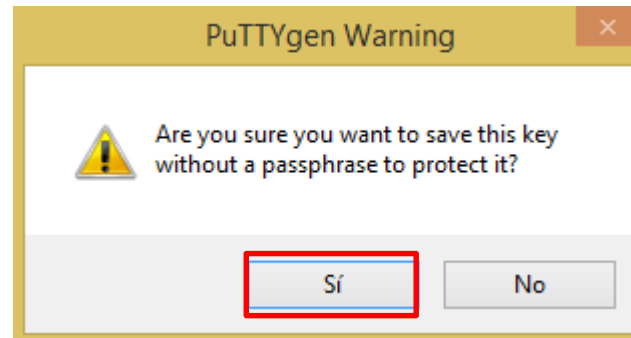
SSH-1 (RSA) SSH-2 RSA SSH-2 DSA

Number of bits in a generated key: 2048



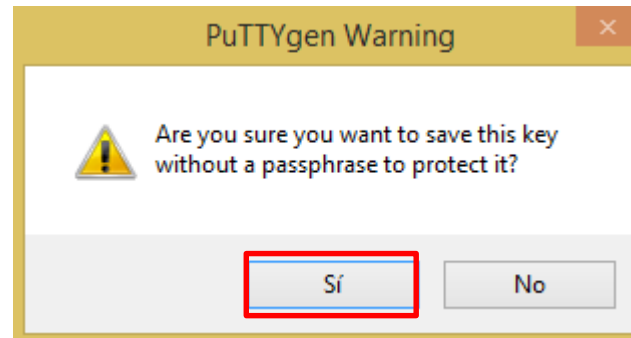
FIWARE Lab: funcionalidades básicas

Generación de la clave para el acceso con PuTTY



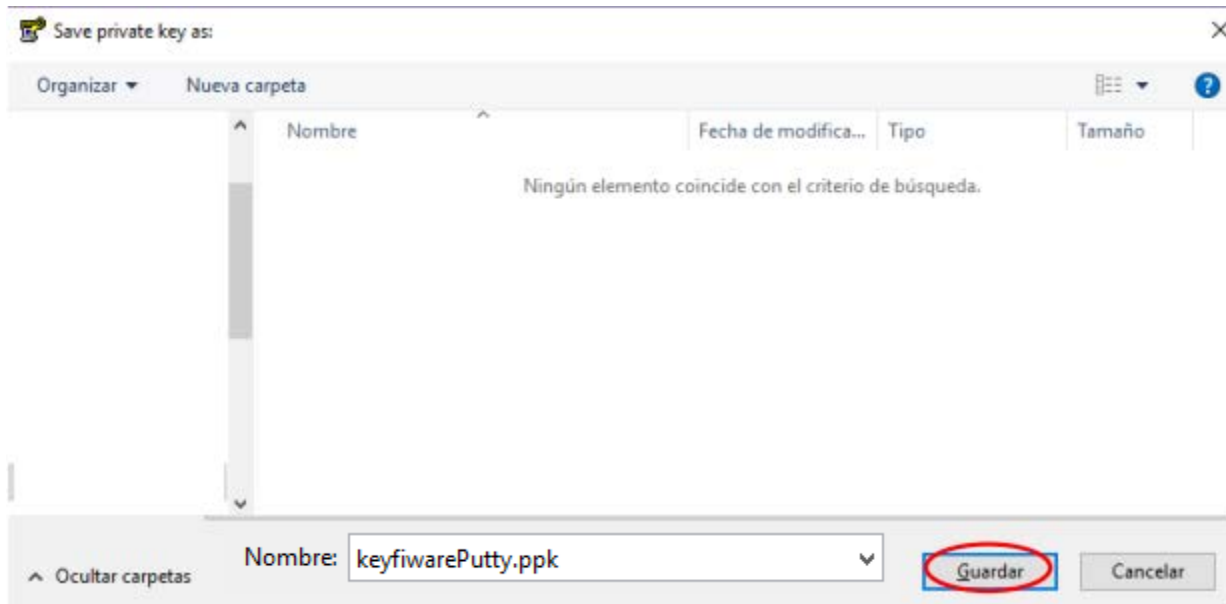
FIWARE Lab: funcionalidades básicas

Generación de la clave para el acceso con PuTTY



FIWARE Lab: funcionalidades básicas

Generación de la clave para el acceso con PuTTY



FIWARE Lab: funcionalidades básicas

Generación de la clave para el acceso con PuTTY

PuTTY Key Generator

File Key Conversions Help

Key

Public key for pasting into OpenSSH authorized_keys file:

```
ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAQDgvuvk3Y3JUNduuxA78B2voFcNA48UIG
c8Cl2aov6Ke0XMBmyuJhVM2yNKAQFI4vvwdiaufz6CPBMzMkkH8i0IYZU9EONCD7I
Q/MtGfOA6Rknva3JSAhFHteHi2tpjcNUcV467EtD5NU4cBX17RRy6rGJv3dUXZGs/d
xgFLyV/P0pnjG6lq3VL8mgDkaO240sDMIMdaTyfu2Q3FeGf5623Vaj10abMP6HWBSN
```

Key fingerprint: ssh-rsa 2048 3b fd:05:33:cf fb:89:40:89:8d:e8:34:31:52:6e:4f

Key comment: imported-openssh-key

Key passphrase:

Confirm passphrase:

Actions

Generate a public/private key pair

Load an existing private key file

Save the generated key

Parameters

Type of key to generate:

SSH-1 (RSA) SSH-2 RSA SSH-2 DSA

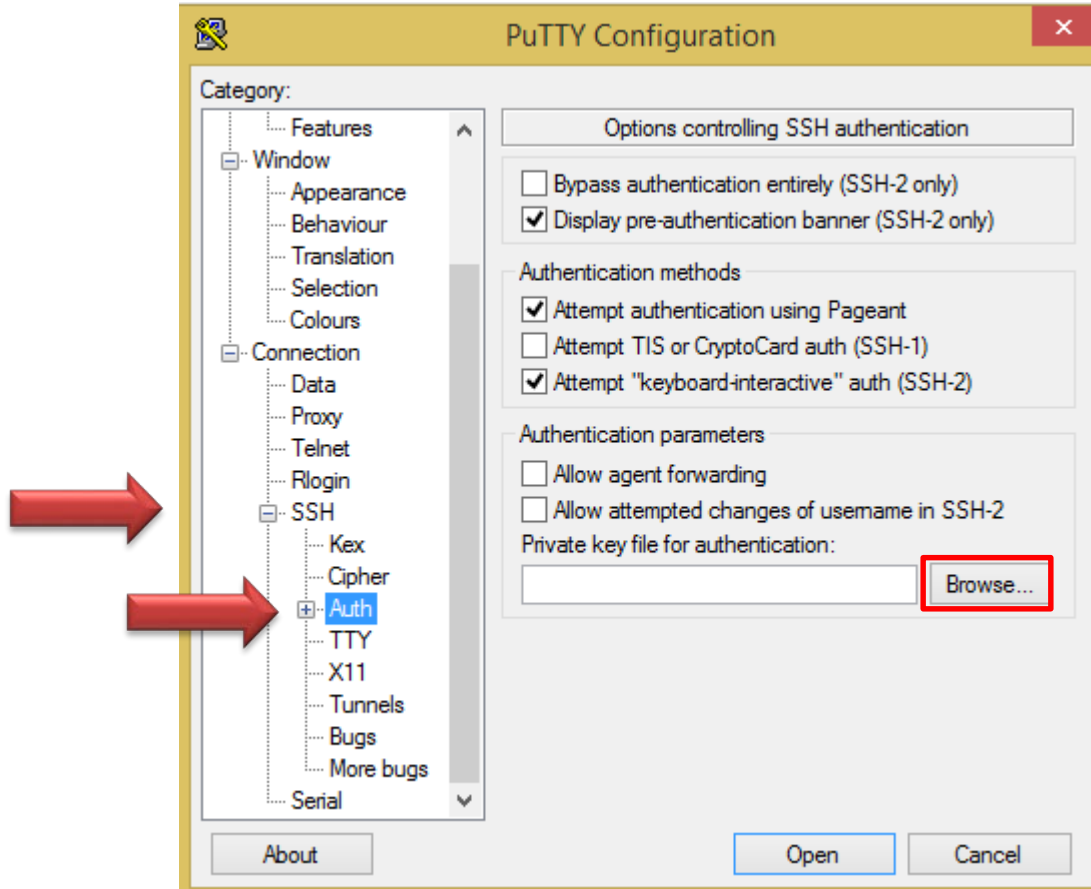
Number of bits in a generated key:

El archivo.ppk solamente se genera una sola vez.



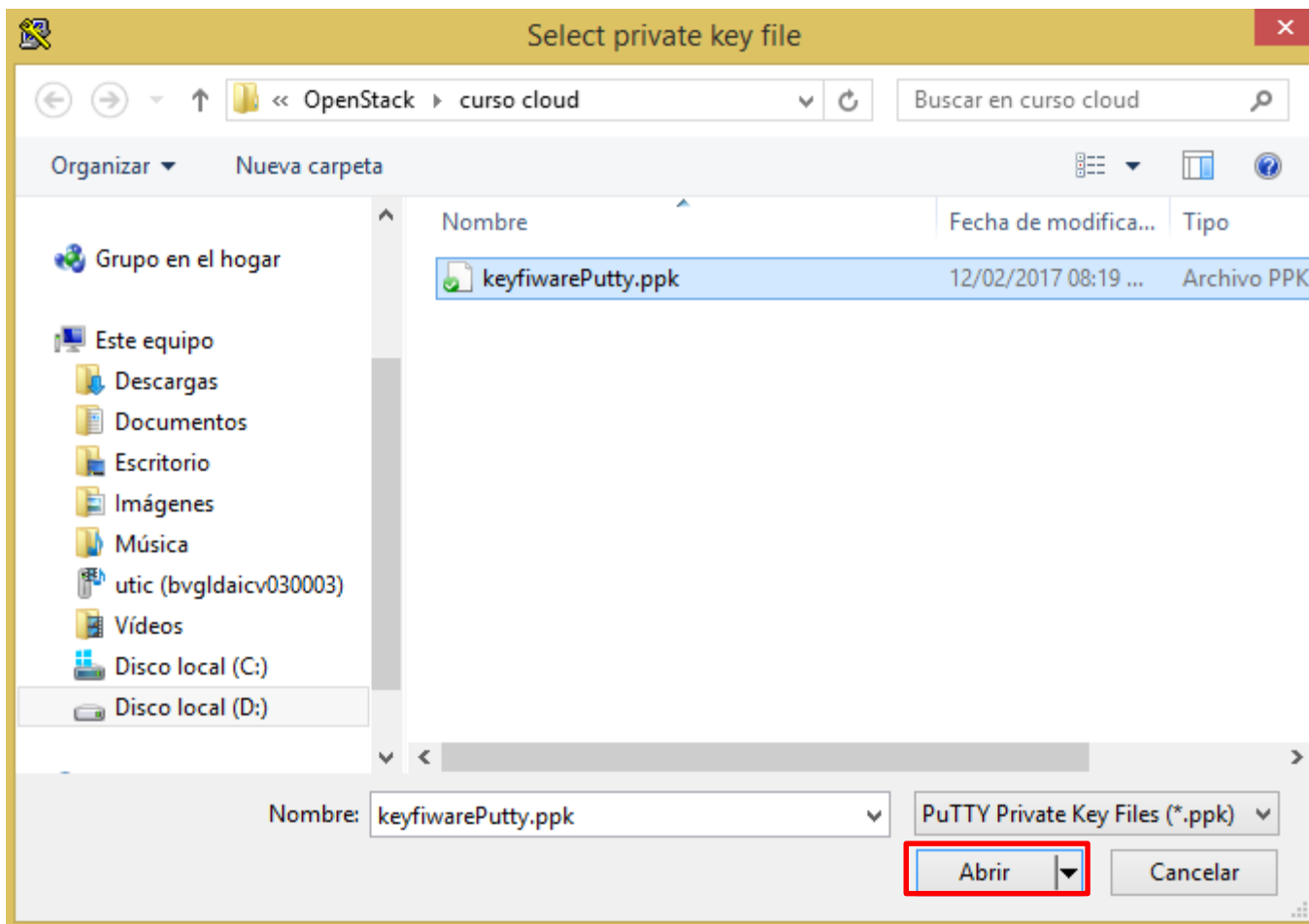
FIWARE Lab: funcionalidades básicas

Acceso a la instancia a través de PuTTY



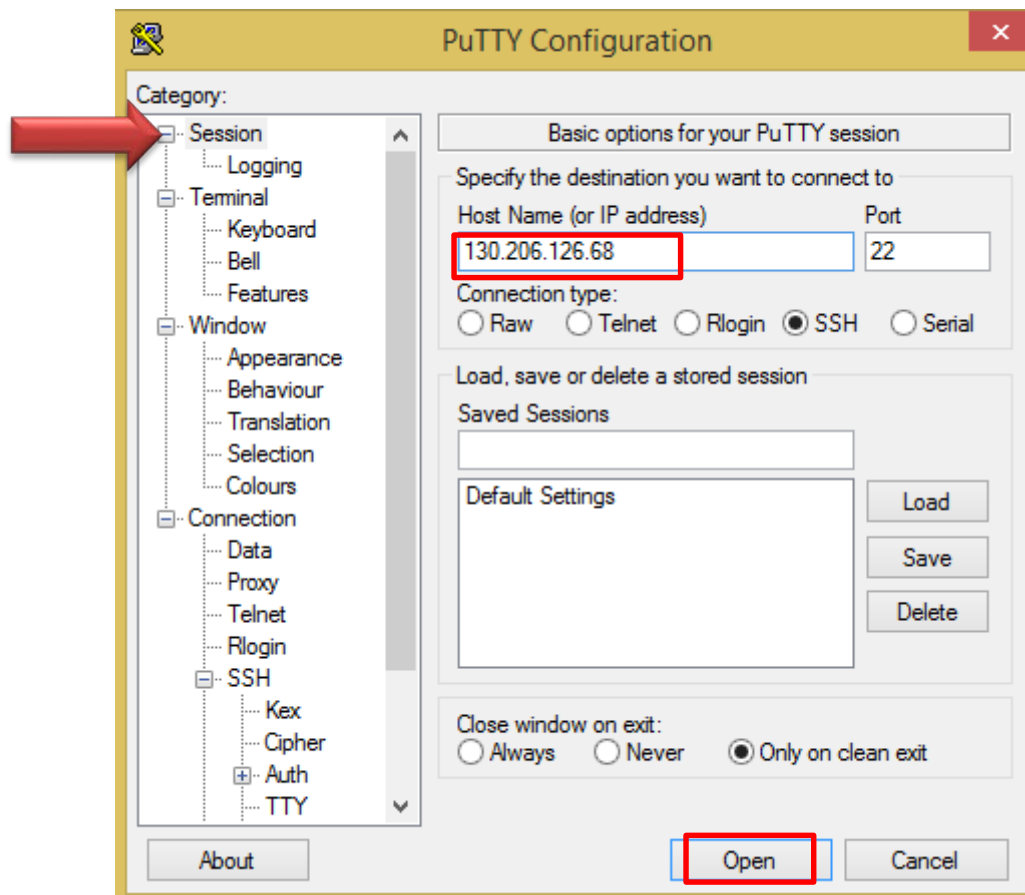
FIWARE Lab: funcionalidades básicas

Acceso a la instancia a través de PuTTY



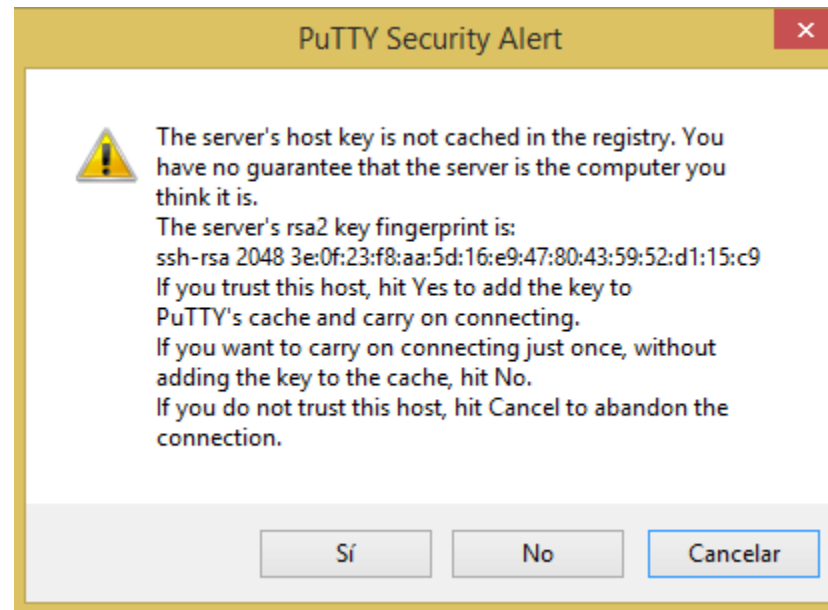
FIWARE Lab: funcionalidades básicas

Acceso a la instancia a través de PuTTY



FIWARE Lab: funcionalidades básicas

Acceso a la instancia a través de PuTTY



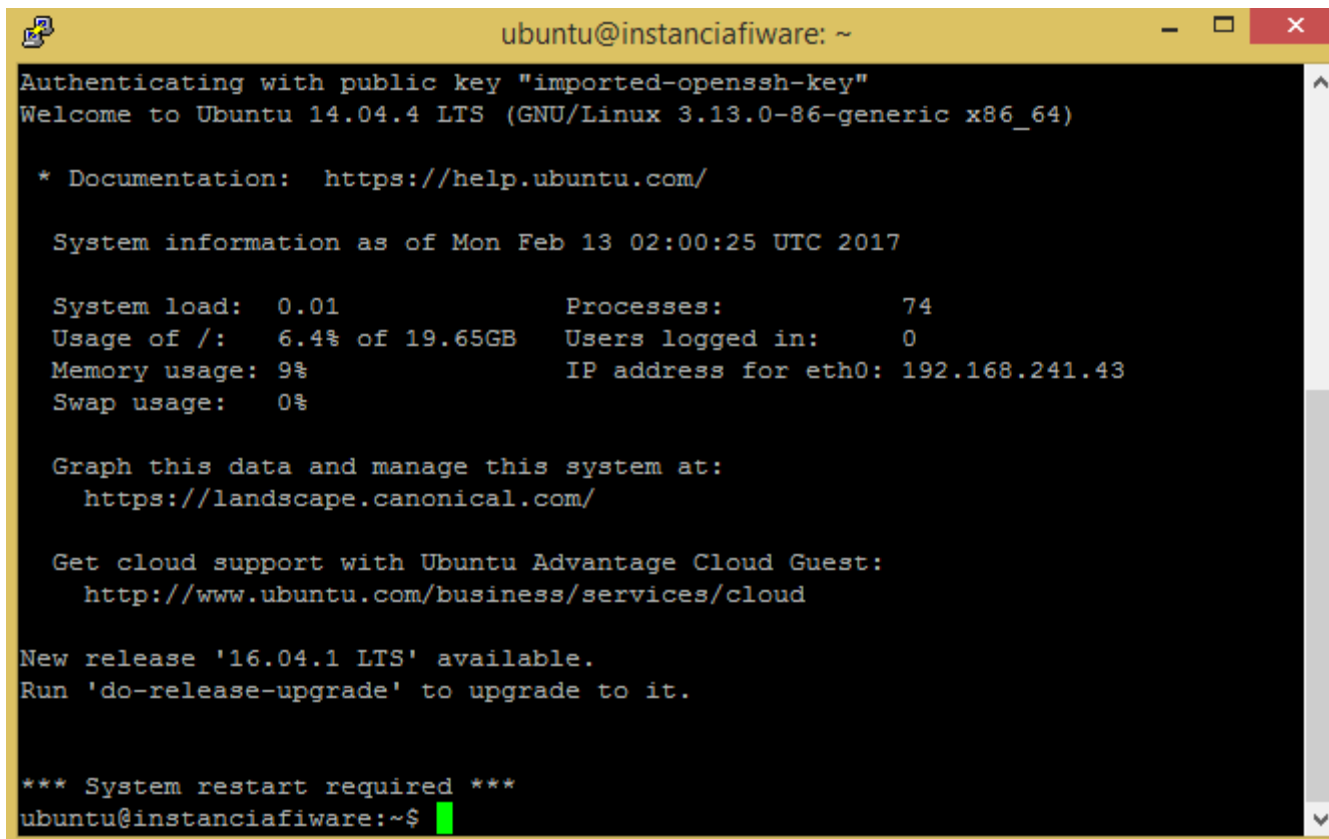
FIWARE Lab: funcionalidades básicas

Acceso a la instancia a través de PuTTY



FIWARE Lab: funcionalidades básicas

Acceso a la instancia a través de PuTTY



```
ubuntu@instanciafiware: ~
Authenticating with public key "imported-openssh-key"
Welcome to Ubuntu 14.04.4 LTS (GNU/Linux 3.13.0-86-generic x86_64)

* Documentation:  https://help.ubuntu.com/

System information as of Mon Feb 13 02:00:25 UTC 2017

System load:  0.01          Processes:            74
Usage of /:   6.4% of 19.65GB Users logged in:      0
Memory usage: 9%          IP address for eth0: 192.168.241.43
Swap usage:   0%

Graph this data and manage this system at:
  https://landscape.canonical.com/

Get cloud support with Ubuntu Advantage Cloud Guest:
  http://www.ubuntu.com/business/services/cloud

New release '16.04.1 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

*** System restart required ***
ubuntu@instanciafiware:~$
```



3

Información de referencia



Información de referencia

- **FIWARE Cloud portal**

<https://catalogue.fiware.org/enablers/self-service-interfaces-cloud-portal-upm>

- **FIWARE Cloud Infraestructure**

Account: <https://catalogue.fiware.org/enablers/identity-management-keyrock>

SDC: <https://catalogue.fiware.org/enablers/software-deployment-configuration-sagitta>

PaaS Manager: <https://catalogue.fiware.org/enablers/paas-manager-pegasus>

- **FIWARE Academy**

<https://edu.fiware.org/>



Thank you

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