



Agencia de
Aprendizaje
a lo largo
de la vida

DJANGO

Reunión 32

Django: Despliegue en servidor

Les damos la bienvenida

Vamos a comenzar a grabar la clase

Reunión 31

Django: Rest Framework

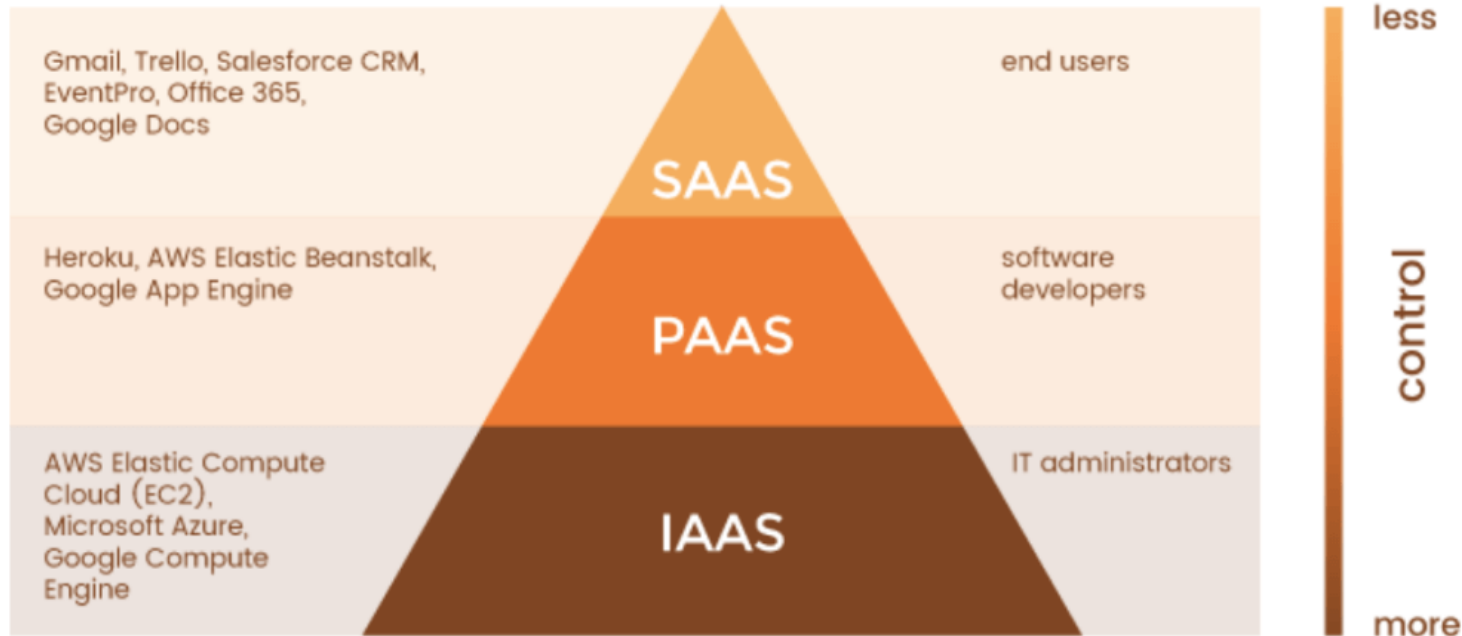
- WebSite vs WebApi
- Serializadores
- Instalación y configuración django rest framework
- Autenticación
- Routers
- Vistas

Reunión 32

Django: Despliegue en servidor

- Tipos de infraestructuras (IaaS, PaaS, SaaS)
- Load Balancer
- Python Anywhere
- Heroku
- Render.com
- Amazon EC2
- Docker

Infraestructuras



Paas



Free Heroku Postgres, free Heroku Data for Redis*, and free Heroku Dynos are no longer available.



If you have apps using these resources, you must upgrade to our [new low-cost](#) or other paid plans to ensure your apps continue to run and retain your data. To recover your data, [contact Heroku Support](#) as soon as possible. Eligible students can apply for platform credits through our [Heroku for GitHub Students program](#). [Learn more](#)



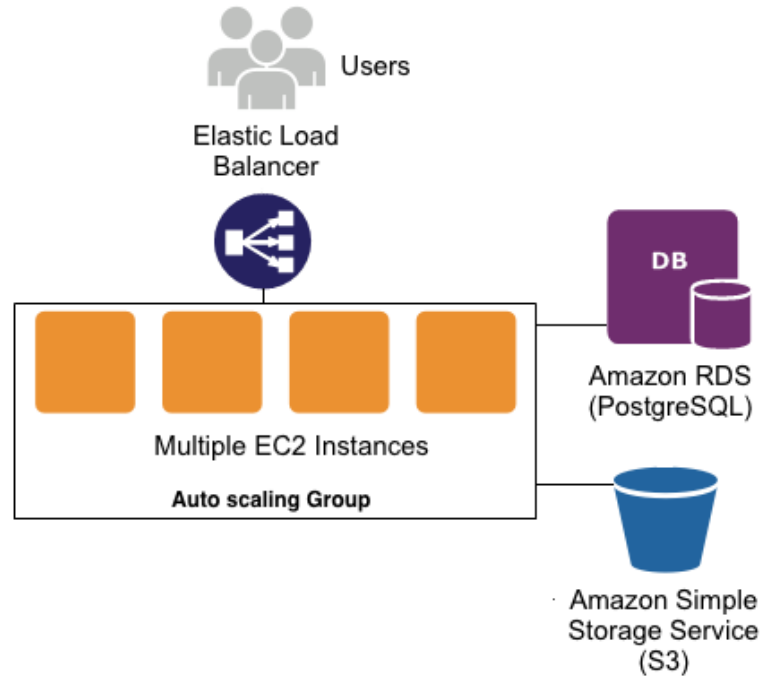
pythonanywhere
by ANACONDA.

Beginner: Free!

A **limited account** with one web app at `your-username.pythonanywhere.com`, restricted outbound Internet access from your apps, low CPU/bandwidth, no IPython/Jupyter notebook support.

It works and it's a great way to get started!

Elastik Beanstalk - EC2 (Server), RDS (DB), Files (S3)



You've been invited to try an early, beta iteration of the new launch instance wizard. We will continue to improve the experience over the next few months. We're asking customers for their feedback on this early release. To exit the new launch instance wizard at any time, choose the Cancel button.

[Try it now!](#)

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

Step 1: Choose an Amazon Machine Image (AMI)

Community AMIs

☐ Free tier only

Amazon Linux
Free tier eligible

Amazon Linux 2 AMI (HVM) - Kernel 4.14, SSD Volume Type - ami-0c1d83d75982f9cc0 (64-bit x86) / ami-010337b01de905480 (64-bit Arm)

Amazon Linux 2 comes with five years support. It provides Linux kernel 4.14 tuned for optimal performance on Amazon EC2, system 219, GCC 7.3, Glibc 2.26, Binutils 2.29.1, and the latest software packages through extras. This AMI is the successor of the Amazon Linux AMI that is now under maintenance only mode and has been removed from this wizard.

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

Ubuntu Server 20.04 LTS (HVM), SSD Volume Type - ami-0b7dcd6e6fd797935 (64-bit x86) / ami-07ef508d01f533f5f (64-bit Arm)

Free tier eligible

Ubuntu Server 20.04 LTS (HVM), EBS General Purpose (SSD) Volume Type. Support available from Canonical (<http://www.ubuntu.com/cloud/services>).

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

Microsoft Windows Server 2019 Base - ami-02af4b27cfc41bd6f

Free tier eligible

Microsoft Windows 2019 Datacenter edition. [English]

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

Ubuntu Server 18.04 LTS (HVM), SSD Volume Type - ami-05654370f5b5eb0b0 (64-bit x86) / ami-06766ee000a27e80b (64-bit Arm)

Free tier eligible

Ubuntu Server 18.04 LTS (HVM), EBS General Purpose (SSD) Volume Type. Support available from Canonical (<http://www.ubuntu.com/cloud/services>).

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

Hay capas gratuitas en cada servicio

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

Step 2: Choose an Instance Type

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. [Learn more](#) about instance types and how they can meet your computing needs.

Filter by: All instance families Current generation Show/Hide Columns

Currently selected: t2.micro (- ECUs, 1 vCPUs, 2.5 GHz, ~, 1 GiB memory, EBS only)

	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance	IPv6 Support
<input type="checkbox"/>	t2	t2.nano	1	0.5	EBS only	-	Low to Moderate	Yes
<input checked="" type="checkbox"/>	t2	t2.micro Free tier eligible	1	1	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.small	1	2	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.medium	2	4	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.large	2	8	EBS only	-	Low to Moderate	Yes

☒ 64-bit (x86)
☐ 64-bit (Arm)

¿Qué es Docker?

Docker es una plataforma de software que le permite crear, probar e implementar aplicaciones rápidamente. Docker empaqueta software en unidades estandarizadas llamadas **contenedores** que incluyen todo lo necesario para que el software se ejecute, incluidas bibliotecas, herramientas de sistema, código y tiempo de ejecución. Con Docker, puede implementar y ajustar la escala de aplicaciones rápidamente en cualquier entorno con la certeza de saber que su código se ejecutará. De manera similar a cómo una máquina virtual virtualiza (elimina la necesidad de administrar directamente) el hardware del servidor, los contenedores virtualizan el sistema operativo de un servidor. Docker se instala en cada servidor y proporciona comandos sencillos que puede utilizar para crear, iniciar o detener contenedores.

Pythonanywhere + Github



Create your account

Username:

Email:

Password:

Password (again):

☐ I agree to the [Terms and Conditions](#) and the [Privacy and Cookies Policy](#), and confirm that I am at least 13 years old.

Register

We promise not to spam or pass your details on to anyone else.

[Dashboard](#) [Consoles](#) [Files](#) [Web](#)[Upgrade/Downgrade Account](#)[Security](#)[Email](#)[Education](#)[API Token](#)[System Image](#)

Your API token

You do not have an API token yet.

[Create a new API token](#)

By clicking this button you agree that you understand that this API is new and in beta and not officially supported, and may change at any time, and is not to be relied upon, and may cause unpredictable growth of extra ears. Extra ears not guaranteed.

MySQL

Postgres

Postgres es
paga ☹️

Initialize MySQL

Let's get started! The first thing to do is to initialize a MySQL server.

Enter a new password in the form below, and note it down: you'll need it to access the databases once you've created them. You will only need to do this once.

New password:

Confirm password:

Initialize MySQL

🌀 Initializing your MySQL database – this will take a minute or so.

This should be different to your main PythonAnywhere password, because it is likely to appear in plain text in any web applications you write.

Your MySQL service is now ready. Details below.

MySQL

Postgres

MySQL settings

Connecting:

Use these settings in your web applications.

Database host address:

Username:

Your databases:

Click a database's name to start a MySQL console logged in to it.

Start a console on:

Create a database

Your database names always start with your username + '\$'. There's no need to type that prefix in below, though: PythonAnywhere will automatically add it.

Database name:

pig_22820

Create

MySQL settings

Connecting:

Use these settings in your web applications.

Database host address:

Username:

Your databases:

Click a database's name to start a MySQL console logged in to it.

Start a console on:

Start a console on:

ipig_22820

DATABASES = {

'default': {

'ENGINE': 'django.db.backends.mysql',

'NAME': '<your_username>\$<your_database_name>',

'USER': '<your_username>',

'PASSWORD': '<your_mysql_password>',

'HOST': '<your_mysql_hostname>',

}

}

En ambiente agregar mysqlclient y mysql-python a los requerimientos o
instalarlos a mano en el ambiente virtual:
pip install mysqlclient
pip install mysql

Dashboard

CPU Usage: 2% used – 2.53s of 100s. Resets in 23 hours, 53 minutes [More Info](#)

File storage: 0% full – 168.0 KB of your 512.0 MB quota [More Info](#)

Recent
Consoles + 5 -

 Bash console 26461682

New console:

 Bash

>>> Python ▾

[More...](#)

Recent
Files + 5 -

You have no recently edited files.

[+ Open another file](#)

[Browse files](#)

```
$ pip install --user pythonanywhere
```

```
$ pa_autoconfigure_django.py --python=3.10 https://github.com/alehunt/pig\_22820.git
```

Automatiza
proceso de
deploy

url del github

pythonanywhere.com

+ Add a new web app

Configuration for pythonanywhere.com

Reload:

Reload pythonanywhere.com

Test before date:

We're happy to host your free website -- and keep it free -- for as long as you want to keep it running, but you'll need to log in at least once every three months and click the "Run until 3 months from today" button below. We'll send you an email a week before the site is disabled so that you don't forget to do that. [See here for more details.](#)

This site will be disabled on **Thursday 02 March 2023**

Run until 3 months from today

Paying users' sites stay up forever without any need to log in to keep them running.

Traffic:

How busy is your site?

This month (previous month)	45	(0)
Today (yesterday)	45	(0)

Agregar HOST (url) a settings.py a la configuración ALLOWED_HOSTS



/home/ alehunt

Dashboard Consoles **Files** Web Tasks Databases

[Open Bash console here](#)

43% full – 217.6 MB of your 512.0 MB quota [More Info](#)

Directories

Enter new directory name

New directory

.cache/
.local/
.virtualenvs/
alehunt.pythonanywhere.com/

Files

Enter new file name, eg hello.py

New file

.bashrc		2022-12-02 03:11	559 bytes
.gitconfig		2022-12-02 03:11	266 bytes
.my.cnf		2022-12-02 03:39	32 bytes
.profile		2022-12-02 03:11	79 bytes
.pythonstartup.py		2022-12-02 03:11	77 bytes
.vimrc		2022-12-02 03:11	4.6 KB
README.txt		2022-12-02 03:11	232 bytes

Upload a file

100MiB maximum size

Se pueden modificar los archivos subidos al server

**No te olvides de completar la
asistencia y consultar dudas**

Recordá:

- Revisar la Cartelera de Novedades.
- Hacer tus consultas en el Foro.

TODO EN EL AULA VIRTUAL