

Who I am?

Web/Mobile Developer

Systems Engineer

(USFX)
(Scholarship 2010 Navarra Public University Spain)

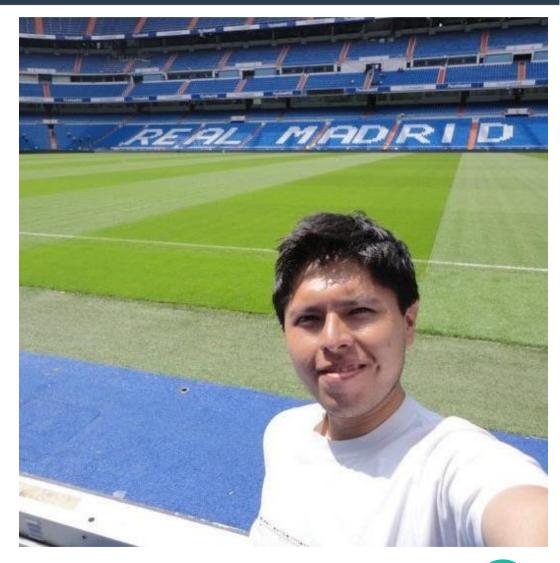
Master Security Informatics

(Scholarship 2016 Salamanca University Spain)

Email: vicsanjinez@gmail.com

Twitter: @victorsanjinez

Github: https://github.com/vicsanjinez



Linkedin: https://www.linkedin.com/in/victor-sanjinez-78484170/

Developer Questions?

Localhost to Production

Hosting?
New Language Programming?
1M users?

Cloud Clients



Why use Cloud? (Economic)



HPE ProLiant DL380 Gen10 base server

with one Intel® Xeon® Silver 4110 processor, 32 GB dual rank memory, P816i-a storage controller, 12 large form factor chassis and 2 800W power supply

PRODUCT: 868710-B21

Partner	Availability	Price (USD)	Lease Option
O PCM	■ In Stock	\$4,539.99	from \$137.79/mo*
O Insight (i)	In Stock	\$4,937.99	17

4539,99 USD

Why use Cloud? (Economic)

Select Instance Type

Operating System		٦
Windows	Linux	
Windows and Std. SQL Server	 Red Hat Enterprise Linux 	☐ EBS-Optimized
Windows and Web SQL Server	SUSE Linux Enterprise Server	
Windows and Enterprise SQL Serve	r	

Select	Name	vCPU	Memory (GiB)	Instance Storage (GB)	I/O	EBS Opt.	On-Demand Hourly Cost	Reserved Effective Hourly Cost (Savings %) *
	t1.micro	1	0.6		Very Low		\$0.020	\$0.008 (60%)
0	t2.nano	1	0.5		Low		\$0.006	\$0.002 (66%)
0	t2.micro	1	1.0		Low to Moderate		\$0.012	\$0.004 (66%)
	t2.small	1	2.0		Low to Moderate	177	\$0.023	\$0.009 (61%)
0	t2.medium	2	4.0		Low to Moderate		\$0.046	\$0.017 (63%)
0	t2.large	2	8.0		Low to Moderate		\$0.093	\$0.035 (62%)
	t2.xlarge	4	16.0		Low to Moderate		\$0.186	\$0.070 (62%)
•	t2.2xlarge	8	32.0		Low to Moderate		\$0.371	\$0.140 (62%)
	The same of the sa	-			THE RESERVE AND ADDRESS OF THE PARTY OF THE			

T2.2xlarge

Why use Cloud? (Economic)

Select Billing Option

Instance Type: t2.2xlarge Operating System: Linux Usage: 100 % Utilized/Month

Per Instance Prices & Projected Costs (all in USD)

Select	Name	Upfront Price	Effective Hourly Cost	Effective Monthly Cost	1 Year Cost	3 Year Cost
0	On-Demand (No Contract)	1	0.371	271.72 🕕	3260.64	9781.92
0	1 Yr No Upfront Reserved	0.00	0.230	167.90	2014.80	6044.40
0	1 Yr Partial Upfront Reserved	959.00	0.219	159.86	1918.28	5754.84
0	1 Yr All Upfront Reserved	1880.00	0.215	156.67	1880.00	5640.00
0	3 Yr No Upfront Reserved	0.00	0.160	117.09		4215.24
0	3 Yr Partial Upfront Reserved	1951.00	0.148	108.37		3901.12
•	3 Yr All Upfront Reserved	3668.00	0.140	101.89		3668.00
0	3 Yr No Upfront Convertible	0.00	0.184	134.61		4845.96
0	3 Yr Partial Upfront Convertible	2244.00	0.171	124.68		4488.24
0	3 Yr All Upfront Convertible	4398.00	0.167	122.17		4398.00

Close

Close and Save

3668 USD

Why use Cloud? (Engineering)

Auto Scaling Load Balancing Snapshots Backups ServerLess

Why use Cloud? (Engineering)



HPE ProLiant DL380 Gen10 base server

with one Intel® Xeon® Silver 4110 processor, 32 GB dual rank memory, P816i-a storage controller, 12 large form factor chassis and 2 800W power supply

PRODUCT: 868710-B21

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O Insight (i)	In Stock	\$4,937.99	17

32Gb x 1024 Mb = **32768 Mb** App \rightarrow 4Mb/User = **8192 user**

100.000 users?

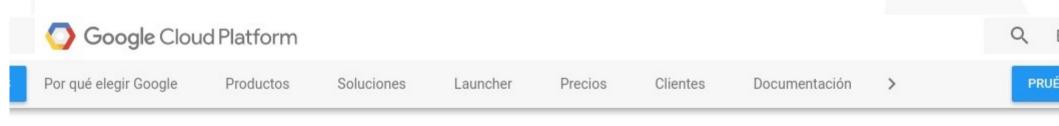
Why use cloud? (Productivity)

USE YOUR TIME FOR YOUR BUSINESS

Not for infrastructure



Google Cloud Platform



Diseña el futuro Desarrolla mejor software, más rápido

- ✓ Utiliza la infraestructura base, el análisis de datos y el sistema de aprendizaje automático de Google.
- Es seguro y cuenta con todas las funciones que necesita cualquier empresa.
- Comprometido con el software libre, y con un precio y un rendimiento sin precedentes.



CONTACTAR CON VENTAS



Tipo de pago



Pagos automáticos mensuales

Pagas todos los meses a través de un cargo automático cuando vence el pago.

Método de pago 🛈



Mastercard · · · 7207



La dirección de la tarjeta de crédito o de débito es la misma que figura arriba.



Google Cloud Platform

Hola, victor

Muchas gracias por haberte registrado en la prueba gratuita de 12 meses.

Tienes a tu disposición un crédito de 300 USD para que los gastes en el periodo de prueba. No te preocupes si lo gastas todo, ya que no te cobraremos hasta que tengamos tu consentimiento.

ENTENDIDO

Iniciar la versión de prueba gratuita

Guías de inicio rápido



Prueba Compute Engine

En este tutorial aprenderás a crear una instancia de VM de Linux en Compute Engine.



Crea una aplicación de libro de visitas en Container Engine

Despliega una aplicación de libro de visitas con Google Container Engine y Kubernetes.

Soluciones populares



App Engine

Google

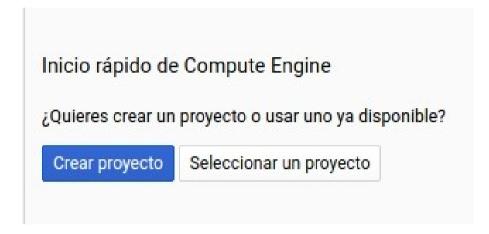
Una plataforma para crear aplicaciones web y móviles que se escalan automáticamente.



Compute Engine

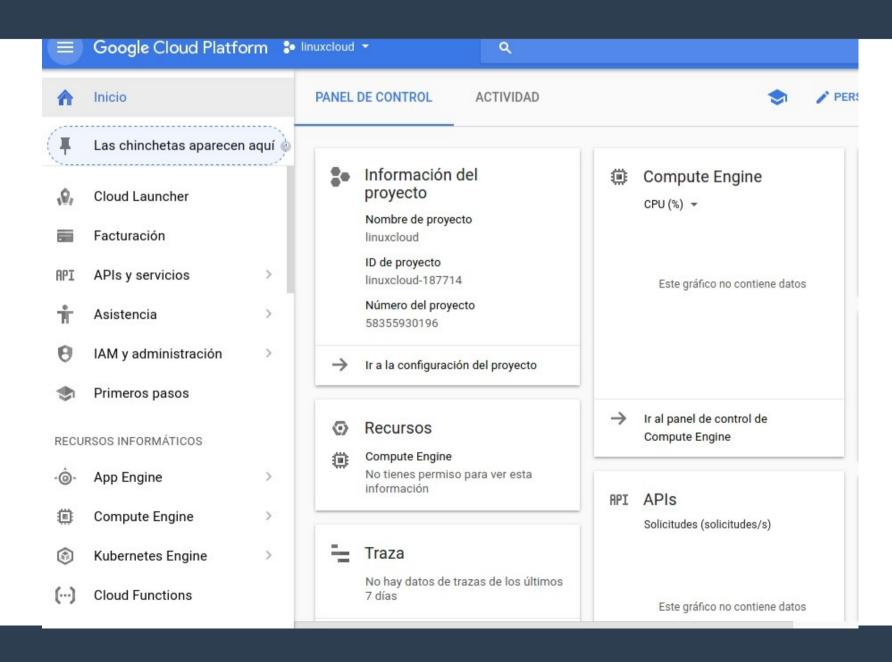
Google

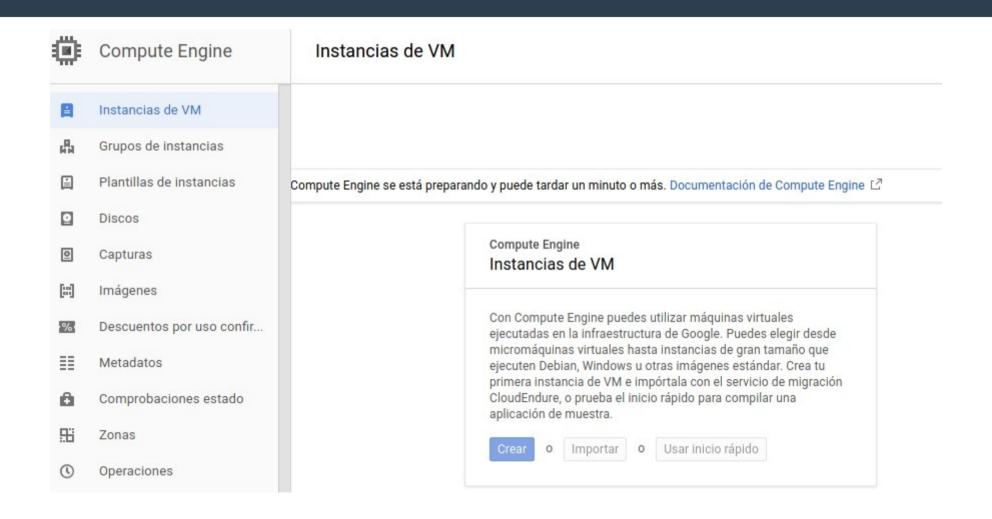
Máquinas virtuales escalables de alto rendimiento

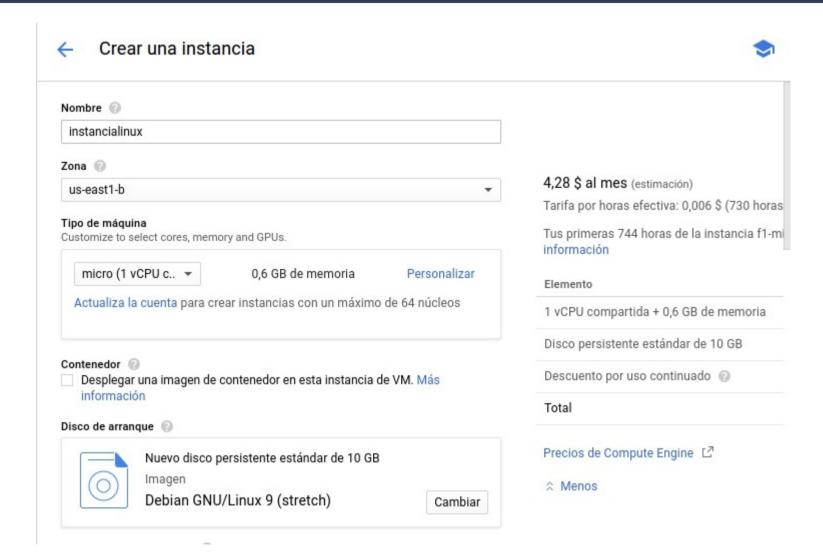


Nuevo proyecto

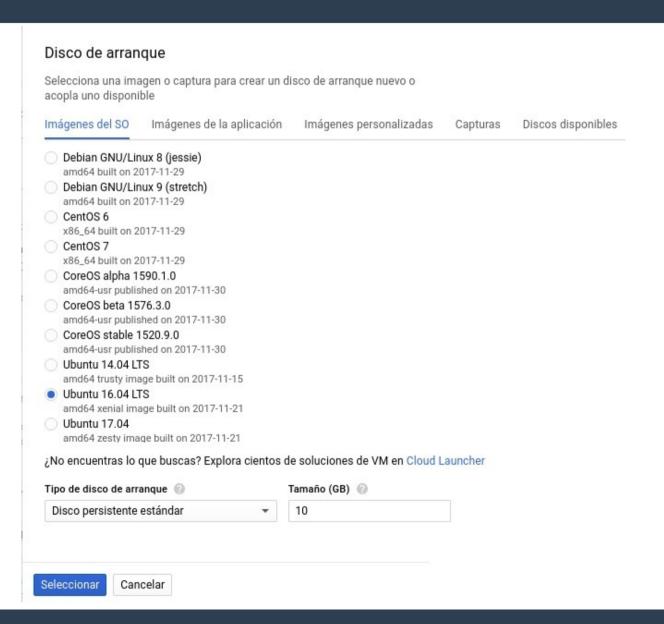
Nombre del proyecto 💮	
linuxcloud	
I ID del proyecto será linuxclo	ud-187714

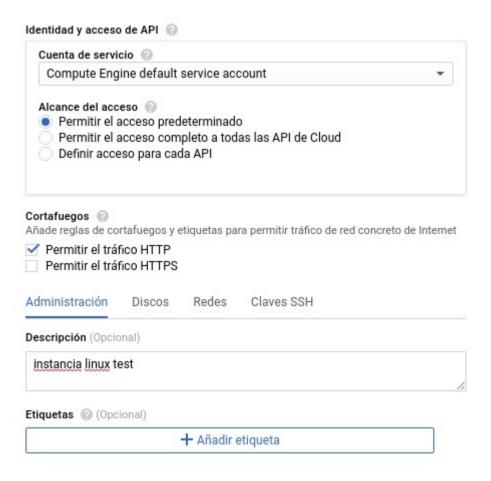




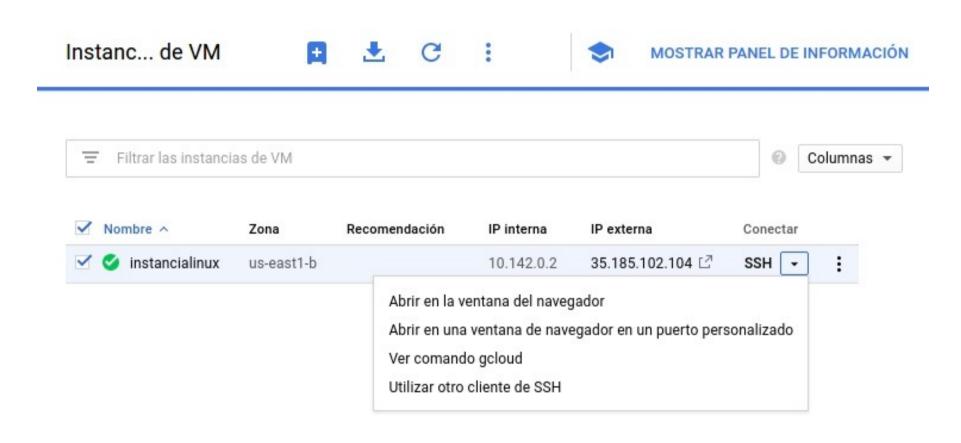


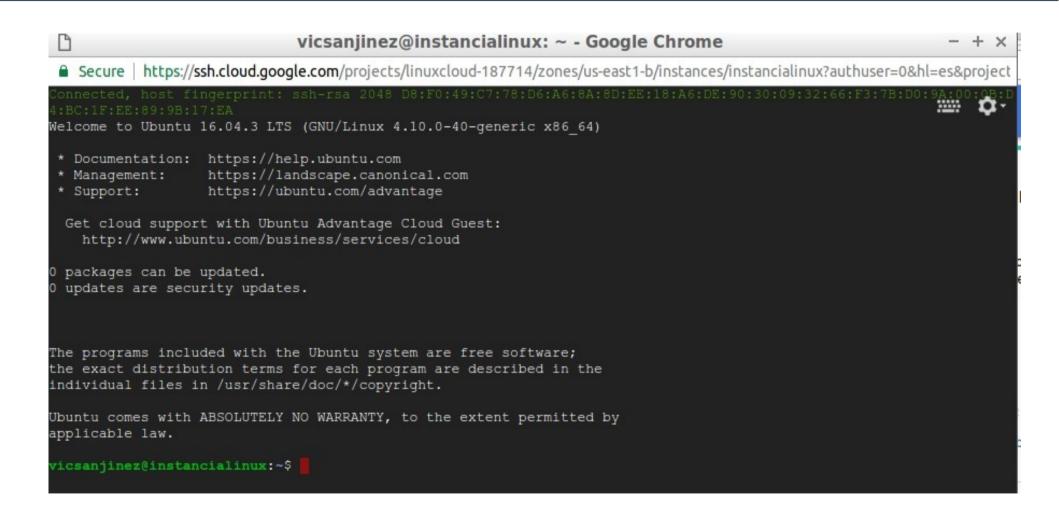
Machine type	Virtual CPUs	Memory	Price (USD)	Preemptible price (USD)
n1-standard-1	1	3.75GB	\$0.0475	\$0.0100
n1-standard-2	2	7.5GB	\$0.0950	\$0.0200
n1-standard-4	4	15GB	\$0.1900	\$0.0400
n1-standard-8	8	30GB	\$0.3800	\$0.0800
n1-standard-16	16	60GB	\$0.7600	\$0.1600
n1-standard-32	32	120GB	\$1.5200	\$0.3200
n1-standard-64	64	240GB	\$3.0400	\$0.6400
n1-standard-96 (Beta) Skylake Platform only	96	360GB	\$4.5600	\$0.9600





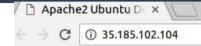






```
vicsanjinez@instancialinux:~$ uname -a
Linux instancialinux 4.10.0-40-generic #44~16.04.1-Ubuntu SMP Thu Nov 9 15:37:44 UTC 2017 x86 64 x86 64 x88 64
vicsanjinez@instancialinux:~$ apt-get update
Reading package lists... Done
W: chmod 0700 of directory /var/lib/apt/lists/partial failed - SetupAPTPartialDirectory (1: Operation not permitted
E: Could not open lock file /var/lib/apt/lists/lock - open (13: Permission denied)
E: Unable to lock directory /var/lib/apt/lists/
W: Problem unlinking the file /var/cache/apt/pkgcache.bin - RemoveCaches (13: Permission denied)
W: Problem unlinking the file /var/cache/apt/srcpkgcache.bin - RemoveCaches (13: Permission denied)
vicsanjinez@instancialinux:~$ sudo apt-get update
Hit:l http://us-eastl.gce.archive.ubuntu.com/ubuntu xenial InRelease
Get:2 http://us-east1.qce.archive.ubuntu.com/ubuntu xenial-updates InRelease [102 kB]
Get:3 http://us-east1.gce.archive.ubuntu.com/ubuntu xenial-backports InRelease [102 kB]
Get:4 http://us-east1.gce.archive.ubuntu.com/ubuntu xenial/main Sources [868 kB]
Get:5 http://security.ubuntu.com/ubuntu xenial-security InRelease [102 kB]
Get:6 http://us-eastl.gce.archive.ubuntu.com/ubuntu xenial/restricted Sources [4,808 B]
Get:7 http://us-eastl.gce.archive.ubuntu.com/ubuntu xenial/universe Sources [7,728 kB]
Hit:8 http://archive.canonical.com/ubuntu xenial InRelease
Get:9 http://us-eastl.gce.archive.ubuntu.com/ubuntu xenial/multiverse Sources [179 kB]
Get:10 http://us-eastl.gce.archive.ubuntu.com/ubuntu xenial-updates/main Sources [285 kB]
Get:11 http://us-east1.gce.archive.ubuntu.com/ubuntu xenial-updates/restricted Sources [3,404 B]
Get:12 http://us-east1.qce.archive.ubuntu.com/ubuntu xenial-updates/universe Sources [184 kB]
Get:13 http://us-eastl.gce.archive.ubuntu.com/ubuntu xenial-updates/multiverse Sources [7,600 B]
Get:14 http://us-eastl.gce.archive.ubuntu.com/ubuntu xenial-updates/main amd64 Packages [670 kB]
Get:15 http://us-eastl.gce.archive.ubuntu.com/ubuntu xenial-updates/main Translation-en [280 kB]
Get:16 http://us-east1.gce.archive.ubuntu.com/ubuntu xenial-updates/universe amd64 Packages [561 kB]
Get:17 http://us-east1.gce.archive.ubuntu.com/ubuntu xenial-updates/universe Translation-en [227 kB]
Get:18 http://us-east1.qce.archive.ubuntu.com/ubuntu xenial-backports/main Sources [3,428 B]
Get:19 http://us-eastl.gce.archive.ubuntu.com/ubuntu xenial-backports/universe Sources [4,948 B]
Get:20 http://us-eastl.qce.archive.ubuntu.com/ubuntu xenial-backports/universe amd64 Packages [6,624 B]
Get:21 http://us-eastl.qce.archive.ubuntu.com/ubuntu xenial-backports/universe Translation-en [3,768 B]
Get:22 http://security.ubuntu.com/ubuntu xenial-security/main Sources [103 kB]
Get:23 http://security.ubuntu.com/ubuntu xenial-security/restricted Sources [2,600 B]
Get:24 http://security.ubuntu.com/ubuntu xenial-security/universe Sources [46.0 kB]
Get:25 http://security.ubuntu.com/ubuntu xenial-security/multiverse Sources [1,140 B]
Get:26 http://security.ubuntu.com/ubuntu xenial-security/main amd64 Packages [397 kB]
Get:27 http://security.ubuntu.com/ubuntu xenial-security/main Translation-en [175 kB]
Get:28 http://security.ubuntu.com/ubuntu xenial-security/universe amd64 Packages [183 kB]
Get:29 http://security.ubuntu.com/ubuntu xenial-security/universe Translation-en [96.5 kB]
Fetched 12.3 MB in 2s (4,702 kB/s)
 eading package lists... 77%
                                                                                                 Muv insatistecho
```

```
studio@instancialinux:~$ sudo apt-get install apache2
studio@instancialinux:~$ sudo service apache2 start
```





Apache2 Ubuntu Default Page

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at /var/www/html/index.html) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

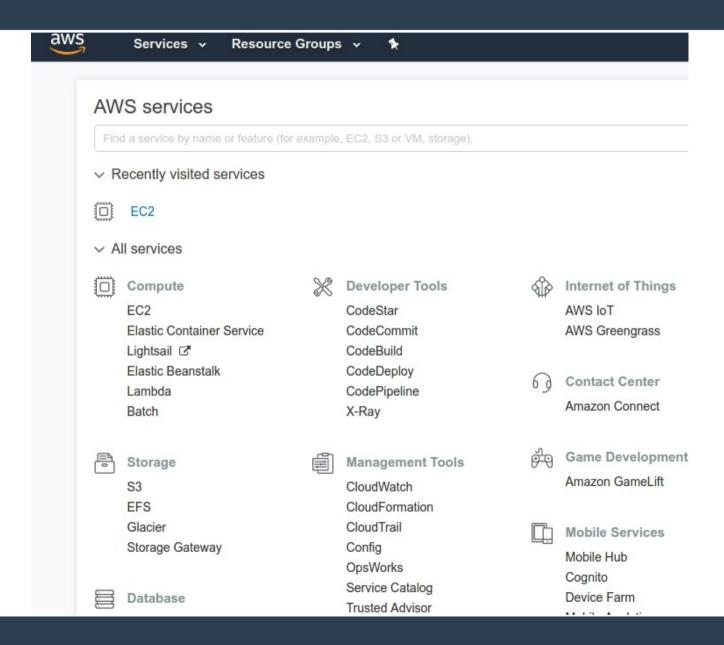
Configuration Overview

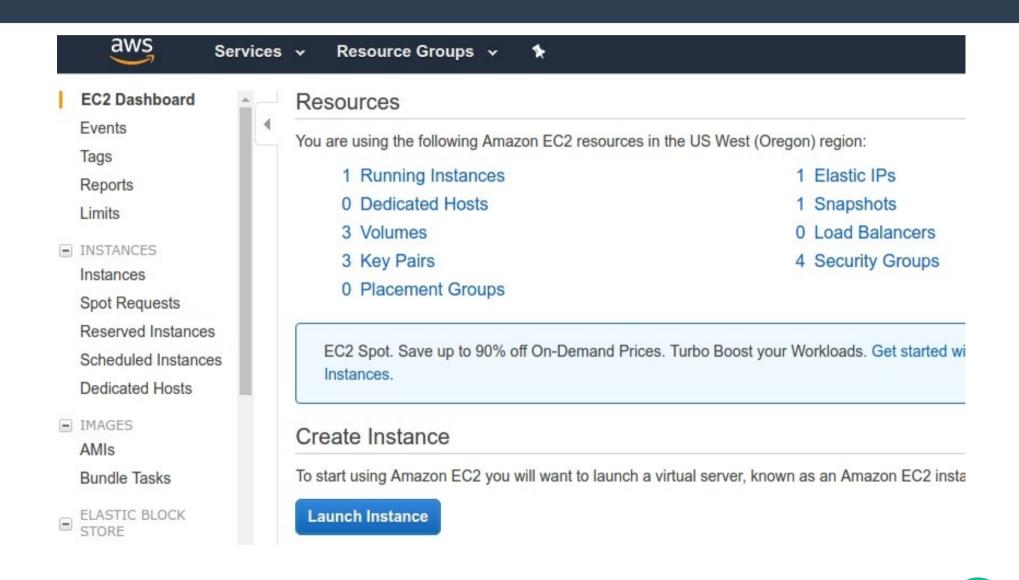
Ubuntu's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Ubuntu tools. The configuration system is **fully documented in /usr/share/doc/apache2/README.Debian.gz**. Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the **manual** if the apache2-doc package was installed on this server.

The configuration layout for an Apache2 web server installation on Ubuntu systems is as follows:

```
/etc/apache2/
|-- apache2.conf
| `-- ports.conf
|-- mods-enabled
| |-- *.load
| -- *.conf
|-- conf-enabled
| `-- *.conf
|-- sites-enabled
| `-- *.conf
```







3. Configure Instance 4. Add Storage 5. Add Tags

2. Choose Instance Type

1. Choose AMI

2. Official ins	stance type 5. Configure instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Neview	
Step 1: Choose an	Amazon Machine Image (AMI)	Cancel and Exit
Community AMIs	Root device type: ebs Virtualization type: hvm ENA Enabled: Yes	
Free tier only (i)	Red Hat Enterprise Linux 7.4 (HVM), SSD Volume Type - ami-9fa343e7 Red Hat Enterprise Linux version 7.4 (HVM), EBS General Purpose (SSD) Volume Type	Select
	Free tier eligible Root device type: ebs	64-bit
	SUSE Linux Enterprise Server 12 SP3 (HVM), SSD Volume Type - ami-e3ef329b	Select
	SUSE Linux Enterprise Server 12 Service Pack 3 (HVM), EBS General Purpose (SSD) Volume Type. Public Cloud, Advanced Systems Management, Web and Scripting, and Legacy modules enabled.	64-bit
	Root device type: ebs Virtualization type: hvm ENA Enabled: Yes	
	Obuntu Server 16.04 LTS (HVM), SSD Volume Type - ami-0a00ce72	Select
	Ubuntu Server 16.04 LTS (HVM),EBS General Purpose (SSD) Volume Type. Support available from Canonical (http://www.ubuntu.com/cloud/services).	64-bit
	Root device type: ebs Virtualization type: hvm ENA Enabled: Yes	
	Microsoft Windows Server 2016 Base - ami-343ef84c	Select
	Windows Microsoft Windows 2016 Datacenter edition. [English]	64-bit

6. Configure Security Group 7. Review

64-bit

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 types

Current generation

Show/Hide Columns

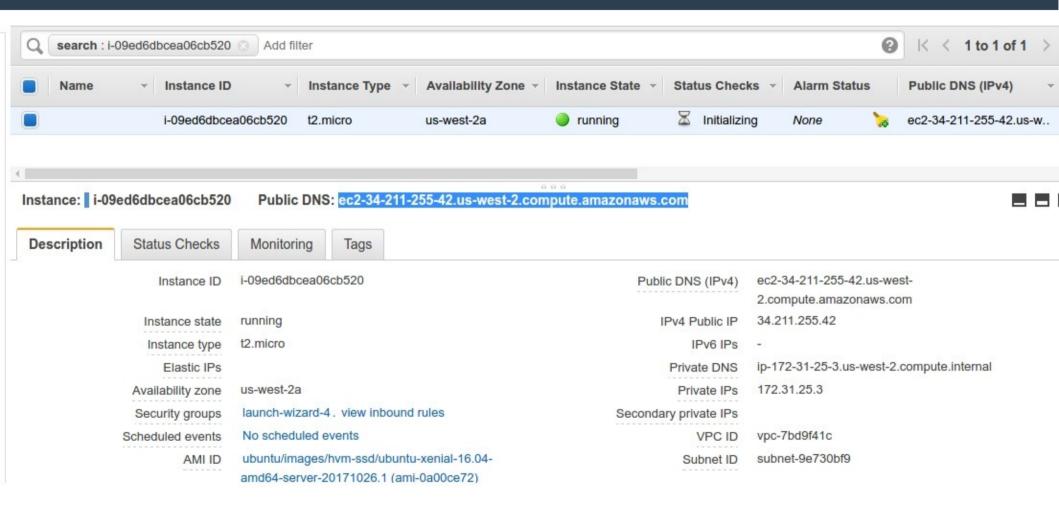
Currently selected: t2.micro (Variable ECUs, 1 vCPUs, 2.5 GHz, Intel Xeon Family, 1 GiB memory, EBS only)

Family +	Type -	vCPUs (i) +	Memory (GiB) ~	Instance Storage (GB) (i) +	EBS-Optimized Available	Network Performance (j) 🔻	IPv6 Support
General purpose	t2.nano	1	0.5	EBS only	-	Low to Moderate	Yes
General purpose	t2.micro Free tier eligible	1	1	EBS only	-	Low to Moderate	Yes
General purpose	t2.small	1	2	EBS only	-	Low to Moderate	Yes
General purpose	t2.medium	2	4	EBS only	-	Low to Moderate	Yes
General purpose	t2.large	2	8	EBS only	-	Low to Moderate	Yes
General purpose	t2.xlarge	4	16	EBS only	-	Moderate	Yes

Previous Revi

Review and Launch

Next: Configure Instance Details



```
testaws ⇒ ssh -i testaws.pem ubuntu@34.211.255.42
ubuntu@ip-172-31-25-3:~$ wget https://bitnami.com/redirect/to/163849/bitnami-lam
pstack-5.6.32-0-linux-x64-installer.run
       ubuntu@ip-172-31-25-3:~$ cd /home/ubuntu/lampstack-5.6.32-0/
       ubuntu@ip-172-31-25-3:~/lampstack-5.6.32-0$ ls
       README.txt
                      config
                                     licenses
                                                              scripts
                       ctlscript.sh
                                                              salite
       apache2
                                     manager-linux-x64.run
                       docs
                                     mysal
                                                              uninstall
       apps
       changelog.txt
                                                              uninstall.dat
                                     php
                      git
                                     properties.ini
                                                              use lampstack
       common
                       imq
       ubuntu@ip-172-31-25-3:~/lampstack-5.6.32-0$
       ubuntu@ip-172-31-25-3:~/lampstack-5.6.32-0$ ./ctlscript.sh start apache
       Syntax OK
       /home/ubuntu/lampstack-5.6.32-0/apache2/scripts/ctl.sh : httpd (pid 2410) alread
       y running
       ubuntu@ip-172-31-25-3:~/lampstack-5.6.32-0$ ./ctlscript.sh start mysql
       /home/ubuntu/lampstack-5.6.32-0/mysql/scripts/ctl.sh : mysql started at port 33
```





① 34.211.255.42



WELCOME

APPLICATIONS



We created the Bitnami Project to help spread the adoption of freely available, high quality Open Source web applications. Bitnami aims to make it easier than ever to discover, download and install Open Source software such as document and content management systems, wikis and blogging software.

You can learn more about Bitnami at https://bitnami.com

The Bitnami LAMP Stack is an easy to install software platform that greatly simplifies the deployment of Open Source web stacks. It includes ready-to-run versions of Apache, MySQL and PHP. Bitnami LAMP Stack is distributed for free under the Apache 2.0 license.

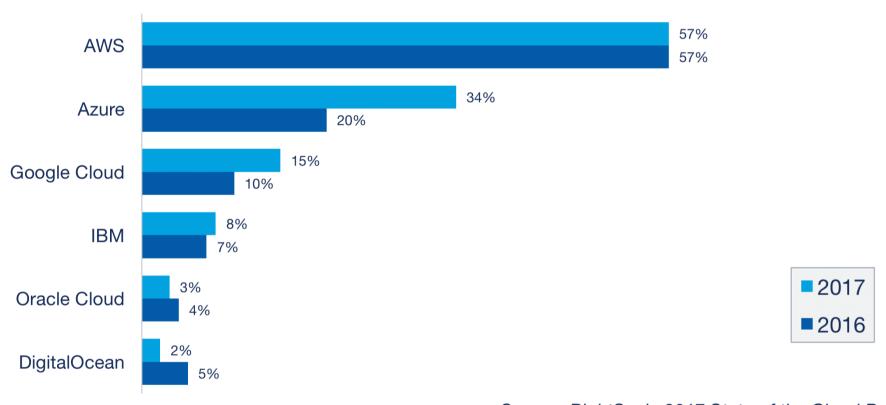
To get started with Bitnami LAMP Stack we suggest the following:

- 1.- <u>Check our documentation</u>. The stack is self-contained and independent on your system, you can find all components in your installation directory: /home/ubuntu/lampstack-5.6.32-0
- 2.- Start the servers. Open the graphical "Manager" tool in your installation directory to start & stop the installed servers. You can also use "ctlscript.sh" from the command line prompt.
- 3.- Add more apps. Download and install any Bitnami application module to run on top of this Stack.
- 4.- Deploy your own project.



Public Cloud Adoption 2017 vs. 2016

% of Respondents Running Applications



Source: RightScale 2017 State of the Cloud Report

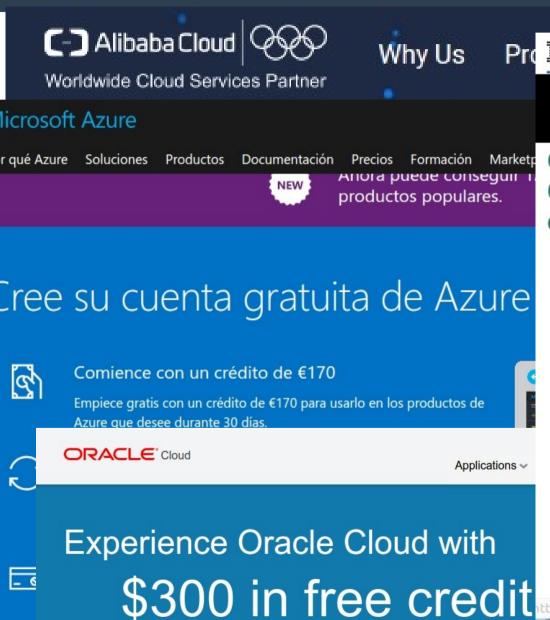
AWS

1.- AMI for Deep Learning

- 2.- AWS Educate Free 75 USD without Credit Card
 - **3.-** Just Classic Terminal
 - 4.- No available
- **5.-** AWS Activate for Startups (1000 USD) Be a new services with a website and business email

Google Cloud

- 1.- Just Linux, Windows, and some optimized
- 2.- Free 300 USD with Credit Card
 - 3.- Terminal Web
 - **4.-** Mobile App Android/IOS for Administration
 - **5.-** Google Cloud for Startups (20000 USD)Be part of a risk capital, accelerator or incubator fund



Get started with IBM Cloud application and developer services

Why IBM?

Cloud

IBM Cloud lets you choose the right over 120 services - including IBM W

Pricing

Garage

Start with a Lite account and upgrad pricing with a subscription.

You can run applications in 49 IBM (currencies.



Solutions

Products

See the catalog

Lite (Free)

No time limit

No credit card required 256 MB of Cloud Foundry memory 1 instance per Lite plan

App auto-sleep

Service garbage collection



Get started for free

One more thing...

Secure https://qwiklabs.com

(n) QWIKLABS



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How Can I Partner With Qwiklabs?

Partners can create, manage and run labs anytime. You can deliver labs via the cloud to classrooms, webinars, events or have them generally available for self-paced learning. Qwiklabs is used by students, trainers and organizations around the world.

Plus, Qwiklabs can integrate with most of your existing learning infrastructure, including learning management systems and student information systems.







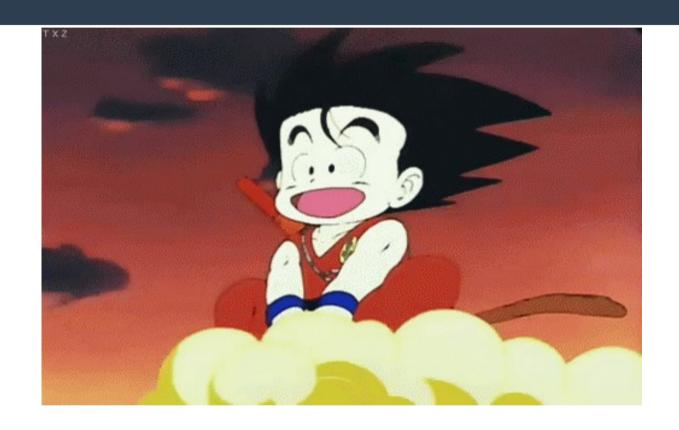
Read More >

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Running a MongoDB Database in Kubernetes with StatefulSets	****	Expert	9 Credits	50m
Speaking with a webpage		Expert	9 Credits	1h 20m
Structured Data Regression with Cloud ML Engine & Datalab via Cloud Shell	****	Expert	9 Credits	45m
Using Google Stackdriver Debug, Traces, Logging and Logpoints	****	Expert	9 Credits	45m
Analyze Big Data with Hadoop	****	Introductory	Free	40m
Challenge Lab	***	Introductory	Free	45m
Introduction to AWS Application Discovery Service	****	Introductory	1 Credit	35m
Introduction to AWS CloudFormation	****	Introductory	1 Credit	20m

Thanks!!!



Email: vicsanjinez@gmail.com

Twitter: @victorsanjinez