

Infrastructure

...

Should I care?

Jorge Abreu - DevOps/SRE at Elementum

- Trabajo en IT “técnicamente” desde los 12 años. Sysadmin hace 8 años +-.
- Wikipedista.
- Vocal en Wikimedia Argentina.
- Participo del podcast “Polémica en /var”.
- Fundamentalista de Hackers del ‘95.
- Fundamentalista de ST Voyager.



Polemica en /var - Youtube, Spotify, iTunes, licuadoras, Etc...



Women Who Code: Buenos Aires



Glosario:

Aplicación/Software: Program or group of programs designed for end users.

Servicio/API: Application programming interface, conjunto de funciones y procedimientos para ser utilizado por otro software como una capa de abstracción.

Deployar: Todas las actividades que hacen que un sistema de software esté disponible para su uso.

Dev: Mostly a Developer, developing developed thing.

Ops: Mostly administrating, enforcing and maintaining the infra.

Seguro algo que me estoy olvidando: Eso que me olvidé. PREGUNTENLON. Posta.

Automagicamente: Es automatico, pero no queremos saber bien cómo.



¿Con quienes interactuamos?

Sysadmins: Administradores de Sistemas clásicos.

DevOps: Mal llamado “DevOps” el puesto. Administración de Sistemas con automatizaciones y management de todo el ciclo.

Eng Prod/CICD: Ingenieros de Productividad. Desarrollo de las “Pipelines” e “Integraciones”.

SRE: Site Reliability Engineer. Google nos inventó más responsabilidades.

“La vida de le SRE”



Las #OnCallSelfie



Yo.



Jorge Abreu



@ar_jorge1987



In [#oncallselfie](#) since 5:50 am...

[Traducir Tweet](#)



6:38 a. m. · 12 ene. 2017 · [Twitter for Android](#)



¿Donde corre mi aplicación?

IaaS: Imaginate armar un Datacenter lleno de servidores “virtual”.

(AWS, Azure, Alibaba, GCloud)

PaaS: Instalar y administrar DBs es heavy, prefiero pagar y usar.
(RDS en AWS, SQL Database en Azure, Cloud SQL en Gcloud)


SaaS: Dame la aplicación ya funcionando directamente.
(GitHub, Gitlab, Trello, Office 365, Google Apps)

On Premise: Baremetal, armar el datacenter fisico. (Casi siempre)
(Lista de precios de Servidores y Routers por DM)

Serverless: Publicidad engañosa. Script As A Service.
(Lambda en AWS, Functions en Azure, Cloud Functions en Gcloud)



IaaS

 Services ▾ Resource Groups ▾ ★


AWS Management Console


AWS services


Find Services


You can enter names, keywords or acronyms.

Recently visited services

 [VPC](#)

 [EC2](#)

 [RDS](#)

 [Billing](#)


All services

Build a solution

Get started with simple wizards and automated workflows.


Launch a virtual machine

With EC2
2-3 minutes




Build a web app

With Elastic Beanstalk
6 minutes




Build using virtual servers

With Lightsail
1-2 minutes



Connect an IoT device

With AWS IoT
5 minutes



Start a development project

With CodeStar
5 minutes

Register a domain

With Route 53
3 minutes

Deploy a serverless microservice

With Lambda, API Gateway
2 minutes

Host a static web app

With AWS Amplify Console
5 minutes

The screenshot displays the AWS VPC Dashboard. On the left, a navigation menu lists various VPC resources. The main area shows a table of subnets. Below the table, the details for the selected subnet, 'subnet-subnet-2b190e5d', are shown under the 'Description' tab.



Subnets Table:

Name	Subnet ID	State	VPC	IPv4 CIDR	Available IPv4	IPv6 CIDR	Availability Zone	Availability Zone ID	Route table	Network ACL
subnet-subnet-2b190e5d	subnet-subnet-2b190e5d	available	vpc-504bce37	172.31.0.0/20	4091	-	us-east-1c	use1-az4	rtb-85f7f9e2	acl-abcca2cc
subnet-6c157b09	subnet-6c157b09	available	vpc-504bce37	172.31.64.0/20	4091	-	us-east-1a	use1-az1	rtb-85f7f9e2	acl-abcca2cc
subnet-8a655eb7	subnet-8a655eb7	available	vpc-504bce37	172.31.32.0/20	4091	-	us-east-1e	use1-az3	rtb-85f7f9e2	acl-abcca2cc
subnet-98e4c3b2	subnet-98e4c3b2	available	vpc-504bce37	172.31.48.0/20	4091	-	us-east-1b	use1-az2	rtb-85f7f9e2	acl-abcca2cc
subnet-e6ddfcbe	subnet-e6ddfcbe	available	vpc-504bce37	172.31.16.0/20	4091	-	us-east-1d	use1-az6	rtb-85f7f9e2	acl-abcca2cc
subnet-ed1298e1	subnet-ed1298e1	available	vpc-504bce37	172.31.80.0/20	4091	-	us-east-1f	use1-az5	rtb-85f7f9e2	acl-abcca2cc

Subnet: subnet-subnet-2b190e5d Details:

Subnet ID	subnet-subnet-2b190e5d	State	available
VPC	vpc-504bce37	IPv4 CIDR	172.31.0.0/20
Available IPv4 Addresses	4091	IPv6 CIDR	-
Availability Zone	us-east-1c (use1-az4)	Route Table	rtb-85f7f9e2
Network ACL	acl-abcca2cc	Default subnet	Yes
Auto-assign public IPv4 address	Yes	Auto-assign IPv6 address	No
Owner	583159184211		

IaaS

 Services ▾ Resource Groups ▾ 


1. Choose AMI2. Choose Instance Type3. Configure Instance4. Add Storage5. Add Tags6. Configure Security Group7. Review

Step 7: Review Instance Launch

Please review your instance launch details. You can go back to edit changes for each section. Click **Launch** to assign a key pair to your instance and complete the launch process.

▼

AMI Details

**Ubuntu Server 18.04 LTS (HVM), SSD Volume Type - ami-07d0cf3af28718ef8**

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: ebsVirtualization type: hvm

▼

Instance Type

Instance Type	ECUs	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
t2.micro	Variable	1	1	EBS only	-	Low to Moderate

▼

Security Groups

Security group name

launch-wizard-2

Description

launch-wizard-2 created 2019-09-30T22:15:44.416-03:00

Type ⓘ	Protocol ⓘ	Port Range ⓘ	Source ⓘ	Description ⓘ
This security group has no rules				

PaaS

aws

Services

Resource Groups

★

☰

Create database


Choose a database creation method [Info](#)


☒ Standard Create
You set all of the configuration options, including ones for availability, security, backups, and maintenance.


☐ Easy Create
Use recommended best-practice configurations. Some configuration options can be changed after the database is created.


Engine options


Engine type [Info](#)


☐ Amazon Aurora


☒ MySQL


☐ MariaDB


☐ PostgreSQL


☐ Oracle


☐ Microsoft SQL Server


Edition
☒ MySQL Community

Version [Info](#)
MySQL 5.7.22 ▼

Aprovecha Office al máximo con Office 365

Para empresas

Office 365 Empresa

\$ 506,80 por usuario al mes

(suscripción anual)

El precio no incluye impuestos.

[Comprar ahora](#)

Lo mejor para empresas que necesitan aplicaciones de Office, además de almacenamiento y uso compartido de archivos en la nube en PC, Mac o celular. Correo electrónico de categoría empresarial no incluido.

Aplicaciones de Office incluidas



Outlook



Word



Excel



PowerPoint



Access (solo PC)

Servicios incluidos



OneDrive

Office 365 Empresa Premium

\$ 767,90 por usuario al mes

(suscripción anual)

El precio no incluye impuestos.

[Comprar ahora](#)

Lo mejor para empresas que necesitan correo electrónico empresarial, aplicaciones de Office y otros servicios empresariales en PC, Mac o celular.

Aplicaciones de Office incluidas



Outlook



Word



Excel



PowerPoint



Access (solo PC)

Servicios incluidos



Exchange



OneDrive



SharePoint



Teams

Office 365 Empresa Essentials

\$ 307,20 por usuario al mes

(suscripción anual)

El precio no incluye impuestos.

[Comprar ahora](#)

Lo mejor para empresas que necesitan correo electrónico empresarial y otros servicios empresariales en PC, Mac o celular. Versiones de escritorio de aplicaciones de Office no incluidas.

Aplicaciones de Office incluidas

(Solo las versiones para móviles y web) ¹

Servicios incluidos



Exchange



OneDrive



SharePoint



Teams

On Premise (Casi siempre)



Serverless

AWS Lambda

lets you run code without thinking about servers.

You pay only for the compute time that you consume — there is no charge when your code is not running. With Lambda, you can run code for virtually any type of application or backend service, all with zero administration.

Get started

Author a Lambda function from scratch, or choose from one of many preconfigured examples.

[Create a function](#)

How it works

[Run](#)[Next: Lambda responds to events](#)

```
1 exports.handler = (event, context, callback) => {  
2   // Succeed with the string "Hello world!"  
3   callback(null, 'Hello world!');  
4 };
```

Just write the code

Above is a simple Node.js Lambda function. Try changing callback values and then run the function before going to the next step.

Pricing and costs (US)

First 1M requests / month	Free
First 400K GB-sec / month	Free
Requests / month	\$0.20 per 1M
GB-sec / month	\$16.67 per 1M

[Learn more](#)




Redes Publicas - Redes Privadas - Subredes

VPC / DMZs / DCs: Nube Privada Virtual / Red perimetral es una red local que se ubica entre la red interna de una organización y una red externa, generalmente en Internet..

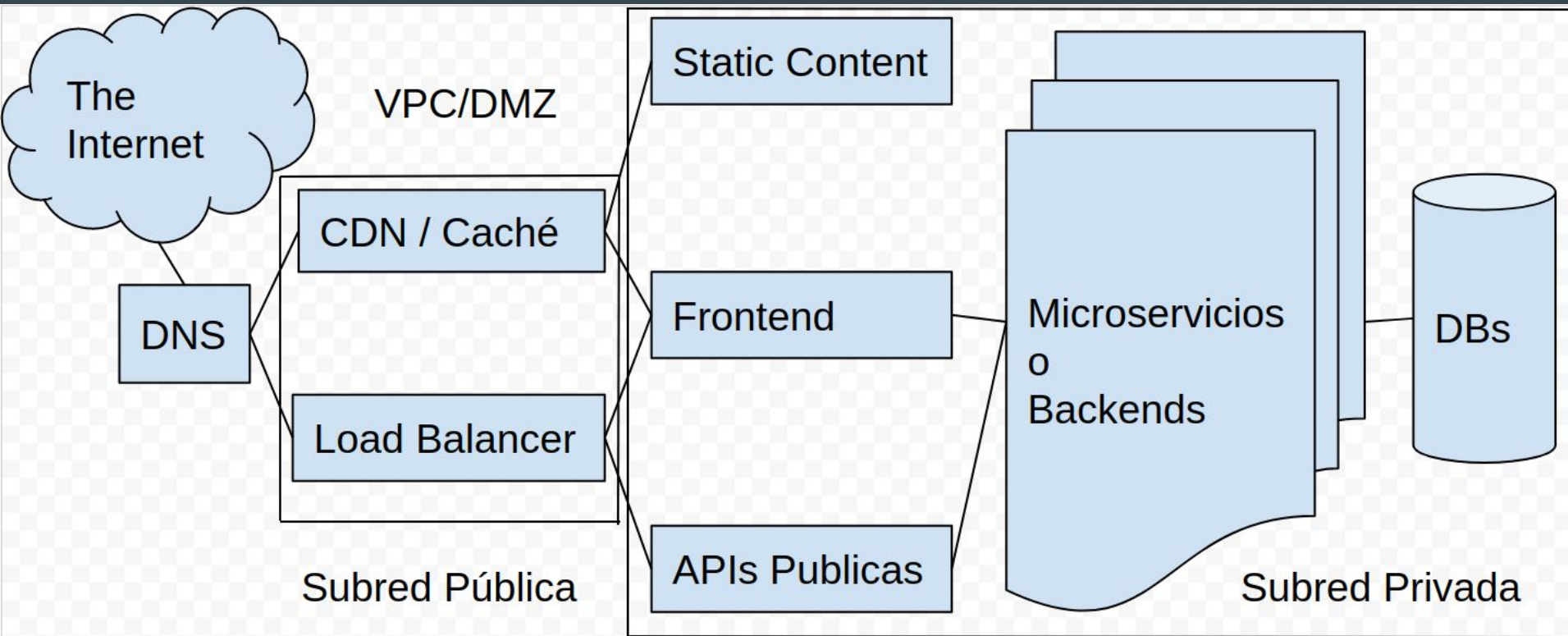
Public Subnet: Red que permite las conexiones DESDE internet.

Private Subnet: Red que solo permite la SALIDA hacia internet, pero solo entradas locales.

A woman with red hair, wearing a red long-sleeved top and a grey vest, stands behind a clear acrylic podium. The podium has a microphone and the text "REYNHOLM INDUSTRIES" on it. Behind her is a blue wall with a large white Facebook logo and the text "M INDUSTRIES".

*Ladies and gentlemen, I'd like to present
to you - the Internet!*

Arquitecturas Clásicas (Despues vemos en detalle)

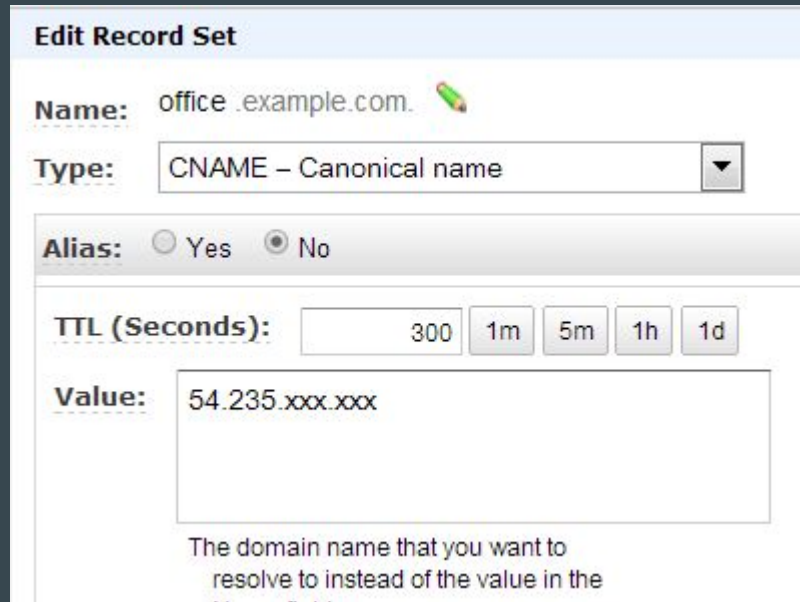


I COULD TELL YOU A DNS JOKE

**BUT IT MIGHT TAKE
YOU 24 HOURS TO GET IT**

DNS

El sistema de nombres de dominio (Domain Name System o DNS, por sus siglas en inglés) es un sistema de nomenclatura jerárquico descentralizado para dispositivos conectados a redes IP como Internet o una red privada.

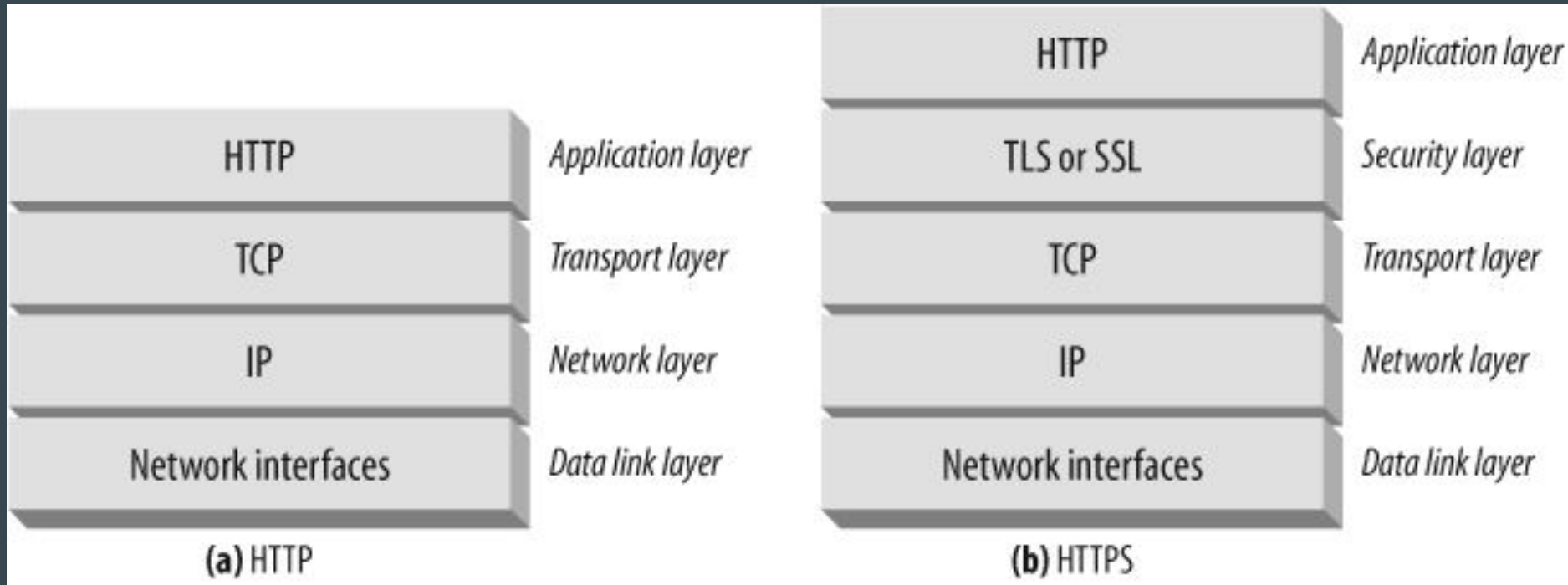


The screenshot shows a web interface titled "Edit Record Set". It contains the following fields and options:

- Name:** office.example.com. (with a pencil icon for editing)
- Type:** CNAME – Canonical name (selected from a dropdown menu)
- Alias:** Radio buttons for "Yes" and "No", with "No" selected.
- TTL (Seconds):** A text input field containing "300" and five buttons: "1m", "5m", "1h", and "1d".
- Value:** A text input field containing "54.235.xxx.xxx".

Below the "Value" field, there is a descriptive text: "The domain name that you want to resolve to instead of the value in the Name Field".

HTTP - No se asusten



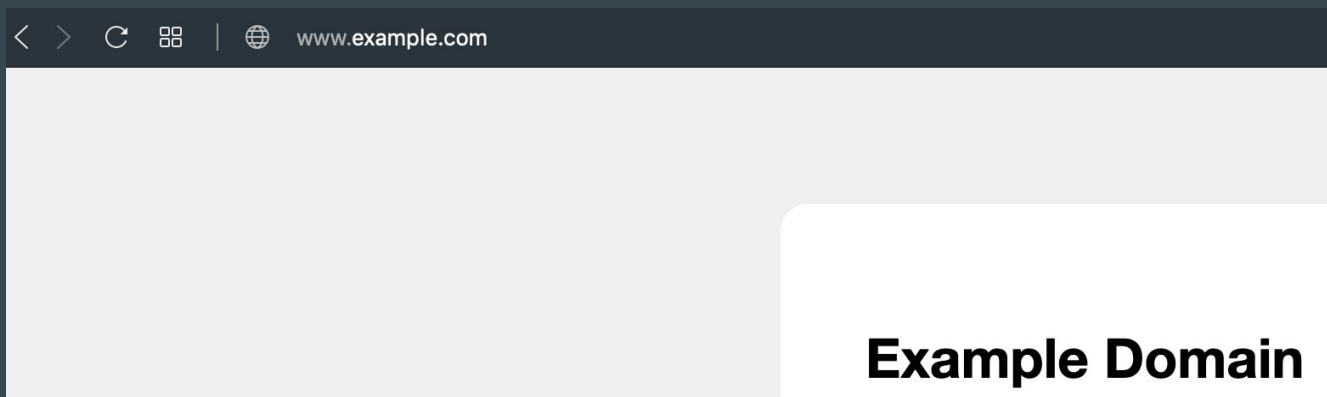
```
GET /index.html HTTP/1.1
Host: www.example.com
Referer: www.google.com
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:45.0) Gecko/20100101 Firefox/45.0
Connection: keep-alive
[Línea en blanco]
```

La respuesta del servidor está formada por encabezados seguidos del recurso solicitado, en el caso de una página web:

```
HTTP/1.1 200 OK
Date: Fri, 31 Dec 2003 23:59:59 GMT
Content-Type: text/html
Content-Length: 1221
```


```
<html lang="eo">
<head>
<meta charset="utf-8">
<title>Título del sitio</title>
</head>
<body>
<h1>Página principal de tuHost</h1>
(Contenido)
.
.
.
</body>
</html>
```


Web Server - Apache / Nginx / Etc...



```
Listen 80
<VirtualHost *:80>
    DocumentRoot "/www/example1"
    ServerName www.example.com

    # Other directives here
</VirtualHost>
```

A man with dark hair, wearing a white dress shirt and dark sunglasses, is shown in profile, looking down at a computer monitor. He has a wide, happy smile. The background is a dark, out-of-focus office setting. The image has a halftone or dithered texture.

Refresh, refresh, refresh!

¿Probaste borrando la caché?

CDN: Una red de distribución de contenidos (content delivery network en inglés) es una red superpuesta de computadoras que contienen copias de datos, colocados en varios puntos de una red con el fin de maximizar el ancho de banda.

Varnish: Es un acelerador de aplicaciones web, también conocido como caché de proxy HTTP inversa. Se instala delante de cualquier servidor HTTP y se configura para almacenar en el caché del servidor una copia del recurso solicitado.

Developer Tools

The screenshot shows the al mundo.com.ar website with the Chrome DevTools Network tab open. The website has a navigation bar with links: Alojamiento, **Vuelos**, Paquetes, Actividades, Vuelo + Alojamiento, and Seguros. The main content area is titled "Encontrá ofertas para tu viaje" and includes a search form with options for "Ida y vuelta", "Solo ida", and "Multidestino". The search form also has fields for "Salgo de", "Voy a", "Salida", "Regreso", "Personas y clase", and a "BUSCAR" button. A footer note says "Tenemos la mejor financiación para tu viaje".

The DevTools Network tab shows a list of resources. The selected resource is "styles.9ca07cad2a8e23ca6c0a.css". The details panel on the right shows the following information:

- General**
 - Request URL: https://al mundo.com.ar/homev2/statics/es-AR/styles.9ca07cad2a8e23ca6c0a.css
 - Request Method: GET
 - Status Code: 200 (from disk cache)
 - Remote Address: 104.17.110.17:443
 - Referrer Policy: no-referrer-when-downgrade
- Response Headers**
 - age: 452
 - cache-control: public, max-age=31536000
 - cf-bj: minify
 - cf-cache-status: HIT
 - cf-ray: 51f2f7d67af867bf-EZE
 - content-encoding: br
 - content-type: text/css
 - date: Wed, 02 Oct 2019 01:40:24 GMT
 - etag: W/"5d93cc3d-859"
 - expect-ct: max-age=604800, report-uri="https://report-uri.cloudflare.com/cdn-cgi/beacon/expect-ct"
 - expires: Thu, 01 Oct 2020 01:40:24 GMT
 - last-modified: Tue, 01 Oct 2019 21:59:25 GMT
 - server: cloudflare
 - service-worker-allowed: /
 - status: 200
 - vary: cf-device-type, Accept-Encoding
 - via: 1.1 varnish-v4
 - x-cache: HIT from varnish-fehome01pr

The bottom of the DevTools window shows the summary: 125 / 129 requests | 167 KB / 167 KB transferred | 3.8 MB / 3.8 MB resources.

almundo.com.ar
almundo.com.ar
styles.9ca07cad2a8e23ca6c0a.css

via: 1.1 varnish-v4

x-cache: HIT from varnish-fehome01pr

x-cache-tag: fehome

x-varnish: 102765 139130

- swiper.min.js
- am-login-guard-v3.js
- bundle.js
- rocket-loader.min.js
- ProximaNova.css
- service-worker-registration-13da4ed38baa65ed9a682b3786cce797.js
- main.4522f4949632b981956b.js
- polyfills.d0c07d735b6746691dd3.js
- runtime.26209474bfa8dc87a77c.js
- jquery-3.3.1.min.js
- ProximaNova.css
- analytics.js
- gtm.js?id=GTM-MZFT
- favicon.ico
- manifest.json
- proxima-nova-regular.woff2
- js?id=GTM-KDHQXBW&cid=1268377790.1569980425&gac=_gaexp%3DGA..

Remote Address: 104.17.95.5:443

Referrer Policy: no-referrer-when-downgrade

▼ Response Headers

access-control-allow-origin: *

age: 252802

cache-control: public, max-age=31536000

cf-cache-status: HIT

cf-ray: 51f2f7d6c9d66813-EZE

content-encoding: gzip

content-type: application/javascript

date: Wed, 02 Oct 2019 01:40:24 GMT

etag: W/"5d8e276c-1df6f"

expect-ct: max-age=604800, report-uri="https://re

expires: Thu, 01 Oct 2020 01:40:24 GMT

last-modified: Fri, 27 Sep 2019 15:14:52 GMT

server: cloudflare

IT'S IN...

THE CLOUD

¿Sobre qué estamos corriendo?

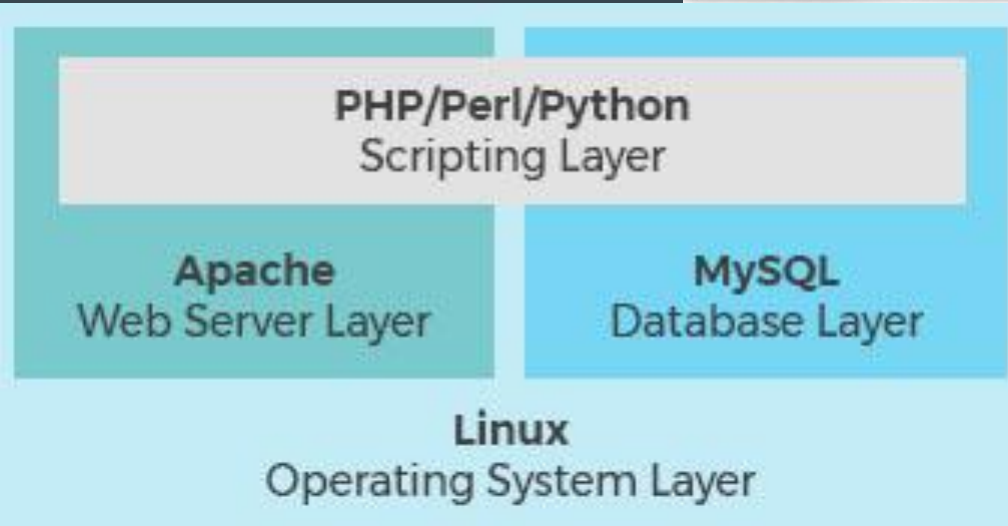
Bare metal: Servidor físico, en la empresa misma u otra locación. Uno o más servicios.

Máquinas Virtuales: Servidor virtual, en la empresa misma u otra locación. Uno o más servicios.

Containers: Minima unidad. El más conocido: Docker

Containers Orquestados: Containers distribuidos en varios nodos con diversos servicios que se comunican entre sí.

Bare metal / Virtual Machine



Containers

```
root@junta-online:~# docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
54eea5d6ce64	http_nginx	"docker-php-entrypoi..."	2 days ago	Up 2 days	443/tcp, 9000/tcp, 0.0.0.0:8100->80/tcp	http-nginx
886a8f9e26ef	linky_lucene	"/entrypoint.sh"	3 days ago	Up 3 days		linky-lucene
97ea5b0a6136	linky_web	"node -r babel-regis..."	3 days ago	Up 3 days	0.0.0.0:8096->8080/tcp	linky-node
94002ad77cea	couchdb:1.7	"tini -- /docker-ent..."	3 days ago	Up 3 days	5984/tcp	linky-couchdb
d591accdc088	cyc_tomcat	"catalina.sh run"	3 days ago	Up 3 days	0.0.0.0:8099->8080/tcp	cyc-tomcat
15479b95bf62	cyc_engine	". /run.sh"	3 days ago	Up 3 days	8999/tcp	cyc-engine
73d4e9686d82	couchdb:1.7	"tini -- /docker-ent..."	3 days ago	Up 3 days	5984/tcp	cyc-couchdb
c2c005e0a799	toldyouso_tomcat	"catalina.sh run"	4 days ago	Up 4 days	0.0.0.0:8091->8080/tcp	toldyouso-tomcat
3d66cc05597c	citybuilder_web	"node ./startServer..."	5 days ago	Up 5 days	0.0.0.0:8090->8080/tcp	citybuilder-node
b6696a9715ff	oglimmer/pouchdb:latest	". /node_modules/.bin..."	5 days ago	Up 5 days		citybuilder-pouchdb
5072930830e5	cardgameassistance_tomcat	"catalina.sh run"	9 days ago	Up 9 days	0.0.0.0:8095->8080/tcp	cardgameassistance-tomcat
df7c71e32de7	junta_tomcat	"catalina.sh run"	9 days ago	Up 9 days	0.0.0.0:8097->8080/tcp	junta-tomcat
b120e20c64e3	ggo_tomcat	"catalina.sh run"	9 days ago	Up 9 days	0.0.0.0:8094->8080/tcp	ggo-tomcat
a5c506d950c3	mysql:5	"docker-entrypoint.s..."	9 days ago	Up 9 days	3306/tcp, 33060/tcp	junta-mysql
728dc86455da	couchdb:1.7	"tini -- /docker-ent..."	9 days ago	Up 9 days	5984/tcp	cardgameassistance-couchdb
a69ebe5b4d7c	mysql:5	"docker-entrypoint.s..."	9 days ago	Up 9 days	0.0.0.0:3306->3306/tcp, 33060/tcp	lunchy-mysql
c24969b85121	lunchy_tomcat	"catalina.sh run"	9 days ago	Up 9 days	0.0.0.0:8098->8080/tcp	lunchy-tomcat
827e2c78125c	scg_tomcat	"catalina.sh run"	9 days ago	Up 9 days	0.0.0.0:8093->8080/tcp	scg-tomcat
67eb556d48eb	couchdb:1.7	"tini -- /docker-ent..."	9 days ago	Up 9 days	5984/tcp	toldyouso-couchdb
a255eee8580b	yatdg_tomcat	"catalina.sh run"	9 days ago	Up 9 days	0.0.0.0:8092->8080/tcp	yatdg-tomcat

```
root@junta-online:~#
```

Containers Orquestados - DCOS/Kubernetes/ECS/EKS/Etc...

The screenshot shows the DC/OS web interface. The browser tabs include 'DC/OS' and '(3) Exhibitor'. The address bar shows the URL: `m1.dcos/#/services/detail/%2Fpulsar%2Fbrokers%2Fbroker/tasks?_k=j77p6b`. The left sidebar contains navigation links: 'dcos-vagrant' (with email 'zhajia03@gmail.com'), 'Dashboard', 'Services' (highlighted), 'Jobs', 'Catalog', and 'RESOURCES' (with 'Nodes'). The main content area shows the breadcrumb path: `... > brokers > broker Running (3)`. Below this are tabs for 'Instances', 'Configuration', and 'Debug'. A message states 'Showing 3 of 11 tasks' with a '(Clear)' link. A filter section shows 'ALL 11', 'ACTIVE 3' (selected), and 'COMPLETED 8'. A table lists the active tasks:

<input type="checkbox"/>	ID	NAME	HOST	STATUS	HEALTH	
<input type="checkbox"/>	pulsar_brokers_broker.391abf28-dc09-1...	broker....	192.168.65.121	Running	●	
<input type="checkbox"/>	pulsar_brokers_broker.391e68ae-dc09-1...	broker....	192.168.65.111	Running	●	
<input type="checkbox"/>	pulsar_brokers_broker.3921c413-dc09-1...	broker....	192.168.65.131	Running	●	

Kathryn Janeway (Me as a Starfleet Captain)



Deployé, a veces carga una cosa, a veces otra.

Load Balancers: Un balanceador de carga actúa como único punto de contacto para los clientes. Los clientes envía las solicitudes al balanceador de carga y este se las envía a los destinos.

Haproxy en On Premise / ALB,NLB en AWS

Register and deregister targets



Registered targets

To deregister instances, select one or more registered instances and then click Remove.

Remove

<input type="checkbox"/>	Instance	Name	Port	State	Security groups	Zone
<input type="checkbox"/>	i-0d90c9c4fe3dffbb8	Main	80	● running	MyWebDMZ	us-east-1b

Instances

To register additional instances, select one or more running instances, specify a port, and then click Add. The default port is the port specified for the target group. If the instance is already registered on the specified port, you must specify a different port.

Add to registered

on port

80

Search Instances



<input type="checkbox"/>	Instance	Name	State	Security groups	Zone	Subnet ID	Subnet CIDR
<input type="checkbox"/>	i-04c4fcc4f4f73a1d6	Blog	● running	MyWebDMZ	us-east-1b	subnet-263ffa09	172.31.80.0/20
<input checked="" type="checkbox"/>	i-0d90c9c4fe3dffbb8	Main	● running	MyWebDMZ	us-east-1b	subnet-263ffa09	172.31.80.0/20

Cancel

Save



Entorno DevOps con CI/CD

CI: Continuous integration. Entendemos por integración la compilación y ejecución de pruebas de todo un proyecto.

CD: Continuous delivery. Se produce software en ciclos cortos, asegurando que el software puede ser liberado en cualquier momento, de forma confiable.

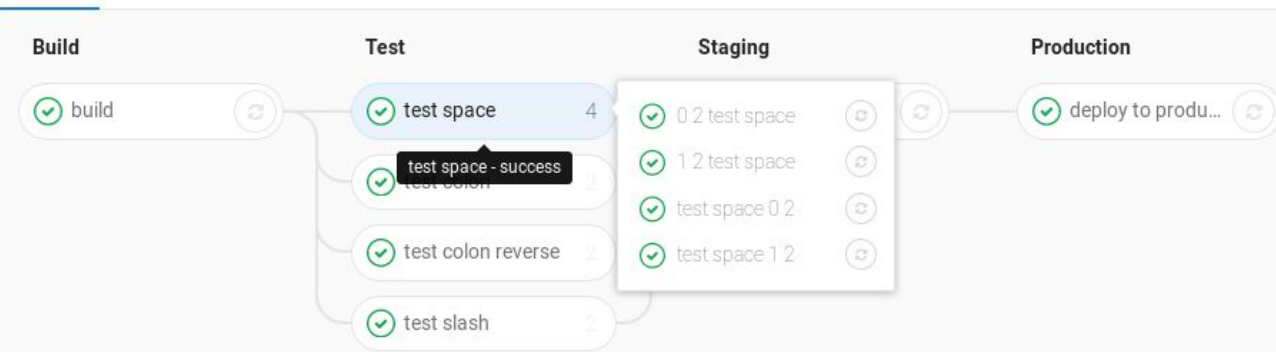
El otro CD: Continuous deployment. si el código nuevo pasa todas las pruebas automatizadas en el ambiente de test, entonces se termina pasando directamente a producción.

Jenkins / Gitlab / Otros.

Average stage times:
(Average full run time: ~5s)

	build	test: integration-& quality	test: functional	test: load-& security	approval	deploy: prod
#17 Sep 22 15:05 No Changes Retry Download	538ms	10s	10ms	8ms	72ms (passed for 7s)	4ms
#16 Sep 22 15:04 No Changes Retry Download	479ms	6s	9ms	9ms	74ms (passed for 6s)	5ms
#15 Sep 22 15:03 No Changes Retry Download	922ms	6s	10ms	9ms Failed		

Pipeline Jobs 14



Pipeline

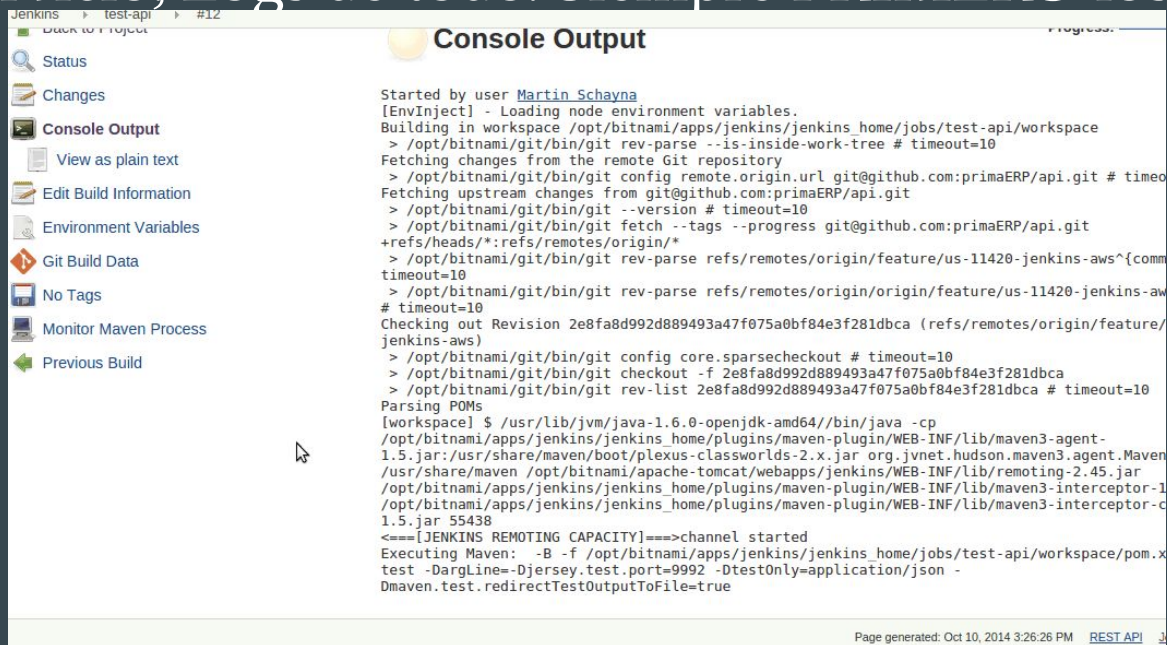
```
pipeline {  
    agent any  
    stages {  
        stage ('build') {  
            ...  
        }  
        stage ('test: integration-&-quality') {  
            ...  
        }  
        stage ('test: functional') {  
            ...  
        }  
        stage ('test: load-&-security') {  
            ...  
        }  
        stage ('approval') {  
            ...  
        }  
        stage ('deploy:prod') {  
            ...  
        }  
    }  
}
```



I'M TRYING

Falló el Deploy

Logs: Logs del sistema de CI/CD, Logs del sistema donde corre nuestro servicio, Logs de todo. Siempre PRIMERO los logs.



The screenshot shows the Jenkins web interface with the 'Console Output' tab selected. The output log displays the following sequence of events:

```
Started by user Martin Schayna
[EnvInject] - Loading node environment variables.
Building in workspace /opt/bitnami/apps/jenkins/jenkins_home/jobs/test-api/workspace
> /opt/bitnami/git/bin/git rev-parse --is-inside-work-tree # timeout=10
Fetching changes from the remote Git repository
> /opt/bitnami/git/bin/git config remote.origin.url git@github.com:primaERP/api.git # timeo
Fetching upstream changes from git@github.com:primaERP/api.git
> /opt/bitnami/git/bin/git --version # timeout=10
> /opt/bitnami/git/bin/git fetch --tags --progress git@github.com:primaERP/api.git
+refs/heads/*:refs/remotes/origin/*
> /opt/bitnami/git/bin/git rev-parse refs/remotes/origin/feature/us-11420-jenkins-aws^{comm
timeout=10
> /opt/bitnami/git/bin/git rev-parse refs/remotes/origin/origin/feature/us-11420-jenkins-aw
# timeout=10
Checking out Revision 2e8fa8d992d889493a47f075a0bf84e3f281dbca (refs/remotes/origin/feature/
jenkins-aws)
> /opt/bitnami/git/bin/git config core.sparsecheckout # timeout=10
> /opt/bitnami/git/bin/git checkout -f 2e8fa8d992d889493a47f075a0bf84e3f281dbca
> /opt/bitnami/git/bin/git rev-list 2e8fa8d992d889493a47f075a0bf84e3f281dbca # timeout=10
Parsing POMs
[workspace] $ /usr/lib/jvm/java-1.6.0-openjdk-amd64/bin/java -cp
/opt/bitnami/apps/jenkins/jenkins_home/plugins/maven-plugin/WEB-INF/lib/maven3-agent-
1.5.jar:/usr/share/maven/boot/plexus-classworlds-2.x.jar org.jvnet.hudson.maven3.agent.Maven
/usr/share/maven /opt/bitnami/apache-tomcat/webapps/jenkins/WEB-INF/lib/remoting-2.45.jar
/opt/bitnami/apps/jenkins/jenkins_home/plugins/maven-plugin/WEB-INF/lib/maven3-interceptor-1
/opt/bitnami/apps/jenkins/jenkins_home/plugins/maven-plugin/WEB-INF/lib/maven3-interceptor-c
1.5.jar 55438
<====[JENKINS REMOTING CAPACITY]====>channel started
Executing Maven: -B -f /opt/bitnami/apps/jenkins/jenkins_home/jobs/test-api/workspace/pom.x
test -DargLine=-Djersey.test.port=9992 -DtestOnly=application/json -
Dmaven.test.redirectTestOutputToFile=true
```

At the bottom of the console output, it says 'Page generated: Oct 10, 2014 3:26:26 PM' and 'REST API'.

Deployó bien pero...

Healthcheck: Informs the load balancer distributing traffic to your application. Eg: connection to a database, invalid S3 credential, low disk space. Health-check endpoints are called frequently and within fixed intervals, therefore your latencies should ideally be small.

Monitoreo: NO, no es algo que tiene que mirar solo Ops. No, no es solo el healthcheck y ver si el servicio está Online.

Respuestas de Healthchecks



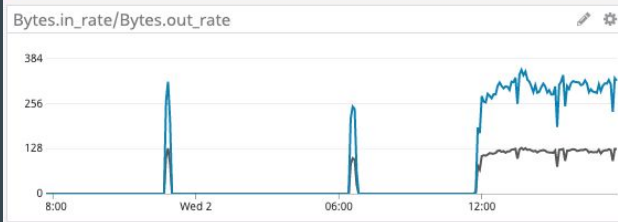
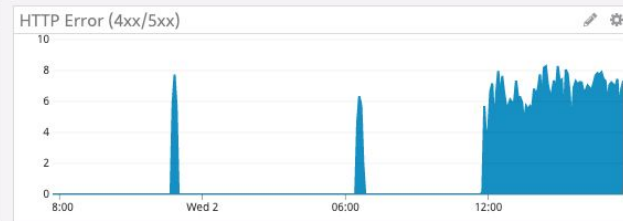
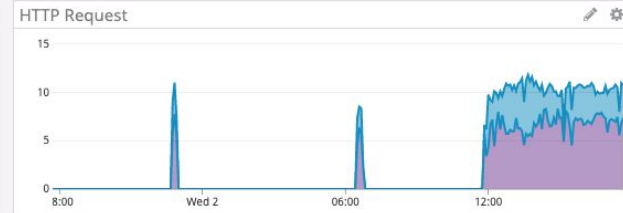
almundo.com.ar/healthcheck

```
{"uptime":166636.802}
```

In case of an error from the database, you should see the following response with the status code **503**.

```
{
  "status": "Service Unavailable",
  "errors": {
    "database": "dial tcp 127.0.0.1:3306: getsockopt: connection
refused"
  }
}
```

Monitorio - Es IM-POR-TAN-TI-SI-MO





Gracias!!!

Twitter: ar_jorge1987

¿Alguna pregunta?

Si les interesa, proponganlen temas a WWC. Yo estoy a disposición.

PD: Escuchen Polémica en /var (?)

Les espero en Nerdear.la !!!