

Road to DevOps: From SysAdmin to Cloud

Automation 101

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About Me

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rutil.io/social

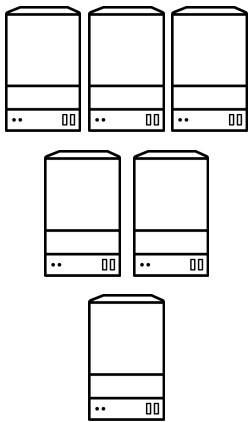


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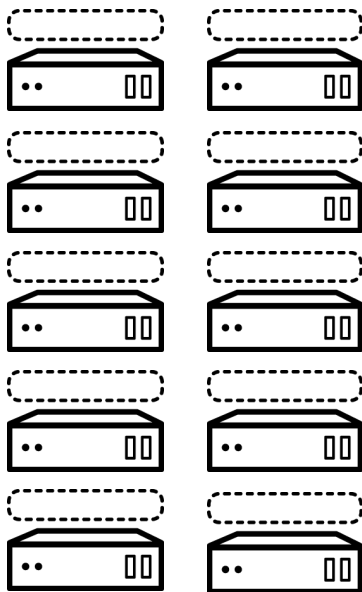
Geek by nature, Linux by choice, Fedora of course!

The time has changed

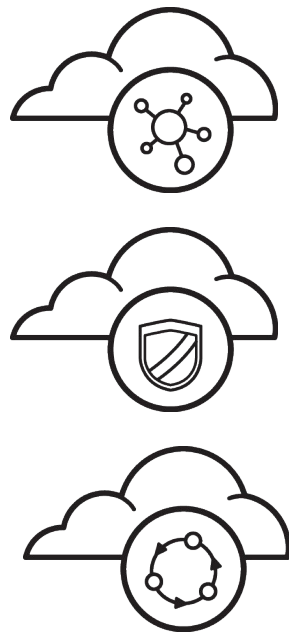
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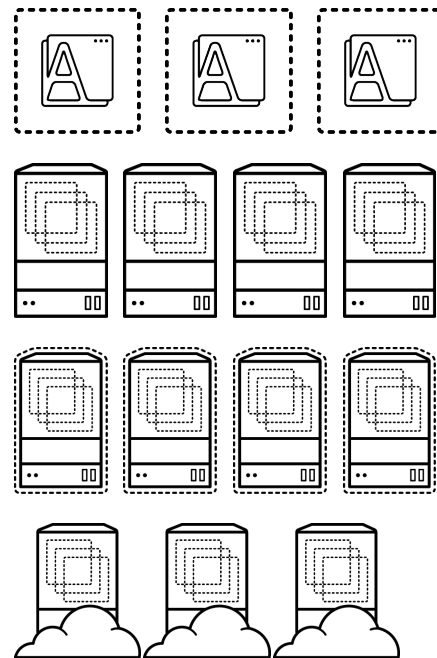
10 years ago



5 years ago



Today





... and now, we're going to the cloud

But don't worry, it's nothing that the practice can't solve



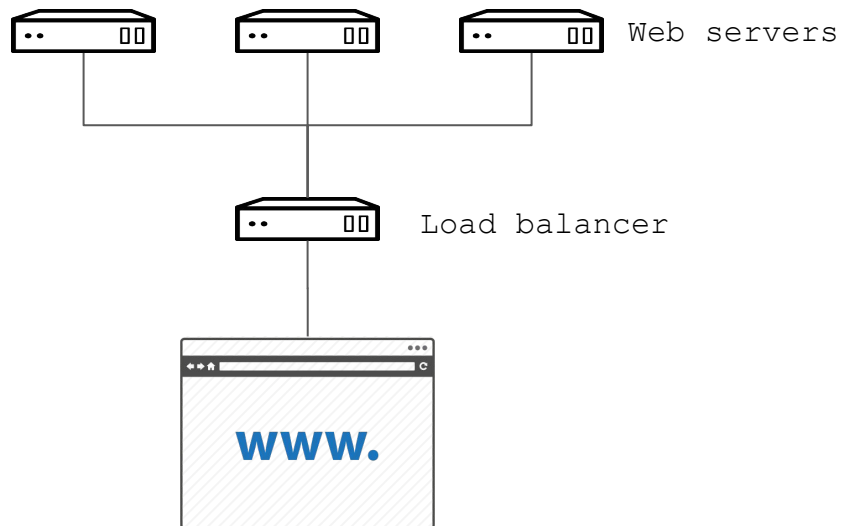
How to start?

simple

THE KISS PRINCIPLE
**KEEP
IT
SIMPLE,
STUPID**

Simplicity is the ultimate sophistication.
Leonardo Da Vinci

A simple and basic example



Prerequisites

- Management node with Ansible installed

- [Google Cloud Platform Guide](#)

- Account on [Google Cloud Platform](#)

- We must also create a pair of RSA keys:

```
$ ssh-keygen -t rsa -b 4096 -f <rsa key file>
```

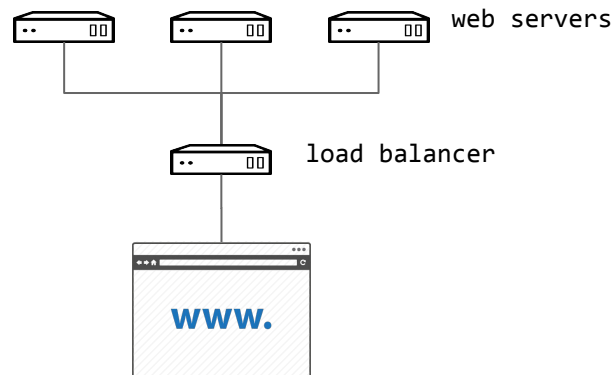
- If you use RHEL instances, you need subscribed with full support from Red Hat

- [Getting started with Red Hat Cloud Access](#)



Service: Ansible playbooks

1. The firewall rule to allow http traffic to our instances
2. Three instances based on CentOS 8, for the preparation of each instance, the ansible role **myapache** will be used
3. The load balancer, indicating the name of our backend instances



Instances: Ansible role



- Install and enable apache and firewalld
- Configure apache with a start page that shows the ip of each gce instance, for example:

```
apache_indexhtml.j2
<!-- {{ ansible_managed }} -->
<html>
<head><title>Apache is running!</title></head>
<body>
<h1>
Hello from {{ inventory_hostname }}
</h1>
</body>
</html>
```

- Open the http port (80)
- Restart apache and firewalld to confirm the configuration

Ansible role and playbooks

```
$ tree myapache/
myapache/
```

```
├── defaults
│   └── main.yml
├── handlers
│   └── main.yml
├── meta
│   └── main.yml
├── README.md
├── tasks
│   └── main.yml
├── templates
│   ├── apache_httpdconf.j2
│   └── apache_indexhtml.j2
├── tests
│   ├── inventory
│   └── test.yml
└── vars
    └── main.yml
```

7 directories, 10 files

AlexCallejas/ myapache

Simple role to install, configure and enable apache on CentOS/Fedora/RHEL for Ansible examples

1 Contributors 0 Issues 0 Stars 1 Forks



```
$ tree ansible-gce-apache-lb/
ansible-gce-apache-lb/
```

```
├── ansible.cfg
├── gce-apache.yml
├── gce-clean.yml
├── gce-lb-apache.yml
├── gce-lb.yml
├── inventory
├── LICENSE
└── README.md
```

0 directories, 8 files

AlexCallejas/ansible-gce- apache-lb

Playbooks to create simple instances of gce centos/apache with load balancing

1 Contributors 0 Issues 0 Stars 0 Forks



The main Ansible playbook

We use the following playbook to join both tasks and obtain the simple instances of GCE CentOS / Apache with load balancing:

```
gce-lb-apache.yml
```

```
---
```

```
# Playbook to create simple instances of gce centos/apache with load balancing
```

```
- import_playbook: gce-apache.yml
```

```
- import_playbook: gce-lb.yml
```

Run the playbook:

```
$ ansible-playbook gce-lb-apache.yml --key-file <Your_id_rsa_key>
```

We're ready!!



Source

- Red Hat's TAM Blog:
 - Creating a load-balanced web service on cloud with Ansible



- Other Posts:

- Opensource.com [<https://opensource.com/users/darkaxl>]
- Enable Sysadmin [<https://www.redhat.com/sysadmin/users/alex-callejas>]
- Personal Blog [<http://www.rootzilopochtli.com/>]



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- <https://www.meetup.com/es/Sysarmy-Mexico/>
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- **Fedora México**

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Gracias!

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