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NGINX AND EC2 LAUNCH TEMPLATE



Today's Takeaways

- ▶ Launching EC2 Instance
- ▶ EC2 Launch Template
- ▶ NGINX Web Server

Launching EC2

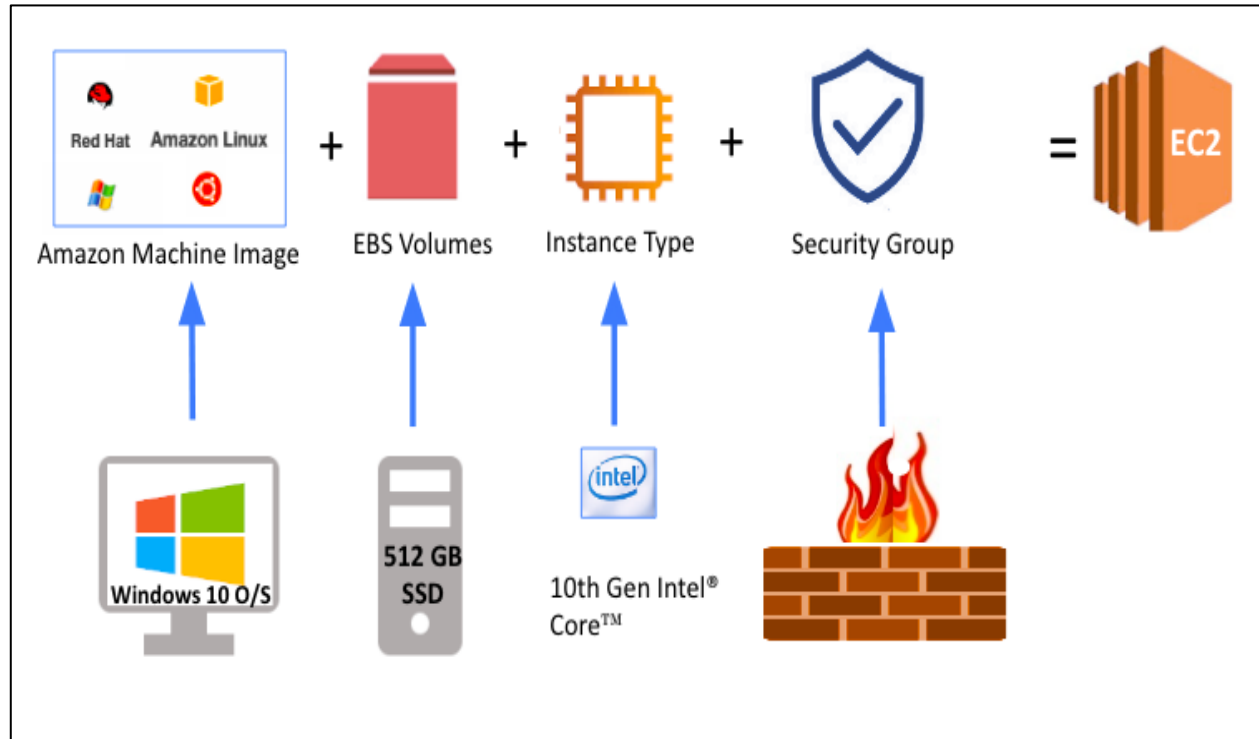


- EC2 stands for **E**lastic **C**ompute **C**loud in AWS.
- EC2 is a virtual server that is physically located within the AWS Data Center.

Launching EC2

What is EC2?

- Amazon Elastic Compute Cloud (Amazon EC2) provides scalable computing capacity in the Amazon Web Services (AWS) Cloud.
- Using Amazon EC2 eliminates the need to invest in hardware up front, so you can develop and deploy applications faster.
- We can use Amazon EC2 to launch as many or as few virtual servers as needed, configure security and networking, and manage storage.
- Amazon EC2 enables to scale up or down to handle changes in requirements or spikes in popularity, reducing your need to forecast traffic.





EC2 Launch Template

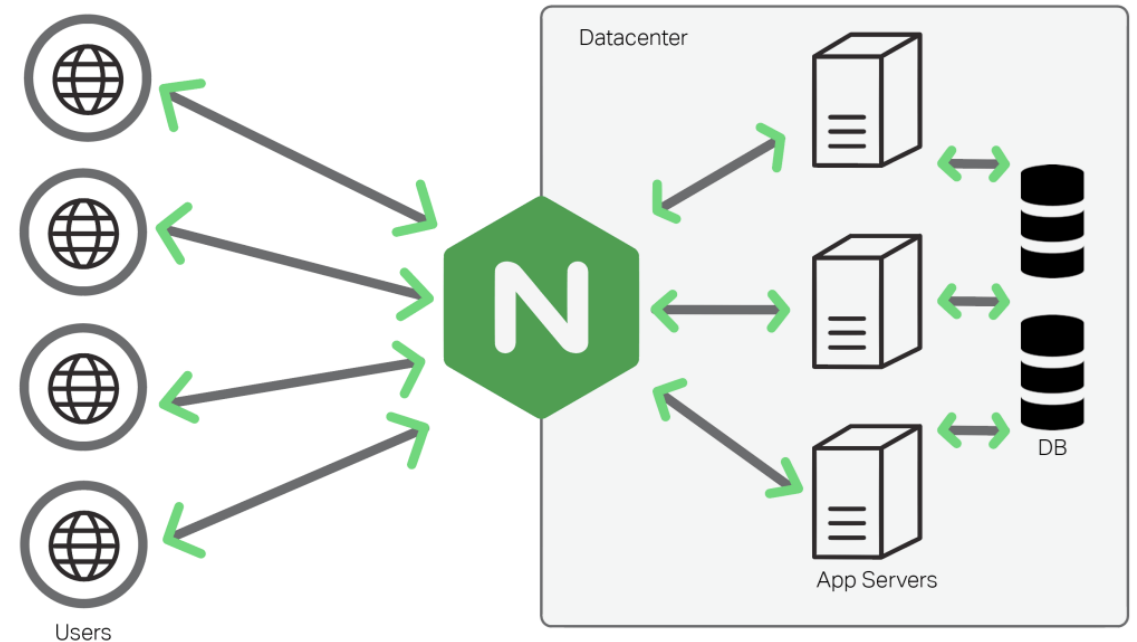


template ?

NGINX WEB SERVER

What is a Web Server? What is NGINX?

NGINX, which is pronounced as '**engine ex**,' is a widely used open-source web server software. It was a project started by Igor Sysoev in 2002. It got officially released in October 2004. It was created to solve the problem of C10k, which is defined as a challenge to manage the ten thousand connections all at the same time.







NGINX is open source software for **web serving**, reverse proxying, caching, load balancing, media streaming, and more. It started out as a web server designed for maximum performance and stability. In addition to its HTTP server capabilities, NGINX can also function as a proxy server for email (IMAP, POP3, and SMTP) and a reverse proxy and **load balancer for HTTP, TCP, and UDP servers.**

What Can NGINX Do for You?

NGINX are the best-in-class web server and application delivery solutions used by high-traffic websites such as **Dropbox, Netflix, and Zynga.** More than **350 million websites** worldwide rely on NGINX Plus and NGINX Open Source to deliver their content quickly, reliably, and securely.



Challenge of Webserver:
Parallel execution, maintaining connections to thousands of users at the same time (concurrency).



Maintains the **communication** channel between the **server** and **client**

Web-server **invokes** framework and the web-framework **figures out** what to return to the client.

Frameworks- Flask, Django...



Challenge of Framework: To ease of development, complete access to the request object, the ability to maintain some state if required and most importantly, to have a way to write all the business-level logic.



It works!

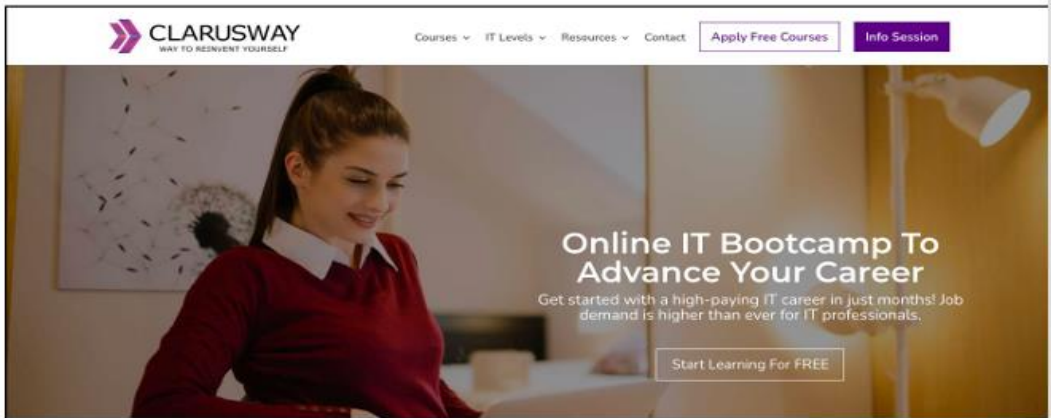
cd /var/www/html



/etc/httpd/conf.d/

/usr/share/httpd/noindex

CUSTOMIZED PAGE



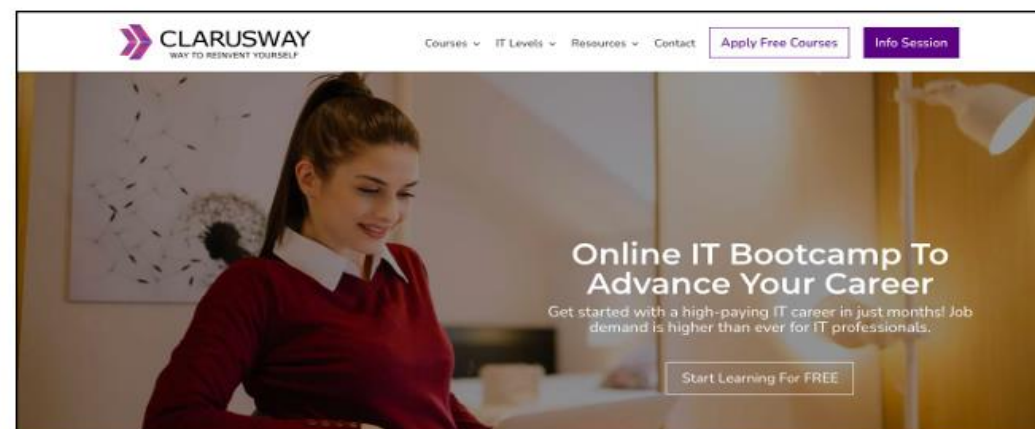


/usr/share/nginx/html

-----default (index.html)

+ ----- (new)index.html

CUSTOMIZED PAGE





It works !

/var/www/html

wget +
echo
touch

New index.html



Welcome to nginx!

Default

ou see this page, the nginx web server is successfully installed and
king. Further configuration is required.

online documentation and support please refer to nginx.org.
nmercial support is available at nginx.com.

ank you for using nginx.

/usr/share/nginx/html

1. rm Default index.html
 2. wget
or echo
or touch
- + New index.html



www.e-commerce...



DNS

Load balancer

aws

EC2

Auto Scaling





Option 1



Launch
Template



Option 2- Later



snapshot



Amazon Machine
Image (AMI)

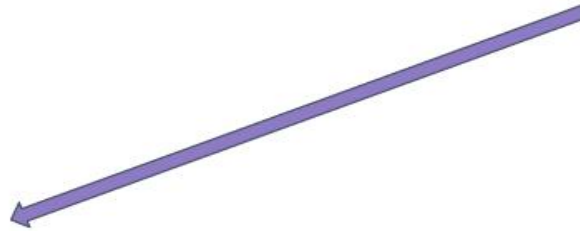
Deprecated



Launch Configuration



Version 1



Version 2

Version 3 = Version 2
user data



Launch
Template



Orijin Version



Version 1



Version 2



THANKS!

Any questions?

You can find me at:

