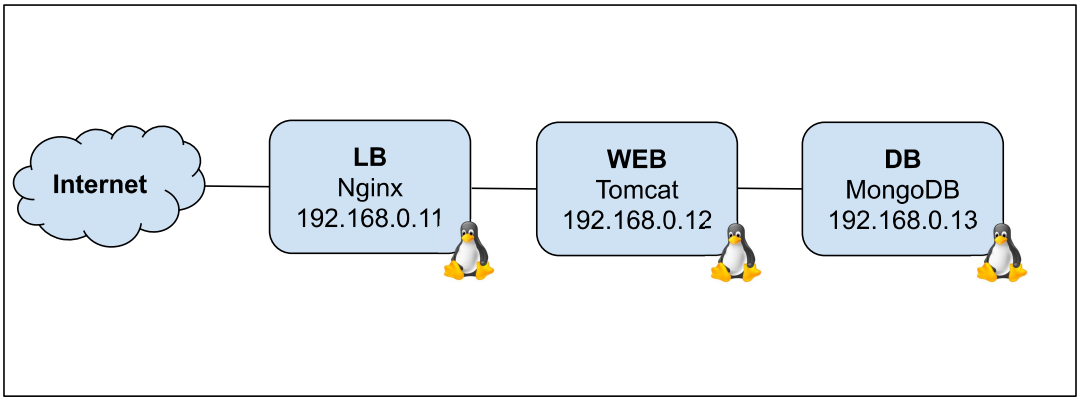
Guardicore

Three Tiered Application Assignment

In this assignment you will need to deploy and configure a three tiered application using Terraform and Ansible.



Workstation Details:

1. IP Address: 16.16.121.38
2. User: ubuntu
3. Password: VJj2AuErFEqWB5Q#$

AWS Details:

1. Account ID: 295196550967 (https://295196550967.signin.aws.amazon.com/console)
2. IAM user name: eliran.ben-maor
3. Password: 6$K2xifUT&uBny$87
4. Access key ID: AKIAUJOYV44352A2KMXG
5. Access key secret: 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
6. Region: us-west-1 (**Note - There are no permissions to other regions**)

Assignment Instructions:

1. Download Terraform to the workstation (see details above)
2. Using the AWS account details provided (see details above), write a Terraform configuration file OR use AWS Console to create the following:
    a. A VPC for the application servers
    b. A Subnet for the application servers

   c. Security Groups, to later apply to the application servers, that will enforce the following network segmentation:
      i. Allow from the workstation to the LB server on port 80
      ii. Allow from the workstation to all the servers on port 22
      iii. Allow any internal communication in the subnet
      iv. Block everything else
   d. An internet gateway to allow assignment servers to access the internet.
3. Using the AWS account details provided, write a Terraform configuration file to do the following:
   a. Deploy three instances of type t2.micro on AWS EC2: (ubuntu/images/hvm-ssd/ubuntu-xenial-16.04-amd64-server) - Search community
   b.
      i. An ubuntu 16 server named LB, with the IP 192.168.0.11, and a public IP address.
      ii. An ubuntu 16 server named WEB, with the IP 192.168.0.12, and a public IP address.
      iii. An ubuntu 16 server named DB, with the IP 192.168.0.13, and a public IP address.
   c. Do not deploy more than 3 instances at the same time.
4. Apply the Terraform configuration, and validate that the three servers were created successfully.
5. Edit the provided ansible inventory file:
   a. Place the public IPs of the servers in the right place (look for <PUBLIC_IP>)
   b. Place the path of the key file
6. Run the provided ansible playbook to configure the three tiered application. If issues arise, fix them.
7. Browse to the url http://<LB-PUBLIC-IP>/Test/ of the LB server. If all the above steps were successful, you should get the following html page presented:

8. Share all the files that should be used to run your code (as an attachment or in a github repository). Please do not publicly share any passwords or keys.