IT3061 – Massive Data Processing and Cloud Computing
Year 3, Semester 2
Practical Sheet 6

AWS Elastic Load Balancing

Elastic Load Balancing automatically distributes your incoming traffic across multiple targets, such as EC2 instances, containers, and IP addresses, in one or more Availability Zones. It monitors the health of its registered targets, and routes traffic only to the healthy targets. Elastic Load Balancing scales your load balancer capacity automatically in response to changes in incoming traffic.

https://docs.aws.amazon.com/elasticloadbalancing/latest/userguide/what-is-load-balancing.html

Elastic Load Balancing supports the following load balancers: Application Load Balancers, Network Load Balancers, Gateway Load Balancers, and Classic Load Balancers. You can select the type of load balancer that best suits your needs.

https://docs.aws.amazon.com/AmazonECS/latest/developerguide/load-balancer-types.html

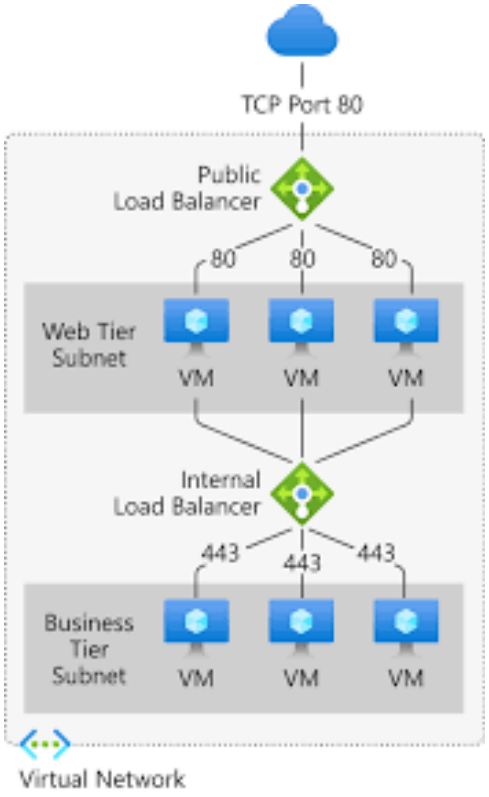
Use the following link to learn about creating an Application Load balancer.

https://docs.aws.amazon.com/elasticloadbalancing/latest/application/application-load-balancer-getting-started.html

Microsoft Azure Load Balancer

The Azure Load Balancer operates at the Transport Layer, which is layer 4 of the OSI model. When you place a load balancer in front of an application running on VMs or on a scale set, the load balancer serves as the single point of access for that application. As users hit the load balancer to access the application, the load balancer balances that incoming traffic across however many backend VMs or resources you've deployed in the backend pool.

Azure load balancers come in two varieties. There are public load balancers and internal load balancers, which are also known as private load balancers.



Use the following link to learn how to create a public load balancer to load balance VMs using the Azure portal.

https://docs.microsoft.com/en-us/azure/load-balancer/quickstart-load-balancer-standard-public-portal

Use the following link to learn how to create an internal load balancer to load balance VMs using the Azure portal.

https://docs.microsoft.com/en-us/azure/load-balancer/quickstart-load-balancer-standard-internal-portal