AWS section 9 - ALB

This is Application load balancer. It is layer seven load balancer that is HTTP. **It allows us to route the traffic to the multiple instances and also allows us to route the traffic across multiple applications on same machine using containers.**

This supports for HTTP2 and Web Sockets. And also we can redirect the traffic from http to https at the load balancer level.

We can route the traffic depending on the url. This is called as the route routing. For example: example.com/user and example.com/reports

This two are different paths and we can redirect the requests to two different target groups.

Comparison of Application load balancer to the Classic load balancer:

If we have multiple applications then we need one classic load balancer per application and in case of the application load balancer we can have just one application load balancer over in-front of all the application.

So the load balancer is the public facing. Ec2 instances dont know the IP addresses of the user which are accessing the EC2 instances. Hence, There is one way to know the IP address of the user accessing the EC2 instance.

Every time when the Load balancer access transfers the request to the EC2 instance so the EC2 instance knows the private IP of the load balancer. Along with the request there is a header called as X-forwarded-for this carries the IP address of the user as well. This is because of which the EC2 instance knows the IP address of the user.

We can also get the port and protocol from the header. The header which gives the port is called as X-Forwaded-Port and the one which gives us the protocol is called as X-forwarded-proto.