

# **Types of Load Balancer**

# 1

## **Cloud-based Load Balancer**

Cloud-based load balancers are provided as a service by cloud providers. They offer scalability, high availability, and automated load-balancing capabilities.

These load balancers are well-suited for cloud-native applications deployed in cloud environments.



# 2

## **DNS Load Balancing**

DNS load balancing distributes traffic across multiple servers by manipulating DNS responses.

It maps domain names to multiple IP addresses, allowing DNS servers to direct users to different servers based on load or proximity.

DNS load balancing can improve availability and performance.

# 3 **Layer 4 (L4) Load Balancing**

Layer 4 load balancers operate at the transport layer (TCP/UDP) of the network stack. They distribute traffic based on IP addresses and port numbers.

L4 load balancers are efficient and perform well for protocols that do not require inspecting the application layer.



# **4 Layer 7 (L7) Load Balancing**

Layer 7 load balancers operate at the application layer (HTTP/HTTPS) of the network stack. They can inspect the content of requests and distribute traffic based on application-specific rules, such as URL paths or request headers.

L7 load balancers offer advanced features like SSL termination, content-based routing, and session persistence.

# 5

## **Global Server Load Balancing (GSLB)**

GSLB load balancers distribute traffic across multiple data centers or geographical locations. They consider factors like user location, server health, and network latency to direct users to the optimal server or data center.

GSLB helps achieve high availability and global traffic optimization.