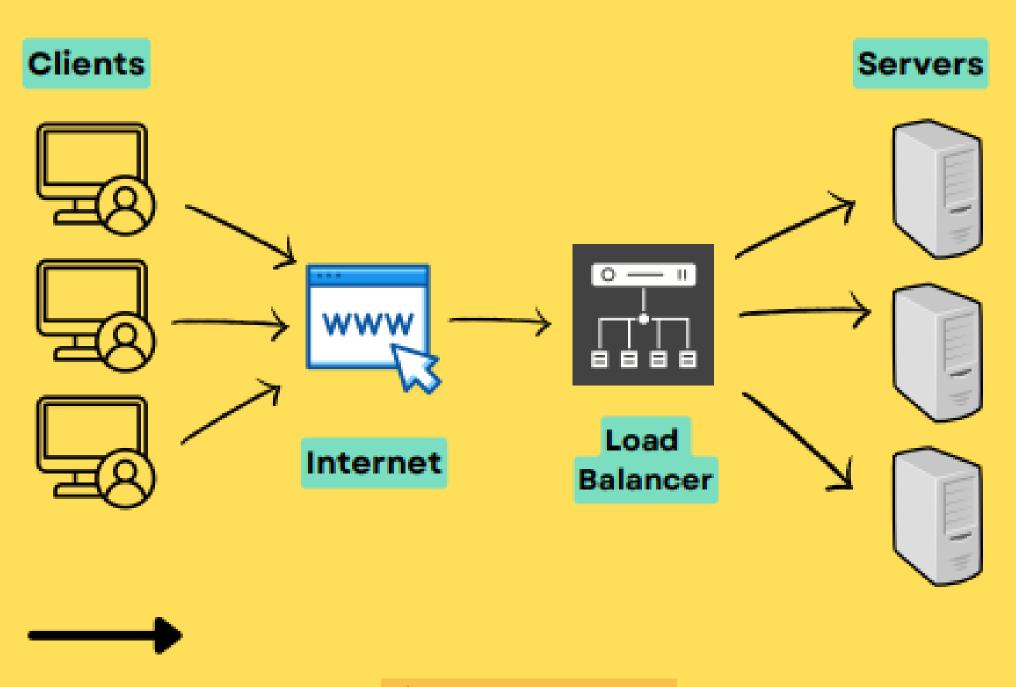
### Load Balancing Explained

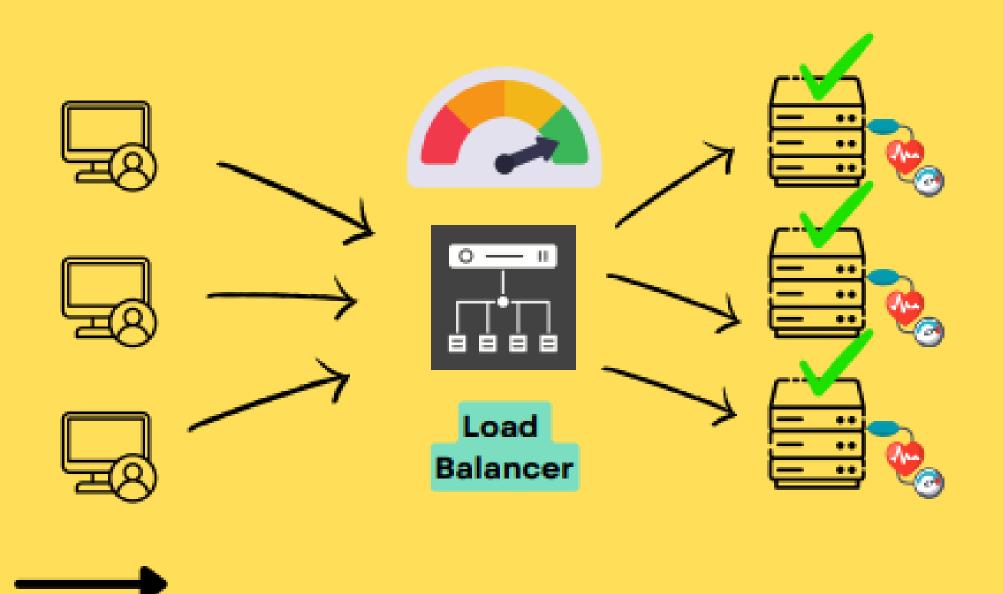


Load balancing is a process used to distribute workloads across multiple computing resources such as computers, servers and networks



#### The goal of load balancing

Is to optimize system performance by evenly distributing workloads so that no single resource becomes overloaded and slows down the system



# For example, consider a website that receives a high volume of traffic



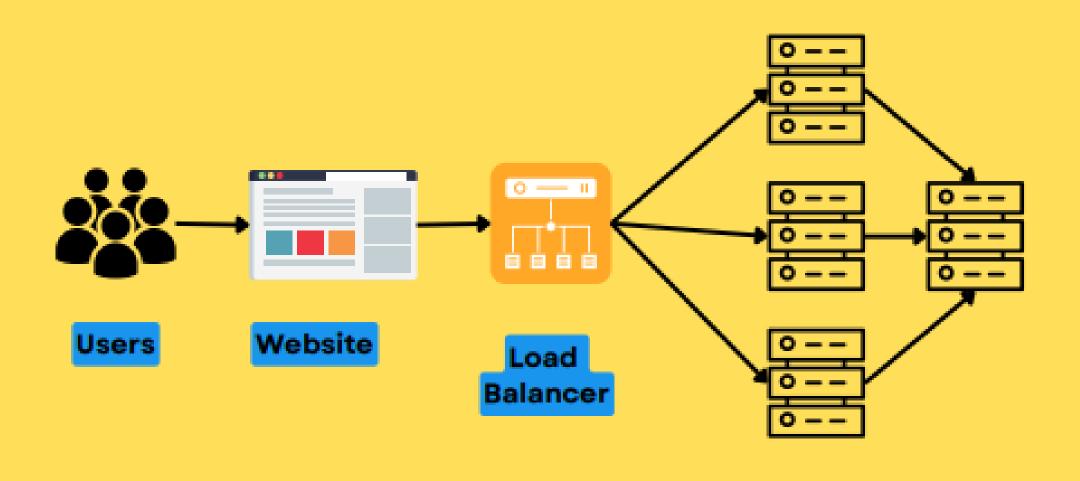
#### Without load balancing

the web server would become overwhelmed by all the requests and may crash or respond slowly to users



#### In contrast

If load balancing is used, the web server can be split into multiple smaller servers each handling part of the workload.

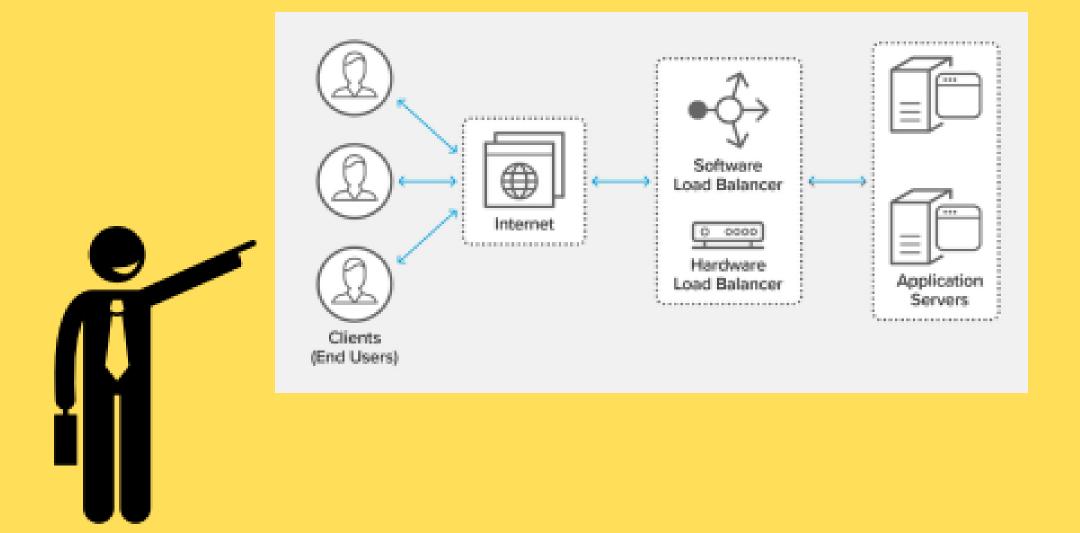


#### Load balancing can also distribute workloads across different networks or data centers.

For example, a cloud provider might use this technique



By using load balancing, organizations can improve system performance, reliability, and scalability while reducing the impact of single points of failure



In conclusion, load balancing is a powerful tool for optimizing system performance by distributing workloads across multiple computing resources.

## TONTENT











