

6 𝐋𝐨𝐚𝐝 𝐁𝐚𝐥𝐚𝐧𝐜𝐢𝐧𝐠 𝐀𝐥𝐠𝐨𝐫𝐢𝐭𝐡𝐦𝐬 𝐘𝐨𝐮 𝐌𝐮𝐬𝐭 𝐊𝐧𝐨𝐰:

1. 𝐑𝐨𝐮𝐧𝐝 𝐑𝐨𝐛𝐢𝐧
Distributes requests sequentially across servers. Simple and effective when all servers have similar capacity.
👉 Best for: Uniform workloads, evenly matched servers

2. 𝐖𝐞𝐢𝐠𝐡𝐭𝐞𝐝 𝐑𝐨𝐮𝐧𝐝 𝐑𝐨𝐛𝐢𝐧
Assigns higher “weights” to more powerful servers so they handle more requests.
👉 Best for: Servers with varying capacities

3. 𝐋𝐞𝐚𝐬𝐭 𝐂𝐨𝐧𝐧𝐞𝐜𝐭𝐢𝐨𝐧
Routes new traffic to the server with the fewest active connections. Great when connection duration varies.
👉 Best for: Stateful applications, long-lived connections

4. 𝐈𝐏/𝐔𝐑𝐋 𝐇𝐚𝐬𝐡
Uses a client’s IP or request URL to consistently route them to the same server.
👉 Best for: Session persistence, sticky sessions

5. 𝐋𝐞𝐚𝐬𝐭 𝐑𝐞𝐬𝐩𝐨𝐧𝐬𝐞 𝐓𝐢𝐦𝐞
Chooses the server with the lowest response time and the fewest active connections.
👉 Best for: Latency-sensitive systems

6. 𝐑𝐞𝐬𝐨𝐮𝐫𝐜𝐞-𝐁𝐚𝐬𝐞𝐝
Considers real-time metrics like CPU, memory, and I/O usage. Sends traffic to the healthiest server.
👉 Best for: Critical applications, environments with fluctuating loads

Which load balancing algorithm do you most often use?