

Proxies in Distributed Systems

Proxy is a component that acts as an intermediary for requests from clients seeking resources from servers. The proxy sits between the client and the server and it can be used to improve performance, security, and reliability in a network.

There are 2 types of proxies:-

1. Forward proxy -

- A forward proxy lies between client and server and acts on behalf of clients. The client makes requests to the proxy, which then forwards the request to the server and returns the response back to the client.
- Uses:-
 - a. Handles requests from multiple clients.
 - b. Control access to the Internet (Blocking access to some sites).
 - c. Anonymity of clients - Hides the client's IP address.

2. Reverse proxy -

- A reverse proxy lies between client and server and acts on behalf of servers. Clients send requests directly to the reverse proxy, which then forwards the request to the appropriate server and returns the response back to the client.
- Uses:-
 - a. Anonymity of Servers - Hides the IP of servers.
 - b. Load balancing
 - c. Improving security (preventing DDoS attack)