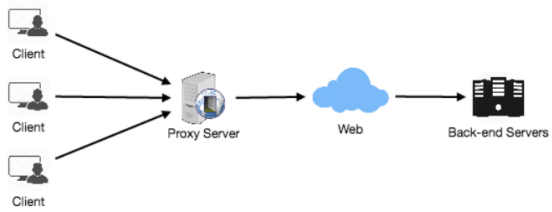
Proxies

A proxy server is an intermediate server between the client and the back-end server. Clients connect to proxy servers to make a request for a service like a web page, file, connection, etc. In short, a proxy server is a piece of software or hardware that acts as an intermediary for requests from clients seeking resources from other servers.

Typically, proxies are used to filter requests, log requests, or sometimes transform requests (by adding/removing headers, encrypting/decrypting, or compressing a resource). Another advantage of a proxy server is that its cache can serve a lot of requests. If multiple clients access a particular resource, the proxy server can cache it and serve it to all the clients without going to the remote server.



Proxy Server Types

Proxies can reside on the client's local server or anywhere between the client and the remote servers. Here are a few famous types of proxy servers:

Open Proxy

An open proxy is a proxy server that is accessible by any Internet user. Generally, a proxy server only allows users within a network group (i.e. a closed proxy) to store and forward Internet services such as DNS or web pages to reduce and control the bandwidth used by the group. With an open proxy, however, any user on the Internet is able to use this forwarding service. There two famous open proxy types:

1. **Anonymous Proxy** - This proxy reveals its identity as a server but does not disclose the initial IP address. Though this proxy server can be discovered easily it can be beneficial for some users as it hides their IP address.
2. **Transparent Proxy** – This proxy server again identifies itself, and with the support of HTTP headers, the first IP address can be viewed. The main benefit of using this sort of server is its ability to cache the websites.

Reverse Proxy

A reverse proxy retrieves resources on behalf of a client from one or more servers. These resources are then returned to the client, appearing as if they originated from the proxy server itself