

Proxy Servers

Proxies

There are two primary types of proxies, forward and reverse proxy. A proxy masks the IP address of a client or server by routing requests through another server. Proximity to this remote server and the average load on this server can impact network speeds.

Forward Proxy

A forward proxy is often used to mask a client's IP address by routing requests through another server. The purpose of a forward proxy is to evade detection or firewall rules that would otherwise impact the client's ability to visit the service. There are Web, HTTP, and SOCKS proxies. Avoid free proxy services as they are a popular form of data collection used by malicious parties to collect and potentially exploit your internet traffic. Forward proxies are not only used for malicious purposes, and can also be used to better organize and enforce server infrastructure rules. For example, routing requests from a cluster of internal servers through a forward proxy enables you to configure the single forward proxy instead of each individual server. This can be used to funnel internal traffic to the external web and better control the traffic and behavior of your infrastructure.

Reverse Proxy

A reverse proxy is a common tactic employed by organizations to implement load balancing features on high-traffic web services. A service which generates a lot of traffic can route requests from clients and forward them to any one of a large number of proxy servers. By diverting requests to through the proxy to the server with the smallest load, we reduce the average load on the server and can maintain a more consistent service with speed and availability. There is also the added security benefit of hiding your server's IP address and protecting it from malicious scans and activity by using a reverse proxy, since the proxy server can be used to filter out bad requests and protect your infrastructure. NGINX, Apache, and HAProxy are all popular forms of reverse proxy servers.

Resources and Links

Linuxbabe - Forward & reverse Proxies

JSCAPE - Forward & reverse Proxies

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