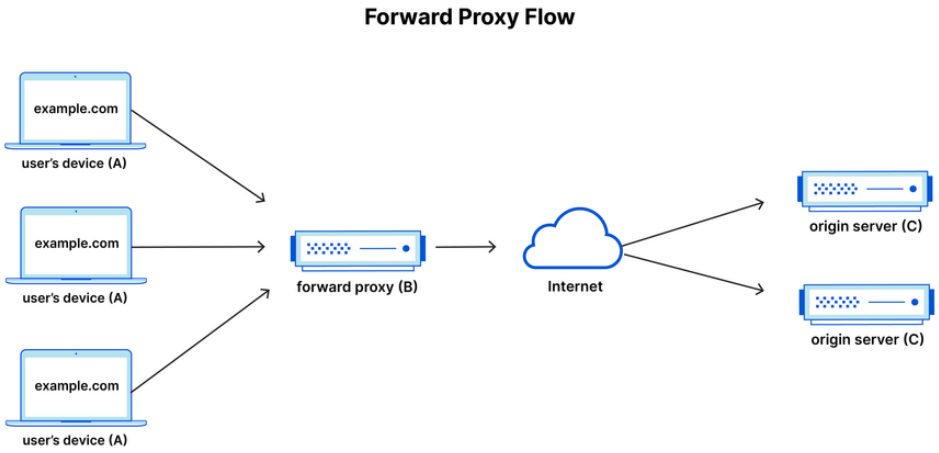
Difference Between Forward and Reverse Proxy.

Forward Proxy:

A forward proxy, also referred to as a “proxy server,” or simply a “proxy,” is a **server that sits in front of one or more client computers and serves as a conduit between the clients and the internet**. The forward proxy receives the request before sending it on from the client machine to the internet resource. **On behalf of the client machine, the forward proxy then sends the request to the internet and returns the response.**

A forwards proxy is mostly used for:

1. Client Anonymity
2. Caching
3. Traffic Control
4. Logging
5. Request/Response Transformation
6. Encryption

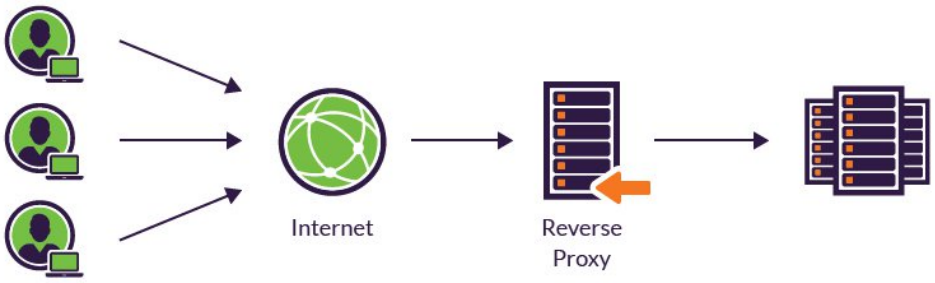


Reverse Proxy:

A server that sits in front of one or more web servers and serves as a go-between for the web servers and the Internet is known as a reverse proxy. The reverse proxy receives the request before sending it on to the internet resource for the client. **After sending the request to one of the web servers, the reverse proxy receives the response from that server.** The response is then sent back to the client by the reverse proxy.

A reverse proxy is mostly used for:

1. Server Anonymity
2. Caching
3. Load Balancing
4. DDoS Protection
5. Canary Experimentation
6. URL/Content Rewriting



Difference between Forward and Reverse Proxy Based on features:

	Forward Proxy	Reverse Proxy
Purpose	Provides anonymity and caching to clients	Improves server performance, load balancing, and security
Location	Between the client and the internet	Between the internet and server
Visibility	The client is aware of the proxy	The server is not aware of the proxy
Configuration	The client must be configured to use proxy	Server must be configured to use proxy use
Use cases	Bypassing content filters, accessing restricted content	Load balancing, caching, SSL/TLS offloading, web application firewall
Examples	Squid, Proxy, Tor	Nginx, Apache, HAProxy