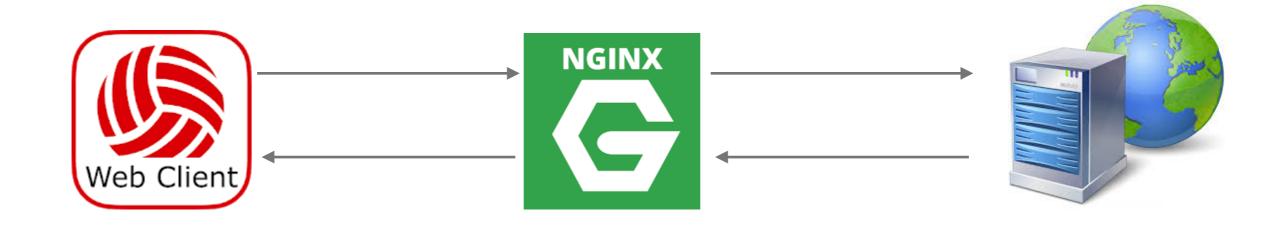
# 

NGINX: Introduction Reverse Proxy

### NGINX: Web-Server & Load Balancer

- ➤ Reverse Proxy: A reverse proxy is a server that sits in front of web servers and forwards client (e.g. web browser) requests to those web servers.
- ➤ Reverse proxies are typically implemented to help increase <u>security</u>, <u>performance</u>, and reliability.



### NGINX: Web-Server & Load Balancer

- Benefits of Reverse Proxy -
- ➤ Load Balancing A popular website that gets millions of users every day may not be able to handle all of its incoming site traffic with a single origin server. Instead, the site can be distributed among a pool of different servers, all handling requests for the same site.
- ➤ A reverse proxy can provide a load balancing solution which will distribute the incoming traffic evenly among the different servers to prevent any single server from becoming overloaded.
- ➤ Protection from attacks With a reverse proxy in place, a web site or service never needs to reveal the IP address of their origin server(s). This makes it much harder for attackers to leverage a targeted attack against them such as DOS attack, CDN attack and more.

## NGINX: Web-Server & Load Balancer

- Benefits of Reverse Proxy -
- ➤ Caching A reverse proxy can also <u>cache</u> content, resulting in faster performance.
- ➤ **SSL encryption** Encrypting and decrypting <u>SSL</u> communications for each client can be computationally expensive for an origin server. A **reverse proxy** can be configured to decrypt all incoming requests and encrypt all outgoing responses, freeing up valuable resources on the origin server.

# Will see you in Next Lecture...

