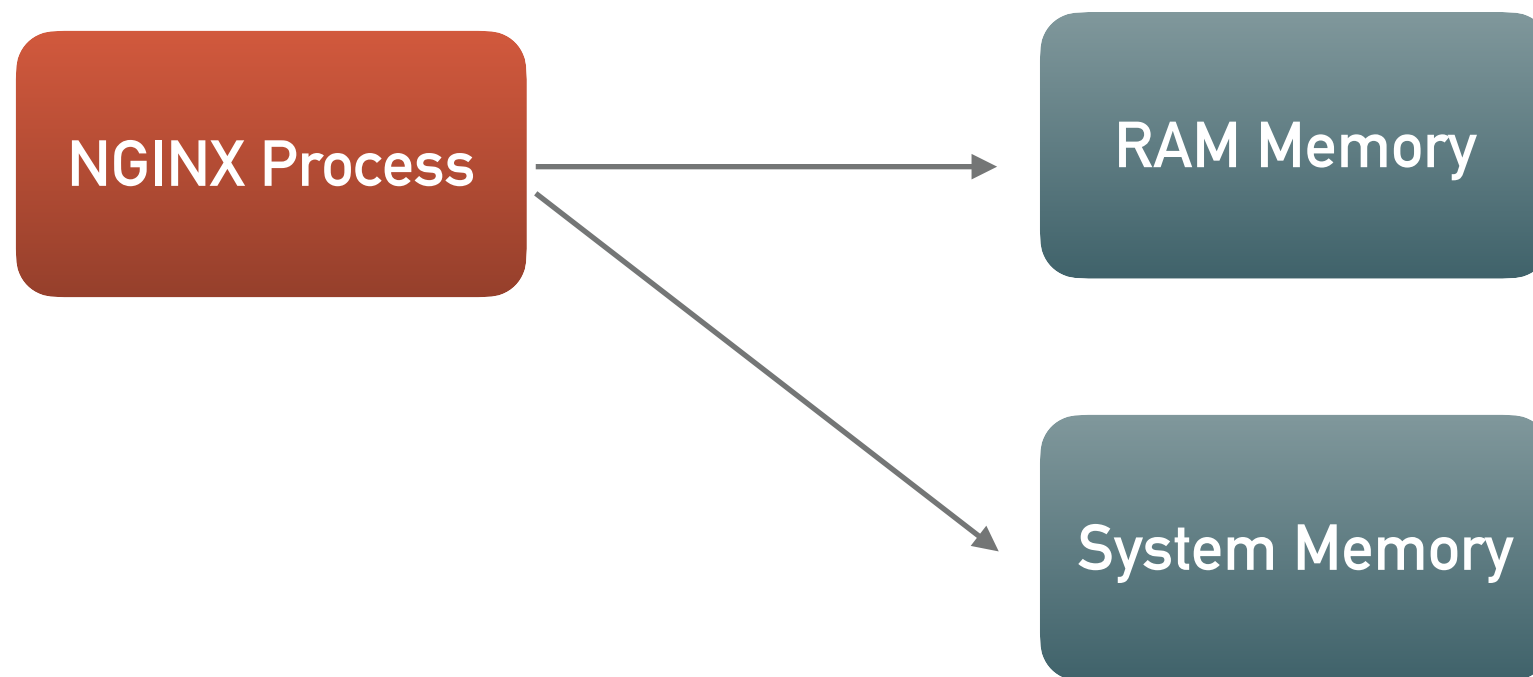


NGINX

NGINX: Performance Optimization

***NGINX** : Web-Server & Load Balancer*

- **Buffer** : Buffer Size is another aspect to manage the NGINX Performance.



- If the buffer sizes are too low, then Nginx will have to write to a temporary file causing the disk to read and write constantly.

NGINX : Web-Server & Load Balancer

- **client_body_buffer_size**: This handles the client buffer size, meaning any POST actions sent to Nginx. POST actions are typically form submissions.
- **client_header_buffer_size**: Similar to the previous directive, only instead it handles the client header size.
- **client_max_body_size**: The maximum allowed size for a client request. If the maximum size is exceeded, then Nginx will spit out a 413 error or Request Entity Too Large.
- **large_client_header_buffers**: The maximum number and size of buffers for large client

NGINX : Web-Server & Load Balancer

- **Timeouts -**
- **client_body_timeout** and **client_header_timeout** directives are responsible for the time a server will wait for a client body or client header to be sent after request. If neither a body or header is sent, the server will issue a **408** error or Request time out.
- **keepalive_timeout** assigns the timeout for keep-alive connections with the client. Nginx will close connections with the client after this period of time.

NGINX : Web-Server & Load Balancer

- **Gzip Compression -**
- Gzip can help reduce the amount of network transfer Nginx deals with. However, be careful increasing the `gzip_comp_level` too high as the server will begin wasting cpu cycles.

```
gzip                on;  
gzip_comp_level 2;  
gzip_min_length 1000;  
gzip_types        text/plain application/x-javascript text/xml text/css  
application/xml;
```

NGINX : Web-Server & Load Balancer

- Static File Caching -
- It's possible to set expire headers for files that don't change and are served regularly. This directive can be added to the actual Nginx server block.

```
location ~* \.(jpg|jpeg|png|gif|ico|css|js)$ {  
    expires 365d;  
}
```

Will see you in Next Lecture...

Thank you!

A close-up photograph of a hand holding a black marker, completing the cursive word 'Thank you!' on a white surface. The hand is positioned on the right side of the frame, with the index and thumb fingers visible, holding the marker. The marker's tip is just finishing the exclamation mark. The background is a plain, light-colored surface.

See you in next lecture ...