

Nginx

- Install Nginx

```
smabrouk@localhost:~$ clear
smabrouk@localhost:~$ sudo yum install nginx
[sudo] password for smabrouk:
Updating Subscription Management repositories.
Last metadata expiration check: 7:32:06 ago on Sat 17 Dec 2022 01:47:39 PM EET.
Dependencies resolved.
=====
Package                        Architecture Version                                Repository                                Size
=====
Installing:
nginx                          x86_64      1:1.14.1-9.module+el8.0.0+4108+af250afe  rhel-8-for-x86_64-appstream-rpms        570 k
Installing dependencies:
nginx-all-modules             noarch      1:1.14.1-9.module+el8.0.0+4108+af250afe  rhel-8-for-x86_64-appstream-rpms        24 k
nginx-filestream              noarch      1:1.14.1-9.module+el8.0.0+4108+af250afe  rhel-8-for-x86_64-appstream-rpms        24 k
nginx-mod-http-image-filter   x86_64      1:1.14.1-9.module+el8.0.0+4108+af250afe  rhel-8-for-x86_64-appstream-rpms        35 k
nginx-mod-http-perl           x86_64      1:1.14.1-9.module+el8.0.0+4108+af250afe  rhel-8-for-x86_64-appstream-rpms        46 k
nginx-mod-http-xslt-filter    x86_64      1:1.14.1-9.module+el8.0.0+4108+af250afe  rhel-8-for-x86_64-appstream-rpms        34 k
nginx-mod-mail                 x86_64      1:1.14.1-9.module+el8.0.0+4108+af250afe  rhel-8-for-x86_64-appstream-rpms        64 k
nginx-mod-stream               x86_64      1:1.14.1-9.module+el8.0.0+4108+af250afe  rhel-8-for-x86_64-appstream-rpms        85 k
Enabling module streams:
nginx                          1.14
Transaction Summary
-----
Install 8 Packages

Total download size: 881 k
Installed size: 2.0 M
Is this ok [y/N]: y
Downloading Packages:
(1/8): nginx-all-modules-1.14.1-9.module+el8.0.0+4108+af250afe.noarch.rpm 34 kB/s | 24 kB 00:00
(2/8): nginx-mod-stream-1.14.1-9.module+el8.0.0+4108+af250afe.x86_64.rpm 110 kB/s | 85 kB 00:00
(3/8): nginx-mod-http-image-filter-1.14.1-9.module+el8.0.0+4108+af250afe.x86_64.rpm 107 kB/s | 35 kB 00:00
(4/8): nginx-mod-http-xslt-filter-1.14.1-9.module+el8.0.0+4108+af250afe.x86_64.rpm 105 kB/s | 34 kB 00:00
(5/8): nginx-1.14.1-9.module+el8.0.0+4108+af250afe.x86_64.rpm 468 kB/s | 570 kB 00:01
(6/8): nginx-filestream-1.14.1-9.module+el8.0.0+4108+af250afe.noarch.rpm 91 kB/s | 24 kB 00:00
(7/8): nginx-mod-http-perl-1.14.1-9.module+el8.0.0+4108+af250afe.x86_64.rpm 119 kB/s | 46 kB 00:00
(8/8): nginx-mod-mail-1.14.1-9.module+el8.0.0+4108+af250afe.x86_64.rpm 255 kB/s | 64 kB 00:00
```

- Change the default file (index.html) to (yourName.html)

```
smabrouk@localhost:~$ cat /etc/nginx/nginx.conf
include /usr/share/nginx/modules/*.conf;

events {
    worker_connections 1024;
}

http {
    log_format main '$remote_addr - $remote_user [$time_local] "$request" '
        '$status $body_bytes_sent "$http_referer" '
        '"$http_user_agent" "$http_x_forwarded_for"';

    access_log /var/log/nginx/access.log main;

    sendfile on;
    tcp_nopush on;
    tcp_nodelay on;
    keepalive_timeout 65;
    types_hash_max_size 2048;

    include /etc/nginx/mime.types;
    default_type application/octet-stream;

    # Load modular configuration files from the /etc/nginx/conf.d directory.
    # See http://nginx.org/en/docs/nginx_core_module.html#include
    # for more information.
    include /etc/nginx/conf.d/*.conf;

    server {
        listen 80 default_server;
        listen [::]:80 default_server;
        server_name ;
        root /usr/share/nginx/html;
        index salma.html

        # Load configuration files for the default server block.
        include /etc/nginx/default.d/*.conf;
    }
}
```

```
file:///home/slabrouk/salma.html
Hello from Salma.html
```

- Make two html files, and change the configuration file to access the first file on port 81, and access the second file on port 82.

```

smabrouk@localhost:~
File Edit View Search Terminal Help
server {
    listen      80 default_server;
    listen      [::]:80 default_server;
    server_name _;
    root        /usr/share/nginx/html;

    # Load configuration files for the default server block.
    include /etc/nginx/default.d/*.conf;

    location / {

    }

    error_page 404 /404.html;
        location = /40x.html {

    }

    error_page 500 502 503 504 /50x.html;
        location = /50x.html {

    }
}

# Settings for a TLS enabled server.
#
#
server {
    listen      443 ssl http2 default_server;
    listen      [::]:443 ssl http2 default_server;
    server_name _;
    root        /usr/share/nginx/html;

    ssl_certificate "/etc/pki/nginx/server.crt";
    ssl_certificate_key "/etc/pki/nginx/private/server.key";
    ssl_session_cache shared:SSL:1m;
    ssl_session_timeout 10m;
    ssl_ciphers PROFILE=SYSTEM;
    ssl_prefer_server_ciphers on;

    # Load configuration files for the default server block.
    include /etc/nginx/default.d/*.conf;

    location / {

    }

    error_page 404 /404.html;
        location = /40x.html {

    }

    error_page 500 502 503 504 /50x.html;
        location = /50x.html {

    }
}
-- INSERT --

```

- Tell me the main differences between Apache & Nginx

APACHE	NGINX
Apache is an open-source web server.	Nginx is a web server. It is also used as a reverse proxy server which receives the request from client and send the request to proxy server.
It is mostly used for Unix, Linux, Windows and Solaris platforms	It is mostly used for Unix like systems, and does not completely support Windows.
Apache is written in C and XML.	Nginx is written in C language.
It is designed for web server.	It is designed for proxy server as well as web server.
It follows Multi-Threaded approach to process client requests.	It follows Event-Driven approach to process client requests.
Apache's performance for static content is lower than that of Nginx.	Nginx's performance of static content is two times faster than that of Apache as it can simultaneously run thousands of connections and it uses less memory comparatively.
Less security provided as compared to Nginx and also the codebase is very high.	compared to Nginx and also the codebase is very high. It provides better security with a smaller codebase.

