

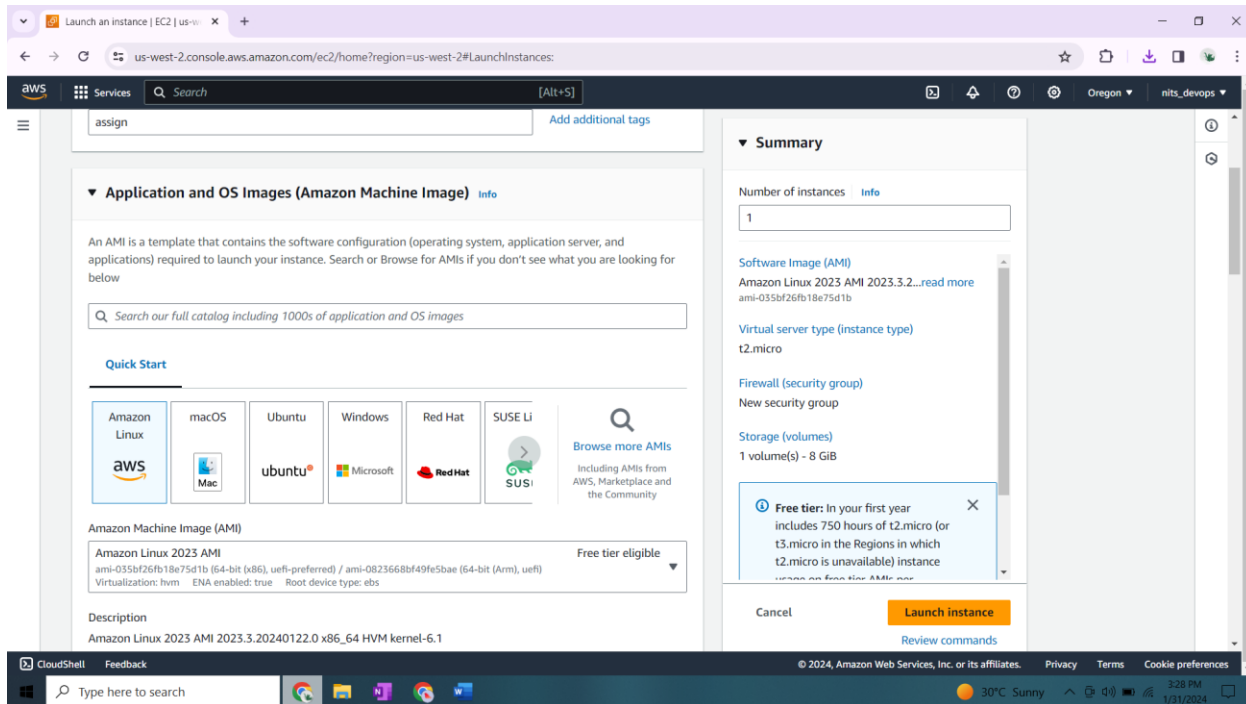
Module 1 Assignment

Problem Statement:

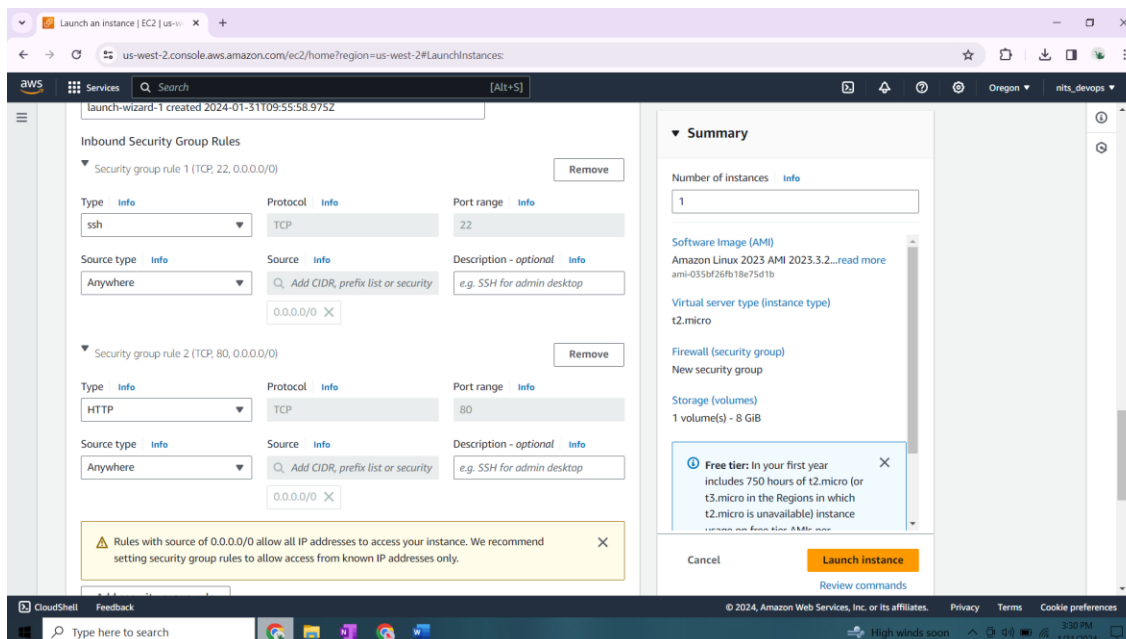
You are assigned a task to install a web server, in order to control multiple worker processes from one master process. After you've done your research you found out that NGINX is the best suitable option in this scenario. Update the host system and install NGINX. Check the version installed.

Solution:

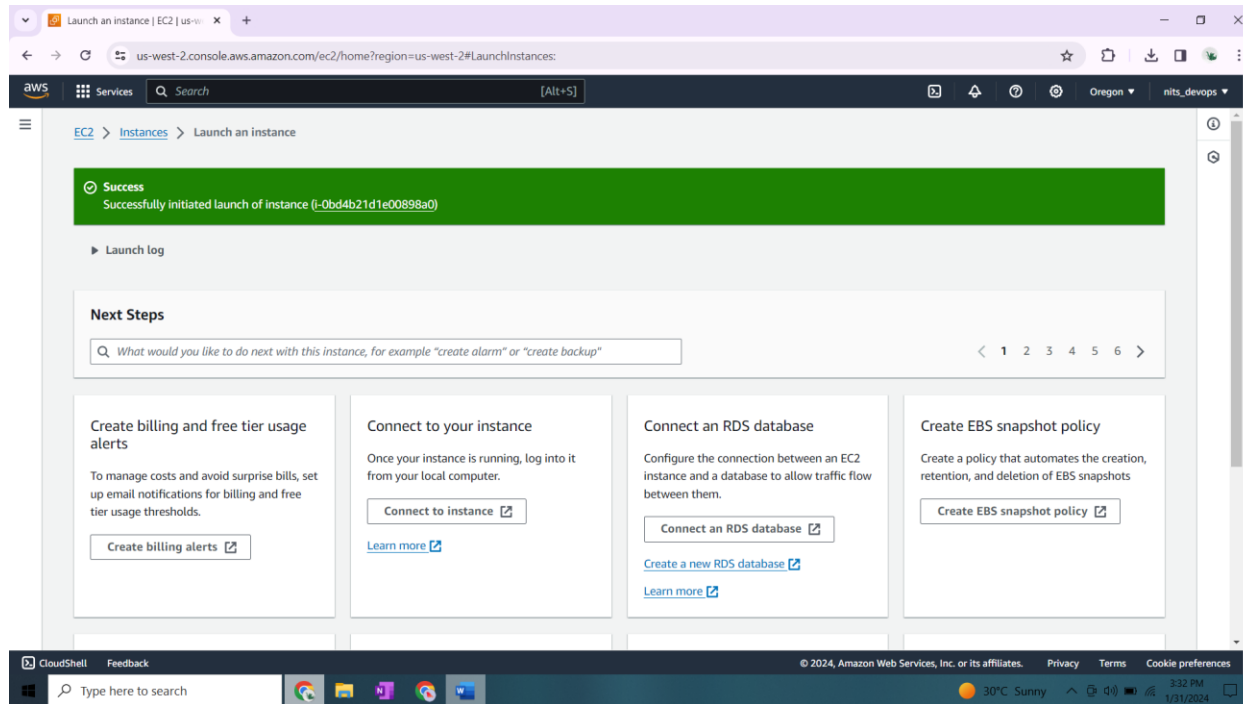
Step 1: Create an Amazon Linux Instance



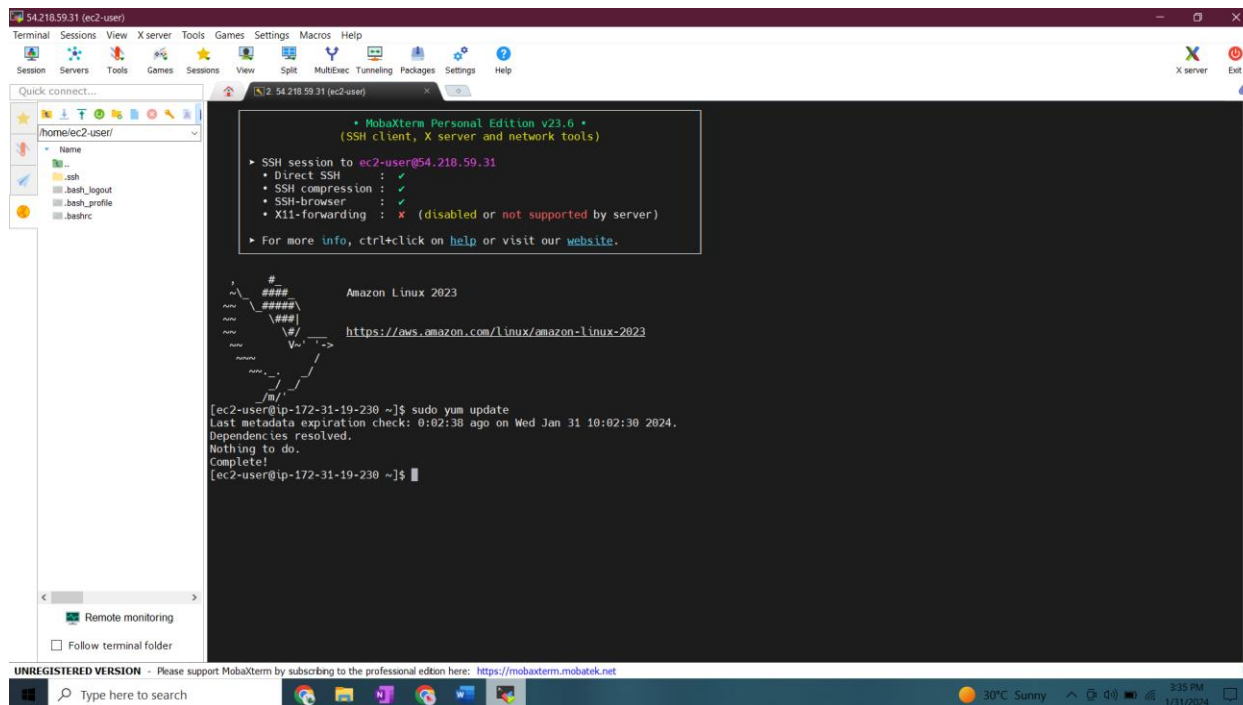
Step 2: Add Inbound Security Group Rule - Port 80, HTTP



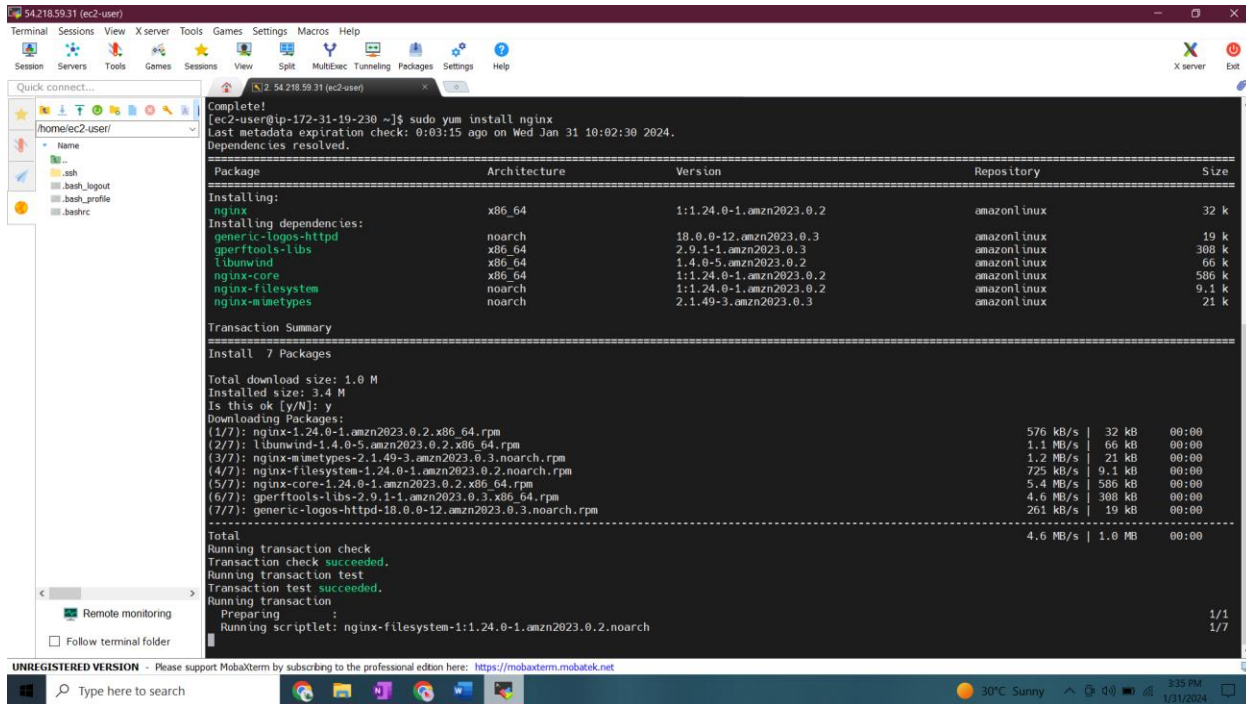
Step 3: Launch the instance



Step 4: Update Package Lists



Step 5: nginx install



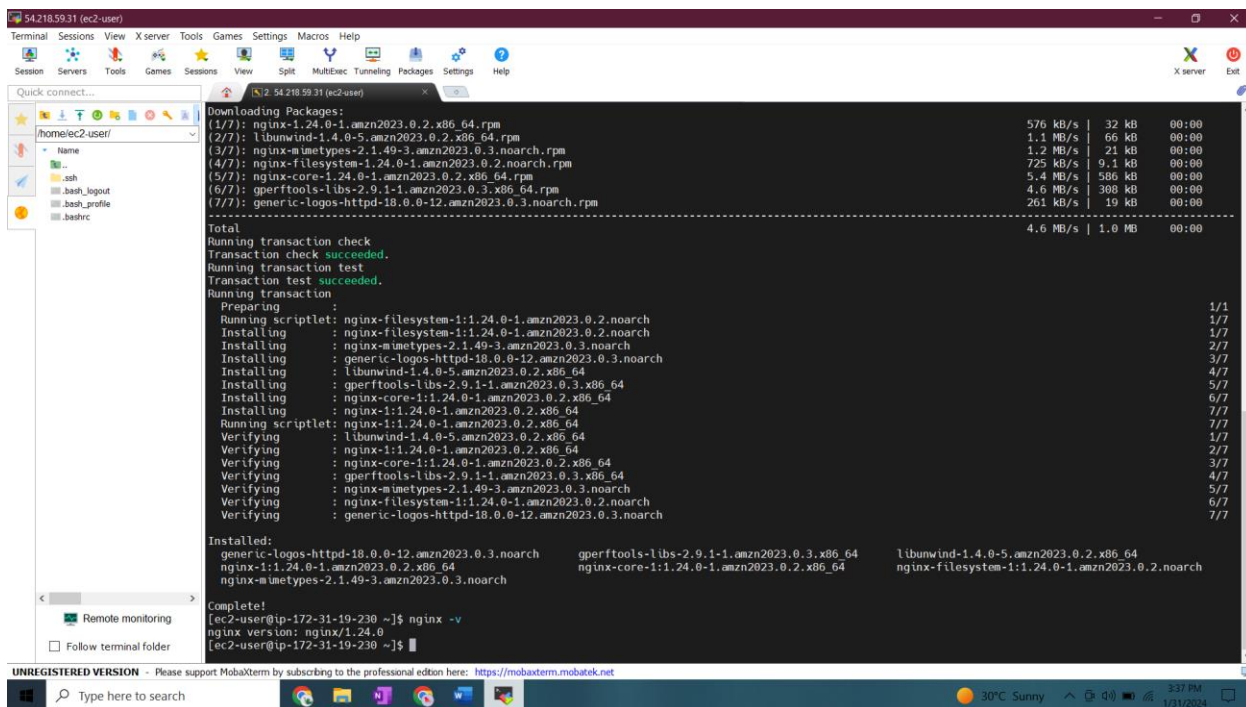
The screenshot shows a terminal window in MobaXterm with the following content:

```
Complete!  
[ec2-user@ip-172-31-19-230 ~]$ sudo yum install nginx  
Last metadata expiration check: 0:03:15 ago on Wed Jan 31 10:02:30 2024.  
Dependencies resolved.  


| Package                  | Architecture | Version                 | Repository  | Size  |
|--------------------------|--------------|-------------------------|-------------|-------|
| Installing:              |              |                         |             |       |
| nginx                    | x86_64       | 1:1.24.0-1.amzn2023.0.2 | amazonlinux | 32 k  |
| Installing dependencies: |              |                         |             |       |
| generic-logos-httpd      | noarch       | 18.0-0-12.amzn2023.0.3  | amazonlinux | 19 k  |
| gperftools-libs          | x86_64       | 2.9.1-1.amzn2023.0.3    | amazonlinux | 388 k |
| libunwind                | x86_64       | 1.4.0-5.amzn2023.0.2    | amazonlinux | 66 k  |
| nginx-core               | x86_64       | 1:1.24.0-1.amzn2023.0.2 | amazonlinux | 586 k |
| nginxfilesystem          | noarch       | 1:1.24.0-1.amzn2023.0.2 | amazonlinux | 9.1 k |
| nginx-muexec             | noarch       | 2.1.49-3.amzn2023.0.3   | amazonlinux | 21 k  |

  
Transaction Summary  
Install 7 Packages  
  
Total download size: 1.0 M  
Installed size: 3.4 M  
Is this ok [y/N]: y  
Downloading Packages:  
(1/7): nginx-1.24.0-1.amzn2023.0.2.x86_64.rpm 576 kB/s | 32 kB 00:00  
(2/7): libunwind-1.4.0-5.amzn2023.0.2.x86_64.rpm 1.1 MB/s | 66 kB 00:00  
(3/7): nginx-muexec-2.1.49-3.amzn2023.0.3.noarch.rpm 1.2 MB/s | 21 kB 00:00  
(4/7): nginxfilesystem-1.24.0-1.amzn2023.0.2.noarch.rpm 725 kB/s | 9.1 kB 00:00  
(5/7): nginx-core-1.24.0-1.amzn2023.0.2.x86_64.rpm 5.4 MB/s | 586 kB 00:00  
(6/7): gperftools-libs-2.9.1-1.amzn2023.0.3.x86_64.rpm 4.6 MB/s | 388 kB 00:00  
(7/7): generic-logos-httpd-18.0-0-12.amzn2023.0.3.noarch.rpm 261 kB/s | 19 kB 00:00  
-----  
Total 4.6 MB/s | 1.0 MB 00:00  
  
Running transaction check  
Transaction check succeeded.  
Running transaction test  
Transaction test succeeded.  
Running transaction  
Preparing :  
Running scriptlet: nginxfilesystem-1:1.24.0-1.amzn2023.0.2.noarch 1/1  
1/7
```

Step 6: Check nginx version



The screenshot shows the same terminal window as in Step 5, but with the following additional output:

```
Complete!  
[ec2-user@ip-172-31-19-230 ~]$ nginx -v  
nginx version: nginx/1.24.0  
[ec2-user@ip-172-31-19-230 ~]$
```

Step 7: start and enable nginx

```
54.218.59.31 (ec2-user)
Terminal Sessions View X server Tools Games Settings Macros Help
Session Servers Tools Games Sessions View Split Multitab Tunneling Packages Settings Help

Quick connect...
home/ec2-user/
  Name
  .ssh
  .ssh_logout
  .ssh_profile
  .sshrc

Remote monitoring
Follow terminal folder

(2/7): libunwind-1.4.0-5.amzn2023.0.2.x86_64.rpm 1.1 MB/s | 66 kB 00:00
(3/7): nginx-mimetypes-2.1.49-3.amzn2023.0.3.noarch.rpm 1.2 MB/s | 21 kB 00:00
(4/7): nginx-filesystem-1.24.0-1.amzn2023.0.2.noarch.rpm 725 kB/s | 9.1 kB 00:00
(5/7): nginx-core-1.24.0-1.amzn2023.0.2.x86_64.rpm 5.4 MB/s | 586 kB 00:00
(6/7): gperftools-libs-2.9.1-1.amzn2023.0.3.x86_64.rpm 4.6 MB/s | 388 kB 00:00
(7/7): generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch.rpm 261 kB/s | 19 kB 00:00
-----
Total 4.6 MB/s | 1.0 MB 00:00
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing :
Running scriptlet: nginx-filesystem-1:1.24.0-1.amzn2023.0.2.noarch 1/1
Installing : nginx-filesystem-1:1.24.0-1.amzn2023.0.2.noarch 1/7
Installing : nginx-mimetypes-2.1.49-3.amzn2023.0.3.noarch 2/7
Installing : generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch 3/7
Installing : libunwind-1.4.0-5.amzn2023.0.2.x86_64 4/7
Installing : gperftools-libs-2.9.1-1.amzn2023.0.3.x86_64 5/7
Installing : nginx-core-1:1.24.0-1.amzn2023.0.2.x86_64 6/7
Installing : nginx-1:1.24.0-1.amzn2023.0.2.x86_64 7/7
Running scriptlet: nginx-1:1.24.0-1.amzn2023.0.2.x86_64 7/7
Verifying : libunwind-1.4.0-5.amzn2023.0.2.x86_64 1/7
Verifying : nginx-1:1.24.0-1.amzn2023.0.2.x86_64 2/7
Verifying : nginx-core-1:1.24.0-1.amzn2023.0.2.x86_64 3/7
Verifying : gperftools-libs-2.9.1-1.amzn2023.0.3.x86_64 4/7
Verifying : nginx-mimetypes-2.1.49-3.amzn2023.0.3.noarch 5/7
Verifying : nginx-filesystem-1:1.24.0-1.amzn2023.0.2.noarch 6/7
Verifying : generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch 7/7

Installed:
generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch gperftools-libs-2.9.1-1.amzn2023.0.3.x86_64 libunwind-1.4.0-5.amzn2023.0.2.x86_64
nginx-1:1.24.0-1.amzn2023.0.2.x86_64 nginx-core-1:1.24.0-1.amzn2023.0.2.x86_64 nginx-filesystem-1:1.24.0-1.amzn2023.0.2.noarch
nginx-mimetypes-2.1.49-3.amzn2023.0.3.noarch

Complete!
[ec2-user@ip-172-31-19-230 ~]$ nginx -v
nginx version: nginx/1.24.0
[ec2-user@ip-172-31-19-230 ~]$ sudo systemctl enable nginx
Created symlink /etc/systemd/system/multi-user.target.wants/nginx.service -> /usr/lib/systemd/system/nginx.service.
[ec2-user@ip-172-31-19-230 ~]$
```

```
54.218.59.31 (ec2-user)
Terminal Sessions View X server Tools Games Settings Macros Help
Session Servers Tools Games Sessions View Split Multitab Tunneling Packages Settings Help

Quick connect...
home/ec2-user/
  Name
  .ssh
  .ssh_logout
  .ssh_profile
  .sshrc

Remote monitoring
Follow terminal folder

(3/7): nginx-mimetypes-2.1.49-3.amzn2023.0.3.noarch.rpm 1.2 MB/s | 21 kB 00:00
(4/7): nginx-filesystem-1.24.0-1.amzn2023.0.2.noarch.rpm 725 kB/s | 9.1 kB 00:00
(5/7): nginx-core-1.24.0-1.amzn2023.0.2.x86_64.rpm 5.4 MB/s | 586 kB 00:00
(6/7): gperftools-libs-2.9.1-1.amzn2023.0.3.x86_64.rpm 4.6 MB/s | 388 kB 00:00
(7/7): generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch.rpm 261 kB/s | 19 kB 00:00
-----
Total 4.6 MB/s | 1.0 MB 00:00
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing :
Running scriptlet: nginx-filesystem-1:1.24.0-1.amzn2023.0.2.noarch 1/1
Installing : nginx-filesystem-1:1.24.0-1.amzn2023.0.2.noarch 1/7
Installing : nginx-mimetypes-2.1.49-3.amzn2023.0.3.noarch 2/7
Installing : generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch 3/7
Installing : libunwind-1.4.0-5.amzn2023.0.2.x86_64 4/7
Installing : gperftools-libs-2.9.1-1.amzn2023.0.3.x86_64 5/7
Installing : nginx-core-1:1.24.0-1.amzn2023.0.2.x86_64 6/7
Installing : nginx-1:1.24.0-1.amzn2023.0.2.x86_64 7/7
Running scriptlet: nginx-1:1.24.0-1.amzn2023.0.2.x86_64 7/7
Verifying : libunwind-1.4.0-5.amzn2023.0.2.x86_64 1/7
Verifying : nginx-1:1.24.0-1.amzn2023.0.2.x86_64 2/7
Verifying : nginx-core-1:1.24.0-1.amzn2023.0.2.x86_64 3/7
Verifying : gperftools-libs-2.9.1-1.amzn2023.0.3.x86_64 4/7
Verifying : nginx-mimetypes-2.1.49-3.amzn2023.0.3.noarch 5/7
Verifying : nginx-filesystem-1:1.24.0-1.amzn2023.0.2.noarch 6/7
Verifying : generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch 7/7

Installed:
generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch gperftools-libs-2.9.1-1.amzn2023.0.3.x86_64 libunwind-1.4.0-5.amzn2023.0.2.x86_64
nginx-1:1.24.0-1.amzn2023.0.2.x86_64 nginx-core-1:1.24.0-1.amzn2023.0.2.x86_64 nginx-filesystem-1:1.24.0-1.amzn2023.0.2.noarch
nginx-mimetypes-2.1.49-3.amzn2023.0.3.noarch

Complete!
[ec2-user@ip-172-31-19-230 ~]$ nginx -v
nginx version: nginx/1.24.0
[ec2-user@ip-172-31-19-230 ~]$ sudo systemctl enable nginx
Created symlink /etc/systemd/system/multi-user.target.wants/nginx.service -> /usr/lib/systemd/system/nginx.service.
[ec2-user@ip-172-31-19-230 ~]$ sudo systemctl start nginx
[ec2-user@ip-172-31-19-230 ~]$
```