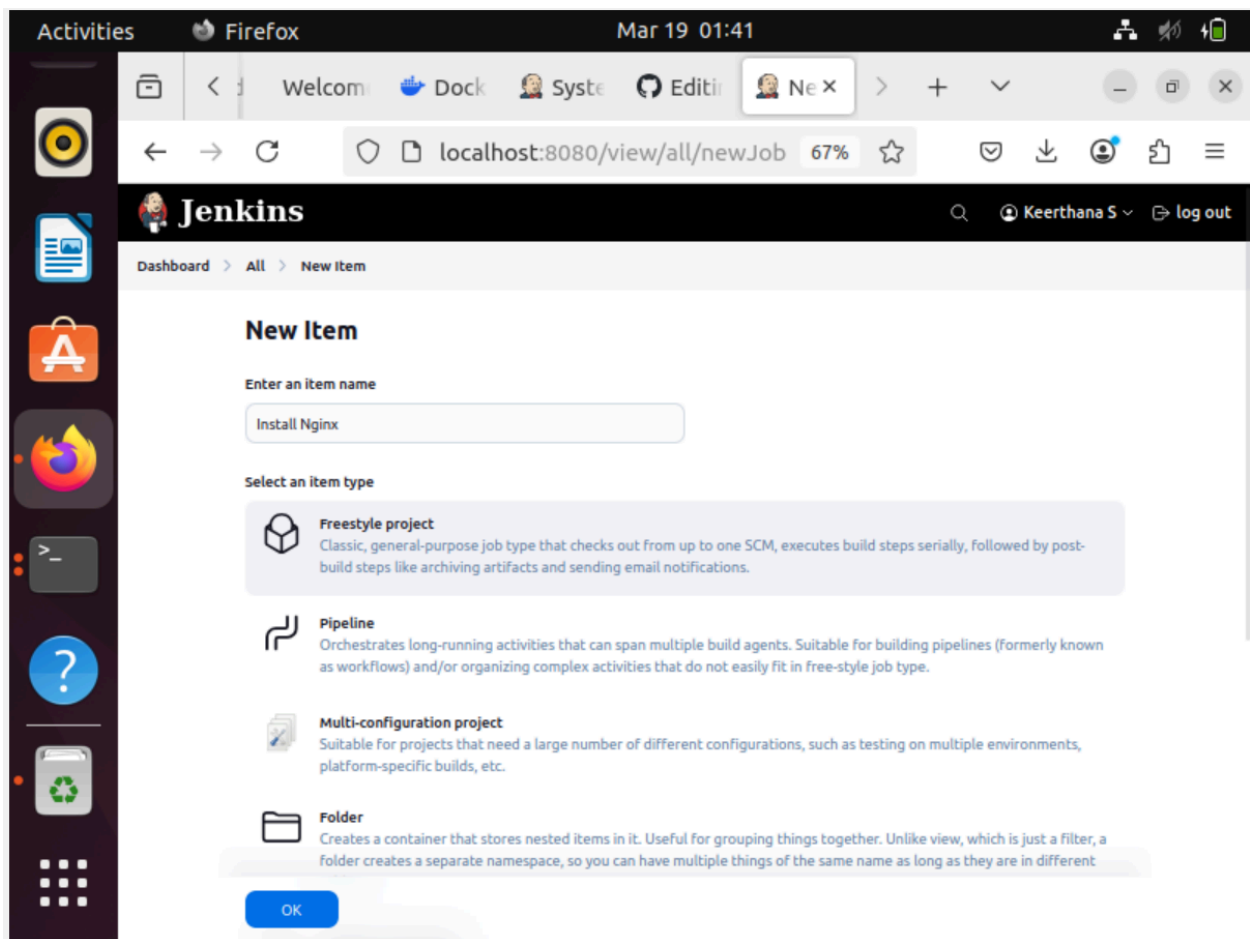


## Task -1

Task Explanation: Create a simple FreeStyle Job To Install Nginx on your server (tools: jenkins, ubuntu vm)

1. Login to Jenkins UI
2. Click on "New Item".
3. Enter a job name (e.g., Install\_Nginx).
4. Select Freestyle Project
5. Click OK.



The screenshot shows the Jenkins web interface. At the top is a black header with the Jenkins logo, a search icon, the user 'Keerthana S', and a 'log out' button. Below the header is a 'Dashboard' section with a left sidebar containing links: '+ New Item', 'Build History', 'Manage Jenkins', and 'My Views'. The main area displays a 'Build Queue' and a 'Build Executor Status' section. The 'Build Queue' shows a single build named 'Install \_Nginx' with a status of 'Success' (green checkmark), a duration of '1 hr 21 min', and a last failure of 'N/A'. The 'Build Executor Status' section shows '(0 of 2 executors busy)'. At the bottom right, it says 'REST API' and 'Jenkins 2.492.2'.

S	W	Name ↓	Last Success	Last Failure	Last Duration
✓	☀	Install _Nginx	1 hr 21 min	N/A	9.6 sec

- Scroll down and select "Build Steps" option
- Click "Add build step"
- Select "Execute shell".

- Write the following script:

```
#!/bin/bash
sudo apt update
sudo apt install -y nginx
sudo systemctl start nginx
sudo systemctl enable nginx
echo "Nginx installation completed!"
```

- Save the job.

Activities

Firefox

Mar 18 23:37

Document

Install\_Ng

Welcome to n

KeerthanaS

localhost:8080/job/Install\_Nginx 67%

Dashboard > Install\_Nginx > Configuration

Configure

General

Source Code Management

Triggers

Environment

Build Steps

Post-build Actions

Build Steps

Automate your build process with ordered tasks like code compilation, testing, and deployment.

Execute shell ?

Command

See the list of available environment variables

```
#!/bin/bash
sudo apt update
sudo apt install -y nginx
sudo systemctl start nginx
sudo systemctl enable nginx
echo "Nginx installation completed!"
```

Advanced

Add build step

Post-build Actions

Save

Apply

## 6.Run the Job

- Click "Build Now".
- Monitor the build logs on Console Output
- 

Dashboard > Install\_Nginx > #7 > Console Output

Status

Changes

Console Output

Edit Build Information

Delete build '#7'

Timings

✓ Console Output

Download Copy View as plain text

Started by user Keerthana S

Running as SYSTEM

Building in workspace /var/lib/jenkins/workspace/Install\_Nginx

[Install\_Nginx] \$ /bin/bash /tmp/jenkins13910034418448661723.sh

WARNING: apt does not have a stable CLI interface. Use with caution in scripts.

Hit:1 <http://security.ubuntu.com/ubuntu> jammy-security InRelease

Hit:2 <https://download.docker.com/linux/ubuntu> jammy InRelease

Ign:3 <https://pkg.jenkins.io/debian-stable> binary/ InRelease

Hit:4 <https://pkg.jenkins.io/debian-stable> binary/ Release

Hit:6 <http://in.archive.ubuntu.com/ubuntu> jammy InRelease

Hit:7 <http://in.archive.ubuntu.com/ubuntu> jammy-updates InRelease

Hit:8 <http://in.archive.ubuntu.com/ubuntu> jammy-backports InRelease

Reading package lists...

Building dependency tree...

Reading state information...

3 packages can be upgraded. Run 'apt list --upgradable' to see them.

WARNING: apt does not have a stable CLI interface. Use with caution in scripts.

Reading package lists...

Building dependency tree...

Reading state information...

nginx is already the newest version (1.18.0-6ubuntu14.6).

0 upgraded, 0 newly installed, 0 to remove and 3 not upgraded.

Synchronizing state of nginx.service with SysV service script with /lib/systemd/systemd-sysv-install.

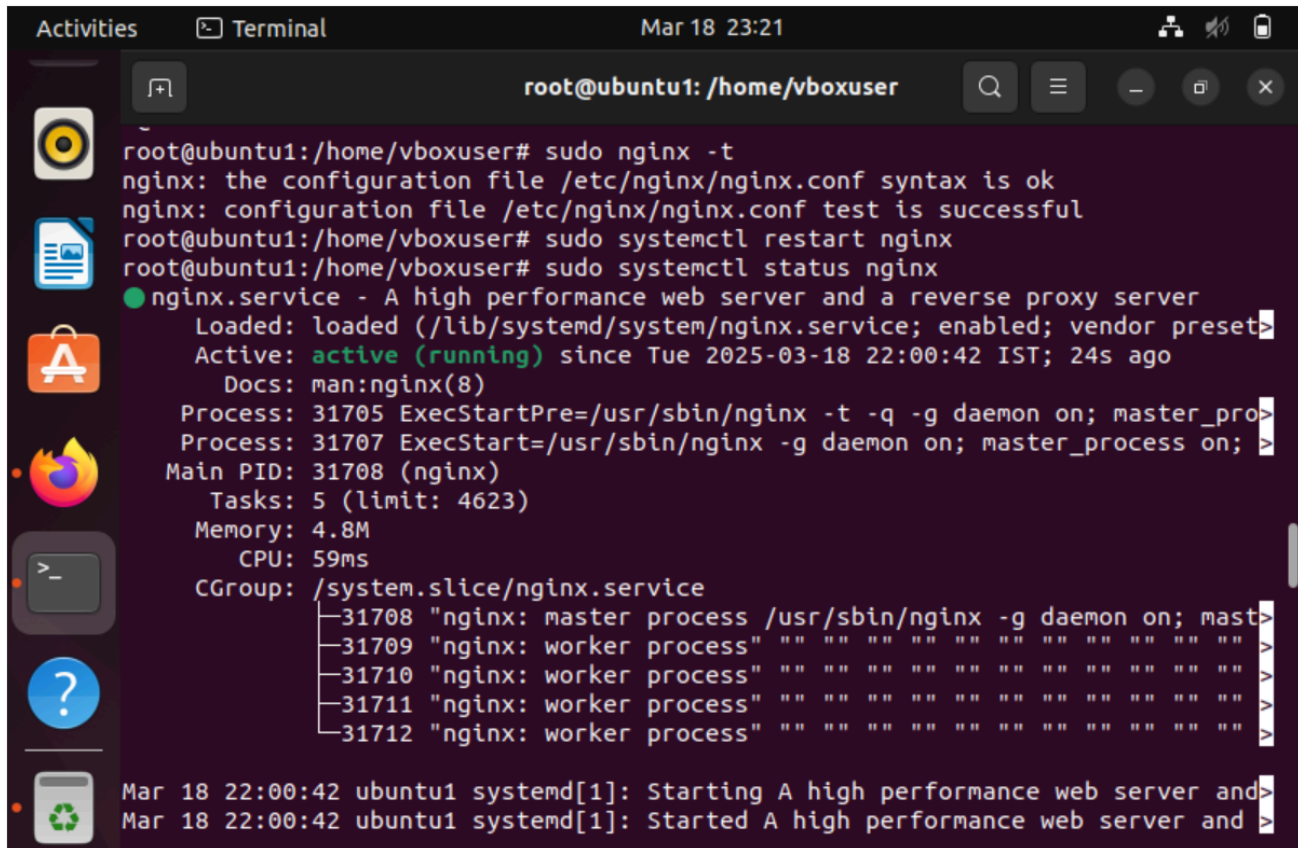
Executing: /lib/systemd/systemd-sysv-install enable nginx

Nginx installation completed!

Finished: SUCCESS

## 7. Verify Nginx Installation

- Check Nginx status

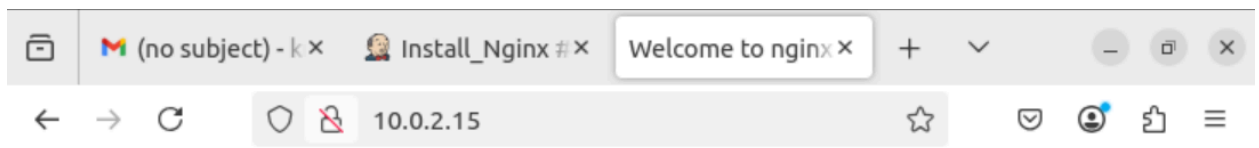


A terminal window titled "Terminal" with a timestamp of "Mar 18 23:21". The window shows a user at the prompt "root@ubuntu1: /home/vboxuser" performing several commands to verify Nginx installation. The commands and their outputs are as follows:

```
root@ubuntu1:/home/vboxuser# sudo nginx -t
nginx: the configuration file /etc/nginx/nginx.conf syntax is ok
nginx: configuration file /etc/nginx/nginx.conf test is successful
root@ubuntu1:/home/vboxuser# sudo systemctl restart nginx
root@ubuntu1:/home/vboxuser# sudo systemctl status nginx
● nginx.service - A high performance web server and a reverse proxy server
   Loaded: loaded (/lib/systemd/system/nginx.service; enabled; vendor preset: enabled)
   Active: active (running) since Tue 2025-03-18 22:00:42 IST; 24s ago
     Docs: man:nginx(8)
  Process: 31705 ExecStartPre=/usr/sbin/nginx -t -q -g daemon on; master_process on;
  Process: 31707 ExecStart=/usr/sbin/nginx -g daemon on; master_process on;
 Main PID: 31708 (nginx)
    Tasks: 5 (limit: 4623)
   Memory: 4.8M
      CPU: 59ms
   CGroup: /system.slice/nginx.service
           └─31708 "nginx: master process /usr/sbin/nginx -g daemon on; master_process on;"
             └─31709 "nginx: worker process"
               └─31710 "nginx: worker process"
                 └─31711 "nginx: worker process"
                   └─31712 "nginx: worker process"

Mar 18 22:00:42 ubuntu1 systemd[1]: Starting A high performance web server and a reverse proxy server: nginx.service.
Mar 18 22:00:42 ubuntu1 systemd[1]: Started A high performance web server and a reverse proxy server: nginx.service.
```

- Verify by opening the browser
- Navigate to <http://10.0.2.15>
- The Nginx welcome page should be visible



# Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to [nginx.org](http://nginx.org).  
Commercial support is available at [nginx.com](http://nginx.com).

*Thank you for using nginx.*