

DEVOPS TASK - 1

Step 1: Open Oracle virtual Box and open the terminal

Step 2: Enter the username(su) and password(changeme)

Step 3: Give "sudo su -" to switch to the root user within a login shell.

Step 4: Open jenkins and click on new item as "Nginx-Task"

Step 5: Select the item type as "FreeStyle Project"

← → ↻ localhost:8080/view/all/newJob ☆

Jenkins 🔍 🛡️ 👤 ⌵ 📄

Dashboard > All > New Item

New Item

Enter an item name

Nginx_Task

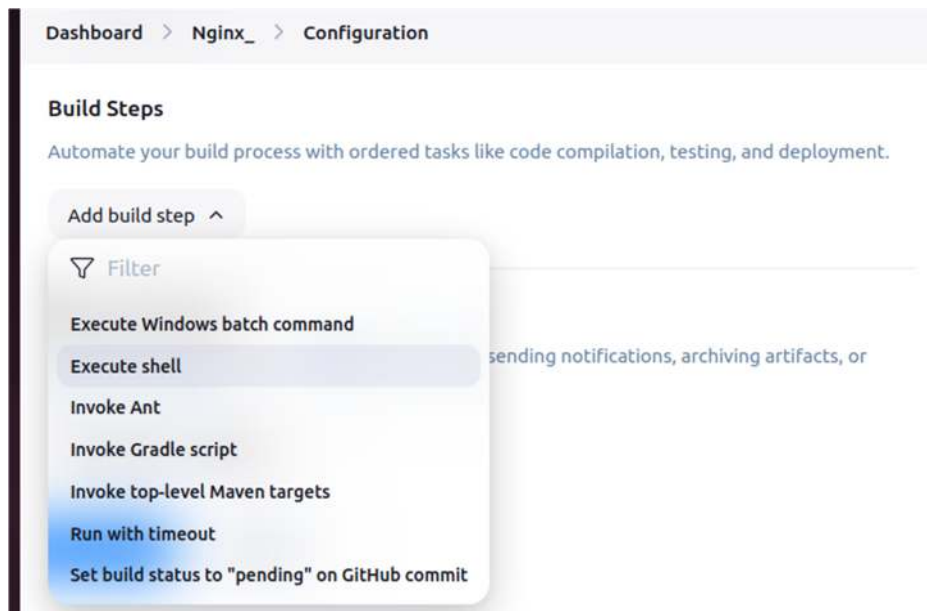
Select an item type

Freestyle project
Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications.

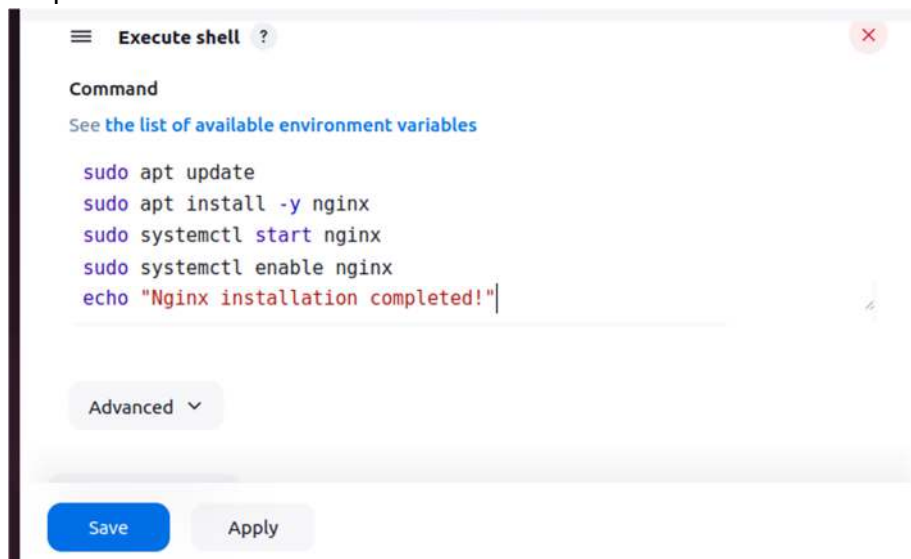
Pipeline
Orchestrates free-running activities that are run multiple build steps...

OK

Step 6: Go to Build Steps and choose Execute Shell from Add build steps.



Step 7: Give the commands



Step 8: Then click on "Save".

Step 9: Click "Build now".

Step 10: Go to console output, I faced a sudo password related error.

Step 11: In the terminal give "visudo"

Step 12: Add "jenkins ALL=(ALL) NOPASSWD: ALL", save(ctrl+X and Y) and exit.

Step 13: Run "systemctl status nginx"

Step 14: Re-run the Job by clicking "Build Now"

Step 15: Go to console output of #2.

The image displays two screenshots of a Jenkins console output window, showing the installation of Nginx on a Ubuntu Jammy system.

Top Screenshot: The window title is "localhost:8080/job/Nginx_Task1/2/console". The breadcrumb navigation is "Dashboard > Nginx_Task1 > #2 > Console Output". The main heading is "Console Output" with a green checkmark icon. Below the heading are buttons for "Download", "Copy", and "View as plain text". The output text shows the terminal session starting with "Started by user", "Running as SYSTEM", and "Building in workspace /var/lib/jenkins/workspace/Nginx_Task1". The user runs the command "[Nginx_Task1] \$ /bin/bash /tmp/jenkins3519046486697350366.sh". The output includes a warning about apt's CLI interface and a list of packages being installed: "Get:1 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]", "Hit:2 https://download.docker.com/linux/ubuntu jammy InRelease", "Ign:3 https://pkg.jenkins.io/debian-stable binary/ InRelease", "Hit:4 http://in.archive.ubuntu.com/ubuntu jammy InRelease", "Hit:5 https://pkg.jenkins.io/debian-stable binary/ Release", "Get:6 http://in.archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]", "Get:8 http://in.archive.ubuntu.com/ubuntu jammy-backports InRelease [127 kB]", and "Reading package lists...".

Bottom Screenshot: The window title is "localhost:8080/job/Nginx_Task1/2/console". The breadcrumb navigation is "Dashboard > Nginx_Task1 > #2 > Console Output". The main heading is "Console Output" with a green checkmark icon. Below the heading are buttons for "Download", "Copy", and "View as plain text". The output text shows the terminal session continuing with the installation of Nginx. The output includes "Setting up libnginx-mod-http-xslt-filter (1.18.0-6ubuntu14.6) ...", "Setting up libnginx-mod-http-geoip2 (1.18.0-6ubuntu14.6) ...", "Setting up libnginx-mod-mail (1.18.0-6ubuntu14.6) ...", "Setting up libnginx-mod-http-image-filter (1.18.0-6ubuntu14.6) ...", "Setting up libnginx-mod-stream (1.18.0-6ubuntu14.6) ...", "Setting up libnginx-mod-stream-geoip2 (1.18.0-6ubuntu14.6) ...", "Setting up nginx-core (1.18.0-6ubuntu14.6) ...", "* Upgrading binary nginx", "...done.", "Setting up nginx (1.18.0-6ubuntu14.6) ...", "Processing triggers for man-db (2.10.2-1) ...", "Processing triggers for ufw (0.36.1-4build1) ...", "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!", and "Finished: SUCCESS".

Step 16: Go to terminal and give "systemctl status nginx"

```

vboxuser@Ubuntu:~$ su
Password:
root@Ubuntu:/home/vboxuser# sudo su -
root@Ubuntu:~# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:d6:5c:96 brd ff:ff:ff:ff:ff:ff
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
        valid_lft 83272sec preferred_lft 83272sec
    inet6 fe80::34b2:f0c2:e2e4:e75e/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
3: docker0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN group default
    link/ether 3a:53:e5:ad:39:6c brd ff:ff:ff:ff:ff:ff
    inet 172.17.0.1/16 brd 172.17.255.255 scope global docker0
        valid_lft forever preferred_lft forever
root@Ubuntu:~# systemctl status nginx
Unit nginx.service could not be found.
root@Ubuntu:~# visudo
root@Ubuntu:~# 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:

```

Step 17: Give "hostname -I" in the terminal

```

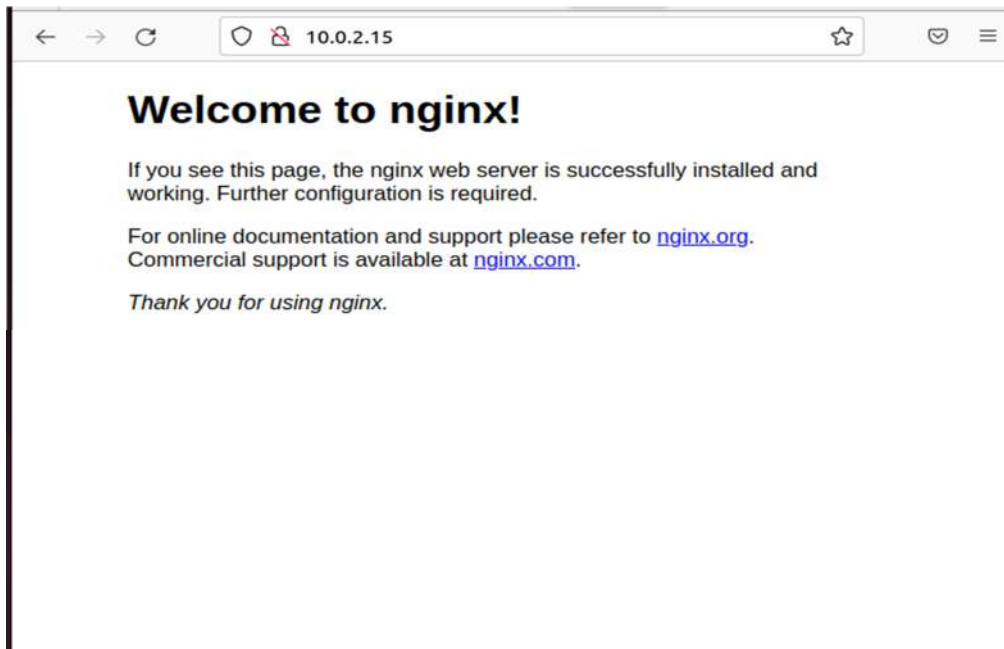
root@Ubuntu:~# visudo
root@Ubuntu:~# systemctl status nginx
● nginx.service - A high performance web server and a reverse proxy server
   Loaded: loaded (/lib/systemd/system/nginx.service; enabled; vendor preset:
   Active: active (running) since Tue 2025-03-18 16:53:29 IST; 2min 36s ago
     Docs: man:nginx(8)
   Main PID: 6982 (nginx)
    Tasks: 11 (limit: 4627)
   Memory: 10.2M
      CPU: 1.030s
   CGroup: /system.slice/nginx.service
           └─6982 "nginx: master process /usr/sbin/nginx -g daemon on; maste
              └─6985 "nginx: worker process"
              └─6986 "nginx: worker process"
              └─6987 "nginx: worker process"
              └─6988 "nginx: worker process"
              └─6989 "nginx: worker process"
              └─6990 "nginx: worker process"
              └─6991 "nginx: worker process"
              └─6992 "nginx: worker process"
              └─6993 "nginx: worker process"
              └─6994 "nginx: worker process"

Mar 18 16:53:29 Ubuntu systemd[1]: Starting A high performance web server and
Mar 18 16:53:29 Ubuntu systemd[1]: Started A high performance web server and a

root@Ubuntu:~# hostname -I
10.0.2.15 172.17.0.1
root@Ubuntu:~#

```

Step 18: This will give the Ip address - 10.0.2.15 , Go to firefox and type <https://10.0.2.15>



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.
Commercial support is available at nginx.com.

Thank you for using nginx.