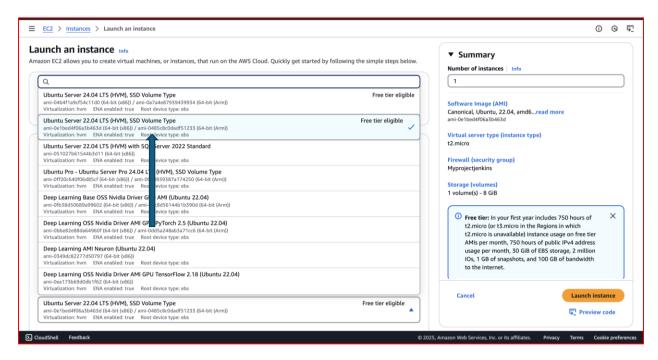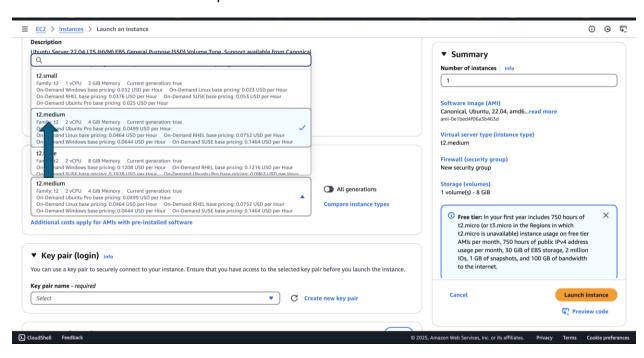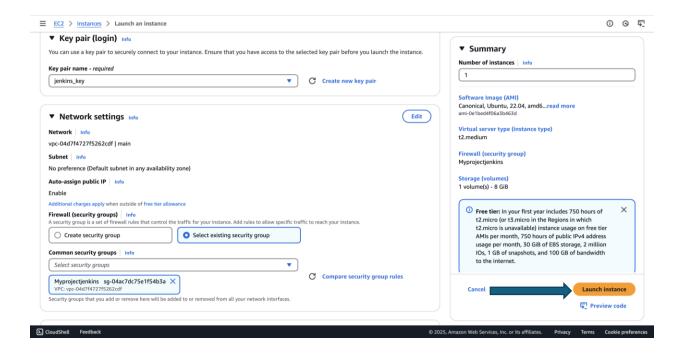# Installation of DOB in AWS Ubuntu 22.4

instance size t2 medium is required

▼ **Key pair (login)** Info

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - required

jenkins_key ▼   C   Create new key pair

▼ **Network settings** Info   Edit

Network | Info

vpc-04d7f4727f5262cdf | main

Subnet | Info

No preference (Default subnet in any availability zone)

Auto-assign public IP | Info

Enable

Additional charges apply when outside of free tier allowance

Firewall (security groups) | Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

○ Create security group   ● Select existing security group

Common security groups | Info

Select security groups ▼

Myprojectjenkins sg-04ac7dc75e1f54b3a ✕   C **Compare security group rules**
VPC: vpc-04d7f4727f5262cdf

Security groups that you add or remove here will be added to or removed from all your network interfaces.

▼ **Summary**

Number of instances | Info

1

Software Image (AMI)

Canonical, Ubuntu, 22.04, amd6...read more
ami-0e1bed4f06a3b463d

Virtual server type (instance type)

t2.medium

Firewall (security group)

Myprojectjenkins

Storage (volumes)

1 volume(s) - 8 GiB

ⓘ **Free tier:** In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.   ✕

Cancel   **Launch instance**

Preview code

Dashboard
EC2 Global View
Events

▼ **Instances**
  Instances
  Instance Types
  Launch Templates
  Spot Requests
  Savings Plans
  Reserved Instances
  Dedicated Hosts
  Capacity Reservations

▼ **Images**
  AMIs
  AMI Catalog

▼ **Elastic Block Store**
  Volumes
  Snapshots
  Lifecycle Manager

▼ **Network & Security**
  Security Groups
  Elastic IPs
  Placement Groups

Instances (1) Info   Last updated less than a minute ago C   Connect   Instance state ▼   Actions ▼   **Launch instances** ▼

Find Instance by attribute or tag (case-sensitive)   Running ▼   < 1 >

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4
☐	ubutu	i-01bdf2af5f95d2f8e	⊘ Running ⊕ ⊖	t2.medium	⏱ Initializing	View alarms +	us-east-1b	ec2-3-94-...

Select an instance

Connect to instance Info

Connect to your instance i-01bdf2af5f95d2f8e (ubutu) using any of these options

| EC2 Instance Connect | Session Manager | **SSH client** | EC2 serial console |

Instance ID

📋 i-01bdf2af5f95d2f8e (ubutu)

1. Open an SSH client.
2. Locate your private key file. The key used to launch this instance is jenkins_key.pem
3. Run this command, if necessary, to ensure your key is not publicly viewable.
   📋 chmod 400 "jenkins_key.pem"
4. Connect to your instance using its Public DNS:
   📋 ec2-3-94-165-108.compute-1.amazonaws.com

Example:

📋 ssh -i "jenkins_key.pem" ubuntu@ec2-3-94-165-108.compute-1.amazonaws.com

ⓘ **Note:** In most cases, the guessed username is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

Cancel

```
[deeeye@Dees-MacBook-Pro key % ssh -i "jenkins_key.pem" ubuntu@ec2-3-94-165-108.compute-1.amazonaws.com
The authenticity of host 'ec2-3-94-165-108.compute-1.amazonaws.com (3.94.165.108)' can't be established.
ED25519 key fingerprint is SHA256:QGoWNyArwekTzLkf6h0kAov4RGriyrHbw05Zpqgtt9k.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-3-94-165-108.compute-1.amazonaws.com' (ED25519) to the list of known hosts.
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1021-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/pro

 System information as of Sun Jan 26 13:38:40 UTC 2025

  System load:  0.07              Processes:             119
  Usage of /:   21.7% of 7.57GB   Users logged in:       0
  Memory usage: 5%                IPv4 address for eth0: 172.31.25.0
  Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status


The list of available updates is more than a week old.
To check for new updates run: sudo apt update


The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

[ubuntu@ip-172-31-25-0:~$ sudo -i
root@ip-172-31-25-0:~#
```

Run the command app-get update to update the system for the latest packages

```
root@ip-172-31-25-0:~# apt install python3-pip
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  build-essential bzip2 cpp cpp-11 dpkg-dev fakeroot fontconfig-config fonts-dejavu-core g++ g++-11 gcc gcc-11 gcc-11-base
  javascript-common libalgorithm-diff-perl libalgorithm-diff-xs-perl libalgorithm-merge-perl libasan6 libatomic1 libc-dev-bin
  libc-devtools libc6-dev libcc1-0 libcrypt-dev libdeflate0 libdpkg-perl libexpat1-dev libfakeroot libfile-fcntllock-perl
  libfontconfig1 libgcc-11-dev libgd3 libgomp1 libis123 libitm1 libjbig0 libjpeg-turbo8 libjpeg8 libjs-jquery libjs-sphinxdoc
  libjs-underscore libllsan0 libmpc3 libnsl-dev libpython3-dev libpython3.10 libpython3.10-dev libpython3.10-minimal
  libpython3.10-stdlib libquadmath0 libstdc++-11-dev libtiff5 libtirpc-dev libtsan0 libubsan1 libwebp7 libxpm4 linux-libc-dev
  lto-disabled-list make manpages-dev python3-dev python3-wheel python3.10 python3.10-dev python3.10-minimal rpcsvc-proto zlib1g-dev
Suggested packages:
  bzip2-doc cpp-doc gcc-11-locales debian-keyring g++-multilib g++-11-multilib gcc-11-doc gcc-multilib autoconf automake libtool flex
  bison gdb gcc-doc gcc-11-multilib apache2 | lighttpd | httpd glibc-doc bzr libgd-tools libstdc++-11-doc make-doc python3.10-venv
  python3.10-doc binfmt-support
The following NEW packages will be installed:
  build-essential bzip2 cpp cpp-11 dpkg-dev fakeroot fontconfig-config fonts-dejavu-core g++ g++-11 gcc gcc-11 gcc-11-base
  javascript-common libalgorithm-diff-perl libalgorithm-diff-xs-perl libalgorithm-merge-perl libasan6 libatomic1 libc-dev-bin
  libc-devtools libc6-dev libcc1-0 libcrypt-dev libdeflate0 libdpkg-perl libexpat1-dev libfakeroot libfile-fcntllock-perl
  libfontconfig1 libgcc-11-dev libgd3 libgomp1 libis123 libitm1 libjbig0 libjpeg-turbo8 libjpeg8 libjs-jquery libjs-sphinxdoc
  libjs-underscore libllsan0 libmpc3 libnsl-dev libpython3-dev libpython3.10-dev libquadmath0 libstdc++-11-dev libtiff5 libtirpc-dev
  libtsan0 libubsan1 libwebp7 libxpm4 linux-libc-dev lto-disabled-list make manpages-dev python3-dev python3-pip python3-wheel
  python3.10-dev rpcsvc-proto zlib1g-dev
The following packages will be upgraded:
  libpython3.10 libpython3.10-minimal libpython3.10-stdlib python3.10 python3.10-minimal
5 upgraded, 64 newly installed, 0 to remove and 15 not upgraded.
Need to get 78.7 MB of archives.
After this operation, 239 MB of additional disk space will be used.
Do you want to continue? [Y/n]
```

```
root@ip-172-31-25-0:~# apt install git
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Suggested packages:
  git-daemon-run | git-daemon-sysvinit git-doc git-email git-gui gitk gitweb git-cvs git-mediawiki git-svn
The following packages will be upgraded:
  git
1 upgraded, 0 newly installed, 0 to remove and 14 not upgraded.
Need to get 3165 kB of archives.
After this operation, 4096 B of additional disk space will be used.
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 git amd64 1:2.34.1-1ubuntu1.12 [3165 kB]
Fetched 3165 kB in 0s (19.0 MB/s)
(Reading database ... 72639 files and directories currently installed.)
Preparing to unpack .../git_1%3a2.34.1-1ubuntu1.12_amd64.deb ...
Unpacking git (1:2.34.1-1ubuntu1.12) over (1:2.34.1-1ubuntu1.11) ...
Setting up git (1:2.34.1-1ubuntu1.12) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

Running kernel seems to be up-to-date.

Restarting services...
Service restarts being deferred:
 systemctl restart networkd-dispatcher.service
 systemctl restart unattended-upgrades.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-172-31-25-0:~#
```

Clone the official installation link from the official DOB GitHub repo

```
root@ip-172-31-25-0:~# git clone https://github.com/Devops-Bot-Official/DOB-Installation-Package.git
Cloning into 'DOB-Installation-Package'...
remote: Enumerating objects: 593, done.
remote: Counting objects: 100% (103/103), done.
remote: Compressing objects: 100% (92/92), done.
remote: Total 593 (delta 48), reused 33 (delta 11), pack-reused 490 (from 2)
Receiving objects: 100% (593/593), 94.79 MiB | 69.88 MiB/s, done.
Resolving deltas: 100% (257/257), done.
root@ip-172-31-25-0:~# ls
DOB-Installation-Package  snap
root@ip-172-31-25-0:~# cd DOB-Installation-Package
root@ip-172-31-25-0:~/DOB-Installation-Package# ls
IMG_2055.png   README.md   devops-bot-0.1.tar.gz   devops_bot-0.1-py3-none-any.whl
root@ip-172-31-25-0:~/DOB-Installation-Package#
```

```
root@ip-172-31-25-0:~/DOB-Installation-Package# pip install devops_bot-0.1-py3-none-any.whl
Processing ./devops_bot-0.1-py3-none-any.whl
Collecting azure-mgmt-sql==3.0.1
  Downloading azure_mgmt_sql-3.0.1-py2.py3-none-any.whl (912 kB)
                                              912.9/912.9 KB 8.6 MB/s eta 0:00:00
Collecting google-cloud-logging==3.5.0
  Downloading google_cloud_logging-3.5.0-py2.py3-none-any.whl (195 kB)
                                              195.8/195.8 KB 10.5 MB/s eta 0:00:00
Collecting requests==2.31.0
  Downloading requests-2.31.0-py3-none-any.whl (62 kB)
                                              62.6/62.6 KB 7.7 MB/s eta 0:00:00
Collecting azure-core==1.31.0
  Downloading azure_core-1.31.0-py3-none-any.whl (197 kB)
                                              197.4/197.4 KB 15.2 MB/s eta 0:00:00
Collecting azure-mgmt-cosmosdb==7.0.0
  Downloading azure_mgmt_cosmosdb-7.0.0-py3-none-any.whl (308 kB)
                                              308.7/308.7 KB 6.9 MB/s eta 0:00:00
Collecting google-cloud-dns==0.35.0
  Downloading google_cloud_dns-0.35.0-py2.py3-none-any.whl (18 kB)
Collecting cryptography==41.0.0
  Downloading cryptography-41.0.0-cp37-abi3-manylinux_2_28_x86_64.whl (4.3 MB)
                                              4.3/4.3 MB 31.9 MB/s eta 0:00:00
Collecting google-cloud-storage==2.10.0
  Downloading google_cloud_storage-2.10.0-py2.py3-none-any.whl (114 kB)
                                              114.6/114.6 KB 19.0 MB/s eta 0:00:00
Collecting paramiko==2.11.0
  Downloading paramiko-2.11.0-py2.py3-none-any.whl (212 kB)
                                              212.9/212.9 KB 27.1 MB/s eta 0:00:00
Collecting tabulate==0.8.10
  Downloading tabulate-0.8.10-py3-none-any.whl (29 kB)
Collecting Flask-Login==0.5.0
  Downloading Flask_Login-0.5.0-py2.py3-none-any.whl (16 kB)
Collecting boto3==1.28.0
  Downloading boto3-1.28.0-py3-none-any.whl (135 kB)
                                              135.7/135.7 KB 3.4 MB/s eta 0:00:00
Collecting PyYAML==6.0
  Downloading PyYAML-6.0-cp310-cp310-manylinux_2_5_x86_64.manylinux1_x86_64.manylinux_2_12_x86_64.manylinux2010_x86_64.whl (682 kB)
                                              682.2/682.2 KB 16.6 MB/s eta 0:00:00
Collecting azure-mgmt-dns==8.1.0
  Downloading azure_mgmt_dns-8.1.0-py3-none-any.whl (205 kB)
```

```
-cosmosdb, azure-mgmt-containerinstance, azure-mgmt-compute, aiohttp-retry, twilio, msal-extensions, google-cloud-logging, azure-identit
y, devops-bot
  Attempting uninstall: PyYAML
    Found existing installation: PyYAML 5.4.1
    Not uninstalling pyyaml at /usr/lib/python3/dist-packages, outside environment /usr
    Can't uninstall 'PyYAML'. No files were found to uninstall.
  Attempting uninstall: click
    Found existing installation: click 8.0.3
    Not uninstalling click at /usr/lib/python3/dist-packages, outside environment /usr
    Can't uninstall 'click'. No files were found to uninstall.
  Attempting uninstall: requests
    Found existing installation: requests 2.25.1
    Not uninstalling requests at /usr/lib/python3/dist-packages, outside environment /usr
    Can't uninstall 'requests'. No files were found to uninstall.
  Attempting uninstall: cryptography
    Found existing installation: cryptography 3.4.8
    Not uninstalling cryptography at /usr/lib/python3/dist-packages, outside environment /usr
    Can't uninstall 'cryptography'. No files were found to uninstall.
  Attempting uninstall: pyOpenSSL
    Found existing installation: pyOpenSSL 21.0.0
    Not uninstalling pyopenssl at /usr/lib/python3/dist-packages, outside environment /usr
    Can't uninstall 'pyOpenSSL'. No files were found to uninstall.
Successfully installed Flask-2.0.3 Flask-Cors-3.0.10 Flask-Login-0.5.0 PyYAML-6.0 Werkzeug-2.0.3 aiohappyeyeballs-2.4.4 aiohttp-3.11.11
aiohttp-retry-2.9.1 aiosignal-1.3.2 async-timeout-5.0.1 azure-common-1.1.28 azure-core-1.31.0 azure-identity-1.13.0 azure-mgmt-compute-2
8.0.0 azure-mgmt-containerinstance-9.0.0 azure-mgmt-core-1.5.0 azure-mgmt-cosmosdb-7.0.0 azure-mgmt-datafactory-9.1.0 azure-mgmt-dns-8.1
.0 azure-mgmt-keyvault-10.2.0 azure-mgmt-network-25.0.0 azure-mgmt-resource-23.0.0 azure-mgmt-sql-3.0.1 azure-mgmt-storage-21.2.1 boto3-
1.28.0 botocore-1.31.85 cachetools-5.5.1 cffi-1.17.1 charset-normalizer-3.4.1 click-8.1.8 croniter-1.0.15 cryptography-41.0.0 devops-bot
-0.1 flask-bcrypt-0.7.1 frozenlist-1.5.0 google-api-core-2.24.0 google-api-python-client-2.70.0 google-auth-2.22.0 google-auth-httplib2-
0.1.0 google-auth-oauthlib-1.0.0 google-cloud-appengine-logging-1.5.0 google-cloud-audit-log-0.3.0 google-cloud-bigquery-3.10.0 google-c
loud-compute-1.10.0 google-cloud-core-2.4.1 google-cloud-dns-0.35.0 google-cloud-functions-1.8.0 google-cloud-iam-2.11.0 google-cloud-km
s-2.15.0 google-cloud-logging-3.5.0 google-cloud-pubsub-2.17.0 google-cloud-scheduler-2.12.0 google-cloud-storage-2.10.0 google-crc32c-1
.6.0 google-resumable-media-2.7.2 googleapis-common-protos-1.66.0 grpc-google-iam-v1-0.14.0 grpcio-1.70.0 grpcio-status-1.48.2 importlib
-resources-5.13.0 isodate-0.7.2 itsdangerous-2.0.1 jmespath-1.0.1 kubernetes-26.1.0 msal-1.31.1 msal-extensions-1.2.0 msrest-0.7.1 multi
dict-6.1.0 paramiko-2.11.0 portalocker-2.10.1 propcache-0.2.1 proto-plus-1.25.0 protobuf-3.20.3 psutil-5.9.0 pyOpenSSL-23.2.0 pycparser-
2.22 pynacl-1.5.0 python-dateutil-2.9.0.post0 requests-2.31.0 requests-oauthlib-2.0.0 rsa-4.9 s3transfer-0.6.2 tabulate-0.8.10 twilio-8.
3.0 typing-extensions-4.12.2 uritemplate-4.1.1 websocket-client-1.8.0 yarl-1.18.3
WARNING: Running pip as the 'root' user can result in broken permissions and conflicting behaviour with the system package manager. It i
s recommended to use a virtual environment instead: https://pip.pypa.io/warnings/venv
root@ip-172-31-25-0:~/DOB-Installation-Package#
```

run the command dob --help to check if the installation is successful it's not

```
root@ip-172-31-25-0:~/DOB-Installation-Package# dob --help
New encryption key created and saved to /etc/devops-bot/enc_key.key
Usage: dob [OPTIONS] COMMAND [ARGS]...

Options:
  --v, --version  Show version of the devops-bot tool.
  --debug         Enable debug mode to show full error tracebacks.
  --help          Show this message and exit.

Commands:
  activation             Activate context for Kubernetes or Docker...
  ans                    Execute Ansible command on a remote server
  ansible                Commands related to Ansible configuration and...
  artifactory            Execute Artifactory commands
  aws                    Commands to manage AWS resources.
  aws_cli                Execute AWS CLI commands
  azure                  Commands to manage Azure resources.
  brood                  Manage DevOps bot files.
  check-nodes            Check if the DevOps bot can connect to the node.
  chef                   Execute Chef commands
  consul                 Execute Consul commands
  decrypt                Decrypt an encrypted value with salt and...
  dks                    Commands related to DevOps Kubernetes Services...
  dobp                   DevOps Bot Proxy configuration commands.
  doc                    Execute docker command on a remote server
  docswarm               Execute Docker Swarm commands
  edit-execution         Edit an entire execution state
  encrypt                Encrypt a sensitive value with salt and output...
  gcp                    Commands to manage GCP resources.
  generate-token         Generate a token for a user.
  generate-webhook-secret  Generate a new webhook secret key.
  gitlab                 Execute GitLab commands
  infracrid              Manage encrypted infra credentials.
  infracycle             Commands related to build and deployment...
  infraset               Commands related to infraset configurations...
  istio                  Execute Istio commands
  jenkins                Commands to manage Jenkins server.
  kub                    Execute kubectl command on a remote server
  kubectl                Commands to manage k8s server.
  kustomize              Execute Kustomize commands
  list-executions        List all stored execution IDs or details of a...
  packer                 Execute Packer commands
```