

NetBox Quick Start Installation Guide

Deploy a NetBox Dev/Test Environment in 20 Minutes

To get [NetBox](#) up and running in the fastest possible way, follow this guide. This framework will allow you to install, backup, remove, upgrade, customize, and deploy NetBox plugins, all in minutes.

The blue info boxes flag **What You've Missed**, which are stages you should consider in a production, or in "more than just a NetBox lab" environment.

5 Minute Demo

<https://www.youtube.com/embed/-08l3LOLX-o?si=5Hrtzfw15N1Xubas>

Installation Guide

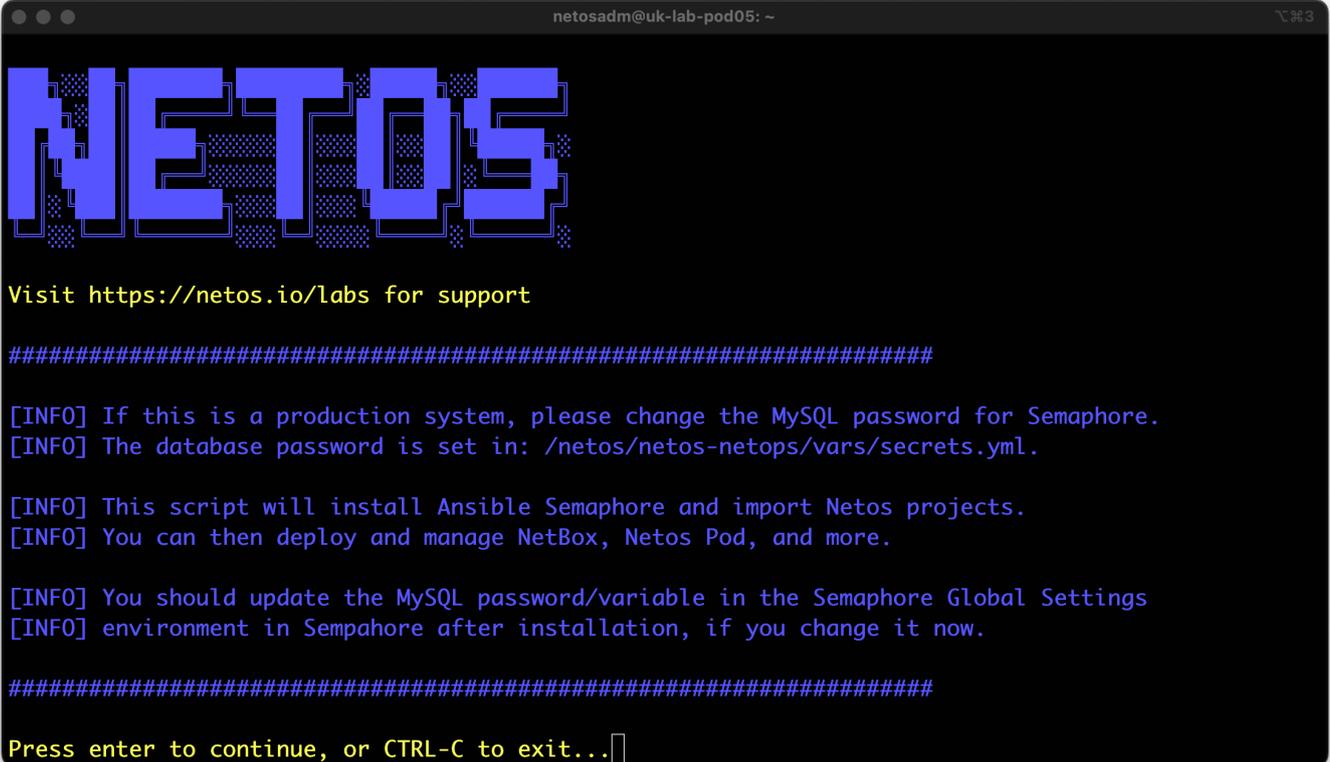
1. Install Ubuntu Server

You're going to need to get a server with **Ubuntu 24.04 LTS** up and running. [Download an image](#) like `ubuntu-24.04-live-server-amd64.iso` or spin up an instance on your favorite cloud provider, like AWS.

2. Install Semaphore and the Netos NetOps Project

You can follow the full [Install Semaphore Guide](#), however, in summary, once you install Ubuntu, paste this command to pull the repo and run the install script, and you shouldn't need to do anything else:

```
sudo wget https://raw.githubusercontent.com/netos-networks/netos-netops/refs/heads/main/easy-deploy.sh && sudo chmod +x easy-deploy.sh && sudo ./easy-deploy.sh
```



```
netosadm@uk-lab-pod05: ~  
NETOS  
Visit https://netos.io/labs for support  
#####  
[INFO] If this is a production system, please change the MySQL password for Semaphore.  
[INFO] The database password is set in: /netos/netos-netops/vars/secrets.yml.  
  
[INFO] This script will install Ansible Semaphore and import Netos projects.  
[INFO] You can then deploy and manage NetBox, Netos Pod, and more.  
  
[INFO] You should update the MySQL password/variable in the Semaphore Global Settings  
[INFO] environment in Sempahore after installation, if you change it now.  
#####  
Press enter to continue, or CTRL-C to exit...  
█
```

The [Key Semaphore Principles](#) guide explains more about Semaphore.

Check the [Users, Accounts, and Tokens](#) guide for more information about credentials and variables.

3. Configure Semaphore

These steps are optional, so you can skip this for now.

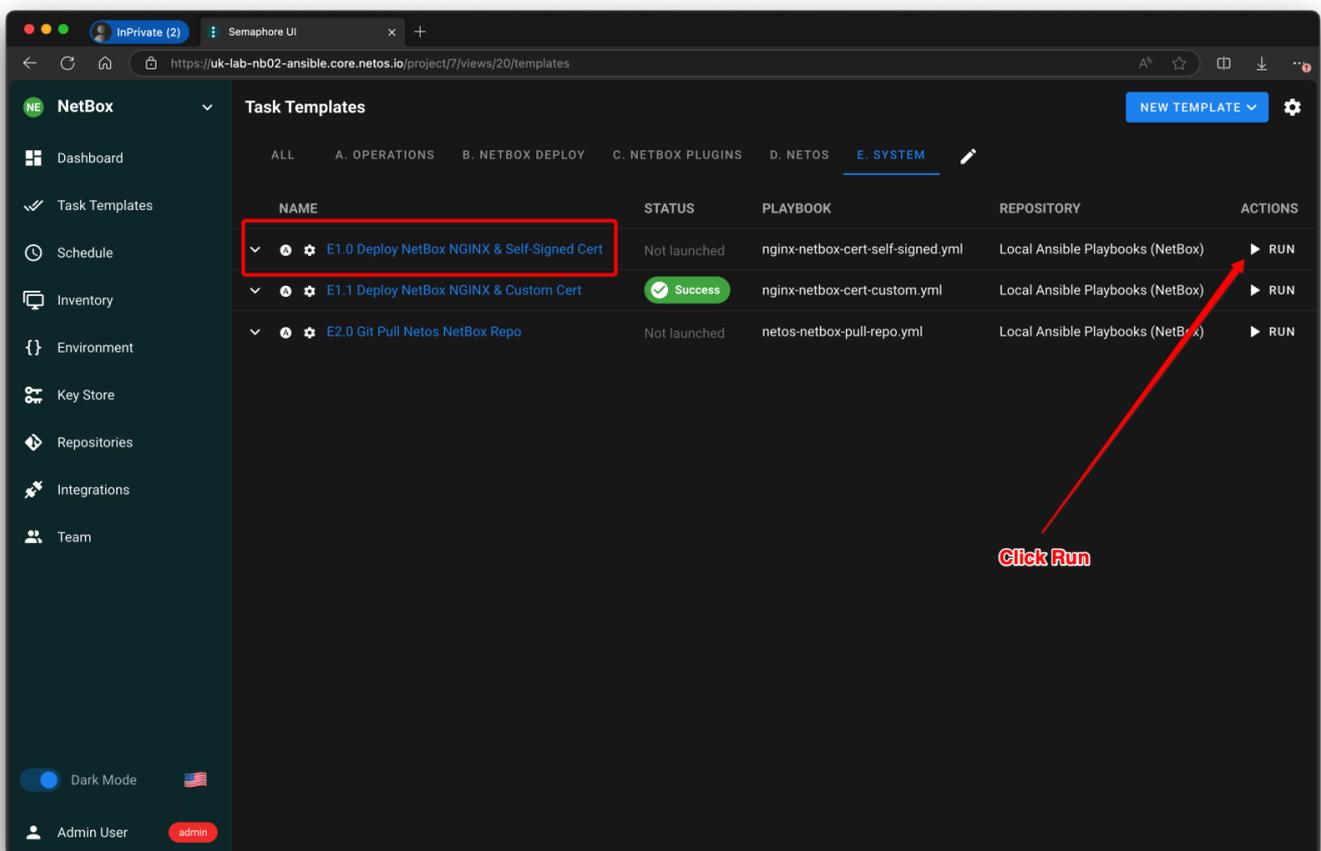
Change the `DOMAIN` and `SEMAPHORE_HOSTNAME` variables in the **NetBox Global Settings** Semaphore environment. Follow the [Deploying NGINX & Certificates](#) guide.

Deploy self-signed certificates, so you don't get "**your connection isn't private**" browser warnings. Follow the [Deploying NGINX & Certificates](#) guide.

Enable [Semaphore Backups](#).

4. Deploy NGINX and Self-Signed Cert for NetBox

You need to deploy NGINX to connect to NetBox. To fast track, you can just create a self-signed certificate. The default hostname will be `netbox.netos.dev`.



Change the `DOMAIN` and `NETBOX_HOSTNAME` variables in the **NetBox Global Settings** Semaphore environment. Follow the [Deploying NGINX & Certificates](#) guide.

Deploy self-signed certificates, so you don't get "Your connection isn't private" browser warnings. Follow the [Deploying NGINX & Certificates](#) guide.

5. Install NetBox

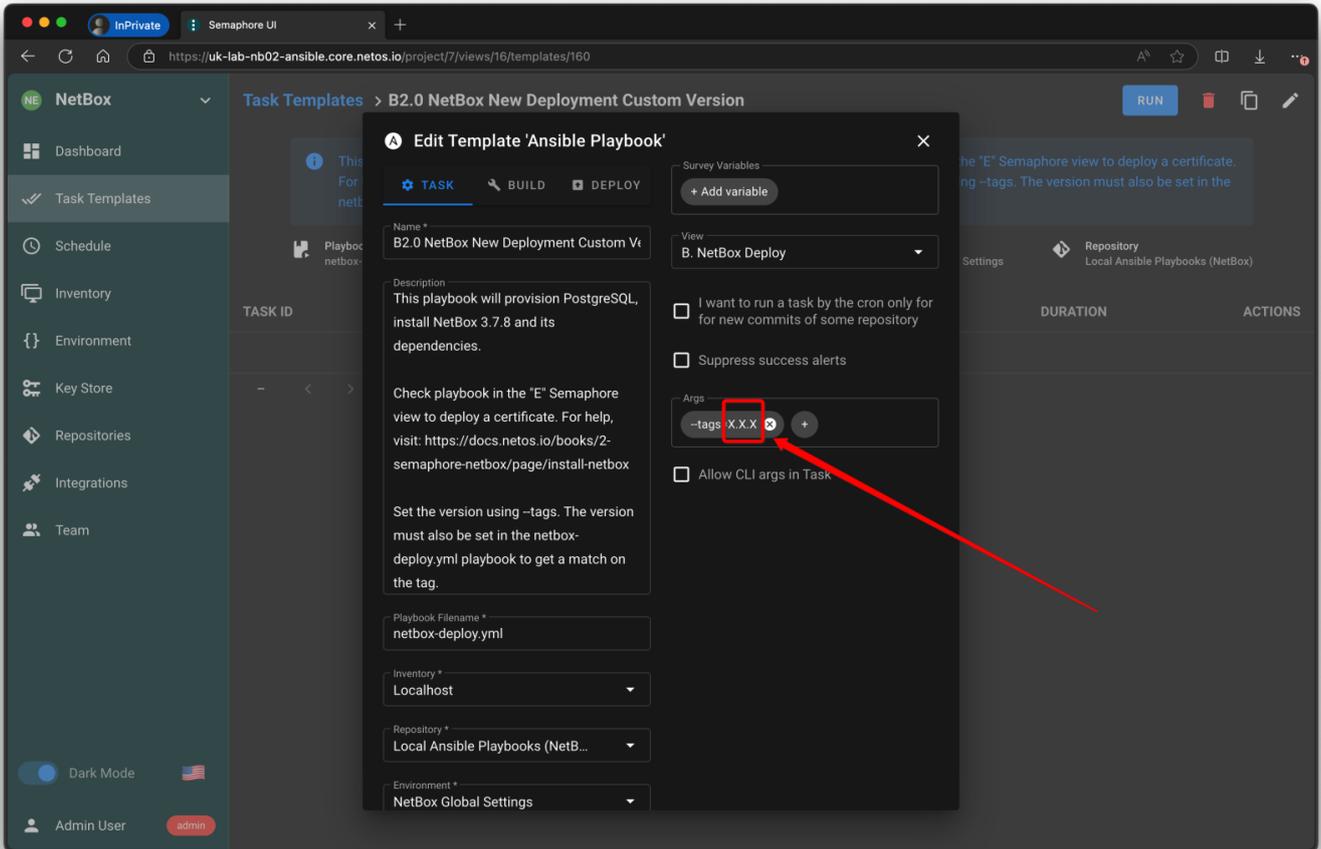
Browse to the **NETBOX DEPLOY** view in Semaphore to start the installation. The full [NetBox Installation Guide](#) is here.

The screenshot shows the Semaphore UI interface for managing task templates. The left sidebar contains navigation options like Dashboard, Task Templates, Schedule, Inventory, Environment, Key Store, Repositories, Integrations, and Team. The main area displays a table of task templates under the 'NETBOX DEPLOY' tab. The table has columns for NAME, STATUS, PLAYBOOK, REPOSITORY, and ACTIONS. The following table represents the data shown in the screenshot:

NAME	STATUS	PLAYBOOK	REPOSITORY	ACTIONS
B1.0 NetBox New Deployment v3.7.8	Success	netbox-deploy.yml	Local Ansible Playbooks (NetBox)	RUN
B1.1 NetBox New Deployment v4.0.11	Not launched	netbox-deploy.yml	Local Ansible Playbooks (NetBox)	RUN
B2.0 NetBox New Deployment Custom Version	Not launched	netbox-deploy.yml	Local Ansible Playbooks (NetBox)	RUN
B3.0 NetBox Upgrade Check Path	Not launched	netbox-deploy-check-path.yml	Local Ansible Playbooks (NetBox)	RUN
B3.1 NetBox Upgrade to Next Suitable Version	Not launched	netbox-deploy-upgrade.yml	Local Ansible Playbooks (NetBox)	RUN
B4.0 Deploy NetBox CSRF Domain Settings	Not launched	netbox-csrf.yml	Local Ansible Playbooks (NetBox)	RUN
B5.0 Remove NetBox App and Database	Not launched	netbox-remove.yml	Local Ansible Playbooks (NetBox)	RUN

Red annotations in the image highlight the 'B2.0 NetBox New Deployment Custom Version' template as 'Custom NetBox versions' and the 'B1.0' and 'B1.1' templates as 'Predefined NetBox versions'.

If you want to install a specific version, set it here, matching the numeric version from [Releases · netbox-community/netbox \(github.com\)](#). Don't add the `v`, i.e. `v4.1.2` would be `4.1.2`.



Configure scheduled daily [NetBox Backups](#) or set your own custom frequency.

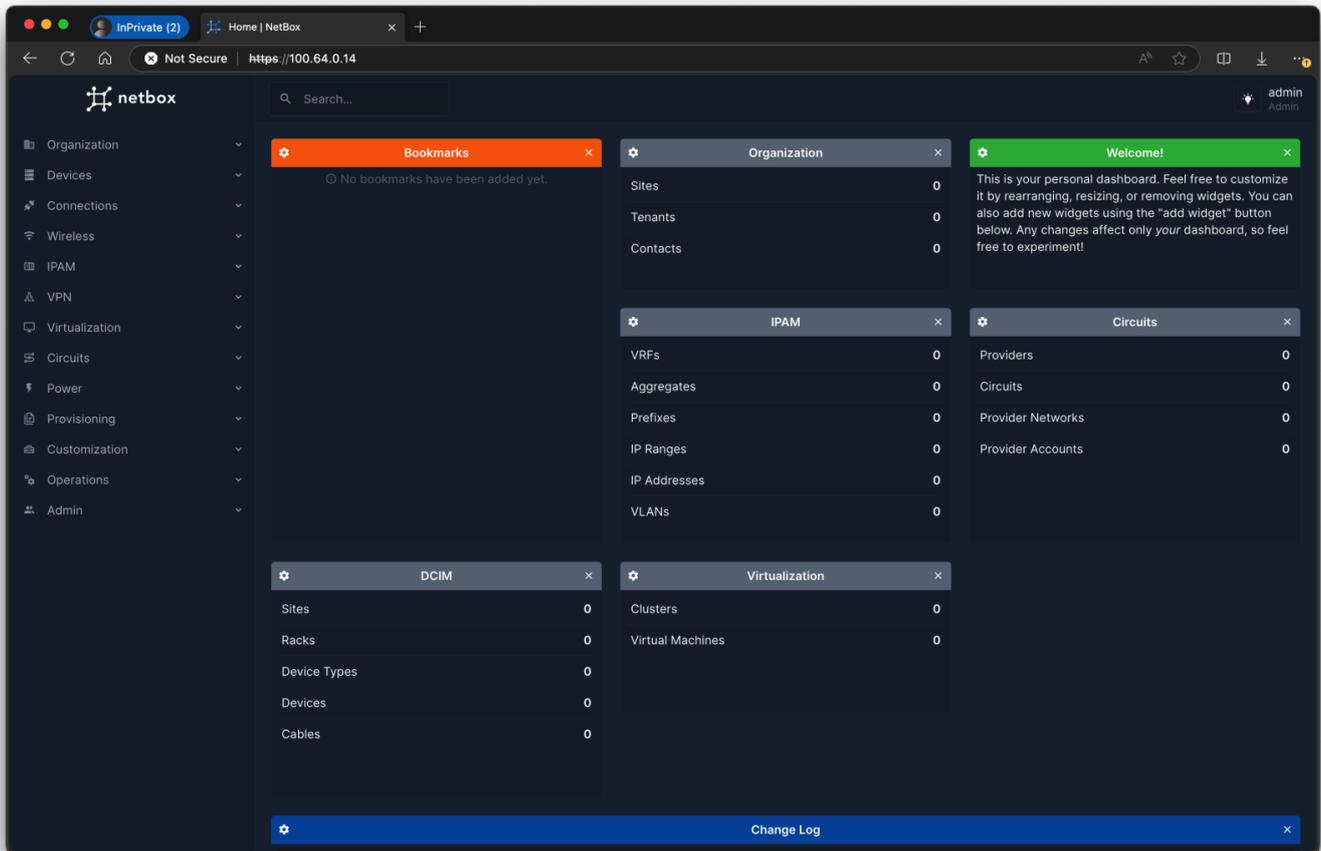
[Upgrade NetBox](#). For example, maybe you've used the [Restore](#) process to restore to an older version and want to upgrade to a newer version.

Enable the [NetBox Maintenance Playbook](#) on a daily schedule as per the developer's guidance.

6. Connect to NetBox

Once the playbook is complete, you should be able to connect using HTTPS and the IP address to NetBox. Check the [Users, Accounts, and Tokens](#) guide for full details on account and passwords. The default credentials are as follows:

- **Username:** `admin`
- **Password:** `ohp8toef7Jee`



If you experience any problems, you can run the [Health Check Playbook](#) to quickly diagnose common issues. For example, check the logs to catch the reason why NetBox failed to start.

7. Install NetBox Plugins

You can [Install and Upgrade](#) popular NetBox plugins from within Semaphore, and also [Disable NetBox Plugins](#). This feature is a work-in-progress, and probably will be for a while...!

The screenshot shows the NetBox interface with the 'Task Templates' section selected. The interface is in dark mode. The left sidebar contains navigation options: Dashboard, Task Templates (selected), Schedule, Inventory, Environment, Key Store, Repositories, Integrations, and Team. The main content area displays a table of task templates under the 'C. NETBOX PLUGINS' category. The table has columns for Name, Status, Last Task, Playbook, Repository, and Actions. The status of each task is either 'Success' (indicated by a green checkmark) or 'Not launched'. The 'Last Task' column shows the task ID and the user who executed it. The 'Playbook' column shows the name of the Ansible playbook used. The 'Repository' column shows the location of the playbook. The 'Actions' column contains a 'RUN' button for each task.

NAME	STATUS	LAST TASK	PLAYBOOK	REPOSITORY	ACTIONS
C. IP Fabric - Deploy Plugin	Success	#2640 by Admin User	netbox-plugin-deploy.yml	Local Ansible Playbooks (NetBox)	RUN
C. IP Fabric - Disable Plugin	Not launched		netbox-plugin-disable.yml	Local Ansible Playbooks (NetBox)	RUN
C. NetBox ACLs - Deploy Plugin	Success	#2642 by Admin User	netbox-plugin-deploy.yml	Local Ansible Playbooks (NetBox)	RUN
C. NetBox ACLs - Disable Plugin	Not launched		netbox-plugin-disable.yml	Local Ansible Playbooks (NetBox)	RUN
C. NetBox Attachments - Deploy Plugin	Success	#2641 by Admin User	netbox-plugin-deploy.yml	Local Ansible Playbooks (NetBox)	RUN
C. NetBox Attachments - Disable Plugin	Not launched		netbox-plugin-disable.yml	Local Ansible Playbooks (NetBox)	RUN
C. NetBox BGP - Deploy Plugin	Success	#2643 by Admin User	netbox-plugin-deploy.yml	Local Ansible Playbooks (NetBox)	RUN
C. NetBox BGP - Disable Plugin	Not launched		netbox-plugin-disable.yml	Local Ansible Playbooks (NetBox)	RUN
C. NetBox OTP - Deploy Plugin	Success	#2602 by Admin User	netbox-plugin-deploy.yml	Local Ansible Playbooks (NetBox)	RUN
C. NetBox OTP - Disable Plugin	Success	#2576 by Admin User	netbox-plugin-disable.yml	Local Ansible Playbooks (NetBox)	RUN
C. NetBox Re-Order Rack - Deploy Plugin	Success	#2592 by Admin User	netbox-plugin-deploy.yml	Local Ansible Playbooks (NetBox)	RUN
C. NetBox Re-Order Rack - Disable Plugin	Not launched		netbox-plugin-disable.yml	Local Ansible Playbooks (NetBox)	RUN
C. NetBox Secrets - Deploy Plugin	Success	#2645 by Admin User	netbox-plugin-deploy.yml	Local Ansible Playbooks (NetBox)	RUN
C. NetBox Secrets - Disable Plugin	Not launched		netbox-plugin-disable.yml	Local Ansible Playbooks (NetBox)	RUN
C. NetBox Topology Views - Deploy Plugin	Success	#2646 by Admin User	netbox-plugin-deploy.yml	Local Ansible Playbooks (NetBox)	RUN

If things go wrong in your test environment, you can quickly [Wipe NetBox](#) and start again.

Revision #26

Created 24 September 2024 17:29:04 by Richard Foster

Updated 15 October 2024 07:51:15 by Richard Foster