

# Introduction to the Netos NetOps Project

## Introduction

Our goal with our Semaphore projects is to deliver a framework that makes it simple and fast to deploy and manage open-source enterprise networking applications and tools.

- Quickly spin up an enterprise grade application stack (in minutes).
- Deal with all the critical yet time consuming platform engineering at the click of a button.
- Deal with the boring but important stuff like backups, restores, and maintenance.
- Fast track to the interesting stuff like playing with the tools and dev/test.

Over time we will publish more projects with associated playbooks. Currently available is:

- **Netos NetOps** - A simple wrapper project for managing the underlying Semaphore instance.
- **Netos NetBox** - Contains all the playbooks to deploy and operate NetBox.

## Ansible Semaphore

Semaphore UI is a simple and easy to use alternative to Ansible AWX. Netos have used it for over a year without issues to run thousands of playbooks and manage all of our infrastructure.

“ It is convenient and easy to use - user friendly web interface for executing Ansible playbooks, Terraform, OpenTofu, Pulumi code and Bash scripts. It is designed to make your automation tasks easier and more enjoyable.

## Playbooks

At a click of a button you can perform complex installations, like installing NetBox, and a lot more.

**B1.0 NetBox New Deployment v3.7.8** > Task #2691

Success

Author  
Admin User

Started  
15 hours ago

Duration  
3 minutes

8:51:17 PM

changed: [127.0.0.1] => (item=netbox)

8:51:17 PM

changed: [127.0.0.1] => (item=netbox-rq)

8:51:17 PM

TASK [netbox-deploy : Add Postgresql ubuntu apt key] \*\*\*\*\*

8:51:19 PM

ok: [127.0.0.1]

8:51:19 PM

TASK [netbox-deploy : Get lsb\_release version for Ubuntu] \*\*\*\*\*

8:51:19 PM

changed: [127.0.0.1]

8:51:19 PM

TASK [netbox-deploy : Add Postgresql Repository for noble] \*\*\*\*\*

8:51:20 PM

ok: [127.0.0.1]

8:51:20 PM

TASK [netbox-deploy : Ensure postgresql client is installed] \*\*\*\*\*

8:51:20 PM

ok: [127.0.0.1]

8:51:20 PM

TASK [netbox-deploy : Ensure requisite directories are created] \*\*\*\*\*

8:51:20 PM

ok: [127.0.0.1] => (item=/netos/backups)

8:51:21 PM

ok: [127.0.0.1] => (item=/netos/backups/netbox)

8:51:21 PM

TASK [netbox-deploy : ensure .pgpass file is created] \*\*\*\*\*

8:51:21 PM

ok: [127.0.0.1]

8:51:21 PM

TASK [netbox-csrf : Modify the CSRF\_TRUSTED\_ORIGINS Setting in settings.py] \*\*\*\*

8:51:21 PM

changed: [127.0.0.1]

8:51:21 PM

RUNNING HANDLER [database-deploy : restart postgresql] \*\*\*\*\*

8:51:24 PM

changed: [127.0.0.1]

8:51:24 PM

RUNNING HANDLER [netbox-csrf : restart netbox services] \*\*\*\*\*

8:51:26 PM

changed: [127.0.0.1] => (item=netbox)

8:51:28 PM

changed: [127.0.0.1] => (item=netbox-rq)

8:51:28 PM

PLAY RECAP \*\*\*\*\*

## Views

Views group together different playbooks, for example, below you can the tasks that deploy NetBox:

Task Templates

NEW TEMPLATE

ALLA. OPERATIONS**B. NETBOX DEPLOY**C. NETBOX PLUGINSD. NETOSE. SYSTEM

NAME	VERSION	STATUS	LAST TASK	PLAYBOOK	INVENTORY	ENVIRONM
▼ ⚙️ B1.0 NetBox New Deployment v3.7.8	—	Success	#2576 by Admin User	netbox-deploy.yml	Localhost	NetBox Glo
▼ ⚙️ B1.1 NetBox New Deployment v4.0.11	—	Not launched		netbox-deploy.yml	Localhost	NetBox Glo
▼ ⚙️ B2.0 NetBox New Deployment Custom Version	—	Not launched		netbox-deploy.yml	Localhost	NetBox Glo
▼ ⚙️ B3.0 NetBox Upgrade Check Path	—	Success	#2593 by Admin User	netbox-deploy-check-path.yml	Localhost	NetBox Glo
▼ ⚙️ B3.1 NetBox Upgrade to Next Suitable Version	—	Success	#2573 by Admin User	netbox-deploy-upgrade.yml	Localhost	NetBox Glo
▼ ⚙️ B4.0 Deploy NetBox CSRF Domain Settings	—	Success	#2574 by Admin User	netbox-csrf.yml	Localhost	NetBox Glo
▼ ⚙️ B5.0 Remove NetBox App and Database	—	Success	#2575 by Admin User	netbox-remove.yml	Localhost	NetBox Bac

# Semaphore Projects

Finally, we group everything together into different projects.

NE NetBox

NE NetOps

NP Netos Pod

+ New project...

↺ Restore Project...

{ } Environment

🔑 Key Store

📦 Repositories

🔗 Integrations

👤 Team

Task Templates

ALLA. OPERATIONS**B. SYSTEM**

NAME	VERSION	STATUS
▼ ⚙️ A2.0 Semaphore Backup	—	Not launched
▼ ⚙️ B1.0 Deploy Semaphore NGINX & Self-Signed Cert	—	Not launched
▼ ⚙️ B1.1 Deploy Semaphore NGINX & Custom Cert	—	Not launched
▼ ⚙️ B2.0 Git Pull Netos NetOps Repo	—	Not launched