Introduction to the Netos NetOps Project

Introduction

Our goal with our Sempahore 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   Started   Duration
                 Admin User   15 hours ago   3 minutes

```
8:51:17 PM     changed: [127.0.0.1] => (item=netbox-rq)
8:51:17 PM
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
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
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
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
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
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
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
8:51:21 PM     RUNNING HANDLER [database-deploy : restart postgresql] ************************
8:51:24 PM     changed: [127.0.0.1]
8:51:24 PM
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
8:51:28 PM     PLAY RECAP *******************************************************************
```

Views

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

Task Templates

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 Bad

Semaphore Projects

Finally, we group everything together into different projects.