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Sign up

NetBox IPAM & DCIM training

2 days (14 hours)

Presentation

NetBox is an open source platform that unifies IPAM and DCIM to become your infrastructure's source of truth. Thanks to its rich data model, powerful APIs and ecosystem of plugins, NetBox structures your inventory and powers your DevOps automations.

Our NetBox IPAM & DCIM training course will teach you how to model sites, racks, equipment, interfaces and IP addresses, secure and industrialize data quality, then integrate NetBox into your automation pipelines (API, Ansible, Terraform).

You'll also see how to leverage NetBox's reporting capabilities, change management and plug-in extension to operationalize NetBox in production.

At the end of the course, you'll be able to deploy and administer NetBox as a reliable source of truth, power your network/infra workflows and accelerate your industrialization projects.

Like all our training courses, this one uses the latest stable version of NetBox.

Objectives

- Model a complete IPAM/DCIM inventory
- Implement API, Ansible, Terraform for automation
- Secure and govern data (RBAC, quality, audit)
- Industrialize reports, imports/exports and jobs
- Leverage NetBox as a source of truth for DevOps/NetOps

Target audience

- DevOps / NetOps engineers

- Network & datacenter administrators
- Infrastructure engineers
- Cloud & automation architects

Prerequisites

- Linux and network basics

NetBox IPAM & DCIM training program

[Day 1 - Morning]

Understanding NetBox: IPAM, DCIM and source of truth

- IPAM/DCIM positioning and use cases
- Data model: sites, racks, devices, interfaces, IP, VLAN, VRF
- Governance and data quality
- Integration with the IT ecosystem
- Practical workshop: Install NetBox and take your first inventory.

[Day 1 - Afternoon]

IP Address Management (IPAM)

- VRF, prefixes, IPs, VLANs: concepts and links
- Roles, status, custom fields, bulk edit
- IP assignment ? interfaces and reservations
- Best practices for addressing plans
- Practical workshop: Modeling a multi-VRF addressing plan.

Data Center Infrastructure Management (DCIM)

- Racks & devices, modules, power & cabling
- Front/back connections, providers
- Tags, custom links, documentation
- CSV import/export
- Workshop: Documenting a complete rack and its cabling.

[Day 2 - Morning]

Automation & integration (APIs, GitOps, IaC)

- REST/GraphQL APIs, tokens, webhooks
- Ansible & Terraform integration
- GitOps strategy (PR, promotions)
- Tooling examples (config generation)
- Practical workshop: Powering NetBox via API/Ansible.

[Day 2 - Afternoon]

Supervision, data quality and security

- Reports, jobs, change tracking
- Integrity checks and audits
- RBAC, SSO/LDAP, permissions
- Mass import management
- Practical workshop: Building a data quality report.

Extensions, plugins & advanced operation

- Overview of plugins, compatibility
- NetBox?Docker (dev/test), backup & upgrade
- Runbooks and operating model
- Industrialization roadmap
- Practical workshop: Deploying in containers and preparing a runbook.

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced IT technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the forthcoming course, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical training: 60% hands-on, 40% theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples and

and group work sessions.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Certification

A certificate will be awarded to each trainee who has completed the entire course.