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Sign up

XCP-ng training

3 days (21 hours)

Presentation

Discover advanced solutions for resource and virtual machine management with our XCP-ng training course. This user-friendly, high-performance open-source virtualization platform will enable you to optimize your virtual workloads.

You'll learn to master concepts such as live migration, restore and backup virtual machines and virtual networking. In particular, you'll be able to create and monitor as many virtual machines as you like.

At the end of the course, you'll be challenged to acquire skills in virtualization, problem solving and all aspects of server management.

As with all our training courses, this one will introduce you to the latest version of XCP-ng (at the time of writing: XCP-ng 8.2.

Objectives

- Efficient use of the local management interface and Xen Orchestra
- Master the installation and initial configuration of XCP-ng
- Learn how to create and manage Virtual Machines, resources and saveugarde
- Implement backup and high-availability strategies

Target audience

- System and Network Administrators
- Developers
- IT engineers

Prerequisites

- Basic knowledge of systems administration
- Experience with virtualization

XCP-NG TRAINING PROGRAM

INTRODUCTION

- Introducing XCP-ng and its benefits
- Understanding use cases and key functionalities
- Comparison with other virtualization solutions
- Overview of the XCP-ng ecosystem (Xen Orchestra, XO Lite)
- Exploring community and support resources

INSTALLATION

- System requirements and hardware support
- Installation process on different types of equipment
- Migrating an existing system to XCP-ng
- Upgrade to a new version of XCP-ng
- Checking compatibility and resolving installation problems

LOCAL AND LARGE-SCALE MANAGEMENT

- Using XCP-ng's local management interface
- Getting to grips with Xen Orchestra Web UI for centralized management
- Large-scale management with Xen Orchestra CLI and API
- Updating XCP-ng and managing additional packages
- Best practices for load balancing virtual machines (VMs)

BACKUP AND HIGH AVAILABILITY

- VM backup and restore strategies
- Configuring high availability for critical VMs
- Using cloud-based features for backup
- Infrastructure as code for management and automation
- Practical workshop on setting up regular backups

VIRTUAL MACHINE MANAGEMENT

- VM creation, management and deletion
- Configuration of allocated resources (CPU, memory, disk)
- VM import and export
- VM snapshot and clone management
- Best practices for optimizing VM performance

STORAGE CONFIGURATION

- Overview of storage solutions in XCP-ng
- Configuration of different types of storage (local, shared, iSCSI, etc.)
- Disk and volume management
- Storage performance and optimization
- Practical workshop on storage configuration

NETWORK IN XCP-NG

- Basic network configuration in XCP-ng
- Setting up virtual network strategies (VLAN, bonding)
- Network security and VM isolation
- Network performance and troubleshooting
- Practical workshop on advanced network configuration

COMPUTE RESOURCE MANAGEMENT AND GPU

- Computing resource management
- Configuring and using GPUs for VMs
- Dynamic allocation and power management
- Performance and provisioning monitoring
- Practical workshop on optimizing computing resources

TROUBLESHOOTING AND WINDOWS TOOLS

- Methodology for troubleshooting after an upgrade
- Diagnosis and resolution of common problems
- Analysis of log files
- Solving storage-related problems
- Installing and configuring Windows Agent / PV-Tools

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer 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 confirmed, 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 learning difficulties.

in-company security (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

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

Sanction

A certificate will be issued to each trainee who completes the course.