Course : Proxmox Level 1: Installation, Implementation and Administration

Practical course - 3d - 21h00 - Ref. PXA
Price : 2240 € E.T.

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NEW

This training course will give you the essential skills to deploy and administer a virtualization infrastructure with Proxmox VE. It covers installation, management of virtual machines and containers, as well as security.

Teaching objectives

At the end of the training, the participant will be able to:

- Understand the fundamental concepts of virtualization and the role of Proxmox VE
- Install and configure Proxmox VE on a server
- Create and manage Kernel-based Virtual Machine (KVM) and Linux Container (LXC) virtual machines
- Use the web interface and essential administration commands
- Set up storage adapted to the needs of a virtualized environment
- Backup and restore virtual machines (VMs)/ConTainers (CTs)

Intended audience

This course is designed for system administrators and architects who want to get to grips with the Proxmox software suite quickly.

Prerequisites

Basic knowledge of Windows and/or Linux administration required.

Course schedule

1 Introduction to Proxmox VE and virtualization

- General overview of virtualization.
- Virtualization concepts (hypervisors, paravirtualization, full virtualization).
- Virtualization in the Linux kernel: LXC versus KVM.
- Presentation of Proxmox VE and its position in the ecosystem.

PARTICIPANTS

This course is designed for system administrators and architects who want to get to grips with the Proxmox software suite quickly.

PREREQUISITES

Basic knowledge of Windows and/or Linux administration required.

TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

2 Installation and initial configuration

- Preparing a server for Proxmox (BIOS, storage, network).
- Prerequisites for installation in "bare-metal".
- Implementation of the first server in the model using nested virtualization.
- Configuration of initial parameters after installation.
- Presentation and navigation of the web interface.

Hands-on work

Install Proxmox VE on a server and discover the web interface.

3 LXC containers: creation and administration

- Introducing LXC and its benefits.
- Container creation and management via web interface and command line.
- Use of LXC templates.
- Network configuration and resource management.

Hands-on work

Create and configure an LXC container.

4 KVM virtualization: creation and administration

- Differences between KVM and LXC.
- Create and configure a KVM VM.
- CPU/RAM/storage resource management.
- Snapshots and snapshot management.

Hands-on work

Create and configure a KVM virtual machine (VM).

5 Storage management in Proxmox VE

- Overview of compatible storage systems (LVM, ZFS, iSCSI, NFS, CIFS).
- Add and configure storage for VMs and CTs.
- Disk and cache management.

Hands-on work

Add storage and migrate a virtual machine (VM).

6 Backup and restoration

- Backup methods (local and remote).
- Restore a VM or CT from a backup.
- Scheduling backups.

Hands-on work

VM restoration planning and testing.

7 Network management and security

- Management of network interfaces and bridges.
- Network configuration for VM and CT.
- Introduction to the Proxmox firewall.

Hands-on work

Configuring a network bridge to isolate VMs.

TEACHING AIDS AND TECHNICAL RESOURCES

• The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.

• At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.

• A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@orsys.fr to review your request and its feasibility.

Dates and locations

REMOTE CLASS
2026 : 25 Mar., 29 June, 14 Oct., 2 Dec.

PARIS LA DÉFENSE
2026 : 22 June, 7 Oct., 25 Nov.