Updated 07/30/2024

Sign up

Qubes OS training

2 days (14 hours)

PRESENTATION

Our Qubes OS training course will enable you to master a security-focused operating system thanks to virtualization isolation. Unlike other systems, Qubes OS uses a qubes (virtual machine) architecture to separate different tasks and applications, offering an unrivalled level of security.

You'll learn how to install, configure and use Qubes OS, while exploiting its advanced features to maintain a high level of security.

You'll get hands-on experience with the many features of Qubes OS and discover how these features can be integrated to create a secure and robust environment.

This program consists of theoretical lectures and practical exercises designed to help you understand and master the workings of Qubes OS. These exercises will teach you how to perform configuration and operation tasks to maximize the benefits offered by this unique operating system.

As with all our training courses, this one will introduce you to the latest stable version of Qubes OS (at the time of writing).

Objectives

- Understanding virtualization and isolation concepts in Qubes OS
- Install and configure Qubes OS securely
- Manage and organize qubes efficiently
- Implement advanced security techniques in Qubes OS
- Customize and administer software and interfaces in different qubes

Target audience

- IT security professionals
- System administrators
- Cybersecurity engineers
- Systems architects
- Security Consultants

Prerequisites

- Practical experience of basic IT security concepts
- Basic knowledge of Linux command lines is recommended
- Familiarity with the use of virtual machines (VirtualBox, KVM, VMWare)

Technical requirements

- Access to pre-configured Qubes OS virtual machines for training, either via a remote server (e.g. 128 GB Ubuntu server with VirtualBox and RDP configured) or via a DaaS solution.
- A personal computer capable of running virtual machines with at least 16 GB of memory. RAM.

QUBES OS TRAINING PROGRAM

INTRODUCTION TO QUBES OS

- Overview of Qubes OS and its key features
- Demonstrate user interfaces with screenshots and videos
- Discussion on the importance of security in Qubes OS
- Exploring virtualization and isolation concepts in Qubes

HARDWARE REQUIREMENTS AND COMPATIBILITY

- Minimum and recommended system requirements for Qubes OS
- Presentation of certified and community-recommended equipment
- Explanation of how to use the hardware compatibility list (HCL)
- Tips for choosing the right equipment for your safety needs

INSTALLATION AND UPGRADE

- Step-by-step guide to downloading and installing Qubes OS
- Safety measures to be taken during installation
- Upgrade procedures and management of supported versions
- Initial configuration after installation

MANAGEMENT AND ORGANIZATION OF QUBES

- How to organize, update and manage your qubes efficiently
- Qubes backup, restoration and migration techniques
- Using disposable qubes and template management
- Recommended practices for daily qube maintenance

SAFETY IN QUBES BONES

- Configuring and using the built-in firewall
- Data leakage prevention and device security
- Implementation of advanced techniques such as Anti Evil Maid and Split GPG
- Discussion of Multi-factor Login and other advanced security configurations

ADVANCED USE AND CONFIGURATION

- Installing and managing software in dom0 and various qubes
- Customization of disposable qubes and graphic interfaces
- Qube core management and RPC policies
- Case studies and solutions to common problems encountered by users

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 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 training to come, 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 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.