

Overview

This hands-on practical course provides participants with a practical introduction virtualization and cloud computing. These are arguably two of the most significant enablers in modern computing, allowing for rapid deployment of new services and easier backup and recovery strategies. The course provides an understanding of each and builds skills in deploying and managing virtual environments and ultimately launching different types of cloud service. The learning is facilitated with many practical exercises and activities.

You will be able to

- Install and configure a virtual environment
- Create a virtual machine
- Remotely access & control a virtual machine
- Perform backup, export, import and cloning functions on a virtual machine
- Monitor resource usage in a virtual environment
- Configure virtual network services
- Monitor traffic in a virtual environment
- Design a Virtual Network from a given plan
- Understand different modes of cloud computing
- Create a basic cloud service
- Configure cloud clients to utilize a cloud service

Who can benefit

All those who need to be familiar with virtualization technology and cloud computing

Pre requisite knowledge

Basic technical knowledge of computer & operating systems

Outline

Introduction to Virtualization

- What is virtualization
- Server virtualization
- Key virtual environments & platforms
- Virtual data centres
- Virtualization & cloud computing
- Cloud models
- Migration strategies

Virtual Environments

- Key virtual environments & hypervisors
- Installing a virtual management system
- Key environment variables
- Storage

Virtual Server creation

- Creating a VM

- Installing an OS
- Export & cloning
- Downloading VMs
- Connecting to the VM
- VM snapshots

Virtual Machine Management

- Modifying VM settings
- Integrating VMs with hosts
- Monitoring resource usage
- VM backup strategies

Virtual Networking

- Configuring interfaces
- Bridging and internal interfaces
- Internal switching and DHCP
- Virtual network devices
- Monitoring internal activity
- Virtual network design & implementation
- Troubleshoot faults on a Virtual Network

Cloud Computing

- Cloud versus virtualization
- Cloud modes
 - Infrastructure as a Service (IaaS)
 - Software as a Service (SaaS)
 - Platform as a Service (PaaS)
 - Network as a Service (NaaS)
- Private and public Cloud

Configuring Cloud Services

- Creating a LAMP server
- Setting up a simple cloud storage environment
- Deploying a cloud web service
- Configuring a database for a service
- Cloud clients
- Managing cloud services
- Software defined networking (SDN)

DURATION 5 days

MAXIMUM CLASS SIZE 12