

RWNOG 2022

Virtualization and cloud computing

31st May to 04th June 2022

9:00 am (07:00 UTC) – 17:00 pm (15:00 UTC)

Virtualization and Cloud computing Workshop Overview

Virtualization uses software to create an abstraction layer over computer hardware that allows the hardware elements of a single computer—processors, memory, storage and more—to be divided into multiple virtual computers, commonly called virtual machines (VMs). Each VM runs its own operating system (OS) and behaves like an independent computer, even though it is running on just a portion of the actual underlying computer hardware

Today, virtualization is a standard practice in enterprise IT architecture. It is also the technology that drives cloud computing economics. Virtualization enables cloud providers to serve users with their existing physical computer hardware; it enables cloud users to purchase only the computing resources they need when they need it, and to scale those resources cost-effectively as their workloads grow.

RWNOG WORKSHOP AGENDA

Day 1: 9:30 – 17:00

Welcoming remarks- **RICTA CEO** (9:00 – 9:30 am)

Topics to be covered

- Software Review (Linux/UNIX)
- Unix – basics
- What is virtualization?
- Benefits of virtualization?
- Defining the problems?
- Virtualization concept?
- Different types of Virtualizations?
- Disk Management (RAID) – Practical Session

The day includes breaks Session

Day 2: 9:00 – 17:00

The day is more on practical sessions (Hands-On)

- Installing virtualization software (VMware ESXI)
- Creation of virtual machines & installation of an operating system (Ubuntu 20.04 LTE)
- Introduction on vCenter?

The day includes breaks session

Day 3: 9:00 – 17:00

The day is more on practical sessions (Hands-on)

- Installation of vCenter
- Creation of clustering to benefit from High availability services + Distributed Resource Scheduler
- How to Secure the virtual environment
- Installation of tools to monitor service availability

The day includes breaks

Day 4: 9:00 – 17:00

The day is more on Cybersecurity Awareness

Closing: 4:00-4:30

Survey and handing of Certificates