

## HANDS\_ON

# Networks Administration

Trainees will be exposed to the following;

- Designing and planning the network
- Setting up the network
- Maintaining the network
- Securing the network
- Expanding the network

### Power management systems

- Setting up power backup systems.
- Monitoring of power backup systems using automatic shutdown software.

### ii) LAN setup and configuration

- Look at the various networking tools
- Introduction to networking devices i.e. switches, routers, WAPs
- Terminating cables in a structured environment
- IP addressing IPv4 and IPv6
- Setting up and configuring wireless networks
- Configuring and setting up indoor and outdoor antennas.
- Integrating wired and wireless networks
- Sharing network resources like printers and scanners

### iii) Network Design connectivity

- Network design principles
- Modular network design solutions
- Switching design methods
- Choosing routing protocols

- Basic WAN design
- IP address design techniques
- Assessing Network security
- Designing Network management

### **WAN setup and configuration**

- Overview of a typical LAN-WAN architecture (Telecom / 1000+ hosts)
- Designing and drawing network architecture diagrams
- Designing WAN architectures using CISCO recommended SAFE architecture
- Setup and configuration of advanced LAN/ WAN Simulation tools e.g. GNS3
- Remote logins using tools like putty etc...
- Layer 2 / WAN switches setup and configuration
- Layer2/WAN router setup and configurations
- Layer 3/ core switches setup and configuration
- Network address Translation (NAT)
- Configuring VLANs

### **iv) Network security**

- The Cisco security product line
- Self defending networks.
- Locking down routers
- Configuring routers for AAA
- Using access lists
- Secure management and reporting
- Locking down the catalyst switch
- Layer 2 attacks
- Planning and setting up a DMZ.
- Setting up and configuration of firewalls (PIX and ASA).
- Setting up and configuration of proxy servers.
- Threat management Gateway(TMG)

- VPN: VPN product Line up

#### vi) VOIP AND PABX setup and configuration

- configuration of basic PBX systems (office phone system)

And much more...

#### Delivery Method

Instructor-Led with numerous Hands-On labs and exercises.

Course Length: 4 weeks

Price: **UGX 400,000**