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### **GNS3 TRAINING**

3 days (21 hours)

## **GNS3** Training presentation

**GNS3** is a program for simulating router and switch networks running under IOS (the operating system for Cisco routers and switches).

GNS3 is used by hundreds of thousands of network engineers worldwide to emulate, configure, test and troubleshoot virtual and real networks. GNS3 lets you run a small topology consisting of just a few devices on your laptop, to those with multiple devices hosted on multiple servers or even hosted in the cloud.

GNS3 can not only help you prepare for certification exams such as Cisco CCNA, but also help you test and verify real-life deployments. Jeremy Grossman, the original developer of GNS3, originally created the software to help him study for his CCNP certifications. Thanks to this original work, today you can help yourself do the same without paying for expensive hardware.

The course will use the latest stable version of the project (GNS3 version 2.2.19 to date).

# **Objectives**

- Increase networking lab capacity
- Enable the whole class of students to work simultaneously on the same lab session in the networking lab, PC lab, Mac lab or remotely online.

## Target audience

Network administrators, Infrastructure architects, System administrators

#### **Prerequisites**

Linux knowledge

#### **OUR GNS3 TRAINING PROGRAM**

#### Benefits

- Free software
- Free software
- No monthly or annual license fees
- No limitation on the number of devices supported (the only limitation is your hardware)
  CPU and memory)
- Supports multiple switching options (ESW16 Etherswitch, IOU/IOL Layer 2 images, VIRL IOSvL2)
- Supports all VIRL images (IOSv, IOSvL2, IOS-XRv, CSR1000v, NX-OSv, ASAv)
- Support for multi-vendor environments
- Can be used with or without hypervisors
- Support for free and paid hypervisors (Virtualbox, VMware workstation, VMware player, ESXi, Fusion)
- Downloadable, free, pre-configured and optimized appliances are available for simplify deployment.
- Native Linux support without the need for additional virtualization software
- Software from several suppliers available free of charge
- Large, active community (over 800,000 members)

#### Disadvantages

- Cisco images must be supplied by the user (download from Cisco.com, or purchase of a VIRL license, or copy from a physical device).
- This is not a stand-alone software package, but a local software installation (GUI).
- GNS3 may be affected by your PC's configuration and limitations due to local installation (firewall and security settings, company laptop policies, etc.).

#### 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.

#### 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.