



MELBOURNE
INSTITUTE OF TECHNOLOGY

LABORATORY 1

Course Title: Network Automation

Course code: MN521

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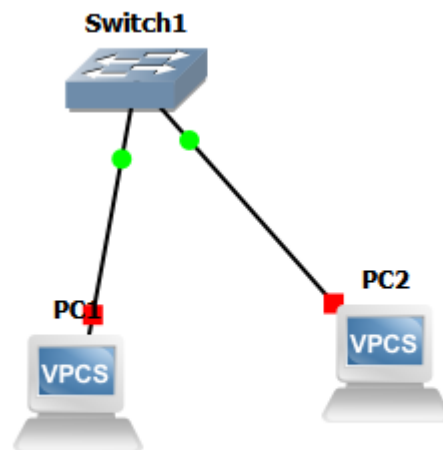
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Software Installation and Configuration

1. VirtualBox Installation



Router0

Physical Config **CLI** Attributes

IOS Command Line Interface

```

Router>en
Router>enable
Router#config t
Router#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface GigabitEthernet 0/1
^
% Invalid input detected at '^' marker.

Router(config)#
Router(config)#
Router(config)#inte
Router(config)#interface GigabitEthernet0/1
^
% Invalid input detected at '^' marker.

Router(config)#
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#
Router#
Router#config t
Router#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface GigabitEthernet0/1
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up

Router(config-if)#show interfaces
  
```

Ctrl+F6 to exit CLI focus

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VirtualBox was installed as the virtualization environment required to host both the GNS3 VM and an Ubuntu VM. The latest version compatible with the host operating system was used.

2. GNS3 VM Setup

The GNS3 VM was downloaded and imported into VirtualBox using the "Import Appliance" feature. Network configurations were as follows:

Adapter 1: NAT (for internet access)

Adapter 2: Host-only Adapter (for local connectivity with host and other VMs)

3. Ubuntu VM Installation

Ubuntu virtual machine was installed and configured in VirtualBox. The operating system was installed from the default ISO, and the minimal system updates were installed.

4. GNS3 Client Installation

The GNS3 client was set up on the Ubuntu VM through the GNS3 PPA repository. Dependencies such as Wireshark and ubridge were installed and configured for non-root user access.