



THE UNIVERSITY of
NEW ORLEANS

CSCI 4460/5460 **NETWORK OPERATION & DEFENSE**

Spring 2024

LAB #3: Server Management

DUE: April 23, 11:59pm

GOALS

Main goal of the project is to create and configure Webserver, Mailserver and Cloud Server.

Steps:

You need at least 2 Ubuntu VM for this assignment. You will use one of the VM for installing servers. The other one will be for testing purposes.

Note that you need to create a fresh Ubuntu for installing servers. Also, setup your VM for bridged network, not NAT.

Target 1: Create a webserver

In the first step, you will create your own website by using local hosting. You can use Apache which is an open-source web server. You can use the following link for tutorial.

<https://ubuntu.com/tutorials/install-and-configure-apache#1-overview>

Change the default Apache webpage and create your own webpage. Keep it simple but create something interesting. E.g. put some text, some photos etc. No need to create complex website, simple HTML would be fine.

Note that you need to edit configuration files. Do NOT leave configuration files by default state.

Type ifconfig in your terminal and find your IP address which will be your webserver's IP address. Go to your second VM, open a browser and type that IP address. You will see the webpage.

Target 2: Create a mailserver

Install and configure a mailserver. You can choose any webserver you want but “Postfix” is the easiest way to do that.

After installing your mailserver, connect your mail to an email client, e.g. Roundcube

Create more than one email address. Try to send email between them. Also, try to send an email to/from a valid email address, e.g. gmail.

You may have problems in this step. Explain possible reasons.

Target 3: Create a self-hosted Cloud storage service

In this step, you will install a Cloud hosting services. You can use any service you want. However, “OwnCloud” is the easiest way to solve this problem.

What to Deliver:

You need to write a **detailed report** showing all the steps. Your report needs to include **screenshots for each steps**. For some steps, you may need to provide more than one screenshot.

Submit a single PDF file to Canvas.

Rules:

- You may search freely online reference materials – man pages, stack overflow, etc. However, you may not ask anyone for specific help (related to this lab) online, or offline, other than the instructor.
- This is an individual assignment; all work must be yours.
- Your assignment will not be graded without a report.
- The submission deadline is a hard one. No late submissions.