



---

# ASSIGNMENT 1

---

Cloud Computing



AMAL TOMY

S9 INT MCA

Roll No: 10

# OpenStack

## Introduction

OpenStack is an open-source cloud computing platform that allows for the management of large pools of compute, storage, and networking resources. Below is a step-by-step guide on how OpenStack was installed on a Windows 11 system using Windows Subsystem for Linux (WSL).

## Step 1: Set Up WSL on Windows 11

1. Begin by enabling WSL on the Windows 11 system. This can be done by running the following command in PowerShell with admin privileges:

```
wsl --install
```

2. After the installation, reboot the system to complete the setup.

## Step 2: Install Ubuntu via WSL

1. Install the Ubuntu distribution for WSL by running:

```
wsl --install -d Ubuntu
```

2. After installation, launch Ubuntu from the Start menu and set up a user account.

## Step 3: Update Ubuntu and Install Essential Tools

1. Update the Ubuntu system to ensure all packages are up to date:

```
sudo apt-get update && sudo apt-get upgrade
```

2. Install Git, which is required to clone the DevStack repository:

```
sudo apt-get install git
```

## Step 4: Clone DevStack and Install OpenStack

1. Clone the DevStack repository onto the system:

```
git clone https://opendev.org/openstack/devstack
```

2. Navigate to the devstack directory and create a local.conf file with the necessary configuration.

3. To initiate the installation, run the following command:

```
./stack.sh
```

This step will take some time, as it pulls in all required components and sets up OpenStack.

### Step 5: Access the OpenStack Dashboard

1. After the installation is complete, the script will provide a URL for accessing the OpenStack dashboard.

2. Open the URL in a web browser and log in using the default credentials:

- Username: admin

- Password: [your\_password]

### Step 6: Verify Installation

1. Check the status of the OpenStack services to ensure everything is running smoothly:

openstack service list

2. Test some basic commands to interact with OpenStack, like listing available servers:

openstack server list

### Certification



## ||| COURSE COMPLETION CERTIFICATE |||

The certificate is awarded to

**AMAL TOMY**

for successfully completing the course

**Learning OpenStack**

on August 29, 2024



Issued on: Saturday, August 31, 2024  
To verify, scan the QR code at <https://verify.onwingspan.com>



*Congratulations! You make us proud!*

Thirumala Arohi  
Executive Vice President and Global Head  
Education, Training & Assessment (ETA)  
Infosys Limited