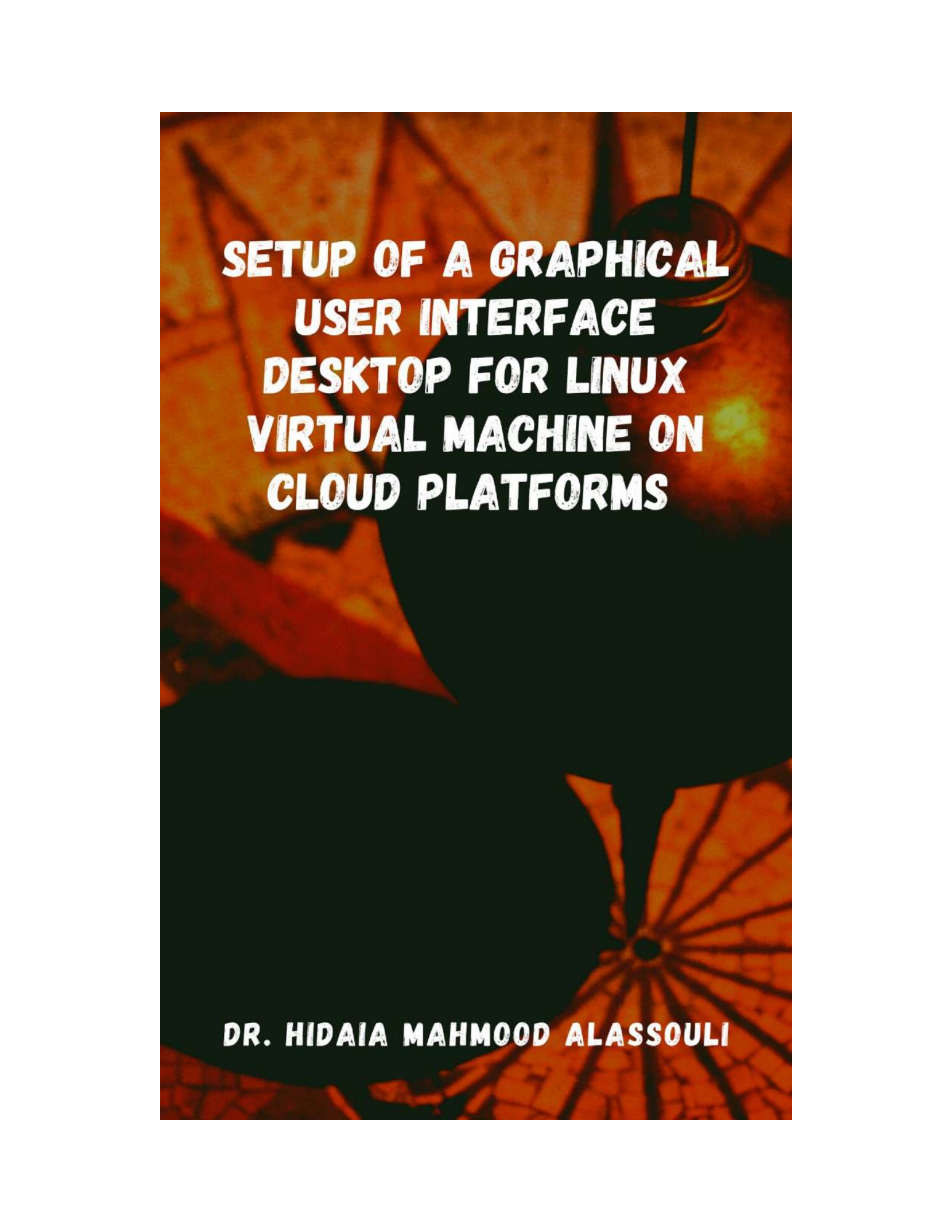


# **SETUP OF A GRAPHICAL USER INTERFACE DESKTOP FOR LINUX VIRTUAL MACHINE ON CLOUD PLATFORMS**

**DR. HIDAIA MAHMOOD ALASSOULI**



The background of the cover features a close-up of autumn leaves in shades of orange, red, and brown. A compass rose is visible in the upper right quadrant, with its needle pointing towards the top. The overall lighting is warm and slightly dim, creating a moody atmosphere.

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# **Setup of a Graphical User Interface Desktop for Linux Virtual Machine on Cloud Platforms**

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## **Setup of a Graphical User Interface Desktop for Linux Virtual Machine on Cloud Platforms**

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## **1. Introduction:**

Cloud Platforms provide VM images in the Linux OS as well. Linux has always been operated via terminal or shell through a keyboard and a terminal. Even with GUIs around, Linux continues to be operated from the shell.

Linux VMs are also operated from the command line of your desktop via an SSH (secure shell) connection. They do not have a desktop environment or GUI installed by default. For Windows users migrating to Linux, a desktop environment would be more convenient to operate. Hence, various desktop environments can be set up on a Linux VM.

Mostly we need to have Graphical User Interface GUI on the Linux Virtual Machine instance and to use Internet browser on it.

This report will talk about the steps to install minimum required User Interface on VM (virtual machine) with Web Browser. We will work on installing a desktop environment on a Linux Virtual Machine on different Cloud Platforms. The book consists from the following sections:

1. Generating SSH key for auto log in to Linux server
2. Creating Google Cloud Linux Virtual Machine
3. Logon to the Linux Virtual Machine
4. Installing VNC server
5. Installing XRDP server
6. Installing a Graphical User Interface (GUI) for Linux Google Cloud instance and connecting to the server through VNC or RDP connection
7. Quick guide to create a Linux virtual machine in Cloudsigma
8. Quick guide to create a Linux Virtual Machine in the Microsoft Azure portal
9. Quick guide to create a Linux Virtual Machine in Amazon AWS







## **2. Generating SSH key for auto log in to Linux server:**

1. Start by downloading and installing "PuTTY installer".
2. Select PuttyGen and press "Enter". Once "PuttyGen" is opened press the "Generate" button. Then you have to move your mouse in the empty area randomly until your key is generated. After this append your name or email to the Key comment. This step is optional but I highly recommend it. When you are working in teams it's easier for a system administrator to manage access based on SSH Keys. Protect your SSH key with a password by filling in the "Key passphrase" field.
3. Let's generate SSH key using Putty Key Generator PuttyGen tool. This is the screen of PuttyGen tool.



4. Click generate. Move your mouser in the empty space to generate the key.