

Cloud Access*

Distributed Data Processing Environments

Lab Guide 2

This session aims at setting up Google Cloud account. It uses the Free Tier¹ and should not consume credits.

Steps First create the cloud account and redeem your voucher:

1. Log in you GMail account in the browser.
2. Click on the "Redeem Now" in the voucher email, or enter information here: <https://console.cloud.google.com/edu>
3. Go to Cloud Console: <https://console.cloud.google.com>
4. Create a project and select the education credits billing account.
5. Navigate to Compute Engine > VM Instances and select "Enable". Wait until complete.

Now configure an SSH key for remote access to VMs:

1. Generate an SSH key with `ssh-keygen`. Take note of the location of the files generated.
2. Display the generated `.pub` file with the `type` command. This is your public key.
3. Navigate to the Compute Engine > Metadata.
4. Select the SSH tab, edit, and then add your public key.

Finally, create a VM instance:

1. Navigate to Compute Engine > Instances and create a new instance selecting:
 - machine type: e2-micro;
 - operating system type Ubuntu;
 - version 24.04 LTS (x86_64).
2. Wait for instance to become ready.
3. Connect to the public IP address with SSH.
4. Repeat the steps of Lab 0 to install packages and run a simple program.

At the end of the session:

1. Navigate to the Compute Engine > Instances page on Cloud Console and delete the VM.
2. Make sure that all instances are gone.

Learning Outcomes Setup a cloud-hosted Linux environment.

*No restrictions on the use of AI tools.

¹<https://cloud.google.com/free/docs/free-cloud-features#free-tier>