

# Google cloud platform project

## Apache Web Server on Google Cloud

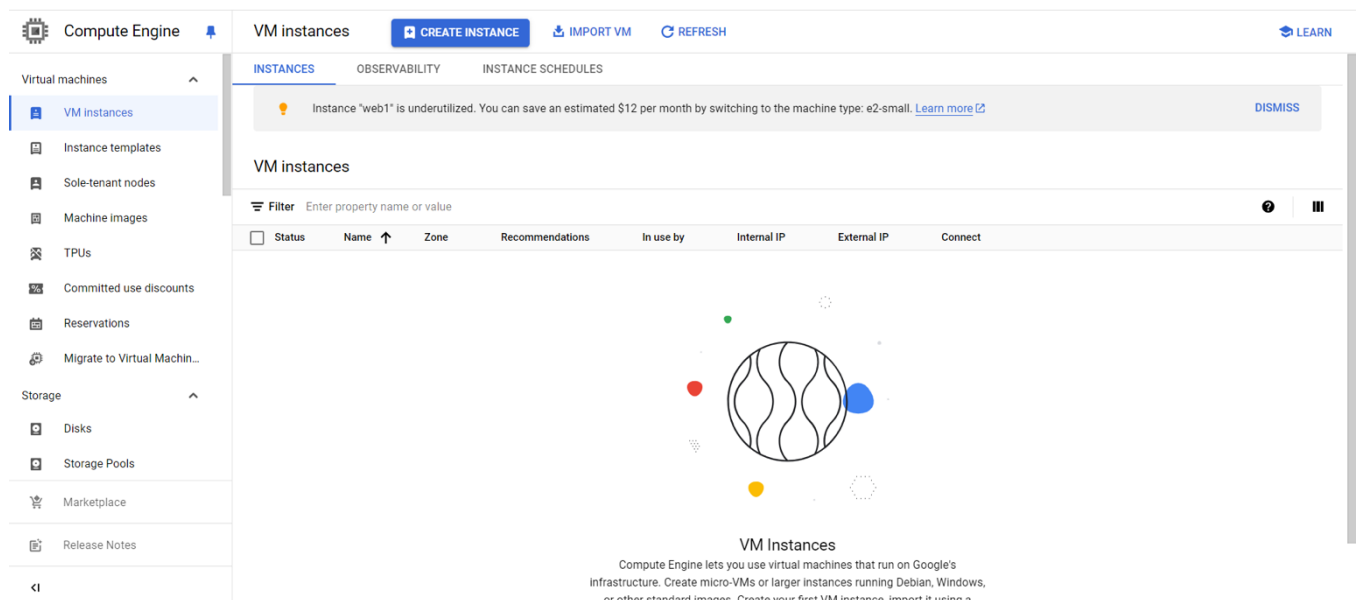
by **Abdulrahman Bawazeer**

### Guidelines:

- First make your own GCP account.
- second after you make your account enable compute engine
- third create your first virtual machine



### VM settings:

here you make your first VM.



The boot disk settings.

### Boot disk

Name	instance-20240608-043127
Type	New balanced persistent disk
Size	10 GB
License type 	Free
Image	 Debian GNU/Linux 11 (bullseye)

CHANGE

Allow HTTP and HTTPS traffic.

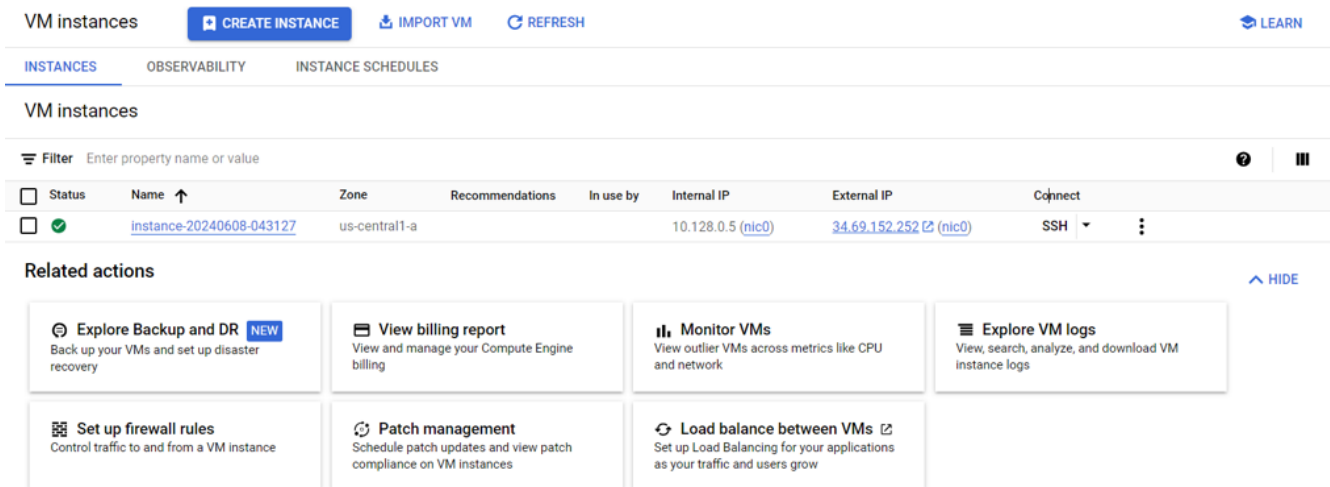
### Firewall

Add tags and firewall rules to allow specific network traffic from the Internet

- ☒ Allow HTTP traffic
- ☒ Allow HTTPS traffic
- ☐ Allow Load Balancer Health Checks

## VM SSH:

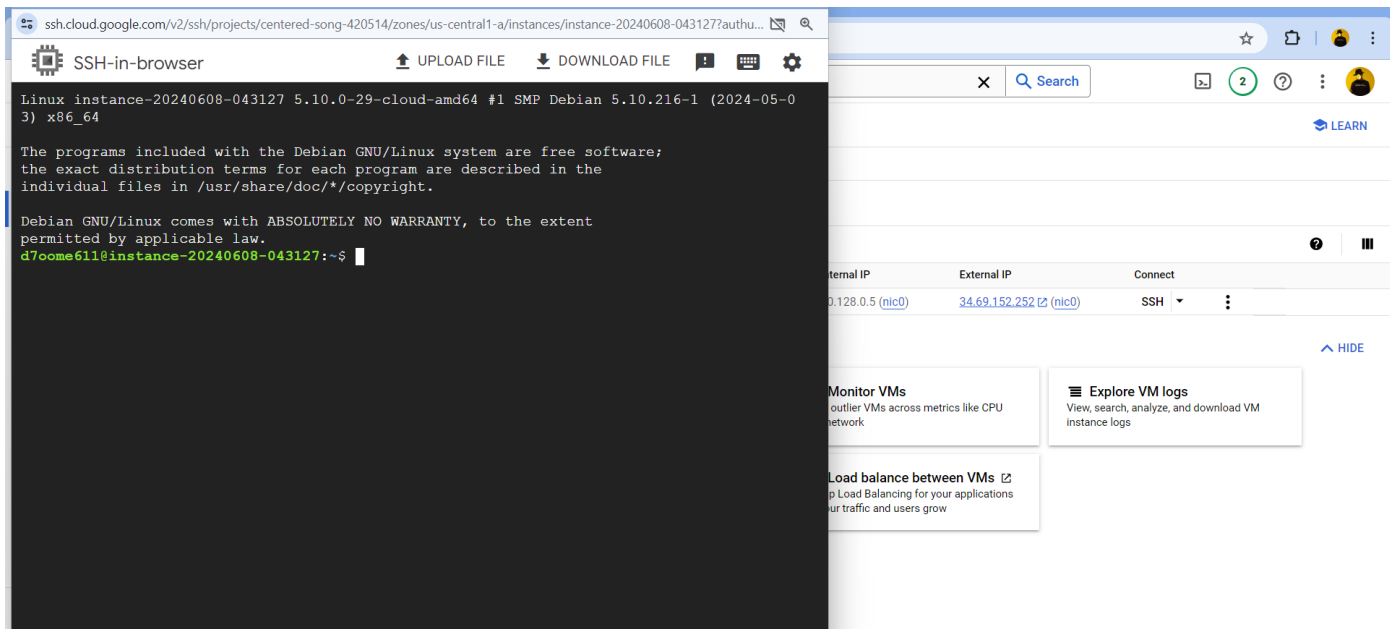
After we create our first VM, we'll run SSH from clicking the SSH button.



The screenshot shows the Google Cloud VM instances management interface. At the top, there are buttons for 'CREATE INSTANCE', 'IMPORT VM', and 'REFRESH'. Below these are tabs for 'INSTANCES', 'OBSERVABILITY', and 'INSTANCE SCHEDULES'. The 'INSTANCES' tab is active, displaying a table of VM instances. The table has columns for Status, Name, Zone, Recommendations, In use by, Internal IP, External IP, and Connect. A single instance is listed with the name 'instance-20240608-043127', zone 'us-central1-a', internal IP '10.128.0.5', and external IP '34.69.152.252'. The 'Connect' column shows an 'SSH' button. Below the table, there is a 'Related actions' section with several cards: 'Explore Backup and DR', 'View billing report', 'Monitor VMs', 'Explore VM logs', 'Set up firewall rules', 'Patch management', and 'Load balance between VMs'.

Status	Name	Zone	Recommendations	In use by	Internal IP	External IP	Connect
<input checked="" type="checkbox"/>	instance-20240608-043127	us-central1-a			10.128.0.5 (nic0)	34.69.152.252 (nic0)	SSH

Now we open the SSH window.



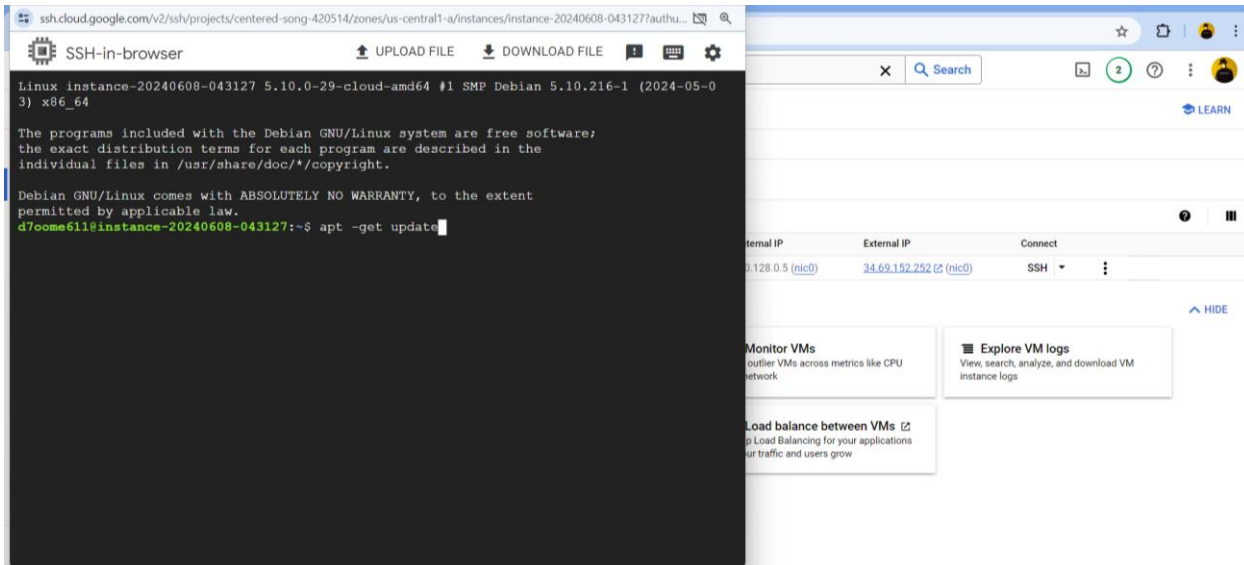
The screenshot shows a browser window with the title 'SSH-in-browser'. The address bar shows the URL 'ssh.cloud.google.com/v2/ssh/projects/centered-song-420514/zones/us-central1-a/instances/instance-20240608-043127?authu...'. The terminal window displays the following text:

```
Linux instance-20240608-043127 5.10.0-29-cloud-amd64 #1 SMP Debian 5.10.216-1 (2024-05-03) x86_64

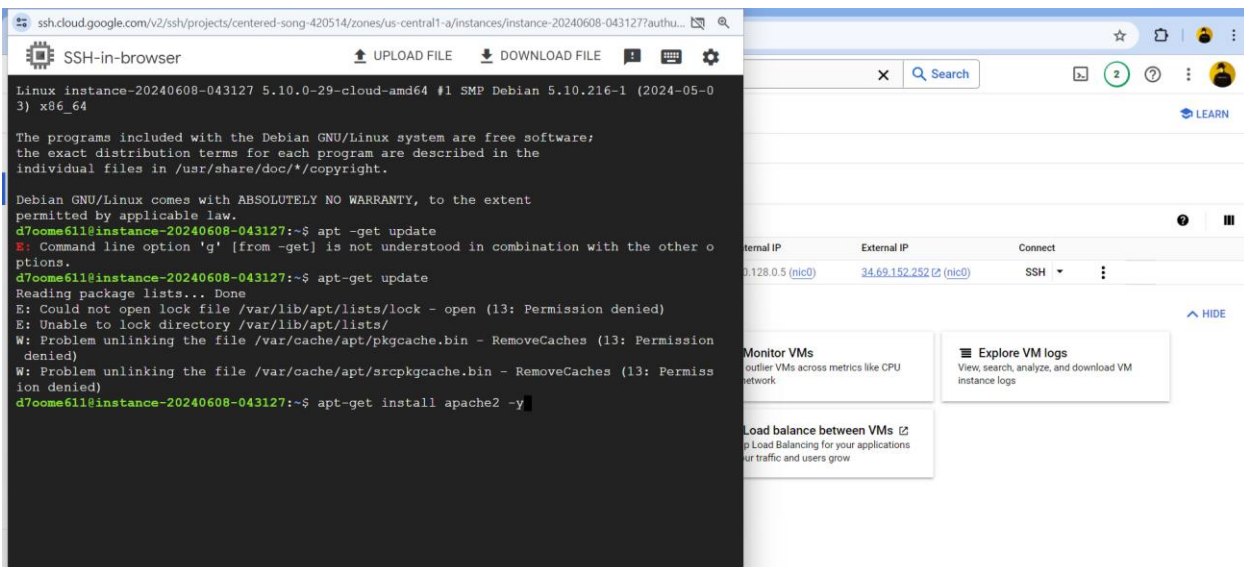
The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
d7oome611@instance-20240608-043127:~$
```

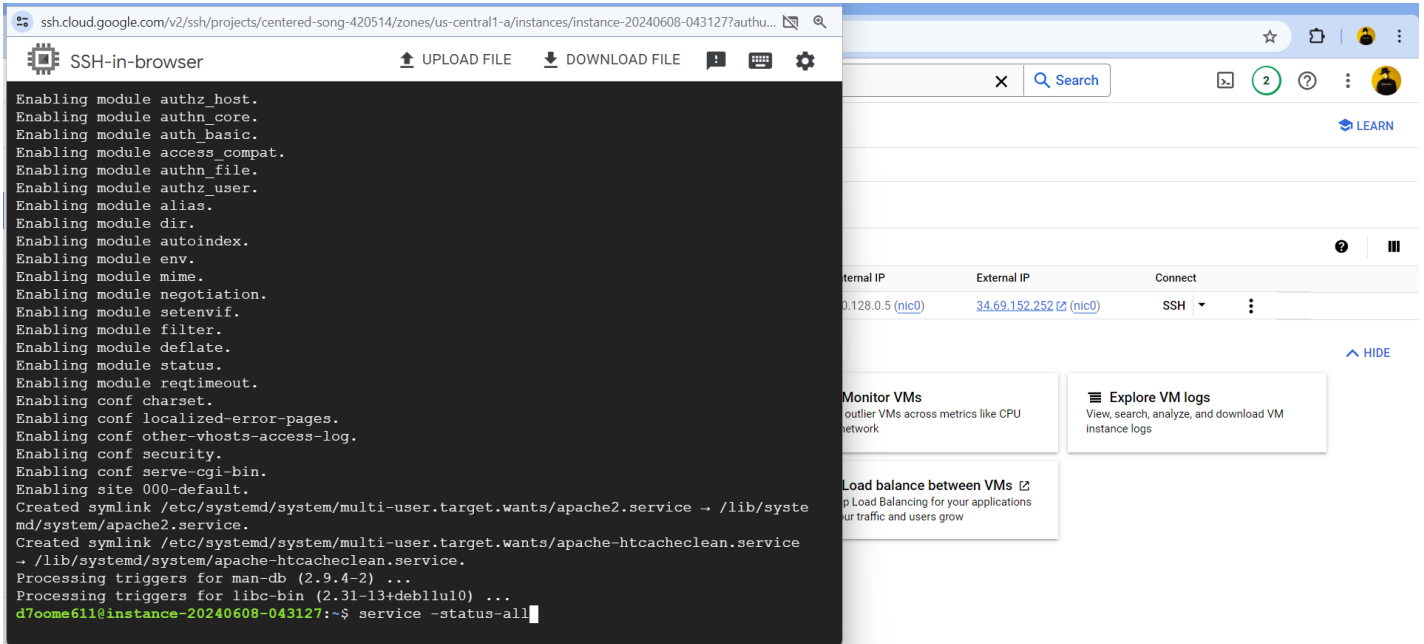
First thing is to update packages by the cmd: `apt-get update`



After that install apache2 server the cmd: `apt-get install apache2 -y`

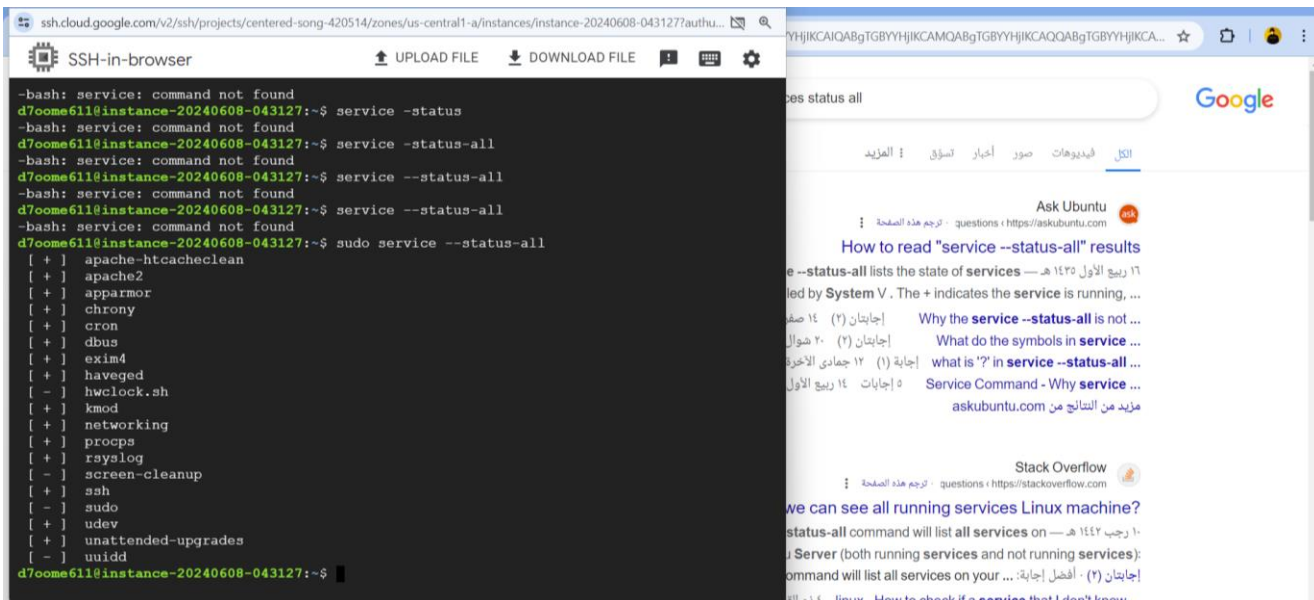


we install apache2 server successfully but how to check if the server is working the cmd: **service --status-all**



The screenshot shows a terminal window titled 'SSH-in-browser' connected to a Google Cloud instance. The terminal output displays the successful installation of Apache2, including enabling various modules and creating symlinks. The command `service --status-all` is entered at the prompt, but the output is not yet visible.

The check is completed.



The screenshot shows the terminal window with the output of `service --status-all`. The output lists various services and their status, with '+' indicating running services and '-' indicating non-running services. To the right, a search result from Ask Ubuntu is visible, titled 'How to read "service --status-all" results', which explains the meaning of the symbols and provides a link to the full command output.

Note:

if you have index.html upload it and move it to  
/var/www/html

Finally after you upload your website now go to your  
external IP and click on it.



I hope that the project will help you.