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## Assignment: Working with Virtual Machines in Azure and GCP

- Before stopping, a popup came up stating that you will only be billed for these preserved resources: Persistent disks and static IP addresses. It also stated that the VM will gracefully shut down in 90 seconds, so its not an immediate termination which I though was interesting.

### GCP

Compute Engine VM instances

INSTANCES OBSERVABILITY INSTANCE SCHEDULES

Your project's VMs use global DNS names by default. To reduce the risk of cross-regional outages, we recommend you use zonal DNS instead. [Learn more](#) [USE ZONAL DNS](#) [DISMISS](#)

1 [START / RESUME](#) [STOP](#) [SUSPEND](#) [RESET](#) [CREATE A GROUP BASED ON THIS VM](#) [DELETE](#) [LABELS](#) [PERMISSIONS](#)

Filter Enter property name or value

Status	Name	Zone	Recommendations	In use by	Internal IP	External IP	Connect
<input checked="" type="checkbox"/>	<a href="#">instance-20240914-154701</a>	us-central1-c			10.128.0.2 ( <a href="#">nic0</a> )		SSH

Related actions

- [Explore Backup and DR](#) **NEW**  
Back up your VMs and set up disaster recovery
- [View billing report](#)  
View and manage your Compute Engine billing
- [Monitor VMs](#)  
View outlier VMs across metrics like CPU and network
- [Explore VM logs](#)  
View, search, analyze, and download VM instance logs
- [Set up firewall rules](#)  
Control traffic to and from a VM instance
- [Patch management](#)  
Schedule patch updates and view patch compliance on VM instances
- [Load balance between VMs](#)  
Set up Load Balancing for your applications as your traffic and users grow

Billing account overview

Your total cost (September 1 – 14, 2024) [?](#) [Last 7 days](#) [Current month](#)

Cost Credits used Total cost

**\$0.00** — **\$0.00** = **\$0.00**

[View details](#)

Forecasted total cost  
Available once there is enough usage

Costs take a few hours to show up, and might take longer than 24 hours.  
[Learn more](#) or [get an alert](#) when usage cost is available.

[View details on Reports](#)

Top projects  
September 1, 2023 – September 30, 2024

\$1

FinOps Hub with carbon tracking **NEW**  
Optimize cloud spend and reduce carbon impact.  
[View details](#)

Save up to **\$0.00**  
0% of last month's total cost

FinOps score **2 / 5.0**  
FinOps maturity: Medium

[View details on FinOps hub](#)

Billing health checks [^](#)  
Check out your account health results to avoid common billing-related issues and adopt our best practice recommendations. [Learn more](#)


**✓ All issues resolved!**

[View all health checks](#)

- No fee shows up because it will take about 24 hours to show up. There most likely was a fee of less than a cent because I only ran for a few minutes.

## Azure - unable to create VM due to permissions

### Create a virtual machine ...

 Validation failed. [Click here to view details.](#) →

[Help me create a low cost VM](#) [Help me create a VM optimized for high availability](#) [Help me choose the right VM](#)

Basics Disks Networking Management Monitoring Advanced Tags Review + create

Price

1 X Standard DC1ds v3  
by Microsoft  
[Terms of use](#) | [Privacy policy](#)

Subscription credits apply ⓘ  
**0.1130 USD/hr**  
[Pricing for other VM sizes](#)

TERMS

By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. See the [Azure Marketplace Terms](#) for additional details.

Name

Preferred e-mail address

Preferred phone number

Basics

Subscription	Azure for Students
Resource group	HHA-504
Virtual machine name	myVM

[< Previous](#) [Next >](#) [Create](#)

## Compare and reflect

- In terms of the costs between the two, I feel like they are pretty similar. Azure had an estimated price of 11 cents per hour which is most likely very similar to GCP. I think it

also depends on the configuration that is used such as if you use a standard DC1 in azure and a n1-standard-4 in GCP. The duration of the VM was very minimal and so it was charged per second and there should be a cost of less than a cent or even just one cent if they round up. I think Azure management tools are very robust and allow users to track costs effectively. I think the GCP might have been easier to understand as it was simple to navigate and offers lots of clear costs for the time period as well as several reports to see the top services used. This could be beneficial if you have several projects or instances of services running simultaneously. I think GCP's console has a very simple and streamlined process for managing the VM's. The overall steps are simple and intuitive and was easy to navigate. I like how the search bar can also direct you to places or tools that you may need. The tutorials they offer on the side was also beneficial in learning.