OH OK NORMAL VM DEPLOY JUST HAS A DEPLOY CONTAINER TO VM SO THATS NICE

https://console.cloud.google.com/compute/instancesAdd?project=rips-research-project

<https://stackoverflow.com/a/66854886>

<https://cloud.google.com/compute/docs/gpus#reserving_gpus_with_committed_use_discounts>

<https://cloud.google.com/ai-platform/training/docs/train-ml-model-custom-containers>

GCLOUD CLI NOTES

<https://cloud.google.com/sdk/docs/install>

<https://cloud.google.com/sdk/gcloud/reference/compute/scp>

With gcloud cli installed you can use

gcloud auth login

gcloud config set project rlr-research-project

gcloud compute ssh [deeplearning-1-vm](https://console.cloud.google.com/compute/instancesDetail/zones/us-central1-c/instances/deeplearning-1-vm?project=rlr-research-project) # will make an ssh key here for you if you havent

Distributed training notes

<https://cloud.google.com/ai-platform/training/docs/distributed-training-containers>

<https://cloud.google.com/ai-platform/training/docs/train-ml-model-custom-containers>

Managing VM components

[Add or remove GPUs | Compute Engine Documentation | Google Cloud](https://cloud.google.com/compute/docs/gpus/add-remove-gpus)

[GPU regions and zones availability | Compute Engine Documentation | Google Cloud](https://cloud.google.com/compute/docs/gpus/gpu-regions-zones)

[Move a VM instance between zones or regions | Compute Engine Documentation | Google Cloud](https://cloud.google.com/compute/docs/instances/moving-instance-across-zones#:~:text=To%20move%20your%20VM%2C%20you,point%20to%20the%20earlier%20VM).

What it almost certainly won't resolve the error while the zone has insufficient resources, you can prevent this error in the future by [Reserving Zonal Resources](https://cloud.google.com/compute/docs/instances/reserving-zonal-resources) in advance -- effectively guaranteeing that the resources will be available for you when you need them.

<https://stackoverflow.com/a/58671933>

Managing VMs

This page will give you ips

<https://console.cloud.google.com/monitoring/dashboards/resourceList/gce_instance?referrer=search&project=rlr-research-project&timeDomain=1h>

This one will actually let you start and stop the container

<https://console.cloud.google.com/compute/instances?project=rlr-research-project>

THIS PAGE HAS SO MUCH INTERESTING STUFF FOR CONFIG OF VM INCLUDING STARTUP SCRIPT AND SSH KEYS

<https://console.cloud.google.com/compute/instancesEdit/zones/us-central1-c/instances/deeplearning-1-vm?project=rlr-research-project>

<https://cloud.google.com/solutions/connecting-securely>

RDP

Go to this page and start vm using hamburger member on the right

<https://console.cloud.google.com/compute/instances?project=rlr-research-project>

Use ssh button to connect to vm and follow the instructions below for RDP

<https://remotedesktop.google.com/headless>

<https://cloud.google.com/architecture/chrome-desktop-remote-on-compute-engine>

<https://remotedesktop.google.com/headless>

<https://cloud.google.com/architecture/chrome-desktop-remote-on-compute-engine>

<https://cloud.google.com/architecture/chrome-desktop-remote-windows-compute-engine#:~:text=To%20install%20Chrome%20Remote%20Desktop,port%203339%20to%20the%20internet>.

VNC

IGNORE THIS STUFF USE RDP

Run vnc server

Go back to this page and make note of the external\_ip and use that and your password to connect to the vnc session

<https://console.cloud.google.com/compute/instances?project=rlr-research-project>

Host: external\_ip:5901

Passwords:

Collins password

#QWFZ!eT

Michaels password

zm9xP<5&

Setup guide

<https://medium.com/@piyushraj246800/your-guide-to-vnc-server-on-gcp-ed8255c81b43>

vncserver

vncserver -kill :1

Settings I had to use in ~/.vnc/xstartup to get it to work

unset SESSION\_MANAGER

unset DBUS\_SESSION\_BUS\_ADDRESS

xsetroot -solid grey

autocutsel -fork

geometry 1080x720

startxfce4 &

vncserver = externalip:5901

Have to add firewall rule for vnc but rdp on port 3398 is open by default for google chrome rdp (suprise suprise)

<https://console.cloud.google.com/networking/firewalls/list?project=rlr-research-project>

<https://cloud.google.com/compute/docs/troubleshooting/troubleshooting-rdp#firewall_rules>

OTHER

Ops Agent is now the recommended agent for monitoring and logging! Built on OpenTelemetry, it streamlines installation and maintenance, and provides deep integration with Cloud Operations.

<https://towardsdatascience.com/machine-learning-best-gpu-option-on-google-cloud-platform-performance-price-discounts-81e0aa99ad46>

Basically use the T4

THIS PLUGIN TO THE PROJECT IS WHAT WE USED LAST SEMESTER FOR DL

<https://console.cloud.google.com/marketplace/product/click-to-deploy-images/deeplearning?_ga=2.99839453.-2121832178.1549923708&project=rlr-research-project>

Forgot about this

chmod g+s

A network endpoint group (NEG) is a collection of IP addresses that you can apply networking functions to, like load balancing, firewalls and logging. If you're creating an HTTP(S) load balancer with backend containers, your NEG will be created automatically