GCP & AWS update GPU limits

CSCI 599

2019-02-12

GCP & AWS by default don’t allow users to use GPU machines (GPU limits are 0 initially).

So if you want to use their GPU machine, you have to update the GPU limits.

The latter slides will show how to update the GPU limits.

AWS & GCP are not free!
GPU Instances are expensive!
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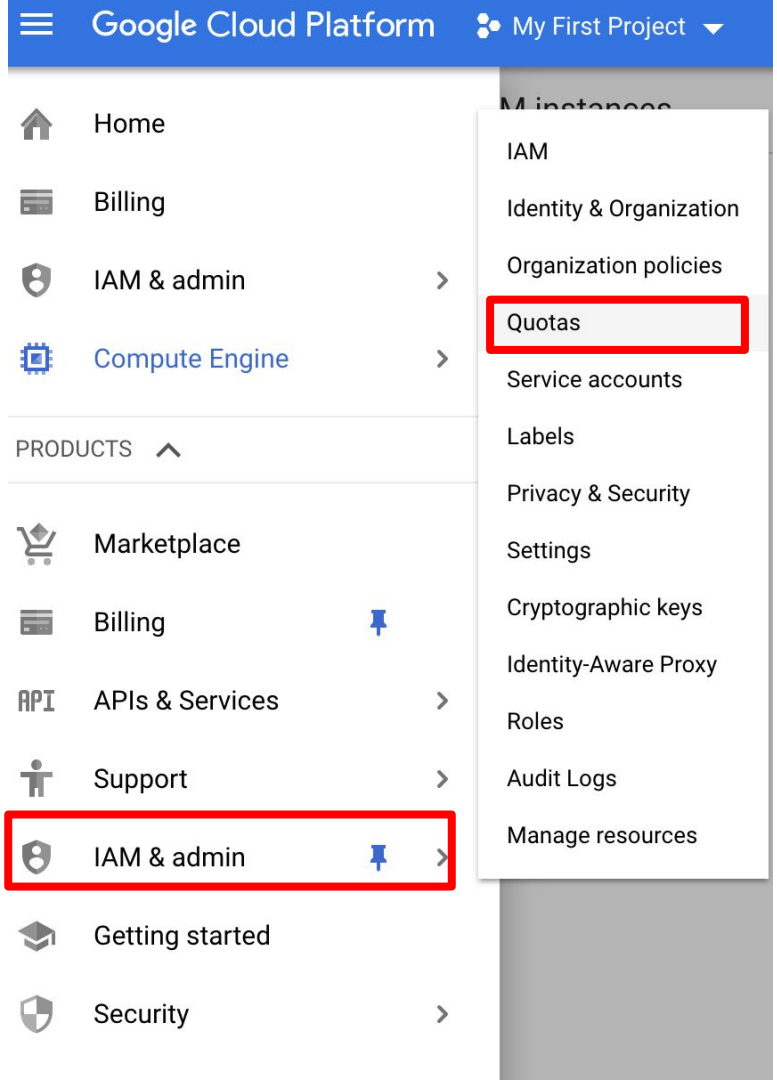
GCP: update GPU limits

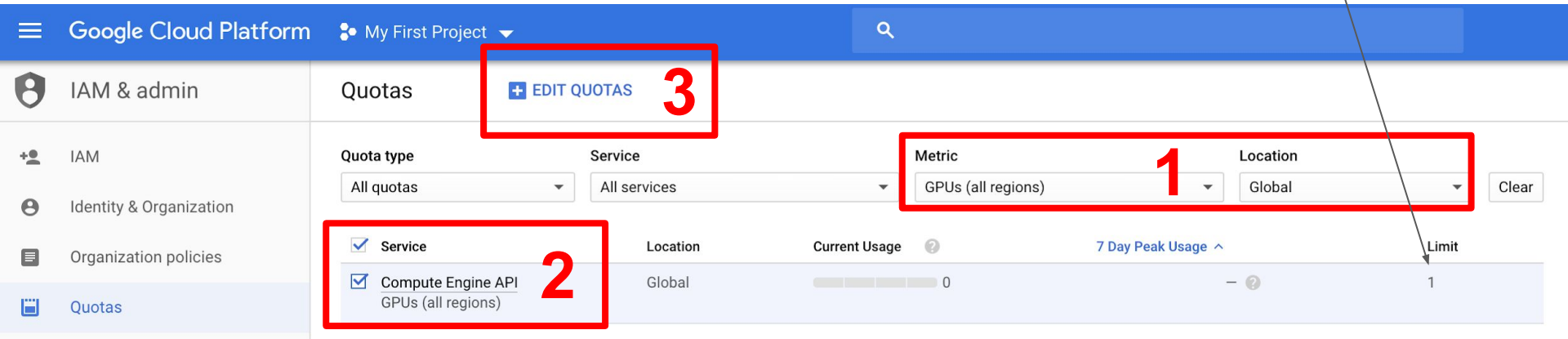
- first create a project
- click top left menu icon
- hover over “**IAM & admin**”
- click the “**Quotas**”



GCP: update GPU limits

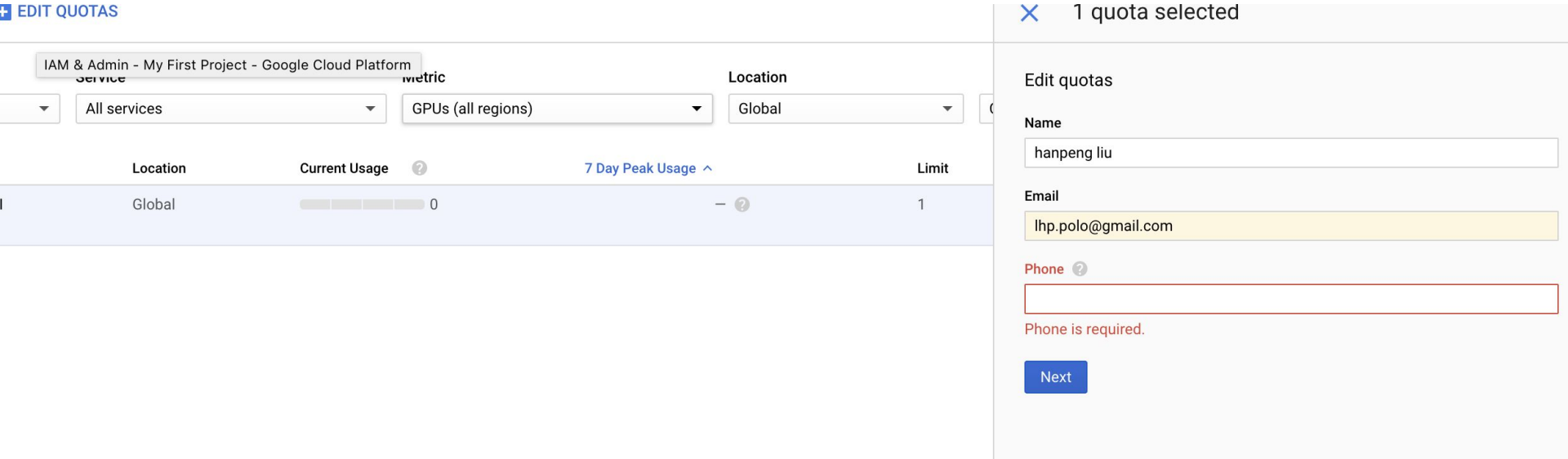
note: if your “limit” value is 1 or more, then you are fine. “0” is the default value for new users.

- Inside the Quotas page,
  - set “Metric” filter to be “GPUs (all regions)
  - set “Location” filter to be Global
- select the “Compute Engine API”
- click “EDIT QUOTAS”



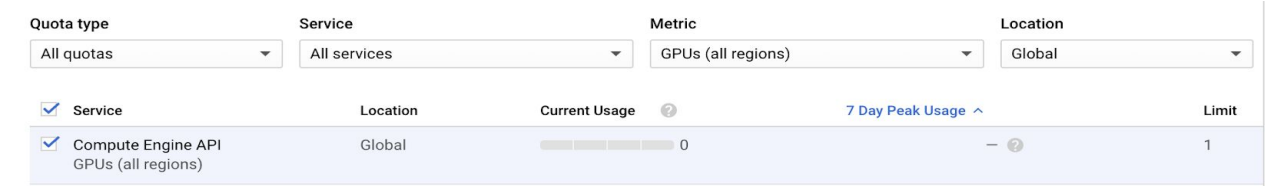
GCP: edit quotas

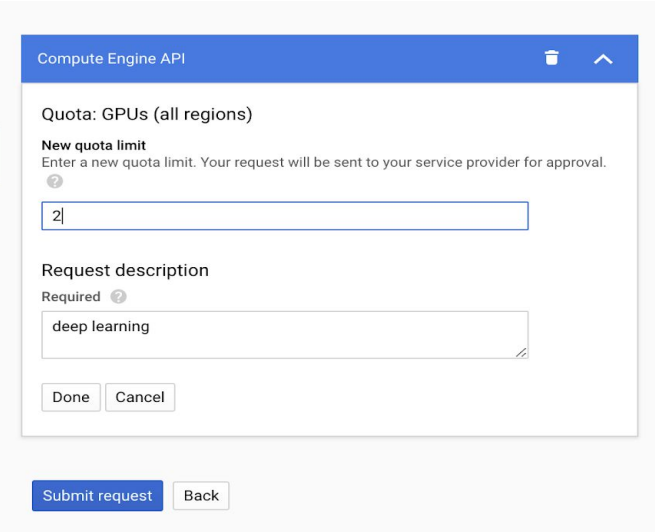
- in the right panel, fill in your name/email/phone, click next



GCP: edit quotas

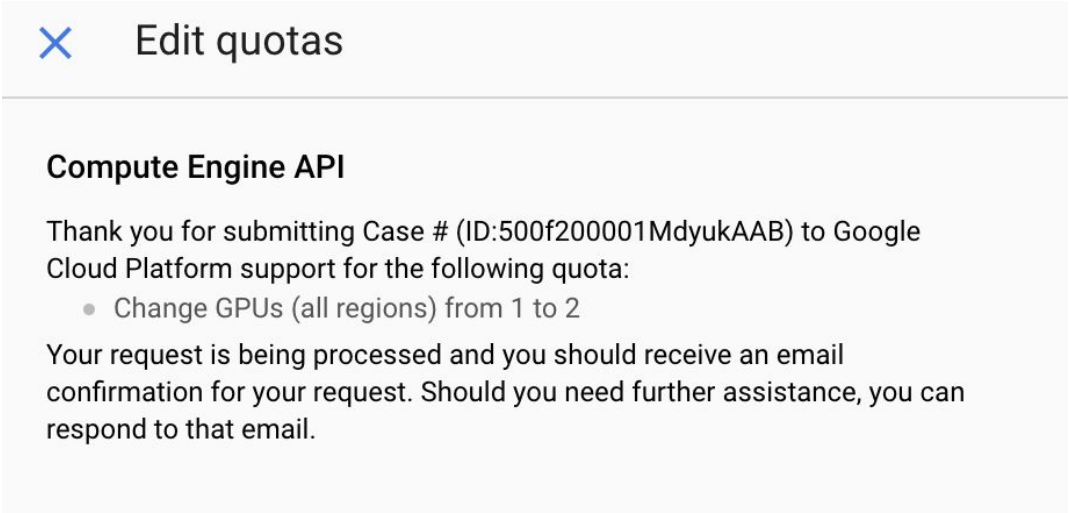
- fill the maximum number of GPUs you want in the “**new quota limit**”, e.g., “2”
- write something to the description, e.g., “deep learning”
- click “**submit request**”





GCP: edit quotas

- you will see your case is submitted and
- usually it takes several hours to get quota approved



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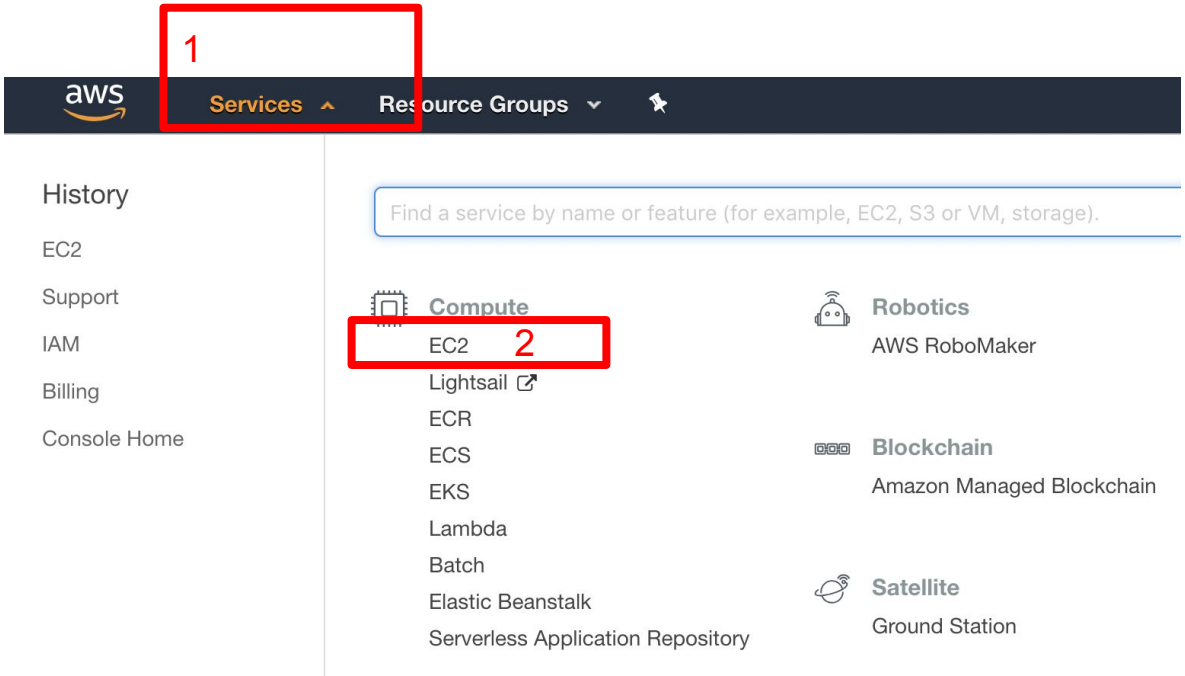
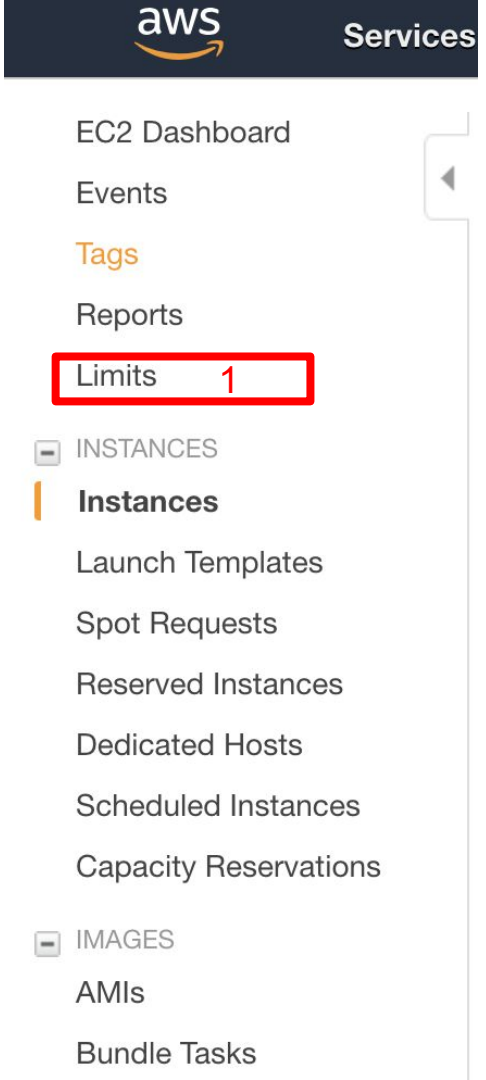
AWS: update GPU limits

- login to AWS console
- click “**Services**”
- then click “**EC2**”



AWS: update GPU limits

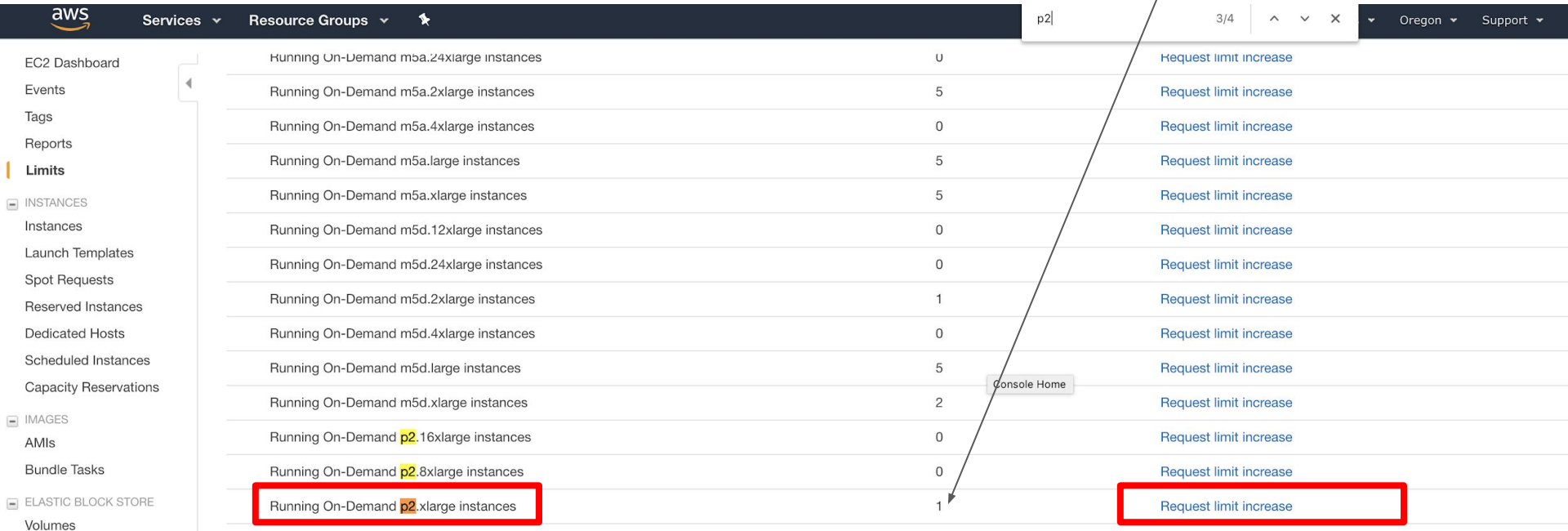
- click “**limits**” in the left side bar



AWS: update GPU limits

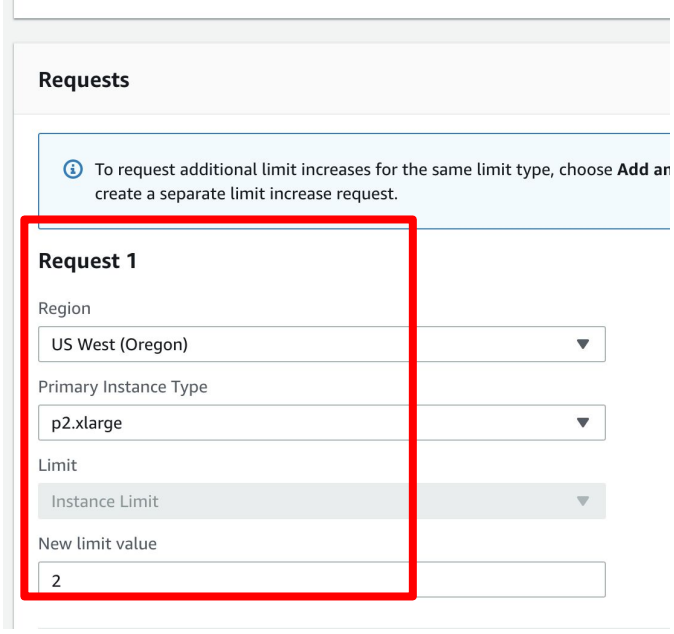
note: if your “limit” value is 1 or more, then you are fine. “0” is the default value for new users.

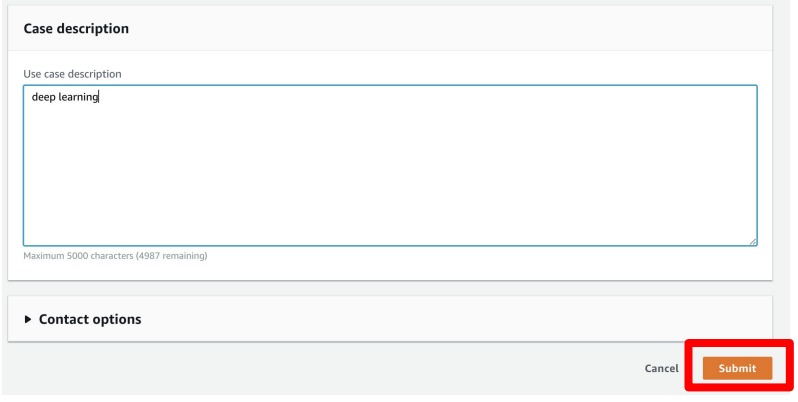
- search “p2” in the new page
- click “**Request limit increase**” for “Running On-Demand p2.xlarge instances”



AWS: update GPU limits

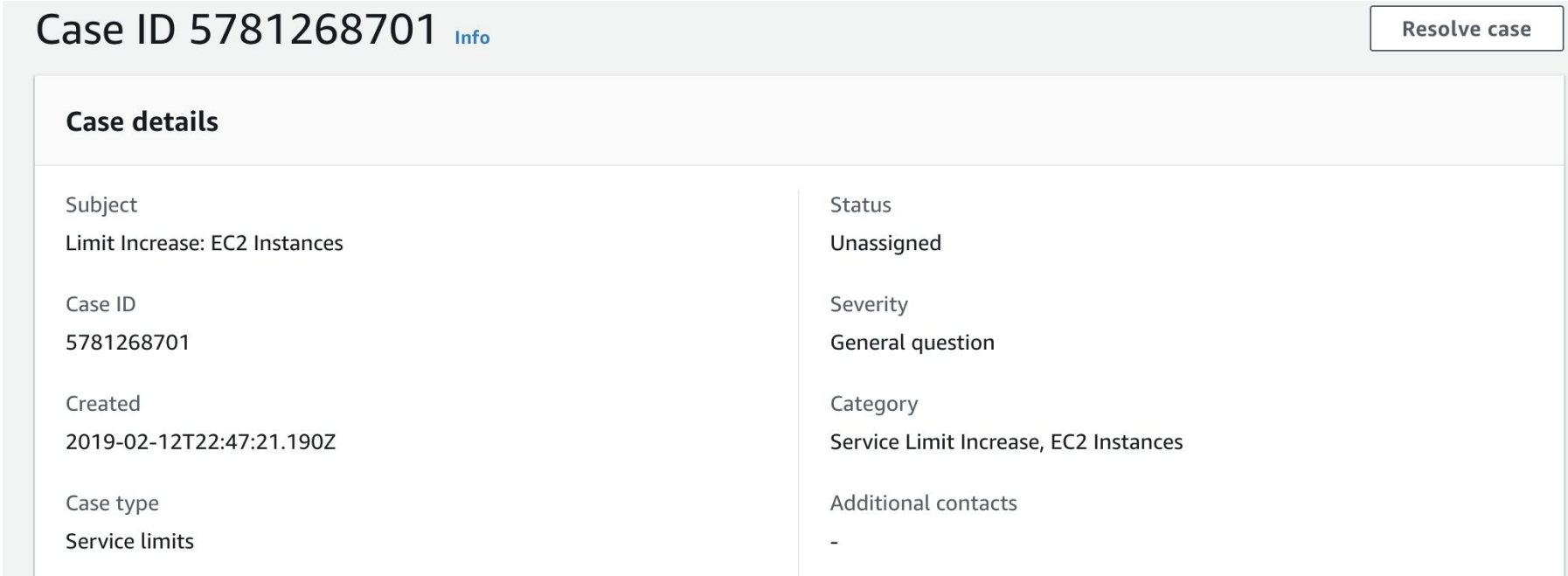
- in the new tab, under “requests”
  - choose the region you want, e.g. Oregon (or whatever you want)
  - choose the machine type: p2.xlarge
  - write down new limit (max GPUs you want), e.g., 1
- under “requests”, fill in the reason, e.g. “deep learning”
- click submit





AWS: update GPU limits

- you should see a new page with case ID and other information
- usually it takes several hours to get quota approved



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