

Troubleshooting notebooks

Nothing happens after clicking "Open JupyterLab"

Verify that your browser does not block pop-up tabs. JupyterLab opens in a new browser tab.

No proxy access to JupyterLab

AI Platform Notebooks instance settings, network configuration, and other factors can prevent proxy access to JupyterLab. [Use SSH to connect to JupyterLab and learn more about why you might not have proxy access \(/ai-platform/notebooks/docs/ssh-access\)](#).

Downloading files from JupyterLab results in 403 (Forbidden) error

The "notebook" package in the M23 release of Deep Learning VM includes a bug that prevents you from downloading a file using the JupyterLab UI. You can read more about the bug at [Cannot download files after JL update \(https://github.com/jupyterlab/jupyterlab/issues/6149\)](https://github.com/jupyterlab/jupyterlab/issues/6149) and [Download file functionality is broken in notebook packages version 5.7.6+ \(5.7.7, 5.7.8\)](https://github.com/jupyter/notebook/issues/4541) (<https://github.com/jupyter/notebook/issues/4541>).

If you are using the M23 release of Deep Learning VM you can resolve the issue in one of two ways:

- Use a Safari browser. The download functionality works for Safari.
- Downgrade your notebook package to version 5.7.5.

To downgrade your notebook package:

1. Connect to your Deep Learning VM using SSH. For information on connecting to a VM using SSH, see [Connecting to instances \(/compute/docs/instances/connecting-to-instance\)](#).
2. Run the following commands:

```
sudo pip3 install notebook==5.7.5
sudo service jupyter restart
```

Opening a notebook results in a 403 (Forbidden) error

If you can't access a notebook, try the following:

- Ensure the Google account trying to access the notebook instance has at least [AI Platform Notebooks IAM](#) (/ai-platform/notebooks/docs/iam) roles, like **Notebooks Runner** or **Notebooks Admin**.
- When you click **Open JupyterLab** to open a notebook, the notebook opens in a new browser tab. If you are signed in to more than one Google account, the new tab opens with your default Google account. If you did not create your notebook instance with your default Google account, the new browser tab will show a **403 (Forbidden)** error.

GPU quota has been exceeded

Determine the number of GPUs available in your project by [checking the quotas page](#) (<https://console.cloud.google.com/quotas>). If GPUs are not listed on the quotas page, or you require additional GPU quota, you can request a quota increase. See [Requesting additional quota](#) (/compute/quotas#requesting_additional_quota) on the Compute Engine [Resource Quotas](#) (/compute/quotas) page.

New notebook is not created (insufficient permissions)

It usually takes about a minute to create a notebook instance. If your new notebook instance remains in "pending" state indefinitely, it might be because the service account used to start the notebook instance does not have the required **Editor** permission in your Google Cloud Platform (GCP) project.

You can start a notebook instance with a custom service account that you create or in single-user mode with a userid. If you start a notebook instance in single-user mode, then your

notebook instance begins the boot process using Compute Engine default service account before turning control over to your user.

To verify that a service account has the appropriate permissions, follow these steps:

Consolegcloud (#gcloud)

1. Open the IAM page in the Cloud Console.

[Open the IAM page \(https://console.cloud.google.com/iam-admin/iam\)](https://console.cloud.google.com/iam-admin/iam)

2. Determine the service account used with your notebook instance, which is one of the following:
 - A custom service account that you specified when you created your notebook instance.
 - The Compute Engine default service account for your GCP project, which is used when you start your notebook instance in single-user mode. The Compute Engine default service account for your GCP project is named *project-number-compute@developer.gserviceaccount.com*. For example: `113377992299-compute@developer.gserviceaccount.com`.
3. Verify that your service account is in the **Editor** role.
4. If not, edit the service account and add it to the **Editor** role.

For more information, see [Granting, changing, and revoking access to resources \(/iam/docs/granting-changing-revoking-access\)](/iam/docs/granting-changing-revoking-access) in the IAM documentation.

Creating an instance using the SDK results in a "Permission denied" error

When creating a new instance, verify that the user creating the instance has the [iam.serviceAccounts.actAs \(/iam/docs/understanding-service-accounts#granting_minimum\)](/iam/docs/understanding-service-accounts#granting_minimum) permission for the defined service account.

The service account on the instance provides access to other Google Cloud services. You can use any service account within the same project, but you must have the service account user permission (`iam.serviceAccounts.actAs`) to create the instance. If not specified, the Compute Engine default service account is used.

The following example shows how to specify a service account when you create an instance:

```
d beta notebooks instances create nb-1 \  
m-image-project=deeplearning-platform-release \  
m-image-family=tf2-latest-cpu \  
machine-type=n1-standard-1 \  
service-account=your_service_account@project_id.iam.gserviceaccount.com \  
location=us-west1-a
```

Notebook is unresponsive

If your notebook instance isn't executing cells or appears to be frozen, first try restarting the kernel by clicking **Kernel** from the top menu and then **Restart Kernel**. If that doesn't work, you can try the following:

- From a terminal session in the notebook, run `top` to see if there are processes consuming the CPU
- From the terminal, check the amount of free disk space using `df` or available RAM using `free`
- Shut your instance down by selecting it from the [Notebook instances page](https://console.cloud.google.com/ai-platform/notebooks/instances) (<https://console.cloud.google.com/ai-platform/notebooks/instances>) and clicking **Stop**. Once it has stopped completely, select it and click **Start**.

Restart the Jupyter service

To restart the Jupyter service, you can stop and start the VM from the [Notebook instances page](https://console.cloud.google.com/ai-platform/notebooks/instances) (<https://console.cloud.google.com/ai-platform/notebooks/instances>) or you can log in to the notebook instance via SSH and enter:

```
service jupyter restart
```

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