# Launching Compute Environments

## Available Compute Environments

jupyter · RStudio · Bioconductor OPEN SOURCE SOFTWARE FOR BIOINFORMATICS · Galaxy PROJECT

**Terminal* available through Jupyter and RStudio

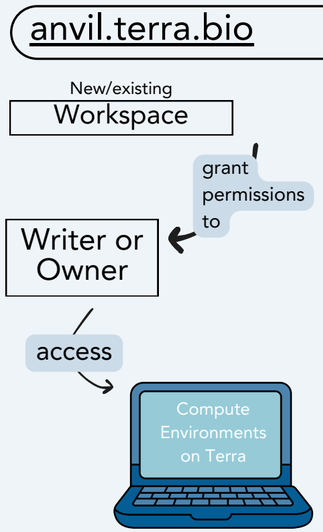
## New Workspaces

1. Login to anvil.terra.bio
2. Click the ☰ icon on the top left corner
3. Click "Workspaces"
4. Click on the ⊕ button at the top left corner
5. Name your Workspace
6. Select the Billing Project
7. Click on *QUICK CREATE WORKSPACE*

   **unless custom configurations are needed*

The new Workspace should now show up under your Workspaces.

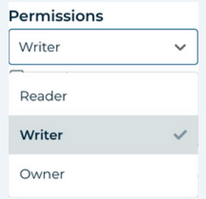
## Sharing Workspace Access




To use compute environments in Terra, you **must have access** to a Terra Workspace with permission to compute.

When creating a new workspace, select: **2. Sharing**

Add user emails and change permissions to either writer/owner




## Choose Cloud Environment

1. Navigate to Workspaces
2. Select a workspace from my workspaces, featured or public
3. Click on the ☁ icon on the far right to access your Cloud Environment configurations
4. Click the ⚙ button under desired compute environment (Jupyter, RStudio, or Galaxy)

## Configure Compute Environment

**Pro-tip:** Stick to the default configuration and scale up if needed!

The default consists of:

- ✓ reasonable compute hours
- ✓ conservative costs

When done configuring, click on **Create** at the bottom right when you are satisfied with the setup!

## Launch Compute Environment

When your environment is ready, you'll see

ⓘ **Your cloud environment is ready** on the top right corner


within your environment details

## Done? CLEAR your Workspace!

**C** Copy any files you need (download data, code, or results)

**L** Leave the environment on pause if you'll be back soon

**E** End (Delete) the compute environment when you're done

**A** A – Annihilate (Delete) your persistent disk if no longer needed

**R** Review your workspace for leftover credentials

! It is essential to deactivate the Billing Project; user removal is not enough to stop incurring charges

## Additional Resources and Tips

**Resource Quota Estimation**: Determine the peak CPU and PD usage by analyzing concurrent tasks and scatter widths in your WDL workflows.

- Example: For a task scattering 10-ways on 10 samples, request 1000 CPUs and 1TB PD if running at maximum concurrency.

Additional information on cost estimation for computing can be found here.

For more resources on using the various compute environments inside AnVIL:

Starting Jupyter | Working within RStudio | Running Galaxy in Terra