

Compute Resources

[User Agreement](#)

The information on this page assumes that you have a knowledge base of using Docker to create images and push them to a repository for use. If you need to review that information, please see the links below.

<https://washu.atlassian.net/wiki/spaces/RUD/pages/1705115761/Docker+and+the+RIS+Compute1+Platform?atlOrigin=eyJpIjoiNzc4YTZjNjIxYmQwNGI3OTk4M2Q0Mw>

<https://washu.atlassian.net/wiki/spaces/RUD/pages/1864892726/Docker+Basics+Building+Tagging+Pushing+A+Custom+Docker+Image?atlOrigin=eyJpljoiMTVjMjNIM>

noVNC (<https://novnc.com/info.html>)

Python (<https://www.python.org>)

TensorFlow (<https://www.tensorflow.org>)

Interactions GUI sessions are done via the Custom noVNC Image application in Open On Demand (OOD).

You can find out more about OOD here:

<https://washu.atlassian.net/wiki/spaces/RUD/pages/1683489040/Compute1+Quickstart?atlOrigin=eyJpIjoiYWYxZTNhNWk1ZmIxMmUxN2EwNTA1Nzc0MG>

There are two fields beyond the basics that will need information specific to this image.

Environment Variables

Docker Image

This information should be space separated in the field.

Optional variables

GUI display size. This can be changed with the following variables.

Width default: 1024

Height default: 768

- DISPLAY_HEIGHT=]]>

Docker Image

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TensorFlow Docker Tag:

The `<tag>` will refer to the version of Tensorflow in the Docker container. Please see below for a current list of supported TensorFlow versions and their corresponding tags.

Fill out the rest of the fields with the appropriate information (explained in the quick start).

You will need to select a GPU in the field for doing so since TensorFlow uses GPUs.

Launch the job through the methods described in the quick start.

Once in an interactive TensorFlow session using the following command:

```
ipython -i --no-banner]]>
```

Interactive Command-Line Session

If you wish to use TensorFlow in an interactive command-line session, you can do so with the following command.

```
)] /bin/bash]]>
```

Extend the TensorFlow Image

You may wish to extend the TensorFlow container with additional Python packages. Below is an example Dockerfile which extends the latest RIS-hosted TensorFlow image with the following packages:

```
pandas (https://pandas.pydata.org/ )
```

```
matplotlib (https://matplotlib.org/ )
```

Dockerfile

Available Versions

Current Version:

```
ghcr.io/washu-it-ris/tensorflow
```

```
latest, 24.04-tf2-py3
```