

# Installing Anvi'o using a Docker Image

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## Abstract

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## Guidelines

### Data binding for Windows Users:

The following is a list of files you need to SCP. Remember you need to open a new terminal window in Cygwin and perform these commands offline (meaning don't login to the hpc on the new window):

- `scp netid@hpc.arizona.edu:/rsgrps/bh_class/username/assembly/megahit-out/fixed-contigs.fa .`
- `scp netid@hpc.arizona.edu:/rsgrps/bh_class/username/read_recruit/bam/*.bam .`

The default location for these files is `C:\cygwin64\home\USER`. You can navigate there and ensure all necessary files are present using File Explorer. This `PC > C > cygwin64/home/user`

Move the necessary files to a folder in Documents.

### Starting your Anvi'o session with necessary data:

In order to access your data in the Docker image you must execute this command:

```
docker run --rm -v /path/to/files:/my_data -it meren/anvio:latest
```

where `/path/to/files` points to where you contig and bam files are located. An easy way to get this is to navigate to the folder containing your files

inside the Docker Terminal. `pwd` to get the path.

**Note:** Use `/` instead of the windows convention of using `\`  
`:/my_data` is the name of the directory that will be created inside the Docker Image. You can leave `my_data` as is and just edit the path.

## Protocol

### Step 1.

Install [Docker Toolbox](#). Scroll down the page until you see downloads. Mac users will download `DockerToolbox-1.12.2.pkg`. Windows users should download `DockerToolbox-1.12.2.exe`. Install with default settings (no need to uncheck anything).

 [LINK:](#)

<https://www.docker.com/products/docker-toolbox>

### Step 2.

After installation is complete, run Docker Quickstart Terminal (Windows users should have a shortcut on the desktop). Allow Docker to perform the necessary initializations.

 [NOTES](#)

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You may be asked multiple times to allow permission. Click yes.

### Step 3.

Once initialization is complete your terminal will change to look like the picture below:

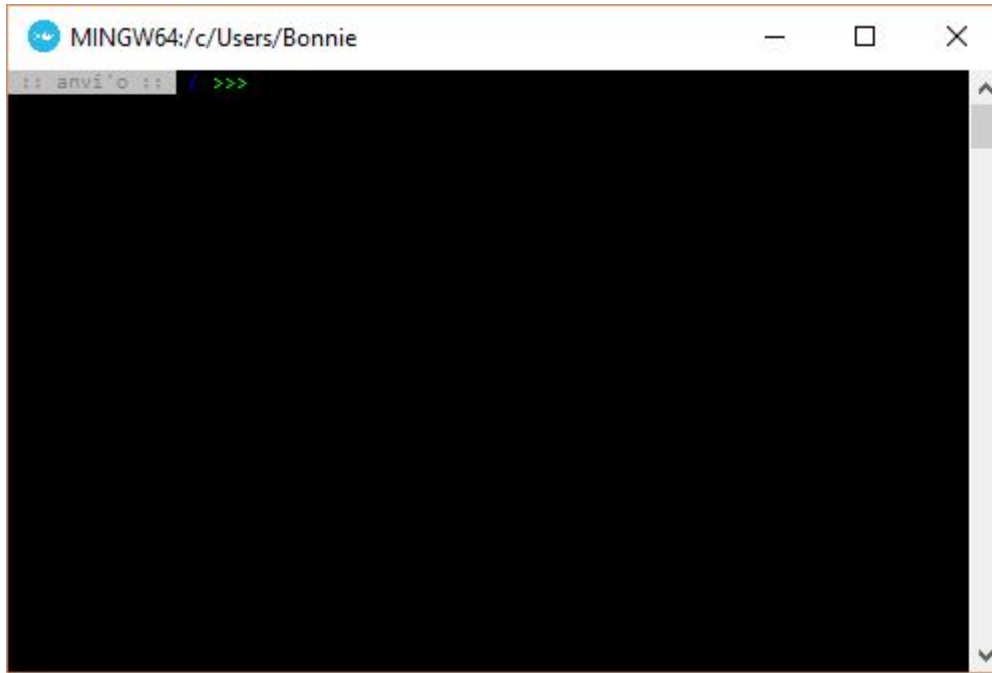
 NOTES

Important: The IP address in green will be used in a later step. Note that your IP will be different than the one shown in the above picture.

**cmd** COMMAND

```
docker run -p 8080:8080 -it meren/anvio:latest
```

Once complete you will have a prompt that looks like the picture below:



### Step 6.

Run the self test by putting the following command into the prompt:

```
cmd COMMAND  
anvi-self-test
```

### Step 7.

Open Google Chrome (yes you need Google Chrome). Input the IP address followed by :8080.

Example: 192.168.99.100:8080

🔗 [LINK:](#)

<https://www.google.com/chrome/browser/desktop/index.html>

### Step 8.

You should see an example Anvi'o visualization. Return to the terminal window and press Ctrl + C to terminate the anvi-interactive session.

### Step 9.

Anvi'o is now ready for use on your own data. See guidelines for binding data directories.