

Assembly Stats with MetaQuast

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Abstract

Calculate various assembly statistics using the MetaQuast app on the CyVerse Discovery Environment.

Citation: James Thornton Jr Assembly Stats with MetaQuast. **protocols.io**

dx.doi.org/10.17504/protocols.io.j86crze

Published: 10 Oct 2017

Protocol

Step 1.

Go to <https://user.cyverse.org/>

🔗 LINK:

<https://user.cyverse.org/>

Step 2.

Click "Sign Up" to create an account.

Step 3.

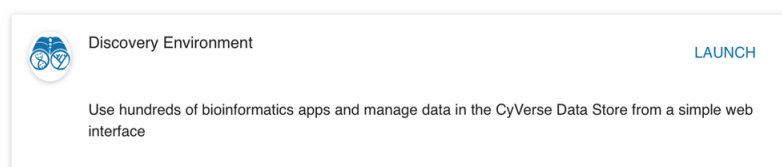
After account creation go back to <https://user.cyverse.org/> and login with your account.

🔗 LINK:

<https://user.cyverse.org/>

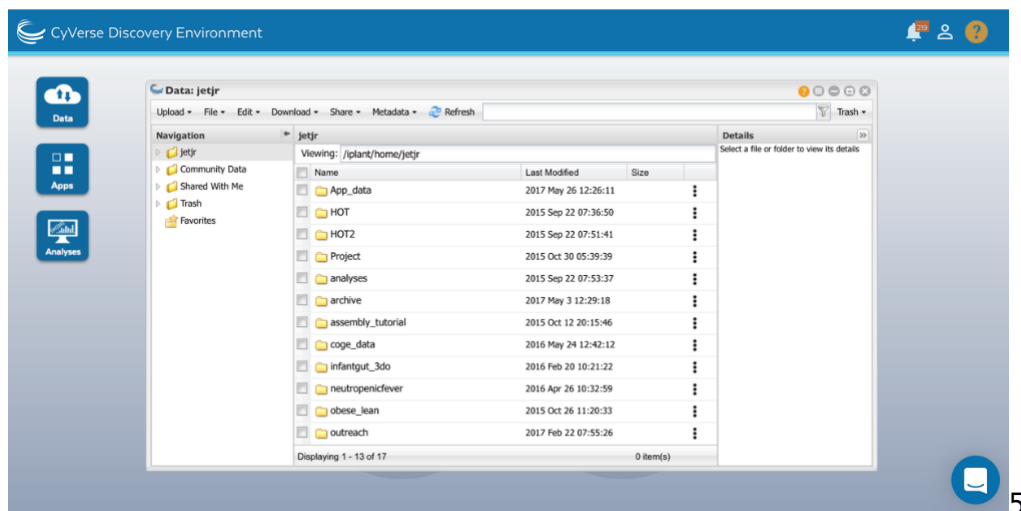
Step 4.

Launch the discovery environment.



Step 5.

Click the "Data" button found on the left. Navigate to your user folder.



Step 6.

Click "Upload" > "Simple Upload From Desktop"

Step 7.

Upload your final.contigs.fa file generated from Megahit.

📌 NOTES

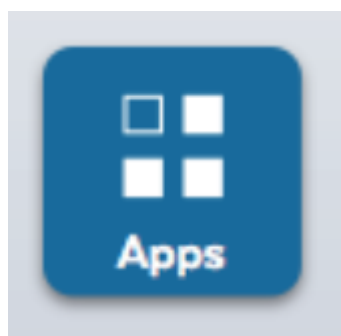
James Thornton Jr 10 Oct 2017

Important: You must scp your contigs to your local machine before you can upload.

```
$ scp username@sftp.hpc.arizona.edu:/rsgrps/bh_class/username/assembly/megahit-out/final.contigs.fa .
```

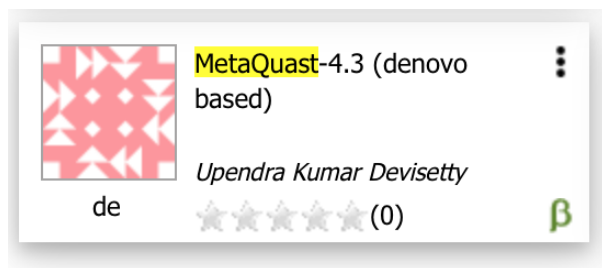
Step 8.

Once your upload is complete, click on the "Apps" button found on the left.



Step 9.

Search for "MetaQuast". Click on MetaQuast-4.3 (denovo based)



Step 10.

Under the "Fasta file(s)" tab, select the newly uploaded final.contigs.fa file. This is the only parameter that needs to change. Click "Launch Analysis".

Step 11.

Once MetaQuast is complete (email notification), navigate to the output found in the "analyses" folder in your data storage.

Step 12.

Download the "report.html" file found in the MegaQuast output folder.

Step 13.

Open the report.html file to see a summary of assembly statistics.