

Reviewer Report

Title: Refgenie: a reference genome resource manager

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Reviewer name: Christophe Dessimoz

Reviewer Comments to Author:

The submission present a system called "refgenie" to build, store, and share genomes and associated indices, which are often required by downstream processes. The authors argue that this is a unique niche, the closest related system being Illumina's iGenomes.

I agree that the practical problem tackled is of high interest, and that the software proposed is a promising solution to that problem. The manuscript is clearly written and nicely showcases the high-level features. This is complemented by extensive documentation and tutorials, neat code, and a highly user friendly installation procedure through PyPI.

In particular, the flexibility of supporting remote retrieval of data via CLI, API and a web interface makes refgenie a compelling solution.

I have no major or minor reservation, just a few discretionary points to the authors.

- * One alternative would be to use git lfs for the storage of genomic data. This could be added to the comparison table (with appropriate amendements to the columns, if sensible)

- * One nice additional feature would be to support the remote addition or update of genomes. For adoption beyond single research labs, this may prove to be an important feature because in many environments, the folks managing servers and those handling new genomes are likely to be in entirely different organisational units.

- * Along the same line, I am not sure I agree with the assertion "remote-hosted assets are only practical for common genomes and assets". As a group leader, I actually much prefer if the assets are centrally hosted than if they are scattered on the thumb drives of my lab members...

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