

Frequently Asked Questions (FAQs)

1. Who can the participants contact for enquiries and for technical support during the Data Mover Challenge (DMC)?

Please contact datamoverchallenge@nscg.sg for enquiries and for technical support during the challenge.

2. Who will schedule the video conference session and how will participants be notified?

The DMC Committee will send an email with a calendar invite to the participants with details of the video conference session, on the Monday of their scheduled challenge week.

3. What are the types and sizes of the individual files which make up the 2TB dataset?

The Dataset comprises of mixed data types (Genome and Satellite) and sizes ranging from 1MB to 1GB.

4. When will participants receive the details to access the DTN network?

The access information will be sent to participants on the Friday before the challenge week scheduled for the team. The access will be enabled on the following Monday 0000Hrs SGT (UTC+8) of the week scheduled for the team.

5. Can participants deploy their solutions using other methods besides Singularity or Docker?

As participants will be provided non-root access into the DTNs, participants are recommended to deploy their solution using Singularity or Docker containers which allow applications to install and run without root permission.

6. Can participants request for root or administrator access to the DTNs system and BIOs configuration?

For any tuning of the BIOs or host configuration which requires sudo / root administrator permission, please send the detailed requirement documentation to the DMC committee for the committee's approval. If approved, the configuration will then be implemented by DMC system administrators.

Participants can request Linux capabilities to access to the raw disk file system on the device within Singularity as per http://man7.org/linux/man-pages/man7/capabilities.7.html#top_of_page

7. Where can participants view the DTNs hardware specifications and disk fio test results?

TBA

8. How do participants access the DTNs?

Internet SSH access will be provided at NSCC DTN (nscg01) for participants to log in from:

- Participants to provide public IP address they will login from to be added to the SSH access list at NSCC.
- Participants to provide public key to be added to the DTNs for ssh access
- From nscg01 DTN, participants can access the other DTNs via ssh from the 100G interface.

9. Would we get a Layer 2 network, or and Layer 3 network for the challenge?

It will be a layer 3 network with DTN configured with public IP addressing on the global routable ip network.

10. Would IP multicast be enabled?

IP multicast will not be supported.

11. Would the competition be about transferring bulk data or streaming data?

Bulk data will be used for the dataset transfer.

12. Would participants have access to bare metal servers?

Participants will have non root access to install and set up their software on Singularity containers running on the DTNs.

13. Do you plan to include reproducibility as one of the judging criteria for the challenge?

Yes, participants are required to demonstrate their software and data transfer results to the judges.

14. How can participants do the MD5 Checksum to verify the integrity of the transferred data?

Participants can run MD5 checksum of the MD5 checksum of all files transferred for

e.g. `md5sum ./* | sort -n | md5sum`