

Data Mover Challenge 2020 (DMC20) – WINNERS Announced!

This year's challenge saw four international teams emerge with accolades for developing uniquely innovative solutions for specific components, each of which are crucial in ensuring the seamless transfer of large amounts of research data across the globe.



Singapore 26 February 2020 - Moving data is an essential foundation of national and global science. The Data Mover Challenge (DMC) is an annual competition that is organised by the National Supercomputing Centre (NSCC) Singapore and brings together experts from industry and academia, to push the envelope in high speed, big data transfer capabilities across vast distances. Data Transfer Nodes (DTNs) for DMC20 connected by 100Gbps international research and education networks were set up globally in Singapore, Australia, Europe, USA, South Korea and Japan.

The DMC20 competition attracted **seven (7) international teams from USA, Europe, Japan, Taiwan, Indonesia, Thailand, Vietnam and South Korea** (list of participants can be found at www.sc-asia.org/data-mover-challenge-2020/) from both the public and private sectors. The challenge focused on optimising point-to-point data transfers between sites – a crucial step forward in advancing research collaboration and sharing. DMC20 tested the expertise and skills of each of the teams to produce the best solutions for data transfer.

After extensive deliberations and reviews, the panel of international judges decided that there would not be a single overall winner for DMC20. They have instead decided to present not one but four awards to the teams that had shown unique and innovative solutions in various areas. Each of the specific areas are crucial components needed to optimise transfer of huge amounts of data over great distances.

Congratulations to all the winning teams!*

| Team | Country | Award Name | Citation |
|--|---------|--|--|
| Gauss Centre for Supercomputing (GCS) e.V. | Germany | Most Systemic Approach Award | GCS enhanced the DTN service using an under the hood feature to optimize data transfer performance using UFTP integrating with various application received the Most Systemic Approach Award |
| iCAIR / Starlight | USA | Best Speed & Science Integration Award | Team iCAIR / Starlight's DTN-as-a-Service solution produced high performance data access with NVMe over Fabric with strong integration with Jupyter notebooks received the Best Speed and Science Integration Award |
| Japan Aerospace Exploration Agency (JAXA) / National Institute of Information and Communications Technology (NICT) | Japan | Experimental Excellence Award | JAXA / NICT's well engineered HCP tool based on their original high performance flexible protocol with GUI integration produced a wide set of tests in challenging environments received the Experimental Excellence Award |
| National Institute of Informatics (NII) | Japan | Most Innovative & Novelty Award | Team NII's solution of MMCFTP to transfer datasets and accelerate automatic archiving and de-archiving of small files received the Most Innovative & Novelty Award |

DMC20 Judging Panel

The awardees were assessed and selected by an international panel of judges comprising domain experts and professionals in the field of networking and data transfer. Members of the judging panel for DMC20 are listed below.

| Name | Designation & Organisation | Country | Panel |
|---------------------|---|-----------------|-------------|
| Andrew Howard | Cloud Systems Manager, National Computational Infrastructure (NCI) | Australia | Chief Judge |
| Cees de Laat | Professor, Informatics Institute, Faculty of Science, University of Amsterdam | The Netherlands | Judge |
| Eric Pouyoul | Network Engineer, Energy Science Network (ESnet) | USA | Judge |
| Francis Lee Bu Sung | Associate Professor, School of Computer Science and Engineering, Nanyang Technological University (NTU) | Singapore | Judge |
| Lawrence Wong | Emeritus Professor, Department of Electrical & Computer Engineering, National University of Singapore (NUS) | Singapore | Judge |
| Tim Chown | Network Development Manager, Jisc | UK | Judge |

For more about the Data Mover Challenge 2020 (DMC20), the participants and the supporting partners, please visit www.sc-asia.org/data-mover-challenge-2020/

***Note** – In light of the cancellation of the SupercomputingAsia 2020 (SCA20) conference, the announcement of the winners and the DMC20 Awards Ceremony, which was scheduled to be held on 26 February in Singapore will not be proceeding. The organisers will arrange to present the Awards separately to the winning teams.

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