National Supercomputing Centre

Outline of Fugaku Project Call

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Fugaku Project Call

- Unique opportunity to access the world's fastest supercomputer
- Amongst the first in the world to be granted regular access to Japan's Fugaku supercomputer
- Regular annual call for projects
- Access to specialized hardware not available in SIngapore
- Provided by an MoU with Japan's Research Organization for Information Science and Technology (RIST)

RIST

NSCC SINGAPORE National Supercomputing Centre

富岳 Fugaku

Enhances Available Compute Resources

CURRENT

1 PFLOPS System
- 1,288 nodes (dual socket,12cores/CPU ES-2690v3)
- 128GB DDR4 RAM/node
- 10 large memory nodes (1x6TB, 4x2TB, 5x1TB)

Accelerator Nodes
- 128 nodes with Tesla K40 GPUs

13PB Storage
- GPFS & Lustre File Systems
- I/O bandwidth up to 500GB/s

Infiniband Interconnection
- EDR (100Gbps) Fat Tree with full bisectional bandwidth within cluster

Add-on Systems (ASPIRE 1+)
- AI.Platform (6 x DGX-1)
- 1,000 cores HTC System
- *Koppen* - 160 TFLOPS Cray XC-50, Climate System

Fugaku

1M Node Hours

PLANNED

ASPIRE 2A
- Aggregate ~10PFLOPS raw compute power
- 8x more powerful than current ASPIRE1

Overview

The National Supercomputing Centre Singapore (NSCC) has opened a call for proposals to access Japan's flagship supercomputer, Fugaku, to Singapore researchers with Singapore residency status under an agreement between NSCC and the Research Organization for Information Science and Technology of Japan (RIST).

Eligibility

- The Principal Investigator and members of the project must belong to a Singapore entity with Singapore residency status.
- Persons belonging to private companies cannot be the Project Representative or members of the project, since this call targets projects for academic purposes

Details of the Call

Available Resources:	RIKEN R-CCS Supercomputer Fugaku.
Computational Resources:	**1M Node-Hours**^ in total (or up to ~400,000 Node-Hours per project), whichever is achieved first.
Storage Resources:	5TB of the local storage of Fugaku is allocated per project by default, and it can be increased if requested. The data will be retained for one month after the project ends. The projects can also request to use the HPCI Shared Storage after they are awarded.
Number of Projects:	Approval of up to a maximum of 5 projects (or 1M Node-Hours in total), whichever is achieved first.
Application Period:	One call per year.
Validity of Project Period:	Up to one year.
Usage Fee:	None.
Submissions:	The same proposal cannot be submitted by the same researcher more than once.
Announcement of Awards:	The results of the project call will be announced once the screening process at NSCC and final approval by RIST is completed. (Estimated to be within 1.5 month after the end of the project call.)
Submission of User Report:	A user report must be submitted within sixty days after the project is completed. The reports will be published in the NSCC and HPCI Portal site.

^1 Node-Hour on the Fugaku is 48 core hours

Important Timeline

Dec 2021	Jan 2022	Feb 2022	Mar 2022	Apr 2022
• **1 – 31 Dec**: Application Period	• **24 – 31 Jan**: Notification of Results for 1st Round of Review via Email	• **14 Feb**: Deadline for Submission to HPCI Online Application System	• Final Notification of Results by RIST	• Access to Fugaku

Procedures for Application

The Project Representative should submit the application.

1. Download the word format of the application form.

2. Submit the completed application form to projects-admin@nscc.sg with the email title "*Application: Call for Proposals for Fugaku Projects*".

3. The NSCC Project Screening Committee will review the applications. After the application has passed the preliminary review, RIST will notify the Project Representatives to register the project information in the HPCI Online Application System().

4. Follow the instructions by RIST to register the project information in the HPCI Online Application System.

5. After the selection, the procedures for utilization should be followed via the HPCI Online Application System.

Refer to the Proposal Preparation Instructions for detailed instructions on submitting the application.

Useful Links

- Website:
  https://www.nscc.sg/call-for-proposals-for-fugaku-projects-via-national-supercomputing-centre-singapore/

- Contact:
  projects-admin@nscc.sg

Please submit your applications by **31 Dec 2021, 2359 hrs (GMT+8)**.

SupercomputingAsia 2022 (SCA22)

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Thank You