

Recruitment for the Large-Scale HPC Challenge for Miyabi Supercomputer System

Joint Center for Advanced High Performance Computing (JCAHPC), has been implementing the Large-Scale HPC Challenge for its Miyabi Supercomputer System since April 2025. The Large-Scale HPC Challenge is a public recruitment project that allows a research group to monopolize the use of computational resources for 24 hours, for 1,090 nodes (1,090 GPU units) which is the maximum number of Miyabi Accelerator nodes group (Miyabi-G) or/and 184 nodes (20,608 cores) which is the maximum number of Miyabi General-Purpose CPU nodes group (Miyabi-C) that the Miyabi Supercomputer System has. Please see below for details on the selection criteria. We look forward to receiving your application..

User's guide

- This initiative allows users to monopolize the use of maximum 1,090 nodes (1,090 GPU units) of Miyabi-G or/and 184 nodes (20,608 cores) of Miyabi-C for 24 hours once a month, in principle from 9 a.m. on the day before the month-end processing to 9 a.m. on the month-end processing day.
- The projects are recruited from the public, and a wide range of projects are accepted in addition to submissions from existing users. While applications are accepted by both individuals and groups, one group is selected each month in principle.
- The results produced through the use of this initiative will be released to the public. In the disclosure of the results of the project, selected projects are required to state clearly that the project was implemented using the Miyabi Accelerator nodes group (Miyabi-G) or/and Miyabi General-Purpose CPU nodes group (Miyabi-C) under the Large-Scale HPC Challenge initiative. Selected projects will also be requested to submit articles reporting on the results of the project to the PR magazine, etc., submit articles (brief reports) to peer-reviewed international conferences, etc.
- There may be cases where the selected projects are invited to present at seminars and workshops organized by the Information Technology Center.
- Use of the supercomputers under this initiative is free of charge.

Recruitment schedule for FY2025 (Provisional)

The following is the provisional schedule for the recruitment of projects for the FY2025 Large-Scale HPC Challenge.

Period of Implementation	Application Deadline	Screening	Notification of Selection
Tue., Apr. 22, 2025, 9 a.m. - Wed., Apr. 23, 9 a.m. Tue., May 27, 2025, 9 a.m. - Wed., May 28, 9 a.m. Tue., June 24, 2025, 9 a.m. - Wed., June 25, 9 a.m. Tue., July 22, 2025, 9 a.m. - Wed., July 23, 9 a.m.	Mon., Mar. 17, 2025, 5 p.m. [Deadline]	End-Mar. 2025	Early Apr. 2025
Thu., Aug. 28, 2025, 9 a.m. - Fri., Aug. 29, 9 a.m. Thu., Sep. 25, 2025, 9 a.m. - Fri., Sep. 26, 9 a.m. Tue., Oct. 28, 2025, 9 a.m. - Wed., Oct. 29, 9 a.m. Tue., Nov. 25, 2025, 9 a.m. - Wed., Nov. 26, 9 a.m.	Tue., July 22, 2025, 5 p.m. [Deadline]	End-July 2025	Early Aug. 2025
Tue., Dec. 23, 2025, 9 a.m. - Wed., Dec. 24, 9 a.m. Tue., Jan. 27, 2026, 9 a.m. - Wed., Jan. 28, 9 a.m. Tue., Feb. 24, 2026, 9 a.m. - Wed., Feb. 25, 9 a.m. Mon., Mar. 30, 2026, 9 a.m. - Tue., Mar. 31, 9 a.m.	Mon., Nov. 17, 2025, 5 p.m. [Deadline]	End-Nov. 2025	Early Dec. 2025

* The recruitment schedule is subject to changes depending on the maintenance schedule and other factors.

* It is possible to apply more than once during the year. However, please note that there are cases where your requests cannot be fulfilled due to the application situation. It is possible to use the supercomputer systems only once with each application.

Research Subjects

The Large-Scale HPC Challenge is restricted to research that involves large-scale computing using a maximum of 1,090 nodes (Miyabi-G) or/and 184 nodes (Miyabi-C). The premise is that applicants and members of research groups have a track record in large-scale computing using parallel computer systems in Japan or abroad. A wide range of research fields related to high-performance computing, as shown below, are eligible.

- Large-scale simulations
- Large-scale data processing
- Large-scale benchmarking, evaluation of the performance of computational and communications systems
- Other software execution related to large-scale computing

Eligibility for use / Screening method

Eligibility for use is determined through screening by a screening committee comprising faculty members of the Supercomputing Research Division, Information Technology Center, The University of Tokyo, faculty members, the Center for Computational Sciences, University of Tsukuba, and external committee members, based on the application documents. Applicants do not have to be existing users of the system.

Projects submitted for consideration will be selected by a screening committee. The results will be announced as soon as possible.

Applicants must be researchers affiliated with universities or public organizations in Japan, and or be parties affiliated with private corporations.

Main selection criteria

- A. The details of calculations and results must be available for publication, including papers.
- B. Computational results can be deemed to be useful to science or have social impact.
- C. Sets out the goal of using 1,024 nodes or more(Miyabi-G) or/and 184 nodes(Miyabi-C).
- D. Feasible plans, and possibility of producing effects in a short time (each period of use is for a maximum of 24 hours).
- E. Provides useful information to the user and to the operation of the Center.

A-D: Required

E: Although not required, the application may be evaluated for points if there is a relevant description in the application form.

Application for use

Read the application guidelines and Terms of Use for Supercomputer Systems of the Information Technology Center, the University of Tokyo carefully, and fill in the necessary fields in the application form. Please submit the completed application form by e-mail to the office for the submission of the application form stated below.

* When submitting the documents, send them in PDF format. Please send “Information of research group members” in Excel format.

The following are compulsory fields that must be completed in the application form.

1. Date of application
2. Requested period of use
3. Applicant's information (Name, affiliation, designation, contact address, e-mail, telephone)
4. Project title (Japanese, English), overview
5. Contents and goals of project
6. **From the research achievements of the applicant and research group members in the relevant field, please provide a separate print of a representative paper as the record of use of large-scale computing systems.**
7. Program information, schedule for use, etc.
8. Requests, special remarks
9. Information of research group members (Name, affiliation, designation, role in the research project)

Submissions / Inquiries

[Submissions]

E-mail: koubo(at)cc.u-tokyo.ac.jp (Please convert “(at)” to “@” before sending the e-mail.)

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[Inquiries]

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Information Technology Center, The University of Tokyo