Fiscal Year 2027 Call for Joint Research Proposals

Joint Usage/Research Center for Interdisciplinary Large-scale Information Infrastructures (JHPCN)

Application Guidelines

JHPCN Office



Release Notes

Version 1: November 16, 2026

Important Notice

In the event of any discrepancy between the Japanese and English versions, the Japanese version shall prevail. The English version is provided for convenience and reference only.

Major Changes from the Fiscal Year 2026 Call for Proposals

Establishment of the "Quantum-HPC Hybrid Computing Joint Research Project" Category

With the cooperation of RIKEN, we have established the "Quantum-HPC Hybrid Computing Joint Research Project" category, which enables the combined use of quantum computers and supercomputers (HPC). Selected Projects may use quantum computers provided free of charge by JHPC-quantum, subject to separate procedures and review.

Revision of the Structure of the Application Form

We have clarified that reviews will be conducted on the basis of the information provided in the submitted Application Form. We have also revised the structure of "Application Form (1)" (Word/LaTeX) to allow applicants to provide sufficient explanations within the Application Form alone, relaxing the upper page limits while setting page limits for specific sections.

Publication of Evaluation Criteria

To improve transparency in the review process, we have explicitly stated the evaluation criteria for the "Overall Evaluation" and "Individual Evaluation." For details, please see here.

Clarification of the Conditions for Exclusion from Review

We have clarified the "Conditions for Exclusion from Review."
Accordingly, for applicants who wish to use this service, the JHPCN Office will conduct a preliminary check of submitted documents for formal deficiencies that would result in exclusion from review. For details, please see here.

Introduction of a Limit on the Number of Applications

We have limited the number of applications that the same Principal Investigator may submit to one Project per Project Category. For details, please see here.

Revision of the Requirements for International Joint Research Projects and Industrial Joint Research Projects

We have revised the requirements to promote International Joint Research Projects and Industrial Joint Research Projects. For details of International Joint Research Projects, please see here; for details of Industrial Joint Research Projects, please see here.

Revision of the Handling of Presentations and Reports at the JHPCN Symposium

We have clarified the handling of presentations and reports at the JHPCN Symposium and included the relevant provisions in the "Compliance Requirements" applicable upon project selection.

Table of Contents

Release Notes i

Important Notice i

Major Changes from the Fiscal Year 2026 Call for Proposals ii

Table of Contents iii

Introduction 1

1. Benefits of Project Selection 3

2. Joint Research Period 3

3. Available Computing Resources and Other Facilities 3

4. Research Areas 4

5. Project Categories 5

6. Eligibility 7

7. Application Form 9

8. Evaluation Methods 13

9. Resource Allocation 16

10. Application Procedures 19

11. Schedule 23

12. Conditions for Exclusion from Review 24

13. Points to Note and Compliance Requirements 25

14. Contact Information 28

Appendix (1): List of the HPCI resources available at the JHPCN member institutions for the Joint Research Project 29

Appendix (2): List of the non-HPCI resources available at the JHPCN member institutions for the Joint Research Project 41

Introduction

The Joint Usage/Research Center for Interdisciplinary Large-scale Information Infrastructures (hereinafter referred to as "JHPCN") is a “Network-Type” Joint Usage/Research Center accredited by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) under the Ordinance for Enforcement of the School Education Act. Joint Usage/Research Centers aim to establish a framework for collaborative research among researchers by leveraging the research capabilities of universities. JHPCN consists of eight centers equipped with large-scale computing systems at Hokkaido University, Tohoku University, The University of Tokyo, Institute of Science Tokyo, Nagoya University, Kyoto University, The University of Osaka, and Kyushu University (hereinafter referred to as the "8 Centers"). JHPCN promotes the provision of computing resources at the 8 Centers for a wide range of research activities (joint usage), as well as joint research with researchers affiliated with the 8 Centers. For further information about JHPCN, please visit the JHPCN website.

JHPCN invites applications for Joint Research Projects for fiscal year 2027 (hereinafter referred to as the "Projects"). JHPCN defines interdisciplinarity as "the creation of interdisciplinary fields between the three pillars of computational science, data science, and computer science, or between these three pillars and application fields," and invites proposals for interdisciplinary research.[1] (Figure 1)[1]

Projects selected under this call for proposals will be eligible to use, free of charge and within the approved range, computing resources such as supercomputers (HPC) operated by the 8 Centers, as well as mdx[2], a computing platform primarily designed for data science and data utilization and jointly operated by nine universities and two research institutions, including all the 8 Centers.[2] (For details of the available computing resources and other facilities, see Appendix (1) and Appendix (2).)

In addition, Projects selected under the newly established "Quantum-HPC Hybrid Computing Joint Research Project" category can use quantum computers provided free of charge by JHPC-quantum with the cooperation of RIKEN, subject to separate procedures and review.

Through participation and presentations at the annual JHPCN Symposium, researchers involved in selected Projects can establish new research networks and further advance their research and development activities. The JHPCN Symposium attracts numerous researchers, and collaboration with these researchers is also expected to contribute to the further development of research topics. In addition, selected Projects may receive financial support for expenses associated with presenting research results overseas, article publication fees, and other related expenses.

The application deadline for fiscal year 2027 Projects is 10:00 a.m. on January 5, 2027. We look forward

[1]JHPCN does not regard interdisciplinary fields formed solely between application fields as interdisciplinary research.

[2]Starting with the fiscal year 2026 call for proposals, mdx II was added to the available computing resources and other facilities. With the addition of mdx II, the original mdx was renamed mdx I, and mdx I and mdx II are collectively referred to as mdx.

to receiving applications from researchers.

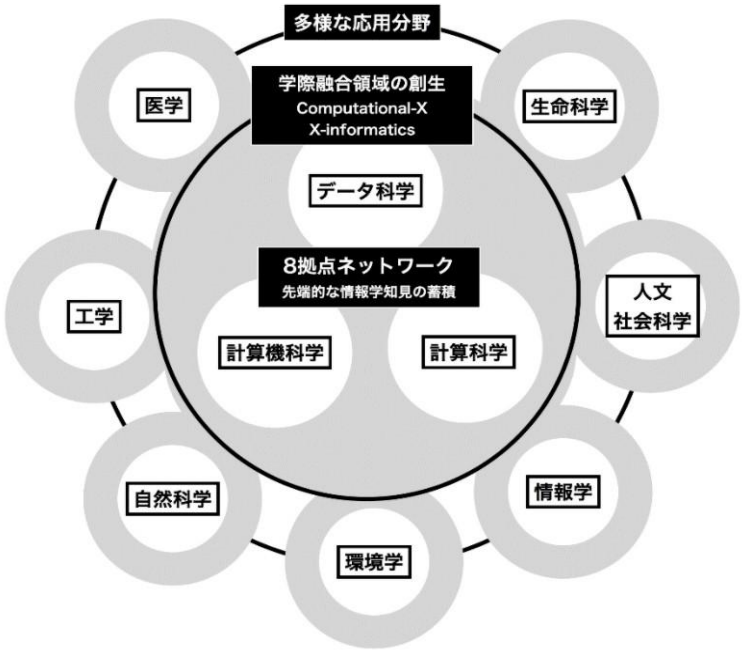


Figure 1. Conceptual diagram of the three pillars of information science and their application fields. We invite proposals for joint research aimed at promoting interdisciplinary research through the creation of new interdisciplinary fields. The application fields shown under "Diverse Application Fields" are examples and are not limited to those illustrated here.

1. Benefits of Project Selection

Projects selected under this call for proposals will receive the following benefits.

- **Free Use of Computing Resources and Other Facilities**
  Computing resources and other facilities may be used free of charge within the approved range at the time of project selection. For details of the computing resources and other facilities, please refer to "Available Computing Resources and Other Facilities" below.
- **Further Promotion of Research through the Establishment of Interdisciplinary Joint Research Networks**
  The establishment of extensive research networks is promoted through interactions at the symposium.
- **Financial Support Program**
  Following review by the "JHPCN Joint Research Project Review Committee" (hereinafter referred to as the "Project Review Committee"), which consists of members from both within and outside the 8 Centers, selected Projects may receive financial support for the following expenses. For the latest information on financial support, application forms, and related matters, please refer to "[3]Information for Principal Investigators" on the JHPCN website.
  - ➢ Conference participation fees, presentation fees, and travel expenses for presentations at international conferences (early-career and female researchers)
  - ➢ Article publication fees

For information on previously selected research project titles, Project Reports, and related materials, please refer to "Joint Research Projects" on the JHPCN website.

2. Joint Research Period

April 1, 2027–March 31, 2028

※ The start of computing resource use may be delayed due to procedures for issuing computing system user accounts.

※ For the detailed schedule, including applications and final reporting, please refer to "Schedule" below.

3. Available Computing Resources and Other Facilities

Two types of resources are available for this joint research: "HPCI Resources" and "Non-HPCI Resources." Please note that the application procedures differ depending on the resources to be used (see

[3]For information on JHPCN committees, please refer to "Committees" on the JHPCN website.

"Application Procedures" below). "HPCI Resources" and "Non-HPCI Resources" may also be used in combination.

3.1. HPCI Resources

HPCI (High Performance Computing Infrastructure) is a shared computing infrastructure that connects computing systems and storage at universities and research institutions across Japan via a high-speed network. It is operated by the Research Organization for Information Science and Technology (hereinafter referred to as "RIST"), a general incorporated foundation. Some of the computing resources provided by HPCI (HPCI-JHPCN systems) are available for use in joint research. These resources are referred to as "HPCI Resources." A list of available "HPCI Resources" is provided in Appendix (1).

3.2. Non-HPCI Resources

"Non-HPCI Resources" refer to resources other than "HPCI Resources", and include "mdx" and other resources. A list of available "Non-HPCI Resources" is provided in Appendix (2).

4. Research Areas

This call for proposals invites applications for Projects in two Research Areas: the "Large-scale Computational Science Area" and the "Data Science / Data Usage Area."

4.1. Large-scale Computational Science Area

We invite a wide range of research proposals related to computational science. Research that uses real-world data to improve computational simulation models should be submitted to this Research Area (including applications to continue Projects conducted in the "Data Science / Data Usage Area" in the previous fiscal year).

4.2. Data Science / Data Usage Area

We invite a wide range of research proposals related to data science and data utilization. We welcome research topics covering a broad range of methods and fields, from fundamental to applied research, including the development of advanced data science methods; the collection and analysis of diverse data across the humanities and social sciences, life sciences, and natural sciences and engineering; and data sharing and the development of platforms within research communities. However, even if a study involves real-world data, research that uses such data to improve computational simulation models should be submitted to the "Large-scale Computational Science Area."

5. Project Categories

This call for proposals includes the following Project Categories: "General Joint Research Project," "International Joint Research Project," "Industrial Joint Research Project," and "Quantum-HPC Hybrid Computing Joint Research Project."

5.1. General Joint Research Project

All Projects that do not fall under the "International Joint Research Project," "Industrial Joint Research Project," or "Quantum-HPC Hybrid Computing Joint Research Project" categories described below should be submitted under the "General Joint Research Project" category.

5.2. International Joint Research Project

This category is intended for interdisciplinary joint research with researchers based outside Japan on problems that are difficult to solve or elucidate through the efforts of researchers in Japan alone. For eligibility requirements, please refer to "Eligibility" below.

The Application Form must be prepared in English. Applications submitted in Japanese will be treated as "General Joint Research Projects."

In this Project Category, travel expenses (travel expenses for business trips or invited visits) may be subsidized following review by the "Project Review Committee." For the latest information on financial support, forms, and related matters, please refer to "Procedures for Travel Expense Support for International Joint Research Projects" on the JHPCN website.

In addition, to promote international joint research, JHPCN concluded a Memorandum of Understanding (MoU) on mutual cooperation with Germany's NHR (Nationales Hochleistungs Rechnen) in 2024. Accordingly, JHPCN established the "International Joint Research Project (NHR)" category, expanded the number of projects eligible for selection under this Project Category, and encourages applications for "International Joint Research Projects" with an NHR researcher serving as a Co-Principal Investigator.

Eligibility requirements have been revised to promote International Joint Research Projects. For details, please refer to "Eligibility" below.

Please note that, as a result of the review, a Project may be selected as a "General Joint Research Project."

5.3. Industrial Joint Research Project

This category is intended for joint research that emphasizes industrial applications. Although a certain degree of research content is required, it is not emphasized. Eligibility requirements have been revised to promote Industrial Joint Research Projects. For details, please refer to "Eligibility" below.

Please note that, as a result of the review, a Project may be selected as a "General Joint Research Project."

5.4. Quantum-HPC Hybrid Computing Joint Research Project

This category allows selected Projects to use quantum computers provided free of charge by [4]JHPC-quantum with the cooperation of RIKEN, subject to separate procedures and review. We welcome ambitious proposals combining quantum computers and HPC. (Proposals that use only quantum computers will not be selected.)

The available quantum computers are (1) ibm_kobe (IBM: 156 qubits, superconducting technology) and (2) Reimei (Quantinuum: 56 qubits, trapped-ion technology). Selected applicants may use either or both, subject to separate procedures and review.

A quantum–HPC hybrid environment connecting these quantum computers with the supercomputers "Miyabi (Miyabi-G/Miyabi-C)" and "OCTOPUS" has already been established. Quantum–HPC hybrid workloads using Miyabi (Miyabi-G/Miyabi-C)/OCTOPUS together with these quantum computers can be executed from the login nodes of both systems (Figure 2). Therefore, applicants in this Project Category must apply to use at least one of the following resources: Miyabi-G or Miyabi-C provided by The University of Tokyo, or OCTOPUS provided by The University of Osaka. Applications that do not request any of these resources will not be reviewed.

Various circumstances may arise in using quantum computers. To avoid potential mismatches between the proposed research and the available computing resources, applicants planning to use Miyabi (Miyabi-G/Miyabi-C) should consult the contact office at the Information Technology Center, The University of Tokyo, while those planning to use OCTOPUS should consult the D3 Center, The University of Osaka. These consultations should be completed by Tuesday, December 15, 2026. The email subject line should include "JHPCN 量子".

Please note that, as a result of the review, a Project may be selected as a "General Joint Research Project."

[4]Details will be provided individually to quantum computer users by RIKEN after project selection. Even if a Project is selected under this call for proposals, use of the quantum computers may not be approved as a result of RIKEN's review.

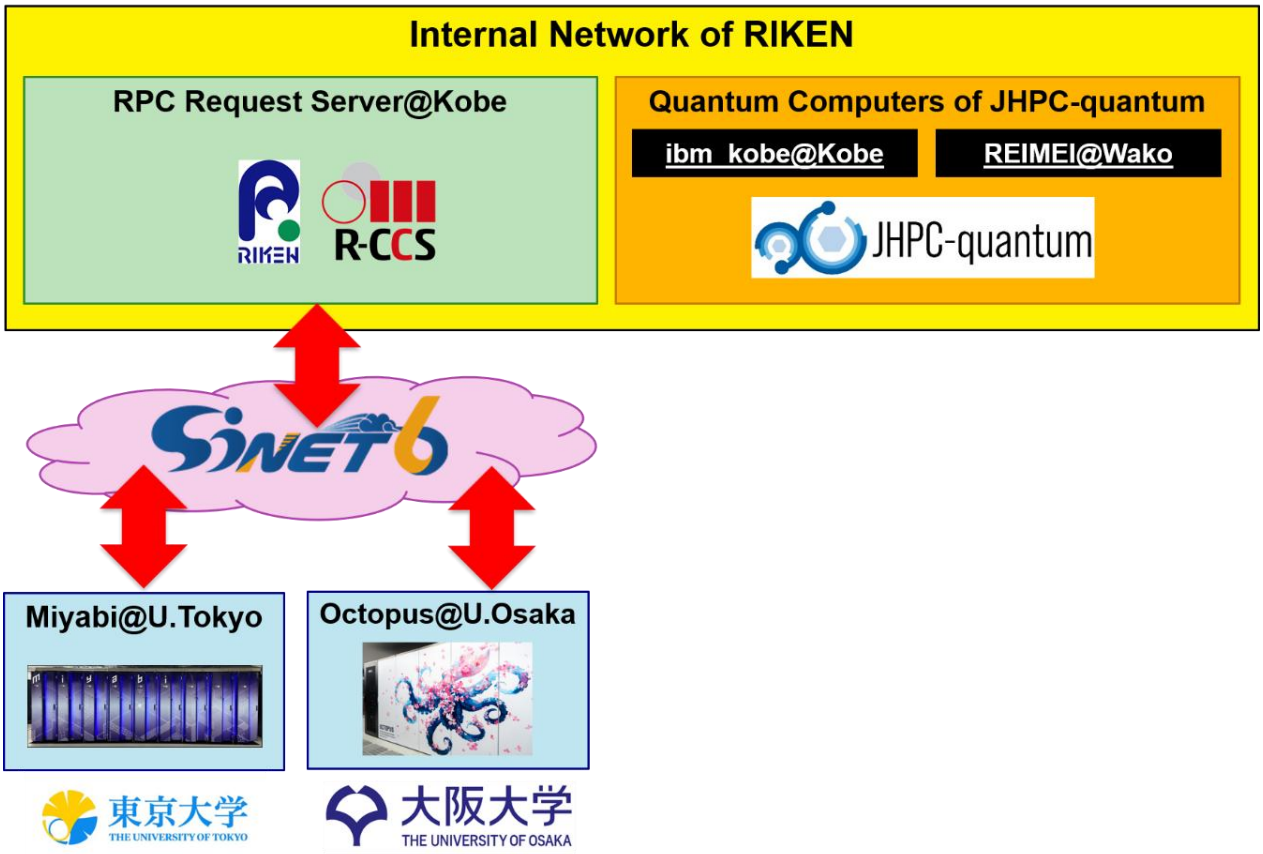


Figure 2. Connections of the quantum computers (ibm_kobe and Reimei) for quantum–HPC hybrid computing. Quantum–HPC hybrid jobs are submitted from the login nodes of "Miyabi (Miyabi-G/Miyabi-C)" or "OCTOPUS."

6. Eligibility

Projects may be proposed by research groups consisting of at least two members, with a researcher affiliated with an organization in Japan serving as the Principal Investigator.

6.1. Requirements for All Project Categories

- Each research group must have one Principal Investigator and at least one Co-Principal Investigator. This structure must be maintained if the Project is selected.
- In addition to the Principal Investigator and Co-Principal Investigator(s), a research group may include any number of Co-Investigators.
- The Principal Investigator must be affiliated with an institution in Japan (such as a university, research institution, or private company) as of the research start date.[5]

[5]If the requirement is not met at the time of application but is expected to be met by the research start date,

- Students enrolled in graduate schools, universities (including junior colleges), colleges of technology, or educational institutions recognized by the National Institution for Academic Degrees and Quality Enhancement of Higher Education as providing education equivalent to that of a university or graduate school may participate as Co-Investigators. They may not serve as the Principal Investigator or a Co-Principal Investigator.
- Non-residents and residents falling under the "Specified Categories" under the Foreign Exchange and Foreign Trade Act (FEFTA) may be denied permission to use computing resources at the discretion of the 8 Centers from the perspective of security export control, even if their Projects are selected. If this makes it impossible to carry out the research Project, the applicants will be required to withdraw.[6]

6.2. Additional Requirements for "International Joint Research Projects"

- The research group must include at least one researcher affiliated with a research institution outside Japan as a Co-Principal Investigator. If this requirement is not met, the application will be treated as a "General Joint Research Project."
- Until fiscal year 2026, participation by a researcher affiliated with one of the 8 Centers was a requirement for the research group. In fiscal year 2027, such participation is encouraged but is no longer a requirement.

6.3. Additional Requirements for "Industrial Joint Research Projects"

- The Principal Investigator must be a researcher affiliated with a private company. If this requirement is not met, the application will be treated as a "General Joint Research Project."
- Until fiscal year 2026, at least one Co-Principal Investigator was required to be a researcher affiliated with one of the 8 Centers. In fiscal year 2027, at least one Co-Principal Investigator must be a researcher affiliated with a university or public research institution in Japan.[7]

6.4. Additional Requirements for "Quantum-HPC Hybrid Computing Joint Research Projects"

- The research group must include a person with a track record of research in quantum computing.
- Applicants must apply to use at least one of the following resources: Miyabi-G or Miyabi-C

---

please consult the JHPCN Office in advance.

[6] See page 4 of "Clarification of 'Deemed Export' Controls" published by the Ministry of Economy, Trade and Industry (METI)

[7] Limited to institutions that receive allocations of competitive research funds.

provided by The University of Tokyo, or OCTOPUS provided by The University of Osaka. Applications that do not request any of these resources will not be reviewed. Furthermore, only these resources may be designated as "High Priority Resources," as defined below.

- Applicants must designate at least one prospective quantum computer user who will actually use the quantum computers. Applications that do not designate any prospective quantum computer users will not be reviewed.[8]

7. Application Form

To apply for a Project, applicants must prepare and submit an Application Form.

7.1. Overview of the Application Form

The Application Form consists of two files: "Application Form (1)" (Word/LaTeX) and "Application Form (2)" (Excel). The templates can be downloaded from "Call for Joint Research Proposals" on the JHPCN website.

7.1.1. "Application Form (1)" (Word/LaTeX)

"Application Form (1)" (Word/LaTeX) contains the items listed in the following table, and page limits are set for its main text. Applications exceeding the page limits will not be reviewed.

[8]As a general rule, persons who are already registered researchers of JHPC-quantum may not serve as quantum computer users under these Projects. If, for unavoidable reasons, a registered researcher of JHPC-quantum needs to participate as a quantum computer user under a Project, please consult the RIKEN Center for Computational Science in advance.

Items in "Application Form (1)"		Page Limits for "Application Form (1)"
Main Text	1. Previous Research and Background	In Japanese: 3 pages In English: 4 pages
	2. Research Objectives and Significance	
	3. Interdisciplinary Nature of the Research and Need for Resource Use	
	4. Research Plan	
	5. Items Requiring Cooperation from Research Groups or Researchers at the 8 Centers to Promote Joint Research	
	6. Protection of Human Rights and Compliance with Laws and Regulations	1 page
	7. Other	
	8. Major Recent Publications and Other Research Outputs Related to This Research	1 page
Basis for Resource Allocation Estimates and Purpose of Use		No limit

7.1.2. "Application Form (2)" (Excel)

In "Application Form (2)" (Excel), complete the Project sheet (project information), Researcher sheet (research group structure), resource application sheets for the 8 Centers whose resources will be used, and Check & Declaration sheet (pre-submission check and declaration).

1. Project Sheet (Project Information)

- **Research Area**

  Referring to "Research Areas" above, select either "Large-scale Computational Science Area" or "Data Science / Data Usage Area," depending on the research topic of the proposed Project. Applications that do not specify a Research Area will not be reviewed.

- **Project Category**

  Referring to "Project Categories" above, select one of the following according to the research group and research content: "General Joint Research Project," "International Joint Research Project," "International Joint Research Project (NHR)," "Industrial Joint Research Project," or "Quantum-HPC Hybrid Computing Joint Research Project." Applications that do not specify a Project Category will be treated as "General Joint Research Projects."

- **Research Field**

  If you intend to use "HPCI Resources," select at least one of the following research fields: "Large-scale Numerical Computing Applications," "Large-scale Data Processing Applications," "Large-capacity Network Technologies," or "Research Related to Large-scale Information Systems."

- **New / Continuing**

  Indicate whether the Project is new or continuing. For a continuing Project, enter the previous

fiscal year's Project ID or Exploratory Project ID.

- **Preferred Review Categories**

  To assist in assigning reviewers to evaluate the proposed Project, specify the "Preferred Review Categories" from the Review Section Table for Grants-in-Aid for Scientific Research (KAKENHI), as follows.

  - From an informatics perspective, you must specify one item from "Examples of Research Topics (formerly: Keywords)" under Medium-sized Sections 60 and 61. You may optionally specify up to five items.
  - From the perspective of application fields, you may optionally specify up to two Basic Sections.

- **Contact Person**

  If clarification of the application is required, or when notification of project selection or non-selection is issued, both the Principal Investigator and the Contact Person will be notified by email. Therefore, designate a Contact Person other than the Principal Investigator who can be reached reliably. The Contact Person is not required to have an HPCI ID.

2. Researcher Sheet (Research Group Structure)

- **General Information**

  All members of the research group must be listed. In particular, ensure that all required fields are completed.

- **Points to Note for "Quantum-HPC Hybrid Computing Joint Research Projects"**

  For "Quantum-HPC Hybrid Computing Joint Research Projects," please note the following.

  - For any person with a track record of research in quantum computing, clearly indicate this in the "Role / Area of Responsibility, etc." column.
  - Designate prospective quantum computer users in the "Intention to Use Quantum Computers" field and enter their email addresses[9] in the "Email Address (if requesting to use quantum computers)" field. If the Project is selected, RIKEN will send instructions for the necessary procedures to these addresses; follow those instructions to complete the procedures. Designate only persons who will actually use the quantum computers. Check whether each prospective user already has a JHPC-quantum account, and indicate whether they have one in the "JHPC-quantum Account Status" field. Applications with no prospective quantum computer users will not be reviewed.[9]

3. Resource Application Sheets

   Referring to "Resource Allocation" below and Appendix (1), complete the sheet for each of the 8 Centers whose resources you intend to use. The amount is calculated automatically based on the formula for calculating the usage cost of each resource. Note that these formulas may differ from those used for general use at the respective Centers.

[9]Free email addresses (such as those provided by free webmail services) are not permitted. The email address must be one from which the user can send email.

4. Check & Declaration Sheet

Use the "Pre-submission Check" to ensure that the application has no omissions or deficiencies before submission.

Also, electronically confirm your declaration that "you have reviewed the Call for Proposals and related regulations, will comply with the eligibility requirements, research ethics, laws and regulations, and that the information in your application is true and accurate."

7.2. Points to Note When Preparing the Application Form

Please note the following when preparing the Application Form.

- The Application Form templates have changed since the previous fiscal year. Use the latest templates. Applications submitted using templates from previous fiscal years or earlier will not be reviewed.
- Prepare the forms after reviewing the notes in "Application Form (1)" (Word/LaTeX) and the "Read Me First" sheet in "Application Form (2)" (Excel).
- Only the Application Form will be used in the review process[10]. Therefore, provide all necessary information in sufficient detail. Write clearly so that reviewers from different fields of expertise can readily understand the proposal.
- Proposals under this call must be intended solely for peaceful purposes. Give due consideration to the protection of human rights and interests.
- In addition to self-contained research Projects, applications may be submitted to develop or expand interdisciplinary aspects of research Projects already being conducted with other competitive research funds or similar funding. In such cases, clearly describe how the proposed Project differs from the existing research Project in "Application Form (1)" (Word/LaTeX).
- Before applying, consult with and confirm with the relevant 8 Centers providing the resources that the computing resources and other facilities you plan to use meet the requirements of your research.
- Please note that not only the functions and performance of the available hardware and software, but also compliance with relevant laws and guidelines may need to be considered. For example, when handling medical information, failure to comply with the Act on the Protection of Personal Information and the guidelines issued by the Ministry of Health, Labour and Welfare, the Ministry of Internal Affairs and Communications, and the Ministry of Economy, Trade and Industry may cause issues.
  - ✧ Ministry of Health, Labour and Welfare: "Guidelines for Safety Management of Medical

[10] However, for Projects continuing from previous fiscal years, as well as Projects deemed to be substantially continuous with previous Projects, the contents of the Progress Reports and Final Reports from previous fiscal years may be taken into consideration during the review.

Information Systems"

- ✧ Ministry of Internal Affairs and Communications and Ministry of Economy, Trade and Industry: "Guidelines for Safety Management of Information Systems and Services Provided by Business Operators Handling Medical Information"

- ➢ If ethical guidelines or other guidelines exist in the research field of the proposed Project, comply with them. In particular, Projects requiring research ethics review must obtain approval for implementation through a review conducted by the researchers' affiliated organizations or other relevant bodies.

7.3. Limit on the Number of Applications

The same Principal Investigator may submit no more than one application per Project Category. However, "International Joint Research Project" and "International Joint Research Project (NHR)" are regarded as separate Project Categories. Therefore, the same Principal Investigator may submit two applications: one for an "International Joint Research Project" and one for an "International Joint Research Project (NHR)."

If the same Principal Investigator submits two or more applications in the same Project Category, only the first application received will be reviewed. The second and subsequent applications will not be reviewed.

Please note that Projects submitted under the "International Joint Research Project," "Industrial Joint Research Project," or "Quantum-HPC Hybrid Computing Joint Research Project" categories may be selected as "General Joint Research Projects" as a result of the review. Consequently, the same Principal Investigator may ultimately have two Projects selected as "General Joint Research Projects."

8. Evaluation Methods

8.1. Overview of the Review Process

Projects submitted under this call for proposals will be reviewed by the "Project Review Committee." The Project Review Committee also serves as RIST's "Interdisciplinary Joint Research Working Group." For Projects using "HPCI Resources," RIST's "Review Committee for Research Projects" will also examine whether the project selection process conducted by the "Interdisciplinary Joint Research Working Group" has been carried out appropriately.

Evaluations by the Project Review Committee will be conducted using the "Evaluation Criteria" described below.

For fiscal year 2027, reviews will be conducted with the policy of supporting a greater number of research Projects within the limited budget available.

8.2. Points Given High Priority in Evaluation

The following points will be given high priority in the evaluation. Applicants should clearly describe any applicable points in their Application Form.

8.2.1. Points Given High Priority in All Research Areas

- **Interdisciplinary Research Group**
  JHPCN defines interdisciplinarity as "the creation of interdisciplinary fields between the three pillars of computational science, data science, and computer science, or between these three pillars and application fields," and invites proposals for interdisciplinary research. Therefore, Projects involving research groups composed of researchers with different areas of expertise will be highly evaluated.
- **Promotion of Software and Data Utilization**
  Projects aiming to make developed software and established databases widely used will be highly evaluated. Such Projects must undertake efforts to promote the widespread utilization of their outcomes, rather than merely making software or data publicly available.
- **Development of IT Infrastructure Technology**
  Projects that contribute to fundamental research in IT technologies, such as computer architecture, system software, and security, will be highly evaluated. Such fundamental research may also be promoted through joint research with researchers specializing in IT infrastructure technology at the 8 Centers.
- **Cooperation with Multiple JHPCN Member Institutions**
  Projects that utilize resources from two or more of the 8 Centers to address challenges that are difficult to tackle with a single system will be highly evaluated. Examples include joint research utilizing computing resources from two or more of the 8 Centers, such as research on large-scale geographically distributed information systems and multi-platform implementation of applications. The simultaneous use of mdx I and mdx II will also be regarded as cooperation among JHPCN member institutions. The same applies to research Projects conducted in collaboration with multiple researchers affiliated with different 8 Centers.
- **Usage of Large-Scale Data and Large-Capacity Networks**
  Projects involving the transfer of large amounts of data between researchers' research locations and resources provided by the Centers, or between the 8 Centers, will be highly evaluated. Some of the available resources can be closely integrated with the high-bandwidth network provided by SINET with the cooperation of the National Institute of Informatics, including services such as L2VPN. This enables research that relies on the use of high-bandwidth networks.

8.2.2. Points Given High Priority in the "Large-scale Computational Science Area"

- **Research Content**

Projects with a substantial research component will be highly evaluated. Projects that lack research and development components and primarily aim only to use computing resources (production-run Projects) will not be selected.[11]

8.2.3. Points Given High Priority in the "Data Science / Data Usage Area"

- **Real-World Impact**
  Projects that use data to help solve important but challenging real-world problems, such as realizing Society 5.0 or achieving the Sustainable Development Goals (SDGs), will be highly evaluated.
- **Promotion of Data Utilization**
  Projects that promote data utilization in fields where data sharing and utilization have traditionally been limited will be highly evaluated. Efforts to integrate and utilize different types of research data (including literature and academic papers) and to achieve new discoveries through advanced analyses will also be highly evaluated.
- **Security and Protection of Personal Information**
  Projects that create new value through the utilization of socially significant data in areas such as healthcare, education, and economics, or that promote technologies for the secure utilization of such data (including technologies for protecting personal information), will be highly evaluated.

8.3. Evaluation Criteria

The evaluation criteria used by the Project Review Committee consist of an Overall Evaluation and Individual Evaluations.

8.3.1. Overall Evaluation

Projects will be evaluated comprehensively in light of the "Points Given High Priority in Evaluation" for each Research Area.

8.3.2. Individual Evaluation: "Objectives and Significance, Necessity, Novelty, Originality, and Impact"

In relation to the items "1. Previous Research and Background" and "2. Research Objectives and Significance" in "Application Form (1)" (Word/LaTeX), the evaluation will consider the research objectives and significance, necessity, novelty, originality, impact, and related aspects.

[11]For production-run Projects, please consider applying under the HPCI project call for proposals.

8.3.3. Individual Evaluation: "Interdisciplinarity, Appropriateness of the Research Plan, and Feasibility"

In relation to the items "3. Interdisciplinary Nature of the Research and Need for Resource Use," "4. Research Plan," "5. Items Requiring Cooperation from Research Groups or Researchers at the 8 Centers to Promote Joint Research," "6. Protection of Human Rights and Compliance with Laws and Regulations," "7. Other," "8. Major Recent Publications and Other Research Outputs Related to This Research," and "Basis for Resource Allocation Estimates and Purpose of Use" in "Application Form (1)" (Word/LaTeX), the evaluation will consider interdisciplinarity; the appropriateness of the research plan, including the purposes of using facilities, equipment, and human resources; and the feasibility of the plan in light of previous relevant research achievements, among other factors.

9. Resource Allocation

9.1. Upper Limits on Requested Resources

The upper limits on requested resources are as follows. The requested resources must be reasonable in light of the research plan. The amounts requested for individual resources are converted into monetary values and added together.

Projects with applications exceeding the upper limit on requested resources will not be reviewed.

1. When applying to use only resources provided by a single one of the 8 Centers (excluding mdx)
   Upper limit: JPY 3 million

2. When applying to use only mdx
   JPY 1 million

3. When applying to use resources provided by two or more of the 8 Centers
   Upper limit: JPY 3.6 million
   Note: If an application also requests mdx, the amount of mdx resources that may be requested is the lower of JPY 1 million and the amount obtained by subtracting the total monetary value of resources requested from other Centers from JPY 3.6 million.

9.2. Basis for Resource Allocation Estimates and Purpose of Use

The basis for resource allocation estimates and the purpose of use are important factors in the review. Therefore, clearly describe them in the "Basis for Resource Allocation Estimates and Purpose of Use" section attached to "Application Form (1)" (Word/LaTeX). There is no page limit for "Basis for Resource

Allocation Estimates and Purpose of Use." Insufficient descriptions may result in a lower overall evaluation of the Project.

The resources for which the basis for resource allocation estimates must be described depend on the Research Area, whether the Project is new or continuing, and the amount of requested resources. Please refer to the following flowchart (Figure 3).

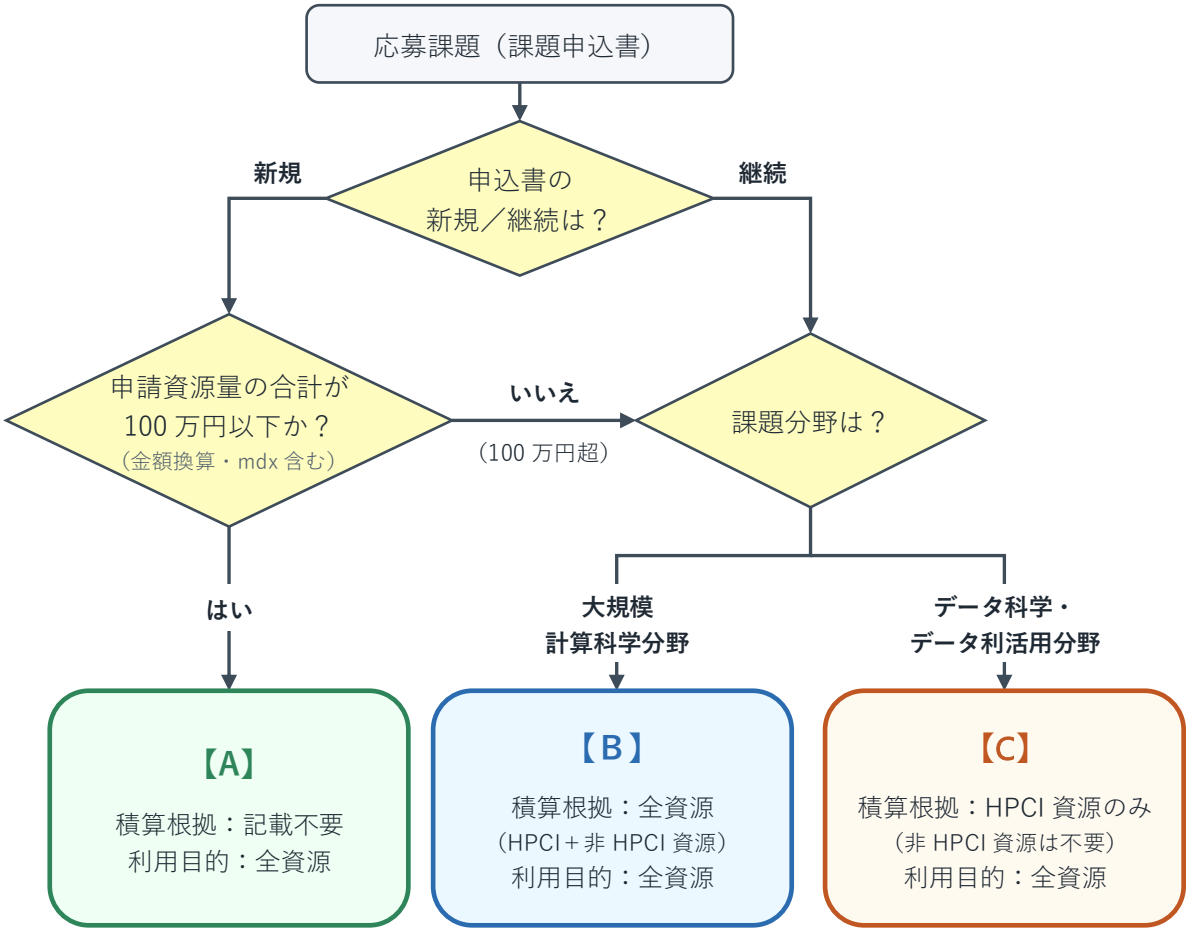


Figure 3. Flowchart showing the scope of information required for "Basis for Resource Allocation Estimates and Purpose of Use."

1. Scope of Information Required for [A]

   Basis for resource allocation estimates: No description is required for any of the resources planned for use.

   Purpose of use: Describe the purpose of use for all resources planned for use.

2. Scope of Information Required for [B]

   Basis for resource allocation estimates: Clearly describe the basis for estimates for all resources planned for use. Descriptions are required for both "HPCI Resources" and "Non-HPCI Resources."

When using mdx, which is a "Non-HPCI Resource," describe the basis for estimates for the amount of resources actually planned for use, regardless of the mdx usage fee displayed in the mdx resource application sheet in "Application Form (2)" (Excel).
Purpose of use: Describe the purpose of use for all resources planned for use.

3. Scope of Information Required for [C]

Basis for resource allocation estimates: Clearly describe the basis for estimates for "HPCI Resources" among all resources planned for use. No description is required for "Non-HPCI Resources."
Purpose of use: Describe the purpose of use for all resources planned for use.

9.3. Amount of Resources Provided

If a Project is selected, the amount of resources actually provided may be reduced due to budgetary constraints. In fiscal year 2027, the policy is to support a greater number of research Projects within the limited available budget. As a result, the resources provided may be substantially reduced.

In particular, for Projects continuing from the previous fiscal year and Projects deemed to be substantially continuous with previous Projects, the amount of resources provided may be reduced if the resources allocated in the previous fiscal year were underutilized or not used.

This call for proposals is open not only to self-contained research Projects but also to applications intended to develop or expand interdisciplinary aspects of research Projects that have already received funding from other competitive research funds or similar sources. Applicants may also supplement resources using their own funds. If the resources provided are reduced, applicants should pursue interdisciplinary development commensurate with the resources provided or, if necessary, supplement the resources using their own funds.

9.4. High Priority Resources

As explained above under "Amount of Resources Provided," reductions may be made to any resources. However, if reducing particular resources would make it impossible to carry out the Project, those resources may be designated as "High Priority Resources." When High Priority Resources are designated, reductions will first be made to resources not so designated. If further reductions are necessary even after reducing resources that are not designated as High Priority Resources, the High Priority Resources will also be reduced.

For "Quantum-HPC Hybrid Computing Joint Research Projects," only Miyabi-G, Miyabi-C, and OCTOPUS may be designated as High Priority Resources.

- Designating High Priority Resources does not change the total amount of resources provided to a Project. Furthermore, because reductions in resource allocations after project selection will be made preferentially to resources not designated as High Priority Resources, substantial imbalances between resources may result. Therefore, designate High Priority Resources only

when absolutely necessary.

- Designation of High Priority Resources is ineffective when an application requests only one resource.
- Only "HPCI Resources" can be designated as High Priority Resources. If an application requests both "HPCI Resources" and mdx, mdx will be given priority over "HPCI Resources" in resource allocation. Consequently, the reduction in "HPCI Resources" may be greater.
- No more detailed specifications can be made beyond designating resources individually as High Priority Resources.

10.Application Procedures

Overview and Important Notes

Application procedures differ depending on whether a Project uses "HPCI Resources." Projects submitted using incorrect application procedures will not be reviewed.

- Research Projects that use "HPCI Resources" (including those that also use "Non-HPCI Resources")
  → Apply according to the procedures for "Application Category A."
- Research Projects that do not use "HPCI Resources" (Projects using only "Non-HPCI Resources")
  → Apply according to the procedures for "Application Category B."

10.1. Application Category A: Research Projects Using "HPCI Resources"

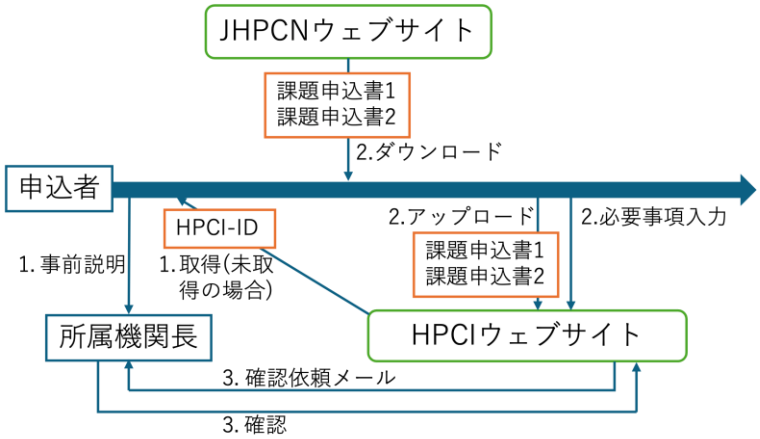


Figure 4. Procedures for Application Category A

These procedures apply to research Projects that use "HPCI Resources" (including those that also use

"Non-HPCI Resources"). For detailed procedures, refer to the "JHPCN Application Guide for Projects Using HPCI Resources," available under "Call for Joint Research Proposals" on the JHPCN website.

Research Projects that use "HPCI Resources" (including those that also use "Non-HPCI Resources") will not be reviewed if submitted according to the procedures for "Application Category B" described below.

10.1.1. Procedures Required Before Application

1. Obtaining an HPCI ID

   Apply through the "HPCI Website." Everyone who will use "HPCI Resources" must obtain an HPCI ID. Those who already have an HPCI ID should check that their registered information is up to date and, if necessary, update or revise it through the "HPCI Application Support System."

   The following persons are required to obtain an HPCI ID:

   - The Principal Investigator
   - At least one Co-Principal Investigator (all Co-Principal Investigators who will apply on behalf of the Principal Investigator or perform in-person identity verification)
   - In addition to the Principal Investigator and at least one Co-Principal Investigator, any other Co-Principal Investigators and Co-Investigators who will use "HPCI Resources"

2. Explanation to the Head of the Affiliated Institution

   Because a confirmation procedure will be required after application, explain the application to the head of your affiliated institution in advance and obtain their consent. At a university, the head of the affiliated institution refers to the head of the relevant academic unit (such as a dean of a faculty, dean of a graduate school, or director of a research institute). At a national research and development agency or private company, it refers to a person holding a position equivalent to that of a university academic-unit head.

   Even if you expect to transfer to another institution by the research start date, obtain the consent of the head of your institution at the time of application.

10.1.2. Application

1. Preparing "Application Form (1)" (Word/LaTeX) and "Application Form (2)" (Excel)

   Download the templates from "Call for Joint Research Proposals" on the JHPCN website and prepare "Application Form (1)" (Word/LaTeX) and "Application Form (2)" (Excel).

   Review the "Points to Note When Preparing the Application Form" above and "Call for Joint Research Proposals" on the JHPCN website once again.

2. Converting "Application Form (1)" (Word/LaTeX) to PDF

   Convert "Application Form (1)" (Word/LaTeX) to PDF. If using the Word version, delete the text boxes containing notes beforehand. Because conversion to PDF may unintentionally increase the page count, check again that "Application Form (1)" remains within the page limits.

3. Uploading “Application Form (1)” (PDF) and “Application Form (2)” (Excel)

   Upload “Application Form (1)” (PDF) and “Application Form (2)” (Excel) to the “HPCI Website.”

4. Entering Information on the HPCI Website

   Enter the required information on the “HPCI Website,” ensuring consistency with the “Application Form.”

   As a general rule, the email address specified as the contact address for the head of the affiliated institution should be the official email address associated with that position. If no such address exists, provide the individual email address of the head of the institution as well as the address of an administrative staff member, secretary, or similar contact. When multiple email addresses are entered separated by commas, emails will be sent to all of them.

10.1.3. Procedures Required After Application

1. Confirmation Procedure by the Head of the Affiliated Institution

   After the application deadline, an email requesting confirmation will be sent directly to the head of the affiliated institution. Follow the instructions in the email to complete the confirmation procedure by the head of the institution.

   Even if you expect to transfer to another institution by the research start date, confirmation by the head of the institution to which you belong at the time of application is required. After the research begins, a separate confirmation procedure by the head of the new institution will also be required.

10.1.4. Procedures Required After Project Selection

1. In-person Identity Verification and Related Procedures

   After project selection, complete in-person identity verification and other procedures in accordance with HPCI requirements. The Principal Investigator or a Co-Principal Investigator must take responsibility for conducting the in-person identity verification. For this purpose, it may be necessary to prepare copies of photo identification documents for members of the research group who will use the computing systems and undergo verification. If in-person identity verification is required, check in advance whether your nearest one of the 8 Centers offers the service (see “Contact Information” below) and contact that Center.

10.2. Application Category B: Research Projects Not Using “HPCI Resources”

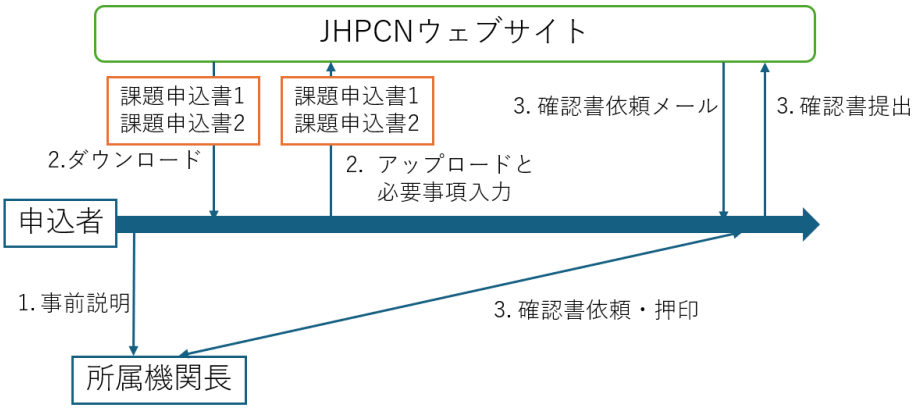


Figure 5. Procedures for Application Category B

These procedures apply to research Projects that do not use “HPCI Resources” (Projects using only “Non-HPCI Resources”).

Research Projects that do not use “HPCI Resources” (Projects using only “Non-HPCI Resources”) will not be reviewed if submitted according to the procedures for “Application Category A” described above.

10.2.1. Procedures Required Before Application

1. Explanation to the Head of the Affiliated Institution

   Because a “Confirmation Form” signed by the head of the affiliated institution must be submitted after project selection, explain the application to the head in advance and obtain their consent. At a university, the head of the affiliated institution refers to the head of the relevant academic unit (such as a dean of a faculty, dean of a graduate school, or director of a research institute). At a national research and development agency or private company, it refers to a person holding a position equivalent to that of a university academic-unit head.

   Even if you expect to transfer to another institution by the research start date, obtain the consent of the head of your institution at the time of application.

10.2.2. Application

1. Preparing “Application Form (1)” (Word/LaTeX) and “Application Form (2)” (Excel)

   See item 1 of Section 10.1.2.

2. Converting “Application Form (1)” (Word/LaTeX) to PDF

   See item 2 of Section 10.1.2.

3. Uploading “Application Form (1)” (PDF) and “Application Form (2)” (Excel)

   Upload “Application Form (1)” (PDF) and “Application Form (2)” (Excel) to the application page under “Call for Joint Research Proposals” on the JHPCN website.

4. Entering Information on the JHPCN Website

   Enter the required information on the application page under "Call for Joint Research Proposals" on the JHPCN website, ensuring consistency with the "Application Form."

   As a general rule, the email address specified as the contact address for the head of the affiliated institution should be the official email address associated with that position. If no such address exists, provide the individual email address of the head of the institution as well as the address of an administrative staff member, secretary, or similar contact. When multiple email addresses are entered separated by commas, emails will be sent to all of them.

10.2.3. Procedures Required After Project Selection

1. Submission of the "Confirmation Form"

   Submit a "Confirmation Form" from the head of the affiliated institution according to the individual instructions provided by the JHPCN Office.

   If you expect to transfer to another institution by the research start date, inform the JHPCN Office when you receive its instructions.

11.Schedule

11.1. Application-related Schedule

1. Information Session for Principal Investigators (Online)

   Friday, November 20, 2026, at 13:00

   Registration URL: https://u-tokyo-ac-jp.zoom.us/meeting/register/1CaOI5huRyaA02nNjwqOVg

2. Start of Application Acceptance

   Thursday, December 10, 2026

3. Application Deadline

   Tuesday, January 5, 2027, at 10:00 Applications submitted after the application deadline will not be accepted. No corrections to the "

   Application Form" will be permitted after the deadline under any circumstances.

   Applications that meet any of the "Conditions for Exclusion from Review" described below will not be reviewed. Applications with minor deficiencies will be reviewed as submitted.

   However, for applications submitted by Monday, December 21, 2026, the JHPCN Office will conduct a formal check to determine whether they contain any deficiencies that would fall under the "Conditions for Exclusion from Review." If any such deficiencies are found, the Principal Investigator will be notified by approximately 17:00 on Monday, January 4, 2027. If applicants wish

to make corrections in response to comments from the JHPCN Office, they must resubmit their applications by the application deadline.

In particular, applicants applying under this call for proposals for the first time and those applying for a "Quantum-HPC Hybrid Computing Joint Research Project" are encouraged to submit their applications by Monday, December 21, 2026, to have them checked by the JHPCN Office.

For the purpose of the above, an application is considered submitted when the following procedures have been completed:

- For "Application Category A," research Projects using "HPCI Resources": the procedures described in "10.1.2. Application"
- For "Application Category B," research Projects not using "HPCI Resources": the procedures described in "10.2.2. Application"

have been completed.

11.2. Research-related Schedule

1. Notification of Review Results
   Applicants are expected to be notified of the results by mid-March 2027.

2. Start of the Joint Research Period
   Thursday, April 1, 2027

3. Presentation of Research Plans and Research Content at the 19th JHPCN Symposium
   Thursday, July 8, and Friday, July 9, 2027 Venue: Yayoi Auditorium, Yayoi Campus, The University of Tokyo (tentative)

4. End of the Joint Research Period
   Friday, March 31, 2028

5. Submission of the Final Report
   Mid-May 2028

6. Presentation of Research Results at the 20th JHPCN Symposium
   Early July 2028 (tentative)

12.Conditions for Exclusion from Review

Please note that even Projects submitted by the application deadline will not be reviewed if any of the following conditions apply:

- An application is submitted using an Application Form template from the previous fiscal year or earlier.

- An application is submitted without specifying a Research Area.
- An application is submitted with "Application Form (1)" (PDF) exceeding the page limits.
- An application requests resources exceeding the upper limit on requested resources.
- A research Project using "HPCI Resources" is submitted according to the procedures for "Application Category B."
- A research Project not using "HPCI Resources" is submitted according to the procedures for "Application Category A."
- The second and subsequent applications submitted by the same Principal Investigator in the same Project Category, if the Principal Investigator submits two or more applications in that category.
- For a "Quantum-HPC Hybrid Computing Joint Research Project," an application does not request the use of any of the following resources: Miyabi-G or Miyabi-C provided by The University of Tokyo, or OCTOPUS provided by The University of Osaka.
- For a "Quantum-HPC Hybrid Computing Joint Research Project," no prospective quantum computer users are designated.
- Any other case in which the Chair of the Project Review Committee determines that conducting a fair review would be difficult.

13.Points to Note and Compliance Requirements

Please note or comply with the following matters. In the "Check & Declaration" sheet of "Application Form (2)" (Excel), electronically confirm the declaration that you have reviewed the Call for Proposals and related regulations, will comply with eligibility requirements, research ethics, laws and regulations, and that the information in your application is true and accurate.

13.1. At the Time of Application

Please note or comply with the following matters at the time of application.

13.1.1. Points to Note

1. Handling of Personal Information

   Personal information provided in connection with applications will be used only for the purposes of reviewing research Projects and using the systems. Accordingly, this information will be shared with RIST, which operates HPCI, to the extent necessary for the use of "HPCI Resources." In addition, for applications submitted under the "Quantum-HPC Hybrid Computing Joint Research Project" category, this information will be shared with RIKEN to the extent necessary to prepare for the use of quantum computers.

13.1.2. Compliance Requirements

1. Measures against Research Misconduct

   Applicants must pledge not to engage in or be complicit in research misconduct. If a researcher is found by their affiliated institution or another relevant body to have committed research misconduct (including misconduct unrelated to JHPCN Projects), measures may include removing that researcher from the research group, suspending the Project, or suspending eligibility to apply.

13.2. Upon Project Selection

Please note or comply with the following matters if the Project is selected.

13.2.1. Points to Note

1. Disclaimer

   The 8 Centers shall bear no responsibility whatsoever for any adverse consequences suffered by users in connection with research conducted under these Projects.

2. Handling of Usage Regulations

   Permission to use computing resources may be denied due to regulations, rules, or other requirements applicable to the research resources to be used.

3. Handling of Intellectual Property and Related Matters

   In principle, intellectual property arising from research conducted under these Projects belongs to the respective research groups. However, the identification of inventors among those conducting joint research is expected to be handled in accordance with the intellectual property policies and other relevant rules of each university. For details and the handling of other exceptional matters, please consult the relevant one of the 8 Centers.

4. Handling of Application Forms

   For Projects applying under the "Quantum-HPC Hybrid Computing Joint Research Project" category, the "Application Form" will be shared with the Information Technology Center at The University of Tokyo for Projects using Miyabi (Miyabi-G/Miyabi-C), and with the D3 Center at The University of Osaka for Projects using OCTOPUS, to ensure appropriate use of the systems. These Centers may provide advice on coordination between the systems and related matters.

13.2.2. Compliance Requirements

1. Completion of Research Ethics Education

   If the research group includes members to whom the requirement applies, submit proof of completion of research ethics education.

   - Cases Where Submission of Proof of Completion Is Not Required

     Research group members affiliated with institutions that receive allocations of competitive

research funds (universities and public research institutions in Japan, and certain private companies).[12]

- Cases Where Submission of Proof of Completion Is Required

  Persons who do not fall into the above category (researchers and students affiliated with private companies that do not receive allocations of competitive research funds or with research institutions overseas) must submit one of the following forms of proof of completion.

  - A certificate of completion of research ethics education provided independently by the affiliated institution.
  - Materials published on the affiliated institution's website confirming that research ethics education is provided (such as regulations or codes of conduct concerning research ethics).
  - Documentation certifying completion of educational materials specified by the JHPCN Office.[13]

  If proof of completion is not submitted within three months after the start of the research, the individual concerned must be removed from the research group.

2. Compliance with Usage Regulations

   When using facilities, comply with the regulations, rules, and other requirements applicable to the research resources being used.

3. Presentations at JHPCN Symposia and Submission of the Final Report

   Principal Investigators of selected Projects must give presentations at the "JHPCN Symposium" and submit the Final Report. Details will be communicated by the JHPCN Office after project selection. JHPCN will cover travel expenses for one presenter per Project at the JHPCN Symposium.

   - **Presentation of Research Plans and Research Content**

     Present the research plans and content at the 19th JHPCN Symposium, scheduled for July 8 and 9, 2027.

   - **Submission of the Final Report**

     Submit the Final Report by mid-May 2028. As a general rule, Final Reports will be published on the JHPCN website under "Joint Research Projects." Failure to submit the Final Report may result in suspension of eligibility to apply for or participate in Projects. The Final Report for an "International Joint Research Project" must be prepared in English.

   - **Presentation of Research Results**

     Present research results at the 20th JHPCN Symposium, scheduled for July 2028.

4. Acknowledgment in Publications of Research Results

---

[12] Institutions receiving competitive research funding are required to provide research ethics education and related training to their researchers. Therefore, submission of proof of completion of such training is not required.

[13] If research ethics education has not been provided at your affiliated institution, please contact the JHPCN Office as soon as possible. We will provide information on appropriate training materials.

When publishing papers or other research results arising from a selected Project, include an acknowledgment to clarify their connection with the joint research. For sample wording, refer to "Examples of Acknowledgments for Research Results" on the JHPCN website.

14.Contact Information

14.1. Inquiries About Applications

- **JHPCN Office**
  jhpcn.adm@gs.mail.u-tokyo.ac.jp
  (Please note that we cannot respond to inquiries by telephone.)

14.2. Inquiries About Resources at the 8 Centers

For details of the resources available at each of the 8 Centers, how to use them, eligibility requirements for their use, faculty members affiliated with the 8 Centers with whom joint research may be conducted, and the handling of intellectual property, please contact the following office at each Center directly.

- **Information Initiative Center, Hokkaido University**
  kyodo@oicte.hokudai.ac.jp
- **Cyberscience Center, Tohoku University**
  cc-joint_research@grp.tohoku.ac.jp
- **Information Technology Center, The University of Tokyo**
  https://www.cc.u-tokyo.ac.jp/support/reference.html
- **Center for Information Infrastructure, Institute of Science Tokyo**
  https://www.t4.cii.isct.ac.jp/contact-t4
- **Information Technology Center, Nagoya University**
  https://sc.icts.nagoya-u.ac.jp/
- **Academic Center for Computing and Media Studies, Kyoto University**
  kyoten-8gm@media.kyoto-u.ac.jp
- **D3 Center, The University of Osaka**
  system@cmc.osaka-u.ac.jp
- **Research Institute for Information Technology, Kyushu University**
  request@iii.kyushu-u.ac.jp
- **mdx I**
  mdx-help@mdx.jp
- **mdx II**
  mdx2-system@cmc.osaka-u.ac.jp

Appendix (1): List of the HPCI resources available at the JHPCN member institutions for the Joint Research Project

(The resources provided as "HPCI-JHPCN")

・When filling out the Resource Utilization Plan section of the project application form, consult and confirm with the Resource Center as necessary before completing it.

For a description of the resources, please refer to the website of the respective institutions.

Information Initiative Center, Hokkaido University

Website URL: https://www.hucc.hokudai.ac.jp/en/

1. Supercomputer Grand Chariot 2

《Hardware resources》

① CPU nodes

- Node Info: Intel Xeon Gold 6548Y+ (Emerald Rapids, 32cores, 2.5GHz)×2, 512GiB memory
- 480 nodes (theoretical peak performance: 2.457 PFLOPS), Shared with general users, Acceptable Job: up to 64 nodes
- Maximum computing resources per 1 project: 42,000 CPU-Hours

② GPU nodes

- Node Info: Intel Xeon Gold 6548Y+ (Emerald Rapids, 32cores, 2.5GHz)×2, 512GiB memory, NVIDIA H100×4
- 24 nodes (theoretical peak performance: 6.55 PFLOPS), Shared with general users, Acceptable Job: up to 8 nodes
- Maximum computing resources per 1 project: 13,000 GPU-Hours

③ Storage system (common to CPU nodes and GPU nodes)

- Lustre 16.95PB (All-flash)
- In units of 4TB, Maximum resources per 1 project: 40TB

《Resource usage fee calculation formula》

- CPU-Hours: Wall time in hours multiplied by the number of CPU sockets used.
- GPU-Hours: Wall time in hours multiplied by the number of GPU cards used.
- For details, please see Application Form 2.

《Software resources》

【Compilers】

Intel oneAPI Base & HPC Toolkit, NVIDIA HPC SDK, NVIDIA CUDA Toolkit, GNU Compiler, Java,

Python, Julia

【Libraries】

cuBLAS, cuDNN, cuFFT, cuSPARSE, FFTW, HDF5, Intel MPI, Intel oneMKL, MAGMA, NCCL, NetCDF, NVIDIA HPCX, OpenMPI

【Application software】

ABINIT-MP, BLAST, FrontFlow/red, GAMESS, Gaussian, GrADS, GROMACS, Horovod, Keras, LAMMPS, MEEP, MXNet, MyPresto, NAMD, OpenFOAM, OpenMX, PHASE, PyTorch, Quantum ESPRESSO, TensorFlow, V-FaSTAR, VMD, WRF

Note: For details on the available software resources, please refer to our website (https://www.hucc.hokudai.ac.jp/en/supercomputer/software/).

2. Research Cloud

《Hardware resources》

1) Shared Kubernetes Cluster

(Up to 600 virtual CPU cores (with 1200GB memory), 1 physical GPU, and 20TB of persistent volumes can be allocated for each project.) The total resources available across all JHPCN projects are limited to 1200 virtual CPU cores, 2 physical GPUs, 80TB of persistent volumes. This cluster is shared among JHPCN projects and other non-JHPCN users.

2) Dedicated Kubernetes Cluster

(Up to 1 dedicated cluster, consisting of 3 physical nodes, and 20TB of persistent volumes can be allocated for each project.) The maximum number of dedicated clusters across all projects is limited to 1. The 3 nodes are exclusively reserved for this cluster.)

《Resource usage fee calculation formula》

For details, please see Application Form 2.

《Software resources》

Applications, such as MariaDB, Apache Spark, and Istio, are provided through Rancher offering application catalogs. Installment of other applications is negotiable (At least, availability of reliable and/or official Helm repository is required).

《Usage》

SINET L2VPN to mdx I is negotiable (dedicated cluster only).

Cyberscience Center, Tohoku University

Website URL: https://www.ss.cc.tohoku.ac.jp/

《Remarks》

Storage : 20 TB per project (Additional storage available in 1 TB increments; maximum capacity negotiable)

1. Supercomputer AOBA Subsystem AOBA-S(504nodes)

《Hardware resources》

About 21.05PFLOPS(DP), Main memory 504TB, Maximum number of nodes 256, Shared use

《Resource usage fee》

Vector nodes :1NH = 100 JPY

CPU nodes :1NH = 22 JPY

Strage:1TB・year = 3,000 JPY

《Software resources》

【Compilers】

Fortran Compiler, C/C++ Compiler

【Libraries】

NEC MPI, NEC Numeric Library Collection(including BLAS, FFTW, LAPACK, ScaLAPACK) , Ftrace Viewer, PROGINF/FTRACE

【Application software】

Quantum ESPRESSO, FPSEID21, ABINITMP, PHASE/0, SALMON, HΦ, FrontISTR, FFX, Gaussian16, MATLAB, OpenFOAM, GROMACS, LAMMPS, GENESIS, MODYLAS, NTChem, OpenMX, SMASH, mVMC, ALAMODE, Phonopy, AkaiKKR, FrontISTR, FFVHCACE

【Container virtualization】

Singularity(Docker image supported)

Information Technology Center, the University of Tokyo

1. Miyabi-G

Supercomputer System of JCAHPC/Node Group with Accelerators, 1,120 nodes of NVIDIA GH200 (Grace Hopper Superchip) ((1CPU+1GPU)/node, Total: 1,120 CPUs + 1,120 GPUs)

《Hardware resources》

・ Maximum tokens for each project: 86,400 GPU-Hour's

- Storage: (5TB/(8,640 GPU-Hour's)) are automatically provided according to awarded tokens (Maximum: 50TB), Additional Storage Space on "Ipomoea 01" :(0.750TB/(8,640 GPU-Hour's))
- Acceptable Job: up to 256 nodes (256CPUs+256GPUs),
- By using MIG (Multi-Instance GPU), it is possible to use the computer resources equivalent to 1/4 node.
- Quantum Computer Clusters for Quantum-HPC Hybrid Computing (ibm_kobe and Reimei)

《Conversion formulas of resources into fees》

1Node-Hour = 69.44 JPY

《Software resources》

【Compilers】

Fortran, C, C++

【Libraries】

MPI, BLAS, LAPACK/ScaLAPACK, FFTW, PETSc, METIS/ParMETIS

【Application software】

OpenFOAM, ABINIT-MP, PHASE, FrontFlow/Blue, FrontISTR, REVOCAP, ppOpen-HPC (Some of them don't work on GPU), Container: singularity (docker image possible)

【Container】

singularity (docker image possible)

2. Miyabi-C

Supercomputer System of JCAHPC/Node Group with only CPUs, 190 nodes of Intel Xeon Max 9480 with only HBM, Total: 380 CPUs)

《Hardware resources》

- Maximum tokens for each project: 103,680 Node-Hour's
- Storage: (4TB/(8,640 Node-Hour's)) are automatically provided according to awarded tokens (Maximum: 48TB), Additional Storage Space on "Ipomoea 01" :(0.600TB/(8,640 Node-Hour's))
- Acceptable Job: up to 64 nodes (128 CPUs)
- Quantum Computer Clusters for Quantum-HPC Hybrid Computing (ibm_kobe and Reimei)

《Conversion formulas of resources into fees》

1Node-Hour = 55.56 JPY

《Software resources》

【Compilers】

Fortran, C, C++

【Libraries】

MPI, BLAS, LAPACK/ScaLAPACK, FFTW, PETSc, METIS/ParMETIS

【Application software】

OpenFOAM, ABINIT-MP, PHASE, FrontFlow/Blue, FrontISTR, REVOCAP, ppOpen-HPC (Some of

them don't work on GPU), MATLAB (*)

(*) Available for academic users only Container: singularity (docker image possible)

【Container】

singularity (docker image possible)

Note: If you wish to use the quantum-HPC hybrid computing environment involving Miyabi-G and/or Miyabi-C, you must apply under the "Quantum-HPC Hybrid Computing Joint Research Project" category. You must also consult the Help Desk at the Information Technology Center, The University of Tokyo (uketsuke@cc.u-tokyo.ac.jp), by Tuesday, December 15, 2026.

3. Miyabi-G/Miyabi-C (Additional Storage)

《Hardware resources》

Maximum additional space for each project: 50 TB

《Conversion formulas of resources into fees》

1 TB/Year= 6,480 JPY

4. AI4S-SDLI-G (Tentative) (Info. to be disclosed in late November) (Available from June 2027)

Simulation/Data/Learning/Inference Integrated Platform System/Node Group with Accelerators

5. AI4S-SDLI-C (Tentative) (Info. to be disclosed in late November) (Available from June 2027)

Simulation/Data/Learning/Inference Integrated Platform System/Node Group with only CPUs

6. AI4S-SDLI (Add. Storage) (Info. to be disclosed in late November) (Available from June 2027)

Details of the systems are available at the following URL's：

Miyabi：https://www.cc.u-tokyo.ac.jp/supercomputer/miyabi/service/

Ipomoea-01：https://www.cc.u-tokyo.ac.jp/supercomputer/ipomoea01/service/

Center for Information Infrastructure, Institute of Science Tokyo

1. TSUBAME4.0

《Hardware resources》

TSUBAME4.0 system includes 240 compute nodes, which provides 66.84PF performance (CPU 46,080 cores + GPU 960 slots) in total. (Shared use)

《Conversion formulas of resources into fees》

Requesting resources should be specified by the unit of 400NH. For storage, also please apply for each capacity of HDD (in units of 1TB) and SSD (in units of 100GB) at the beginning of fiscal year.

Computing resources and storage are rounded up after totaling in Unit.

The rounded up portion is provided as additional computing resources.

“Unit” is a unit for resource management at TSUBAME4.0.

*For details on the amount per unit, please refer to the Resource Usage Application sheet in the application form (2) (Excel).

Computing resources: 400NH = 1 Unit

※Maximum computing resources per 1 project in 4th quarter: 1,600NH

Storage: HDD 1 TB-year = 6 NH = 0.015 Unit SSD 100 GB-year = 2.4 NH = 0.006 Unit

SSD 100GB=2.4NH=0.006Unit

※Maximum storage per 1 project：HDD 250TB（=3.75Unit）

SSD 3TB（=0.18Unit）

※To smooth out resource usage throughout the year and prevent congestion in the fourth quarter, available computing resources will be adjusted quarterly. For specific implementation details, please refer to the TSUBAME webpage (HPCI Usage - Regarding Computing Resources).

《Software resources》

【OS】

Red Hat Enterprise Linux

【Language Compilers】

Intel oneAPI, NVIDIA HPC SDK, Arm Forge, CUDA, GNU compiler Collection, g++, Python, ruby, perl, PHP

【Libraries】

Gaussian, Gauss View, AMBER（学術研究機関所属者のみ), VASP（学術研究機関所属のライセンス所持者のみ), GAMESS, QUANTUM ESPRESSO, Tinker, GROMACS, LAMMPS, NAMD, CP2K, OpenFOAM, Alphafold, PyTorch, TensorFlow, POV-Ray, ParaView, VisIt, vmd, VESTA, Hadoop, gimp, gnuplot, R

【Linux container】

Apptainer

《URL》

TSUBAME4 Computing Services https://www.t4.cii.isct.ac.jp/docs/handbook.ja/#top

HPCI Usage - Regarding Computing Resources https://www.t4.cii.isct.ac.jp/hpci-resource

Information Technology Center, Nagoya University

1. Supercomputer "Flow 2.0" Type I subsystem

《Hardware resources》

7.07PFLOPS (256 nodes,98,304cores, 194,304GiB (253nodes) + 18,432GiB (3nodes) memory)

《Conversion formulas of resources into fees》

CPU: 1NH = 123 JPY

Hot Storage: TB x year= 3,500 JPY

《Software resources》

【OS】

Rocky Linux9

【Development Environment】

Intel oneAPI base & HPC Toolkit, AMD Zen Software Studio

【Libraries】

FFTW, SuperLU, SuperLU M, SuperLU DIST, METIS, MT-METIS, ParMETIS, Scotch, PT-Scotch, PETSc, MUMPUS, Xabclib, ppOpen-APPL/BEM, ppOpen-APPL/FEM, ppOpen-AT, ppOpen-APPL/FDM , ppOpen-MATH/MP , ppOpen-APPL/FDM-AT , ppOpen-APPL/DEM-util , ppOpenAPPL/AMR-FDM, ppOpen-APPL/BEM-AT, ppOpen-APPL/FVM, ppOpen-MATH/VIS, OpenMPI

【Application software】

OpenCV, Geant4, NetCDF, Parallel netCDF, HDF5, TensorFlow, PyTorch, Keras, conda, Numpy, Scipy, scikit-learn, scikit-image, pillow, matplotlib, jupyterlab, VSCode, Singularity, ABINIT-MP, Quantum ESPRESSO, CHARMM, OpenFOAM, Front-Flow/bule, Front-Flow/red, FrontISTR, GENESIS, GAMESS-US, Gromacs, LAMMPS, NAMD, CP2K, Amber, Gaussian, VASP, Chimera, 3D AVS Player, OVITO, VMD, ParaView, POV-Ray・POV-Ray parallel, ffmpeg,ffplay, VTK, RyMOL, meshlab, VisIt, AVS/Express Developer, IDL, ENVI, Amber

2. Supercomputer "Flow 2.0" Type II subsystem

《Hardware resources》

9.03PFLOPS（FP64）

(54 nodes (1per node：NVIDIA GB200 NVL4 (GraceCPU x 2 + B200 x 4 Memory 960GiB (CPU) + 740GiB (GPU)))

《Conversion formulas of resources into fees》

CPU: 1NH = 317 JPY

Hot Storage: TB x year= 3,500 JPY

《Software resources》

【OS】

Rocky Linux9

【Development Environment・Libraries】

Compiler NVIDIA HPC SDK, NVIDIA CUDA Toolkit, FFTW, SuperLU, SuperLU MT, SuperLU DIST, METIS, MT-METIS, ParMETIS, Scotch,PTScotch, PETSc, MUMPUS, Xabclib, ppOpen-APPL/BEM, ppOpen-APPL/FEM, ppOpen-AT, ppOpen-APPL/FDM, ppOpen-MATH/MP, ppOpen-APPL/FDMAT , ppOpen-APPL/DEM-util , ppOpen-APPL/AMR-FDM , ppOpen-APPL/BEMAT, ppOpen-APPL/FVM, ppOpen-MATH/VIS, OpenMPI

【Application software】

OpenCV, Geant4, NetCDF, Parallel netCDF, HDF5, TensorFlow, PyTorch, Keras, conda, Numpy, Scipy, scikit-learn, scikit-image, pillow, matplotlib, jupyterlab, VSCode, Singularity, ABINIT-MP, Quantum ESPRESSO, CHARMM, OpenFOAM, Front-Flow/bule, Front-Flow/red, GENESIS, GAMESS-US, Gromacs, LAMMPS, NAMD, CP2K, Parabricks, nvidia-container-toolkit, cuQuantum, CUDA-Q, AlphaFold, ColaboFold, RELION, DeePMD-kit, cryoSPARC, Amber, Gaussian

Maximum resource allocation amount per issue

Type I : 24,390 NH

Type II: 9,460 NH

3. Hot Storage

600 TB x year

4. Type II Subsystem node Occupied 1 unit x use Month

《Hardware resources》

Node-occupied use of Type II subsystems. You can connect with L2VPN from out of campus and use it for occupancy. Since equipment, consumables, connections, and settings are required for your use, please contact us before submitting your project.

《Usage》

Others

《Conversion formulas of resources into fees》

Type II subsystem node Occupied: unit x use Month= 330,000 JPY

Up to a maximum of 1 node in total.

All resources are shared with general users.

Academic Center for Computing and Media Studies, Kyoto University

1. Camphor3 (Intel Xeon)

《Hardware resources》

① Year-round use

① Year-round use 96 nodes, 10,752 cores, 652.8 TFLOPS x 12 months (From 1st, April, 2027 to the end of March 2028, maximum 32 nodes per project x 12 months) ※However, the maximum number of nodes that can be used per job will be determined after the job is selected.

② Intensive use

96 nodes, 10,752 cores, 652.8 TFLOPS x 8 weeks (maximum 96 nodes per project x 4 weeks, Weekly)

③ Storage

Provides a minimum of 10 TB per one project. Storage capacity is increased according to the node hours used for the full term (approximately 1 TB per 720 node hours).

Only storage capacity can be added in 10TB increments (maximum storage capacity is negotiable).

④ Flash Storage

Can be added in 2TB increments (maximum flash storage capacity is negotiable).

《Conversion formulas of resources into fees》

① 1NH = 20.8 JPY

② 1NH = 53.5 JPY

④ 10 TB = 10,000 JPY

⑤ 2 TB = 10,000 JPY

《Software resources》

【OS】

Red Hat Enterprise Linux 8

【Compilers】

Intel oneAPI （Fortran，C/C++，OpenMP）

【Libraries】

Intel oneAPI MKL （BLAS，LAPACK，ScaLAPACK）

【Application software】

Gaussian16，GaussView，MATLAB

For more information on resources, please refer to the following URL：

https://www.iimc.kyoto-u.ac.jp/ja/services/comp/supercomputer/system/specification.html

D3 Center, Osaka University

1. OCTOPUS

(https://www.hpc.cmc.osaka-u.ac.jp/octopus2/)

《Hardware resources》

・ Resource per project

General purpose CPU nodes: up to 5.48 node years (Shared Use)

Storages: up to HDD 100 TiB

・ Computational node:

General purpose CPU nodes: 140 nodes (103 TiB memory), providing up to 28 node-years for shared use.

Storages: Lustre 3.58 PB (HDD).

・ Quantum Computer Clusters for Quantum-HPC Hybrid Computing (ibm_kobe and Reimei)

《Conversion formulas of resources into fees》

General purpose CPU nodes [Shared Use]: 1 node hour = 66.9 JPY

HDD: If up to 5 TB, 0 JPY. If over 5 TB, 1 TB /year= 2,200 JPY

《Software resources》

【Development Environment】

Intel oneAPI Base & HPC Toolkit （Fortran，C，C++），GNU Compiler Collection (Fortran，C，C++)，Python，OpenJDK，R，Julia

【Communication Libraries】
Intel MPI, Open MPI
【[Scientific Computing Libraries】
Intel oneMKL, GNU Scientific Library, NetCDF, Parallel NetCDF, HDF5
【Machine Learning Framework】
TensorFlow, Keras, PyTorch, pbdR
【Application】
Gaussian, IDL, AVS/Express, ParaView, Gnuplot, ImageMagick, NcView, GROMACS, OpenFOAM, LAMMPS, GAMESS, ABINIT-MP, ReLion, ADIOS, VisIt, CTFFIND, FLASHcode, FreeFem++, GENESIS, MotionCor3, SMASH, Quantum ESPRESSO, OpenMX, ResMap, NEC Vector Annealing

Note: If you wish to use the quantum-HPC hybrid computing environment involving OCTOPUS, you must apply under the "Quantum-HPC Hybrid Computing Joint Research Project" category. You must also consult the D3 Center, The University of Osaka (system@cmc.osaka-u.ac.jp), by Tuesday, December 15, 2026.

Research Institute for Information Technology, Kyushu University

1. NodeGroup A

《Hardware resources》

1.1 (Fixed-node) The maximum resources allocated for 1 project are 8 nodes for 12 months. Most of resources are dedicated to the project.

1.2 (Shared-use) 16,000 node-hours (approx. value). It is shared with general users.

[Node Info]

CPU：Xeon Platinum 8490H 1.9GHz / 60C x2

MEM：512 GB

《Conversion formulas of resources into fees》

1.1 8 nodes month = 144,000 JPY

1.2 16,000 node-hours = 480,000 JPY

《Software resources》

Please see the WEB page.

https://www.cc.kyushu-u.ac.jp/scp/system/Genkai/software/

2. NodeGroup B

《Hardware resources》

(Shared-node) 4,000 node-hours (approx.. value). It is shared with general users.

［Node Info］

CPU：Xeon Platinum 8490H 1.9 GHz / 60C　x2

GPU：NVIDIA H100（SXM5）　x4

MEM：1,024GB

GPU mem：94GB/GPU

《Conversion formulas of resources into fees》

4,000 nodes-hours = 480,000 JPY

《Software resources》

Please see the WEB page.

https://www.cc.kyushu-u.ac.jp/scp/system/Genkai/software/

3. Large storage

3. Large storage 1TB of large storage is provided per issue. Additional storage can be added in increments of 1TB if desired. (Up to a maximum of 400TB)

《Conversion formulas of resources into fees》

10TB month = 1,300 JPY

4. Fast storage

Fast storage can be added in 1TB increments up to a maximum of 40TB per issue.

《Conversion formulas of resources into fees》

1TB month = 420 JPY

If you intend to use multiple resource, please contact us before applying, because the resource limit of one project may be reached

If you wish to use multiple resources, please use a common usage period.

If you require more storage capacity than the maximum, please contact us.

Appendix (2): List of the non-HPCI resources available at the JHPCN member institutions for the Joint Research Project

mdx and mdx II are comanaged by multiple institutions including the member institutions, and it is treated here as an independent institution.

mdx I

<<Notes for FY2027>>

- mdx I is scheduled, in principle, to cease operation at the end of FY2027.
- If you plan to continue operating web services or other services in FY2028 and beyond, please consider using mdx II together with mdx I, or using mdx II alone.
- Even during FY2027, CPU nodes may be operated on a reduced scale depending on usage.
- Due to limited storage capacity across the system, users requesting a large amount of storage may be asked to reduce the requested capacity.

<<Hardware resources as a whole of the mdx I system>>

General-purpose (CPU) node: PRIMERGY CX2550 M6 : Intel Xeon Platinum 8368 (IceLake 38 cores, 2.4GHz x 2 sockets) x 368 nodes

- GPU node: PRIMERGY GX2570 M6 : (Intel Xeon Platinum 8368 (IceLake 38 cores, 2.4GHz × 2 sockets) + NVIDIA A100 GPU × 8) × 40 nodes
- Storage for virtual disk: Approx. 0.44 PB
- High-speed internal storage: Approx. 9.3 PB, Lustre file system
- Large-capacity storage: Approx. 15.6 PB, Lustre file system
- Object storage: Approx. 9.4 PB, AWS S3- compatible storage
- External connection: 400 Gb/s (SINET6 connection), L2VPN available (on request)
- Internal network: Overlay network with Virtual eXtensible LAN (VXLAN), project-specific VLANs assigned (multiple assignments possible)
- Please check out https://mdx.jp/en/mdx1 for more information on mdx I, including an overview of mdx I, the virtual machine services available through mdx I, the concept of resource allocation, and usage fees

<<How to use mdx I resources>>

mdx I resources are provided under a shared-budget system. When using mdx I, users purchase mdx points (1 point = 1 yen) from the allocated budget and use them to request resources such as VMs. The validity period for points granted by JHPCN is until March 31. Additionally, it is possible to purchase additional points with self-funding in case of insufficient points from JHPCN (in such cases, the validity period for mdx points is

either six months from the date of grant or until the end of the fiscal year, whichever is earlier).

- Select 'Use mdx I only' or 'Use both mdx I and mdx II' of the mdx's sheet of the Application Form (2) (Excel).
- On the application form(2) (Excel), the budget will be the lower of '1 million yen' and '3.6 million yen - the estimated amount at other locations,' it does not require a detailed estimate.
- The total of the above budgets for all projects using mdx I and mdx II becomes the shared budget (to be precise, the amount excluding the 100,000 yen mentioned below becomes the shared budget), which is available for shared use in all projects.
- Even if the shared budget is depleted, each project can use 100,000 yen.

<<**Resource Allocation Application>>**

- The range of resources available in the entire mdx I.
- Project users apply for the amount of resources they need within the range of available resources in the entire mdx I, and when they are no longer needed, they are released.
- However, the application may be rejected after taking into account the amount of available resources for the entire mdx I and the shared budget, and the amount of resources allocated to each project may be reduced during use if the overall amount of resources is tight. In this case, users will be notified in advance by e-mail or other means.
- The reserved VM should be requested through the user portal.
- The spot VM needs no request (the project member specifies it when using spot VM).
- In JHPCN projects, the reserved VM for the GPU pack is not recommended. However, if it is necessary for the project's execution, please describe the reason in Form 1.

<<Allocatable resources for each project>>

The following computing resources are applied for each project and allocated to the activated VMs.

- General-purpose (CPU) node: 1 CPU pack (1 core (vCPU). Approximately 1.5 GB per core)
- Compute-accelerated (GPU) node: 1 GPU pack (1 GPU + 18 cores (vCPU), approx. 57 GB memory)
- Storage for virtual disk, high-speed internal storage, mass storage, object storage: Apply in 1 GB increments
- Global IP address: Apply in units of 1 IP

<<Software resources>>

- Virtual machines will run on virtualization software: VMware vSphere (vCenter, ESXi). The software (including OS) necessary for the project will be installed on the virtual machine by each project. In addition, a template of a virtual machine with OS and software packages pre-installed will be provided.
- Users can allocate and use the necessary computing resources and networks from the resources allocated to the project to the VMs through the portal.
- If you need to consider linking with resources other than mdx, such as L2VPN, please contact the

support desk (mdx-help@mdx.jp) in advance.

mdx II

Please refer to the following for an overview of mdx II
https://mdx.jp/mdx2/p/system
Also, please check the following for the usage image of Interoperable nodes
https://mdx.jp/mdx2/p/vmware

《Hardware resources provided to JHPCN》

- Interoperable node group : 6 nodes (43.008 TFLOPS in total)
  [Per-node configuration]
  - CPU: Intel Xeon Platinum 8480+ processor (2.0 GHz, 56 cores) × 2 sockets
  - Main memory: 512 GB
  - Theoretical performance: 7.168 TFLOPS
- Lustre file storage
  Available capacity: NVMe 1,106.48 TB

《Allocatable resources for each project》

The following computing resources can be applied for each project on a three-month basis.

- Virtual Machines on Interoperable node
  Configurable from 16 CPU packs (16 vCPUs, 32 GB memory) up to 224 CPU packs (224 vCPUs, 498 GB memory) per Virtual Machine. Storage capacity: in increments of 1 TB
- Lustre file system：Apply in increments of 1 TB
- Global IP address: Apply in units of 1 IP

《Software resources》

- Virtual machines on Interoperable nodes run on VMware ESXi. Each project installs the software required for their research on their own VMs.
- If it is necessary to consider linkage with resources other than mdx II, consult mdx II Operations Office (mdx2-system@cmc.osaka-u.ac.jp) in advance.

《Shared wallet system》

- The usage of mdx II resources follows the "shared wallet" together with mdx I.
- When using mdx II, users apply for VMs and storage from the "shared wallet." The validity period of the "shared wallet" provided by JHPCN is until March 31. If additional budget is required, it is possible to add self-funding.

《How to apply》

- Select 'Use mdx I only' or 'Use both mdx I and mdx II' of the mdx's sheet of the Application Form (2) (Excel)
- On the application form(2) (Excel), the budget will be the lower of '1 million yen' and '3.6 million yen - the estimated amount at other locations,' it does not require a detailed estimate.
- The total of the above budgets for all projects using mdx I and mdx II becomes the shared wallet (to be precise, the amount excluding the 100,000 yen mentioned below becomes the shared wallet), which is available for shared use in all projects.
- Even if the shared wallet is depleted, each project can use 100,000 yen.

《Resource allocation》

Project users apply for the amount of resources they need within the range of available resources across the entire mdx II.

However, the application may be rejected after taking into account the amount of available resources for the entire mdx II and the shared budget. In this case, users will be notified in advance by e-mail or other means.

Information Initiative Center, Hokkaido University

Large-format printer

《Hardware resources》

Large-format printer

Cyberscience Center, Tohoku University

N/A

Information Technology Center, The University of Tokyo

N/A

Center for Information Infrastructure, Institute of Science Tokyo

N/A

Information Technology Center, Nagoya University

1. Visualization system

《Hardware resources》

185-inch 8K tiled display, 180-inch 3D visualization system, Domed display system, Image Processing client and Onsite client of Supercomputer "Flow 2.0" (Remote visualization using NICE DCV is available.)

《Usage》

Reservation only

《Conversion formulas of resources into fees》

Visualization System: set x year= 20,000 JPY

Academic Center for Computing and Media Studies Kyoto University

1. Virtual Server Hosting

《Hardware resources》

Standard configuration: CPU 2 cores, memory 4GB, disk 100GB

Resource increase: CPU is up to 8 cores in 2 cores units

Memory is up to 64GB in 4GB units.

Disks is up to 1TB in 100GB units.

Total resources provided: CPU 32 cores, memory 256GB, disk 8TB

《Conversion formulas of resources into fees》

Standard configuration: 1VM = 38,400 JPY

Resource increase：

① CPU 2 cores = 3,600 JPY

② Memory 4GB = 3,600 JPY

③ Disk 100GB = 7,200 JPY

《Software resources》

【Hypervisor】VMware

【OS】AlmaLinux

《Usage》

SINET L2VPN is available

For more information on resources, please refer to the following URL：

https://www.iimc.kyoto-u.ac.jp/ja/services/comp/vm/

D3 Center, Osaka University

N/A

Research Institute for Information Technology, Kyushu University

N/A