

○Hokkaido University Information Initiative Center Rules for Using the Large-Scale Computing System

April 1, 2003
HU Doc. No. 15

(Intent)

Article 1

These Rules shall govern the use of the large-scale computing system (hereinafter referred to as the “Large-Scale Computing System”) that is managed and operated by Hokkaido University Information Initiative Center (hereinafter referred to as the “Center”).

(Purpose of Use)

Article 2

The Large-Scale Computing System may be used for academic research (limited to research which may be published to demonstrate its achievement) or for research and development conducted by private sector or corporate bodies. However, if it is found appropriate by the Director of Hokkaido University Information Initiative Center (hereinafter referred to as the “Director”), it may be used for educational purposes to the extent that it does not interfere with the original purpose of use.

(Eligibility)

Article 3

(1) Persons who fall under any of the following items are eligible to use the Large-Scale Computing System for academic research:

- (i) Academic staff of a university, junior college, college of technology or inter-university research institute or equivalent;
- (ii) Persons who belong to an incorporated administrative agency and are engaged solely in research (except for those falling under the preceding item);
- (iii) Persons who belong to a national government or local government agency and are engaged solely in research;
- (iv) Persons who belong to an institution whose purpose is academic research (except for those described in the preceding item) and which is approved by the Director, and are engaged solely in research;
- (v) Persons who are conducting academic research under Grants-in-Aid for Scientific Research (KAKENHI) or Grants-in-Aid from the Academic Research Promotion Foundation (referred to in Article 12 as “Grant-in-Aid for Scientific Research, etc.”);
- (vi) Persons participating as co-researchers (Kenkyu-buntan-sha) under joint research contracts with entities listed in the preceding items, and who are engaged solely in research;
- (vii) Persons who are enrolled in a university, junior college or college of technology (referred to as “Students” in Appended Table 1); or
- (viii) Persons specially approved by the Director.

(2) Persons who belong to a private sector or corporate body which has passed the evaluation criteria specified separately and who have been approved by the Director are eligible to use the Large-Scale Computing System for research and development.

(Application for Use)

Article 4

Persons who intend to use the Large-Scale Computing System must file an application as specified to obtain approval from the Director.

(Approval for Use)

Article 5

- (1) In cases where the application has been received as described in Article 4 and when it is found appropriate, the Director shall approve said application and allocate a user number.
- (2) The user number is valid for a maximum of one year and cannot be carried over to the next fiscal year.

(Changing the Application Details)

Article 6

Persons who have been approved to use the Large-Scale Computing System (hereinafter referred

to as “Users”) must report to the Director without delay when there is a change in the application details during the validity period.

(Cooperation from Users)

Article 7

The Director may ask for the Users’ cooperation in relation to the operation of the Large-Scale Computing System after obtaining their consent.

(User Compliance)

Article 8

(1) In addition to the provisions for the proper use of the Large-Scale Computing System indicated here and separately established by the Director based on Article 13, Users must also adhere to the following items:

- (i) Users must properly manage their user numbers and other necessary information for accessing the Large-Scale Computing System.
 - (ii) Users must not allow a third party to use their credentials to access or use the Large-Scale Computing System, nor use the system for purposes other than those indicated upon application.
 - (iii) Users must not engage in actions that disrupt or may potentially disrupt the normal operation of the Large-Scale Computing System.
- (2) Users must understand and adhere to the information security principles outlined in the National University Corporation Hokkaido University Basic Rules on Information Security (HU Doc. No. 202 of 2016) and the National University Corporation Hokkaido University Rules on Information Security Measures (HU Doc. No. 203 of 2016).

(Exemption from Liability)

Article 8-2

Except in the case of willful misconduct or gross negligence on the part of the Center, the Center shall not be liable for any damages incurred by Users of the Large-Scale Computing System or for any damages related to the use of the Large-Scale Computing System.

(Liability for Damages)

Article 8-3

In the event that the Center incurs damages due to willful misconduct or gross negligence on the part of Users, the responsible Users shall be liable to compensate for such damages.

(Suspension of Use)

Article 9

When Users have violated these Rules or caused considerable damage to the operation of the Large-Scale Computing System, the Director may cancel the approval granted for responsible Users or prohibit the responsible Users from using the Large-Scale Computing System for a specified period.

(Submission of Report)

Article 10

- (1) The Director may request the Users to submit a report on matters relating to the use of the Large-Scale Computing System whenever necessary.
- (2) When publishing an article or paper concerning the achievement of research obtained by using the Large-Scale Computing System, Users shall clearly indicate in the article or paper that they have used the Large-Scale Computing System and donate a copy of such articles or papers to the Director.

(Fees)

Article 11

- (1) The Users must pay a fee as part of the expenses needed for the operation of the Large-Scale Computing System (hereinafter referred to as “Fee”). However, all or part of the Fee may be exempted when deemed necessary by the Director.
- (2) Persons who intend to use the Large-Scale Computing System must notify the Director of the name of the person who will pay the Fee or the person in charge of accounting in advance.
- (3) The Fee amount specified in paragraph (1) shall be as follows, based on the applicable cases:
 - (i) Cases where Users who fall under each item of Article 3(1) use the system: The amount

described in Appended Table 1.

(ii) Cases where Users fall under Article 3(2) and are going to publish the research achievements obtained by using the Large-Scale Computing System: The amount described in Appended Table 2.

(iii) Cases where Users fall under Article 3(2) and are not going to publish their research achievements obtained by using the Large-Scale Computing System: The amount described in Appended Table 3.

(Payment Methods)

Article 12

(1) The Fee shall be paid as set forth in the following:

(i) Internal Users shall make payments through fee transfers within the University (except in cases where the Fee is covered by the Grants-in-Aid for Scientific Research (KAKENHI)).

(ii) Internal Users whose Fee is covered by the Grants-in-Aid for Scientific Research (KAKENHI) and the external Users shall make payments by transferring the specified amount to the bank account designated by the University by the designated date. In this case, a Fee which has been paid shall not be refunded.

(Miscellaneous Provisions)

Article 13

In addition to what is prescribed in these Rules, matters necessary for the use of the Large-Scale Computing System are stipulated by the Director.

Supplementary Provisions

(1) These rules come into force as of April 1, 2003.

(2) Rules Prescribing Temporary Measures for the Use of Hokkaido University Computing Center (HU Doc. 44 of 1970) and Rules Prescribing Temporary Measures for the Expenses Concerning Hokkaido University Large-Scale Computer Center (HU Doc. No. 45 of 1970) are abolished.

Supplementary Provisions (HU Doc. No. 152 of April 1, 2004)

These Rules come into force as of April 1, 2004.

Supplementary Provisions (HU Doc. No. 105 of April 1, 2006)

These Rules come into force as of April 1, 2006.

Supplementary Provisions (HU Doc. No. 173 of April 1, 2007)

These Rules come into force as of April 1, 2007.

Supplementary Provisions (HU Doc. No. 9 of March 19, 2010)

These Rules come into force as of April 1, 2010.

Supplementary Provisions (HU Doc. No. 177 of October 1, 2011)

These Rules come into force as of November 1, 2011.

Supplementary Provisions (HU Doc. No. 33 of February 18, 2014)

These Rules come into force as of April 1, 2014.

Supplementary Provisions (HU Doc. No. 160 of April 1, 2015)

These Rules come into force as of April 1, 2015.

Supplementary Provisions (HU Doc. No. 158 of December 1, 2018)

These Rules come into force as of December 1, 2018.

Supplementary Provisions (HU Doc. No. 10 of January 30, 2024)

These Rules come into force as of January 30, 2024.

Supplementary Provisions (HU Doc. No. 17 of February 26, 2025)

These Rules come into force as of April 1, 2025.

Appended Table 1 (Re: Article 11)

Course	Category	Description	Fee (JPY)
General	Basic Service	Fee per application for all persons who applied to use the Large-Scale Computing System (excluding Students.)	12,000 per year
		Fee per application for Students who applied to use the Large-Scale	2,000 per year

		Computing System.	
Additional Services	Supercomputer System	<p>Select the relevant usage of batch processing from among the following (limited to use within one fiscal year)</p> <p>1. Shared Course (multiple Users can share the resources; the same applies hereinafter)</p> <p>(1) CPU Node (a system composed of 480 nodes, each equipped with 2 multi-core CPUs and 512 GB of memory; the same applies hereinafter)</p> <p>Operation time up to 1,000,000 seconds 10,000 per year</p> <p>Operation time up to 18,000,000 seconds 87,500 per year</p> <p>(2) Graphics Processing Unit (hereinafter referred to as “GPU”.) Node (a system composed of 24 nodes, each equipped with 2 multi-core CPUs, 4 GPUs, and 512 GB of memory; the same applies hereinafter.)</p> <p>Operation time up to 312,500 seconds 10,000 per year</p> <p>Operation time up to 5,625,000 seconds 87,500 per year</p> <p>2. Exclusive Course (A course where users and their permitted colleagues can exclusively utilize the allocated resources; hereinafter the same) and the use of supercomputer storage.</p> <p>(1) CPU Node 120,000 per year</p> <p>CPU Socket 1 Unit (includes 4TB of work area)</p> <p>(2) GPU Node 384,000 per year</p> <p>GPU Card 1 Unit (includes 4TB of work area)</p> <p>3. Supercomputer Storage</p> <p>(1) Home area (per 1TB) 20,000 per year</p> <p>(2) Work area (per 4TB) 30,000 per year</p>	
	Research Cloud System	<p>Select the relevant research cloud system from among the following (limited to use within a fiscal year)</p> <p>1 Shared Cluster Use</p> <p>(1) CPU 1 Core 400 per month</p> <p>4,800 per year</p> <p>(2) GPU 1 Unit 28,000 per month</p> <p>336,000 per year</p> <p>2 Exclusive Cluster Use</p> <p>(1) Node 1 Unit 24,000 per month</p> <p>288,000 per year</p>	

		(2) GPU 1 Unit	28,000 per month 336,000 per year
		3 Persistent Volume Use (1) 1TB	800 per month 9,600 per year
	Cloud Storage	Cloud Storage Use (limited to use within one fiscal year) 1TB	800 per month 9,600 per year
	Output	The use of the large format color printer Plain paper 1 sheet Coated paper 1 sheet Cloth 1 sheet	432 1,188 3,996

Remarks

- (1) Out of the services available for the Large-Scale Computing System, persons who apply for the general course may use: the supercomputer; application server; supercomputer storage; the research cloud (Shared Cluster/Exclusive Cluster); cloud storage and the large format color printer.
- (2) Except for those listed in the next item, the following services are available to those using the Basic Service.
 - (i) Supercomputer Service
 - (a) Use of the application server
 - (b) Home area (Supercomputer Storage)
 - (ii) Cloud Service
 - (a) Use of Jupyter Computing Environment
 - (b) Cloud Storage
- (3) Recipients of the research projects using the HPCI System, publicly solicited by the Research Organization for Information Science and Technology (RIST), the joint research projects publicly solicited by the Joint Usage/Research Center for Interdisciplinary Large-scale Information Infrastructures (JHPCN), recognized based on Article 143-3, paragraph 2 of the Ordinance for Enforcement of the School Education Act (Ordinance of the Ministry of Education No. 11 of 1947), and the exploratory joint research projects publicly solicited by the Center, may use the following services without incurring any fees.
 - (i) Supercomputer Service
 - Home area (Supercomputer Storage)
 - (ii) Cloud Service
 - (a) Use of Jupyter Computing Environment
 - (b) Cloud Storage
- (4) In terms of bearing the costs related to the Basic Service, students must submit a copy of documentation proving enrollment, upon which the provisions in the attached table shall apply. However, individuals enrolled in institutions other than universities, junior colleges or technical colleges shall be considered students and subject to these provisions only if specially approved by the Director.
- (5) The operation time for CPU node usage in the Shared Course is calculated by multiplying the number of CPU sockets used by the elapsed time in seconds.
- (6) The operation time for GPU node usage in the Shared Course is calculated by multiplying the number of GPU cards used by the elapsed time in seconds.
- (7) When applying for CPU node usage under the Supercomputer System Exclusive Course, if using more than 2 CPU sockets, only multiples of 2 (node occupancy) will be accepted.
- (8) When applying for GPU node usage under the Supercomputer System Exclusive Course, if using more than 4 GPU cards, only multiples of 4 (node occupancy) will be accepted.
- (9) The usage period for the Supercomputer System Exclusive Course is from the date of approval to the end of the fiscal year. Additionally, the following usage fees will apply based

on the approval date:

- (i) When the approval date falls between April and June: 100% of the user fee specified in the table.
 - (ii) When the approval date falls between July and September: 75% of the user fee specified in the table.
 - (iii) When the approval date falls between October and December: 50% of the user fee specified in the table.
 - (iv) When the approval date falls between January and March: 25% of the user fee specified in the table.
- (10) The Supercomputer System Exclusive Course, the Supercomputer System Shared Course, and Supercomputer Storage (hereinafter referred to as “Additional Services”) may be shared among research group members. However, the members of the research group must be designated by the applicant for the Additional Services from among the users of the Large-Scale Computing System.
- (11) The Research Cloud System shall include a CPU with one virtual core and 2GB of memory.
- (12) In the Research Cloud System, if a GPU is provided by hardware partitioning, the usage fee will be allocated according to the partition ratio.

Appended Table 2 (Re: Article 11)

Course	Category		Description	Fee (JPY)
Private Sector	Basic Service		Fee per application for all persons who applied to use the Large-Scale Computing System.	12,000 per year
	Additional Services	Supercomputer System	Select the relevant usage of batch processing from among the following (limited to use within one fiscal year)	
			1 Shared Course	
			(1) CPU Node	
			Operation time up to 1,000,000 seconds	20,000 per year
			Operation time up to 18,000,000 seconds	175,000 per year
			(2) GPU Node	
			Operation time up to 312,500 seconds	20,000 per year
			Operation time up to 5,625,000 seconds	175,000 per year
			2 Exclusive Course	
			(1) CPU Node	
			CPU Socket 1 Unit (includes 4TB of work area)	240,000 per year
			(2) GPU Node	
			GPU Card 1 Unit (includes 4TB of work area)	768,000 per year
			3 Supercomputer Storage	
			(a) Home area (per 1TB)	40,000 per year
			(b) Work area (per 4TB)	60,000 per year
		Cloud Storage	Cloud Storage Use (limited to use within one fiscal year) 1TB	
				1,600 per month 19,200 per year

Remarks

- (1) Out of the services available for the Large-Scale Computing system, persons who apply for the private sectors course may use: the supercomputer; supercomputer storage; cloud server; and cloud storage.
- (2) The basic service includes the following:
 - (i) Supercomputer Service
Home area (Supercomputer Storage)
 - (ii) Cloud Service
Cloud Storage
- (3) The operation time for CPU node usage in the Shared Course is calculated by multiplying the number of CPU sockets used by the elapsed time in seconds.
- (4) The operation time for GPU node usage in the Shared Course is calculated by multiplying the number of GPU cards used by the elapsed time in seconds.
- (5) When applying for CPU node usage under the Supercomputer System Exclusive Course, if using more than 2 CPU sockets, only multiples of 2 (node occupancy) will be accepted.
- (6) When applying for GPU node usage under the Supercomputer System Exclusive Course, if using more than 4 GPU nodes, only multiples of 4 (node occupancy) will be accepted.
- (7) The usage period for the Supercomputer System Exclusive Course is from the date of approval to the end of the fiscal year. Additionally, the following usage fees will apply based on the approval date.
 - (i) When the approval date falls between April and June: 100% of the user fee specified in the table.
 - (ii) When the approval date falls between July and September: 75% of the user fee specified in the table.
 - (iii) When the approval date falls between October and December: 50% of the user fee specified in the table.
 - (iv) When the approval date falls between January and March: 25% of the user fee specified in the table.
- (8) The Supercomputer System Additional Services may be shared among research group members. However, the members of the research group must be designated by the applicant for the Additional Services from among the users of the Large-Scale Computing System.

Appended Table 3 (Re: Article 11)

Course	Category		Description	Fee (JPY)
Private Sector	Basic Service		Fee per application for all persons who applied to use the Large-Scale Computing System.	12,000 per year
	Additional Services	Supercomputer System	Select the relevant usage of batch processing from among the following (limited to use within one fiscal year)	
			1 Shared Course	
			(1) CPU Node	
			Operation time up to 1,000,000 seconds	40,000 per year
			Operation time up to 18,000,000 seconds	350,000 per year
			(2) GPU Node	
			Operation time up to 312,500 seconds	40,000 per year
			Operation time up to 5,625,000 seconds	350,000 per year
			2 Exclusive Course	
			(1) CPU Node	
			CPU Socket 1 Unit (includes	480,000 per year

			4TB of work area) (2) GPU Node GPU Card 1 Unit (includes 4TB of work area)	1,536,000 per year
			3 Supercomputer Storage (a) Home area (per 1TB) (b) Work area (per 4TB)	80,000 per year 120,000 per year
		Cloud Storage	Cloud Storage Use (Limited to use within one fiscal year) 1TB	3,200 per month 38,400 per year

Remarks

- (1) Out of the services available for the Large-Scale Computing System, persons who apply for the private sector course may use: the supercomputer; supercomputer storage; and cloud storage.
- (2) The basic service includes the following:
 - (i) Supercomputer Service
Home Area (Supercomputer Storage)
 - (ii) Cloud Server
Cloud Storage
- (3) The operation time for CPU node usage in the Shared Course is calculated by multiplying the number of CPU sockets used by the elapsed time in seconds.
- (4) The operation time for GPU node usage in the Shared Course is calculated by multiplying the number of GPU cards used by the elapsed time in seconds.
- (5) When applying for CPU node usage under the Supercomputer System Exclusive Course, if using more than 2 CPU sockets, only multiples of 2 (node occupancy) will be accepted.
- (6) When applying for GPU node usage under the Supercomputer System Exclusive Course, if using more than 4 GPU nodes, only multiples of 4 (node occupancy) will be accepted.
- (7) The usage period for the Supercomputer System Exclusive Course is from the date of approval to the end of the fiscal year. Additionally, the following usage fees will apply based on the approval date.
 - (i) When the approval date falls between April and June: 100% of the user fee specified in the table.
 - (ii) When the approval date falls between July and September: 75% of the user fee specified in the table.
 - (iii) When the approval date falls between October and December: 50% of the user fee specified in the table.
 - (iv) When the approval date falls between January and March: 25% of the user fee specified in the table.
- (8) The Supercomputer System Additional Services may be shared among research group members. However, the members of the research group must be designated by the applicant for the Additional Services from among the users of the Large-Scale Computing System.