

# NII Research Cloud General Information

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## Introduction

This space is for NII Research Cloud users(including who want to use).

It is used for research cloud explanation and usage procedure, information disclosure for users (manual, fault notification, etc.). Various information on the research cloud (excluding member applications) can only be displayed by members of this space.

**NII Research Cloud is a service for the inside of NII. Only NII researchers, staff, co-researchers can use it.**

If you are planning to use the research cloud, or those already using it, [please apply for member registration of this space](#)

If you are already a member of this space, [click here](#)

If you have any question about the Research Cloud, please contact with following email address.

**research-cloud@nii.ac.jp**

## What is the Research Cloud?

The Research Cloud is a cloud service that allows you to rent out physical machines and treat them just as if they were machines in your own research laboratory segment. Because the service works by loaning out actual physical machines, it enables users to avoid problems such as virtualization overhead as with virtual machines, or reduced performance due to the sharing of computational resources with other users.

Because hardware is managed by the cloud's administrators, there is no need to monitor or handle of disk breakdowns or memory faults. (In the event of a fault or breakdown, the administrators may halt operation of your machine or have you transfer to another machine as necessary.)

As the Reserch Cloud, there are two cloud computing system based on Openstack.

- 2nd generation : AIC(Academic Inter Cloud)
- 3rd generation : ABC(Academic Baremetal Cloud)

## Physical machine spec seat used in Research Cloud

	2nd Generation Reserch Cloud "AIC"	3rd Generation Reserch Cloud "ABC"
Machine	DELL C6220  and other models (Equivalent performance)	DELL R630
CPU	Xeon E5-2670 2P/16C/32T	[RegionOne] Xeon E5-2660 V3 2P/20C/40T  [RegionTwo] Xeon E5-2660 V4 2P/28C/56T
Memory	96GB	128GB
Disk	RAID10 2.7TB 1 Volume 900GB x 4 SAS	[RegionOne] RAID10 1.8TB 1 Volume 1TB x 4 SAS  [RegionTwo] RAID10 5.4TB 1 Volume 2TB x 6 SAS
NIC	10GbE NIC x 2	10GbE NIC x 2

OS	Ubuntu / CentOS	Ubuntu / CentOS
	*We will update about twice a year	*We will update about twice a year