

Informatics Server Room Management Policy

Approved by Strategy Committee, 25 May 2022

The server rooms managed by the School of Informatics are a finite resource. They are subject to a range of constraints, primarily in terms of rack space, power, and cooling. The aim of this policy is to optimise the use of this resource by researchers in the School and encourage the sharing of equipment in the server rooms. In addition to this, fairness is an important consideration, in terms of allowing broad access to the server rooms across institutes and research groups. Another consideration is the requirements of newly appointed academics, who often need to purchase new equipment as part of building a research group.

This policy is the result of consultation with institute directors and has been approved by Strategy Committee.

A server room resource group (SRRG) will oversee the allocation of space in the School's server rooms. The group is composed of Director of Computing, Head of Computing, Director of Research, and Deputy Head of School. The SRRG will:

- consider and prioritise competing requests for the procurement and installation of new or replacement computing equipment
- identify old equipment for decommissioning

Installation of new or replacement equipment

- All items of equipment (including loan or rental equipment) must receive permission to be installed in any of the Informatics server rooms.
- Start-up allowances of new academic staff will be prioritised. By default, unless low-level access requiring dedicated equipment is required, new academic staff will be allocated time on a central provision such as Edinburgh International Data Facility (EIDF).
- Before applying for a grant that would fund equipment to be placed in the server rooms, the applicant is encouraged to put in an application with the SRRG using the [Server Room Request Form](#). This enables SRRG to estimate how likely it is that this equipment will be accommodated, and to give advice on which equipment to budget for.
 - PIs should strongly consider, when preparing grant applications, the use of the EIDF cluster or the ISG Eddie cluster for their projects' compute needs instead of purchasing servers to be hosted in the Informatics server rooms.
 - The application is mandatory for equipment likely to consume over 1kW of power (roughly 2-4 CPU servers, or a GPU server with 2-3 GPU cards).
- At research grant award time, the PI **must** inform the SRRG of details of any computing equipment intended to be installed in any Informatics server room to be funded by the awarded research grant with an approximate timescale for the purchase of that equipment.
- Every quarter or more frequently if required, the SRRG will invite requests for the procurement and installation of new or replacement computing equipment. Requests will be made via the [Server Room Request Form](#). The SRRG will subsequently meet to consider and prioritise for installation all pending requests.

- It is essential that PIs prioritise power efficiency when costing and purchasing servers, particularly GPUs. We encourage the use of data-centre grade GPUs due to their favourable energy requirements compared to commodity gaming GPUs. Power-efficiency will be taken into consideration when prioritising installation requests.
- New servers should be DICE managed unless there is good reason for them to be self-managed
 - Self-managed server room space should be ring-fenced for research which requires low level access to hardware (e.g., for experimenting on operating systems, direct power measurement, etc).
 - The advantage of DICE management is that others can make use of servers when otherwise lightly used.
- Servers should be pooled at the highest level possible (School, institute, or multi-PI research group). New servers should be incorporated into existing DICE clusters.
- Where the request is for a server which is not being used for a lot of compute (e.g., a web server with modest expected traffic), consideration should be given to using a virtualised server (either on IS or School virtualisation infrastructure)

Old server decommissioning

- All equipment will be allocated an initial 5 year tenancy, after which its tenancy will be reviewed on an annual basis. The PI would need to show a significant need for the equipment to keep it in the Informatics server rooms after 5 years.
- There should be no presumption that equipment volunteered or identified as a candidate for decommissioning can be replaced with new equipment.
- It is expected that the **maximum** retirement age for equipment is 10 years. Where equipment is being used to store or process confidential data, that equipment should be retired when firmware updates are no longer being issued if that is earlier than 10 years.