

Virtual Machines for research

IMPORTANT: Virtual machines are only provided for requirements that cannot be fulfilled by Software as a Service (SaaS) options or HPC cluster infrastructure. SaaS options outside JCU will always be considered first. If you request a platform be configured to support your research efforts, the work will be assessed for priority against all other corporate and research projects. It is unlikely that any non-trivial platform would be delivered within 3 months, given JCU Technology Solutions staffing levels.

JCU has a limited capability to provision virtual platforms to its researchers. Examples of requirements that have been provided by virtual platforms:

- Web services
- Database services
- Software licensing services
- Windows compute services
- Graphical workloads (virtual desktop or session hosts)

There are several limits placed on resources provisioned based on existing server/storage capacity:

- 4 CPU cores (may not be dedicated)
- 16GB of RAM/memory (may not be dedicated)
- 100GB of disk space (dedicated). Larger amounts are possible, subject to approval.
- Virtual GPU or Quadro (graphics) capabilities are available once requirements are confirmed (may not be dedicated).
- VMs will come with current Microsoft Windows or RedHat Linux operating systems installed.

Such provisioning will be handled as a Technology Solutions (TS) project with possible assistance from eResearch centre staff. Requests for virtual machines will trigger a requirements gathering exercise.

In addition to [JCU's acceptable usage policy](#), you need to be aware of the fact that JCU's Chief Digital Officer (CDO) has ultimate authority when it comes to anything IT related at/for JCU. There are many conditions that apply to service owners.

Service Availability/Resiliency

- Services provided on JCU HPC infrastructure come with *best effort* availability.
- Service provided on JCU HPC infrastructure come with internal resiliency only.
- JCU corporate infrastructure may be used to provide production services in support of JCU research.
- Availability and resiliency for JCU corporate infrastructure is much better than HPC can offer, but far less than what public cloud providers can offer.

Service Owners

Documented service owners are accountable and responsible for the VM and services running on it. Examples of responsibilities on service owners:

- Ensuring accurate and complete documentation has been handed over prior to creation of production system/service(s).
- Ensuring that all documentation is maintained. This documentation must include definition of people accessing the system and/or services.
- Ensuring that any environment that they (or their people) requested/created is maintained.
- Testing of their environment(s) after system updates/patching.
- Ensure handover of ownership prior to departing JCU or changing roles within JCU.
- Provide budget for any costs associated with provisioning of the systems/services they are owner of.
- Service owners will be contacted annually to determine whether the services running on a VM will continue to be required.

Virtual machines will be decommissioned should the nominated service owner no longer be fulfilling their responsibilities.