HPC Support Service Policy

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Document Overview and Purpose

This document provides the operational framework and supporting policy for the HPC Service, Spartan.

Overview

The HPC Support Service provides user support for the HPC cluster, Spartan, operated by Research Platform Services. This document covers the operational details of that service and the Service Level Targets. It defines the successful operation of support service and the processes for handling incidents and requests.

Critical Success Factors

The HPC support service has four critical success factors:

- That the HPC service is highly available, and provides an excellent computing experience;
- That a user is able to find or obtain the information they need, when they need it and that is upto-date and relevant;
- That a user is able to report that they have been pleased with the support they received through the service desk;
- That the service works upholds the values of University First, Service Excellence and One Team.

Users

Users of the HPC service, Spartan, are researchers from a broad spectrum of disciplines, research projects and institutions. All projects are the responsibility of the Principal Investigator, who may or may not be the project owner. In the case of student projects, the student's research supervisor is considered to be the Principal Investigator and should be identified as the supervisor in the project application. Principal Investigators must be from the University of Melbourne, however, project participants may come from other research or supporting institutions. Exceptions to this rule may be determined by the Head of Research Compute Services and would include researchers from external institutions that have an HPC access contract with the University. Currently this includes:

• Victoria University (valid until end of 2018)

In addition to normal users there are priority users, as determined by the Head of Research Compute Services. Priority users will have higher incident response priorities, as defined below.

When a user's relationship to a university is under question (e.g., a bounced email) their account will be locked and the project leader notified. After six months, if the account is still inactive, the account and files will be deleted.

Service Hours

The HPC service desk support hours are 09:00 to 17:00 AEDT on University of Melbourne business days.

Staffing

The service is staffed by a mix of professional staff from the following teams:

- Melbourne Bioinformatics
- MSE-IT
- Science-IT
- CoEPP

• Research Platform Services

Roster

The roster is maintained and monitored by the Senior HPC Support Officer, Research Platform Services and will be filled by:

- ResPlat Staff (2.0 FTE + DevOps as required)
- MBio (1.5 FTE for GPGPU support and MBio partitions) to be determined
- MSE-IT (1.5 FTE for GPGPU support and Eng partitions)
- Science IT (up to 0.2 FTE) to be determined

Operators Code of Conduct and Expected Behaviours

While not all of the support staff are from University Services, while participating in the HPC Support Service, they agree to adhere to the University Services Values of University First, Service Excellence and One Team.

Principles

- Keep a courteous, friendly and professional manner on the phone, in chat or email
- Maintain regular communications for users who have not had their issue resolved
- Ensure that private or secure information is kept that way
- Document what you do. Update Tier 1-3 material and knowledge base when you find it inaccurate or absent.
- Work within your technological end environmental capacity ask for help when needed.

It is expected the HPC Support Service staff will participate in any appropriate meetings as required.

Service Consumer Code of Conduct and Expected Behaviours

All users of the HPC and related services are required to comply with the following policies:

- <u>Provision and Acceptable Use of IT Policy (MPF1314)</u>
- Information Security Policy (MPF1270)

Principles

- Keep a courteous, friendly and professional manner on the phone, in chat or email
- Respond to requests for information from the service operators in a timely manner
- Make every attempt to use the service in a manner that does not negatively impact on the service operators or the other users of the system
- Follow the instructions for proper use as provided by the service operators and support documentation. Users will receive one warning for behaviour that jeopardises the stability and function of the service.

Failure to comply with these policies may result in the immediate suspension of access to the service, pending an investigation of the breach. Such an investigation may result in the following:

- **Project and access termination.** In this case, project data will be archived and made available for download to either the project leader, or research supervisor (in the case of a research student), or to an appropriate departmental authority.
- Access returned. In this case, the service operator must be satisfied that the user responsible for the breach has made a reasonable attempt to correct any actions that caused the breach.

Service Support Channels

The HPC support service will provide support across three channels:

- Email <u>hpc-support@unimelb.edu.au</u>
- Phone +613 8344 0999
- Website <u>http://research.unimelb.edu.au/infrastructure/research-platform-</u> services/services/hpc-high-performance-computing

Service Level Priority	Issue example	Response time	Resolution/Escalati on
Tier 5	Software installation request.	Next business day	Sixteen business days.
Tier 4	Incorrect or incomplete documentation	Next business day	Eight business days.
Tier 3	Lost password, simple job script error, standard consultation request	Next business day	Four business days
Tier 2	Partial system failure (e.g., lost partition), data lost or corrupted due to system error	4 hours	Two business days
Tier 1	Service failure	1 hour	Next business day

Service Level Targets

Service support priorities

The Senior HPC Support Officer will be responsible for the allocation of support tasks. Standard support requests will be triaged and responded to within one business day. Where appropriate, the Senior HPC Support Officer may escalate the priority of tickets deemed of high value, particularly those that represent a risk to reputation. Priority users are assigned a service support priority and incident priority one level higher that the issue example.

Tier 1-3 Content and Knowledge Centered Support

The HPC Support Service staff will be responsible for managing, updating and creating Tier 1-3 materials to support the Spartan service. Tier 1-3 materials included but are not limited to: Forums; Frequently Asked Questions; Documentation and Self-Help Guides; Internal Operation Guides; Announcements and Website Content.

Incident response handling

The Head of Research Compute Services will be responsible for providing reports to the Associate Director of Research Platform Services as required.

Incidents include those uncovered during routine operations and inspections, and those brought to the operator's' attention through the submission of job tickets.

Incident Priority	Urgency (how quickly will the issue escalate)			
Impact (how many users)		Low	Medium	High
	High	3	2	1
	Medium	4	3	2
	Low	5	4	3

Priority	Example	Notify	Response time	Resolution time
1	Major system failure, all running jobs lost	ector, Research tform Services ad of Research npute Services vOps Team Lead C support staff users	One hour	Next business day.
2	Major network outage, no services accessible for users, partial system failure (e.g., lost partition)	ad of Research npute Services vOps Team Lead C support staff users	Four hours	Two business days
3	Password errors.	C support staff pacted users	Next business day	Four business days.
4	Error in documentation.	pacted users	Next business day	Eight business days.
5	Software installation request.	pacted users	Next business day	Sixteen business days.

Problem management

The Senior HPC Support Officer will be responsible for undertaking Problem Management where appropriate. Problems will be managed using ServiceNow and will require engagement with the Infrastructure Services Problem Management team.

Reporting

The Senior HPC Support Officer will be responsible for providing reports to the Head of Research Compute Services on a monthly basis.

Reports should provide historical and current information defined by the Service Level Objectives, and include:

- Number of tickets resolved, open and new
- Number of software builds and time committed
- Problems open and resolved since last report
- User satisfaction ratings
- Incidents and/or issues reported by DevOps team
- Updates to documentation
- Training stats
- Other items of note