# Position Description

*Technical Solutions Specialist - High Performance Computing (HPC)*

## Technical Services – CSOF4

The following information is for applicants

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| Advertised Job Title**:** | Technical Solutions Specialist - High Performance Computing (HPC) |
| Job Reference: | 59829 |
| Relocation Assistance**:** | Will be provided to the successful candidate if required. |
| Applications Are Open To: | Australian Citizens Only |
| Percentage of Client Focus - Internal: | 100% |
| Percentage of Client Focus - External: | 0% |
| Reports to the: | Technical Solutions Manager |
| Number of Direct Reports: | 0 |
| Name and Contact Details For Applicant Enquiries: | Tim Ho - Tim.Ho@csiro.au |
| Contact Details For Applying: | Call 1300 984 220 or email [careers.online@csiro.au](mailto:careers.online@csiro.au). |
| How to Apply: | Please apply online at [jobs.csiro.au](https://jobs.csiro.au/) and enter the requisition number**.** Internal applicants please apply via ‘Jobs Central’ through the ‘People Hub’ icon |

## Role Overview:

The role of Technical Staff in CSIRO is to provide support for scientific research in a diverse range of laboratory and field situations across a range of different research projects. This support consists of the application of accepted technical practices and the development of new practices. The work is usually carried out as a member of a centralised service.

The Scientific Computing group within the Information Management & Technology (IMT) function provides end-to-end infrastructure ranging from generic corporate IT systems through to leading edge High Performance Computing (HPC) data processing tools and platforms. The teams manage over 30PB of data at a compounded annual growth rate of ~75%, and a proportionate computational and network fabric including several Top500 supercomputers, a private cloud and a highly versatile and robust corporate hosting platform. Additional services include advanced visualisation, data processing, application support and software delivery. The capability is highly client focussed and operates closely in partnership with all areas of CSIRO research.

The Technical Solutions team within the Scientific Computing group is responsible for the delivery of a range of Scientific Computing services to support CSIRO’s strategic and operational objectives, including consultation, business analysis, scientific workflows, solutions design and training. In addition to the internal research cloud, the team also takes responsibility for CSIRO’s HPC platforms, programming and runtime environments, software, technical support and services for a large and diverse user base.

The role of the Technical Solutions Specialist – High Performance Computing (HPC) requires the collaboration with researchers to make the best use of CSIRO’s computing platforms and infrastructure. The position will require an in-depth understanding of CSIRO’s computing services and capabilities as well as working experience in HPC. The Specialist will work closely with clients to gain an understanding of their requirements, and ensure that they are satisfied with the results achieved and that issues are addressed efficiently and effectively. The position also requires the planning, organising and monitoring of the allocation of resources, as well as developing processes and tools, especially when encountering new problems where methods are not defined and initiative is required in seeking new approaches to improve the service provided and meet client needs.

## Duties and Key Result Areas:

* Liaise with clients to determine their needs and take personal responsibility for their satisfaction and correct problems promptly and in a constructive manner
* Assist clients in transitioning existing scientific workflows to the Scientific Computing platforms
* Under general direction, manage a facility or service supporting a large number of users, undertake a wide variety of tasks or tasks that have a high degree of technical difficulty and documenting procedures and training clients in systems and processes
* Utilise management expertise including the ability to plan, organise and monitor the allocation of resources across a facility
* Develop processes and tools, especially when encountering new problems where methods are not defined and initiative is required in seeking new approaches to improve the service provided and meet client needs
* Communicate openly, effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.
* Work collaboratively as part of a multi-disciplinary, often regionally dispersed research team, and business unit to carry out tasks in support of CSIRO scientific objectives.
* Adhere to the spirit and practice of CSIRO’s Code of Conduct, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.
* Other duties as directed.

## CSIRO Competencies:

1. **Teamwork and Collaboration: Cooperates with others to achieve organisational objectives and may share team resources in order to do this. Collaborates with other teams as well as industry colleagues.**
2. **Influence and Communication: Uses knowledge of other party's priorities and adapts presentations or discussions to appeal to the interests and level of the audience. Anticipates and prepares for others reactions.**
3. **Resource Management/Leadership: Allocates activities, directs tasks and manages resources to meet objectives. Provides coaching and on the job training, recognises and supports staff achievements and fosters open communication in the team.**
4. **Judgement and Problem Solving:** Investigates underlying issues of complex and ill-defined problems and develops appropriate response by adapting/creating and testing alternative solutions.
5. **Independence: Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).**
6. **Adaptability:** Copes with ambiguity or situations that lack clarity. Adapts readily to changing circumstances and new responsibilities (which may include activities outside own preferences) in the interests of achieving team objectives. Recognises the need for and undertakes personal development as a result of changes.

## Selection Criteria:

*Under CSIRO policy only those who meet all selection criteria can be appointed.*

1. Relevant trade certificate/diploma/degree or relevant work experience in High Performance Computing
2. Experience in delivering HPC technical support
3. Background in Linux system administration
4. Experience in the development of user documentation, technical guides and training materials
5. Strong problem solving and analytical skills
6. Demonstrated ability to work both autonomously and collaboratively

## Desirable Criteria:

1. Strong experience in HPC batch systems
2. Extensive background with the use of scripting or programming languages for application development in a Linux environment
3. Proven experience providing HPC services to scientists, including engaging with scientists to determine requirements, and knowledge of a range of application software and techniques in fields relevant to CSIRO
4. Strong understanding of Windows HPC systems

## Special Requirements:

To be eligible for this position you need to be an Australian citizen as the successful candidate must hold or have the ability to obtain a Negative Vetting Level 1 (SECRET) Australian Government security clearance.

## About CSIRO:

We imagine. We collaborate. We innovate. To find out more visit us [online](http://www.csiro.au/)!

Find out more about CSIRO [Information & Technology](https://my.csiro.au/orginfo/structure/support/imt)