Systems Engineer (Linux) – Research Infrastructure

POSITION NUMBER
0054469

PROFESSIONAL CLASSIFICATION STANDARD / SALARY
UOM 7 - $96,002 - $103,921 per annum (pro rata for part-time)

SUPERANNUATION
Employer contribution of 17%

WORKING HOURS
Full Time (1 FTE)

BASIS OF EMPLOYMENT
Continuing

HOW TO APPLY
Go to http://about.unimelb.edu.au/careers, under Current staff or Prospective staff, select the relevant option ('Current Opportunities' or 'Jobs available to current staff') and search for the position by title or number.

CONTACT FOR ENQUIRIES ONLY
Dr Stephen Giugni
Tel: +61 466 447 861
Email: stephen.giugni@unimelb.edu.au

Please do not send your application to this contact

For information about working for the University of Melbourne, visit our website: about.unimelb.edu.au/careers
THE UNIVERSITY OF MELBOURNE

Established in 1853, the University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The main campus in Parkville is recognised as the hub of Australia’s premier knowledge precinct comprising eight hospitals, many leading research institutes and a wide-range of knowledge-based industries. With outstanding performance in international rankings, the University is at the forefront of higher education in the Asia-Pacific region and the world.

The University of Melbourne employs people of outstanding calibre and offers a unique environment where staff are valued and rewarded.

Find out more about the University's strategy, ‘Advancing Melbourne’, at https://about.unimelb.edu.au/strategy/advancing-melbourne

CHIEF OPERATING OFFICER PORTFOLIO

The Chief Operating Officer (COO) Portfolio enables quality outcomes for students, staff and partners by delivering University-wide services and operational support to meet the organisation's evolving needs and strategic goals. The portfolio also works in partnership with teams across the University to drive innovation, transformation and improved performance, within and across functions. It is responsible for the University's budget and financial performance, and the management of its property and capital.

The COO Portfolio is comprised of six sub-portfolios covering all areas of our operations, including the newly established Operational Performance group. This has been established to drive and manage a program of operational improvement and service transformation, underpinned by contemporary business insights, data modelling, predictive analytics, digital tools, and service planning.

- Business Services
- Chief Finance Officer Group
- Legal and Risk
- Operational Performance Group
- Research, Innovation and Commercialisation
- Student and Scholarly Services
BUSINESS SERVICES

Business Services provides a full range of class leading information technology, facilities management, finance, HR and health and safety services to all operating entities of the University.

Research Computing Services (RCS) is a department within Business Services. RCS delivers the digital research infrastructure and services for researchers at The University of Melbourne. We operate on-premise High-Performance Computing (HPC), Cloud Computing and General-Purpose Graphical Processing Unit (GPGPU) computational platforms. We operate over 20 PB of research data storage platforms to enable data-driven research and collaboration and a range of data management services. We provide a range of consultation services to support the development of custom computation and data management solutions. RCS also contributes to operating the ARDC Nectar Research Cloud, an ARC-LIEF funded multi-Victorian University GPGPU cluster and we facilitate access to Australia’s national supercomputing facility NCI.

EQUAL OPPORTUNITY, DIVERSITY AND INCLUSION

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion, and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the Advancing Melbourne strategy that addresses diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people’s age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised as vital in our continuous desire to strive for excellence and reach the targets of Advancing Melbourne.
ABOUT THE ROLE

Position Purpose:
The Systems Engineer (Linux) provides technical expertise in the day to day operation, maintenance and development of the University of Melbourne Research Cloud, research data storage platforms and HPC infrastructure. This includes system administration, monitoring, automation, configuration and deployment activities, as well as resolution of service requests and incidents.

The DevOps team works in concert with the other teams within RCS to ensure a coordinated program of demand driven services and infrastructure development.

RCS also works closely with teams across Business Services to ensure an integrated service delivery focus.

Reporting line: Senior Lead Systems Engineer, Research Computing Services
No. of direct reports: 0
No. of indirect reports: 0
Direct budget accountability: Nil

Key Dimensions and Responsibilities:
Task level: Moderate
Organisational knowledge: Moderate
Judgement: Moderate
Operational context: *University wide

OH&S and compliance: All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct. These include general staff responsibilities and those additional responsibilities that apply for managers, supervisors and other personnel. Specific responsibilities for the role are available at http://safety.unimelb.edu.au/topics/responsibilities/.

Staff must comply with all relevant requirements under the University’s risk management framework including legislation, statutes, regulations and policies.

Core Accountabilities:
- Tasks as allocated in the day-to-day operation of the University’s Melbourne Research Cloud, Research Data Storage platforms, and HPC infrastructure
- Contribute to the planning, extension and improvements to the day to day operation of the University of Melbourne Research Cloud, storage and HPC infrastructure
Continually improve the automation, security and systems management policies and processes.
Review, deploy and execute system upgrades, releases and patches
Manage, monitor and report on capacity, performance and usage
Monitor capacity, performance and usage of University of Melbourne Research Cloud, storage and HPC infrastructure to ensure efficient and effective utilisation of our resources and to communicate with researchers and stakeholders
Develop and maintain clear, accurate and useful system and user documentation for colleagues and users
Deliver prompt, responsive, effective and efficient execution of service requests relating to inquiries and incidents using appropriate service channels

Core Skills / Capabilities

- Good written and verbal skills with respect to clientele correspondence via email and phone and documentation
- Ability to work effectively in a team
- Ability to contribute to the development of technical design decisions involving software or hardware implementation strategies.
- Ability to monitor system usage and performance statistics and to understand the impacts of operating system tuning parameters
- Good knowledge of networks, including host level firewalls, subnetting, VLANs, routing, etc.
- Good scripting skills (e.g. Python, bash, etc) to accomplish day to day management and configuration tasks
- Very good Linux systems administration skills, including debugging, patching, log file analysis, upgrading and performance monitoring
- A commitment to:
  - putting the needs of the University and our researchers first,
  - striving to deliver beyond expectations and taking ownership of the delivery; and
  - valuing working collaboratively, connecting with people and building relationships in your workplace
  - Learning and developing your skills on the job

Selection Criteria:

Education/Qualifications

1. The appointee will have Tertiary qualifications in Computer Science or Software Engineering, a degree by research (e.g. Master of Science or PhD), or an equivalent combination of relevant experience and education/training
Knowledge and skills:

2. Good knowledge of one or more scripting languages such as bash or Python
3. Very good Ubuntu and/or Redhat Enterprise Linux system administration experience

In addition, previous experience with or knowledge in some of the following areas will be highly beneficial:

- Demonstrated experience with OpenStack
- Problem solving and judgement in complex and distributed environments
- Experience in using automation and configuration management tools such as Puppet and Ansible to configuration manage a large amount of Linux systems
- Creating and deploying monitoring scripts that send data to Grafana/Graphite

Other job-related information:

Occasional work out of ordinary hours, and interstate travel may be required.

Training, either formal or on the job, will be provided for the successful candidate.