

POSITION DESCRIPTION



Business Services
Chief Operating Officer Portfolio

ARDC SENIOR CLOUD DEVELOPMENT & OPERATIONS ENGINEER

POSITION NUMBER	0051478
PROFESSIONAL CLASSIFICATION STANDARD/SALARY	UOM 8 - \$105,684 - \$114,389 per annum (pro rata for part-time)
SUPERANNUATION	Employer contribution of 17%
WORKING HOURS	Full Time (1 FTE)
BASIS OF EMPLOYMENT	Fixed term available to 30 June 2023
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	Paul Coddington Tel +61 (0)407 074 829 Email paul.coddington@unimelb.edu.au <i>Please do not send your application to this contact</i>

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, 'Growing Esteem', at <http://about.unimelb.edu.au/strategy-and-leadership>

CHIEF OPERATING OFFICER PORTFOLIO

The Chief Operating Officer (COO) Portfolio is responsible for the University's budget and financial performance, and the management of its property and capital. It also delivers efficient and effective shared services in support of all aspects of the University's business.

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
- Finance
- Legal and Risk
- Operational Performance Group
- Research, Innovation and Commercialisation
- Student and Scholarly Services

AUSTRALIAN RESEARCH DATA COMMONS (ARDC)

The Australian Research Data Commons (ARDC) is a national eResearch program funded through the federal government's National Collaborative Research Infrastructure Strategy (NCRIS) as part of the 2016 National Research Infrastructure Roadmap. The purpose of the ARDC is to provide Australian researchers with a competitive advantage through data. The ARDC is a transformational investment, partnering to facilitate a coherent research environment that will enable Australia's researchers to find, access, contribute to and effectively use leading data-intensive eResearch infrastructure to maximise research quality and

impact by developing a world-leading data advantage, facilitating accelerated innovation, fostering collaboration for borderless research, and enhancing researchers' ability to translate their research into benefits for society. <https://ardc.edu.au/>

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 ARDC's Nectar Research Cloud is a national cloud service dedicated to research. It is one of the main services provided by the ARDC. <https://ardc.edu.au/services/nectar-research-cloud/>

Since early 2012, when the University of Melbourne launched the first node of the Nectar Research Cloud, it has grown to support more than 18,000 users nationally and over 4,000 research projects. The federated national cloud platform is made up of nodes operated by eResearch organisations across Australia, and also federates with cloud resources in New Zealand. Coordination of the federated cloud and management of the central cloud services and operations are provided by the Research Cloud Core Services team in ARDC. The platform is built using OpenStack cloud computing software, an open source project that has seen a dramatic rise in usage internationally in the last few years.

The successful candidate will work in the Core Services team and be involved in the development and operation of cloud platforms for testing and production, the integration of storage services, as well as

helping inform and guide how to best build, deliver and operate national cloud and storage services for research communities, particularly to support national and international research collaborations.

The incumbent will report to the Manager, Research Cloud Operations, and also take direction from the Core Services Technical Lead. The incumbent will work with a high degree of autonomy under broad direction to achieve operational goals and assist with the development of improved functionality and operations of the Nectar Research Cloud.

Reporting line: Manager, Research Cloud Operations

No. of direct reports: 0

No. of indirect reports: 0

Direct budget accountability: N/A

Key Dimensions and Responsibilities:

Task level: Significant

Organisational knowledge: Moderate

Judgement: Significant

Operational context: The Core Services team within the ARDC are responsible for the operation of the Nectar Research Cloud. The Core Services team is mainly based in the Chief Operating Officer Portfolio at the University of Melbourne.

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.

Act in the best interest of your employer; displaying service excellence by striving to deliver beyond expectations and taking ownership of the delivery; and value working collaboratively, connecting with people and building relationships in your workplace

Core Accountabilities:

- Work in a small team, in your areas of skill, across the boundaries of developing extensions to the Research Cloud and maintaining operations
- Follow the development of cloud computing, OpenStack, and useful related tools to plan, extend and deploy improvements to the Research Cloud

- Continually improve the automation, security and systems management of the Research Cloud and its software development processes
- Design, develop, test, and deploy system upgrades, new releases, and patches
- Monitor and report on the performance and usage of Research Cloud services, providing compliance, usage, and performance statistics for management
- Work with other teams who support the research cloud to resolve issues unable to be solved or understood without detailed knowledge of the underlying systems
- Work with other teams to make sure that the infrastructure and the applications that depend on it work harmoniously together
- Maintain operational manuals and ensure procedures and processes are regularly reviewed to continually improve the reliability and consistency of service and service delivery of the research cloud.
- Anticipate, mitigate, identify, troubleshoot and resolve hardware, software, and security problems on the research cloud infrastructure
- Proactively participate in and contribute to the global development of OpenStack including blueprint, design, code review, and testing
- Drive the development of long-term strategic goals for the supported systems and software in conjunction with Core Services and partner sites
- Provide technical expertise to team members, including the technical staff at partner sites
- Lead and facilitate open and effective communications in troubleshooting and problem solving with technical representatives at partner sites and with other stakeholders
- Provide appropriate training and technical support to new staff members in Core Services and at Nectar Cloud Federation sites/partners
- Liaise with vendors and open source partners (in addition to OpenStack) as necessary or appropriate to secure sustained reliable support

Selection Criteria:

Education/Qualifications

1. The appointee will have: Tertiary qualification in a computer science or engineering related discipline, or an equivalent combination of relevant experience and education/training

Knowledge and skills. We are looking for previous experience with or knowledge in some of the following areas:

2. Demonstrated experience with OpenStack or similar cloud environments (AWS, Google, Azure), and knowledge of the deployment and operation of cloud technologies
3. A strong track record in system administration of Linux servers in a “scale-out” environment
4. Problem solving and judgement in complex and distributed environments

5. Demonstrated experience in complex resource management which may include but is not limited to compute servers, storage, networks, collaboration tools, and software
6. Experience in using automation and configuration management tools such as Puppet and Ansible
7. Experience using version control & development CI/CD tools such as git, Gerrit and Jenkins
8. Advanced scripting skills (e.g. bash, python)
9. The appointee will possess a high level of technical expertise and analytical skills and ability to work independently
10. Working knowledge of relevant areas such as: programming in Python, Web services, including HTTP and REST principles on Linux platforms
11. Demonstrated ability to take a leading role in software design, analysis and specification.